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Introduction

This document includes information about using OLE automation for use with IBM® Cognos® PowerPlay® Client tasks.

**Audience**

To use this document, you should have

- knowledge of business analysis concepts
- knowledge of your business requirements

**Finding information**

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You can also read PDF versions of the product release notes and installation guides directly from IBM Cognos product disks.

**Accessibility features**

This product does not currently support accessibility features that help users with a physical disability, such as restricted mobility or limited vision, to use this product.

**Forward-looking statements**

This documentation describes the current functionality of the product. References to items that are not currently available may be included. No implication of any future availability should be inferred. Any such references are not a commitment, promise, or legal obligation to deliver any material, code, or functionality. The development, release, and timing of features or functionality remain at the sole discretion of IBM.

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Introduction
Chapter 1: PowerPlay OLE Automation

You can use OLE automation to automate tasks in IBM® Cognos® PowerPlay® by creating macros using the IBM CognosScript language. You can write macros using

- IBM Cognos Series 7 CognosScript Editor
  
  IBM Cognos BI PowerPlay does not include CognosScript Editor. You can use IBM Cognos Series 7 CognosScript Editor to create and run macros for IBM Cognos BI PowerPlay. For more information, see the IBM Cognos Series 7 CognosScript Editor Reference Guide.

- Microsoft® Visual Basic
  
  For more information, see "How the CognosScript Language Compares to Different Versions of Basic" (p. 15)

- a text editor, such as Notepad
  
  When you create a macro using a text editor, you cannot compile or run it from the editor. You must compile and run the macro in the IBM Cognos Series 7 CognosScript Editor or a compatible macro editor such as Microsoft Visual Basic for Applications.

PowerPlay Application Hierarchy

The PowerPlay application hierarchy is organized into a logical tree structure of objects and collections that depend on each other to operate. The structure shows which objects must exist before you can use the properties or methods to control the behavior and characteristics of another object. The following diagram shows the relationship between the collections and objects and the order in which they fit in the hierarchy.
Macro Script Design

Consider error handling, scheduling, and distribution when you create macro scripts.

Error Handling

A script can be thoroughly debugged and still encounter conditions that cause errors, such as running a script that attempts to open a file that does not exist or is unavailable. When a IBM® Cognos® PowerPlay® user encounters errors, they can respond to the error and continue working. However, when a macro encounters an error, it stops. The remaining macro instructions are not executed unless your macro includes instructions to handle errors.

When you write macros, the goal is to write a macro that is not too dependent on a particular set of conditions. For example, you do not want to create a macro that requires precise and accurate input from the user. By structuring your macros to include IF statements, you can try to anticipate your user’s responses.

A macro that functions properly should

- close any documents the macro opened but the user no longer needs
- save, or prompt the user to save, a file that should be saved
• restore the settings of any options the macro may have changed
• delete any temporary files

Scheduling
If you use IBM Cognos Series 7 Scheduler to run a macro, estimate how long the macro will take to execute. For longer activities, you may want to schedule the macro to run during off-hours to minimize network activity. However, too many large macros, along with other routine network activities, may also affect the successful execution of your macros.

Distribution
You can use any file distribution method available to distribute models, cubes, reports, and macros. When you define your PowerPlay strategies for automating model, cube, and report distribution, you need to
• identify repetitive tasks, such as identifying the models, views, cubes, and reports to change or update regularly
• list the users or user communities that require the files
• indicate how, and when, each user or user community will receive the updates

How the CognosScript Language Compares to Different Versions of Basic
The following information will help you understand the differences between CognosScript and different versions of Microsoft® Basic. You must consider these differences if you plan to use Microsoft Basic instead of IBM® Cognos® Series 7 CognosScript Editor to create and run macros.

There are several versions of Basic with which you may be familiar, the most common being Microsoft Visual Basic and Word Basic. The CognosScript Language shares a substantial common core of functions and statements with these versions; however, each one has unique capabilities.

Differences Between the CognosScript Language and Visual Basic
The CognosScript Language is very similar to Microsoft Visual Basic; however, there are some critical differences. The topics below describe some of the differences you will notice between the CognosScript Language and Visual Basic.

Functions and Statements Unique to the CognosScript Language
The CognosScript Language offers a few statements and functions not found in the standard version of Visual Basic, such as:
• $CStrings metacommand
• $Include metacommand
• $NoCStrings metacommand
Control-Based Objects
The CognosScript Language does not include a Visual Basic form of control-based objects. As a result, a Visual Basic property like "BorderStyle" is not an intrinsic part of the CognosScript Language. This does not mean that you cannot define an object in the CognosScript Language that has BorderStyle as a property. You will probably define many objects that are intrinsic to your application in the process of integration.

Differences Between the CognosScript Language and Microsoft Visual Basic for Applications
Microsoft® offers a modified version of Visual Basic in some of its products, called Visual Basic for Applications. In addition to the functions and statements unique to the CognosScript Language, there are differences you will notice between the CognosScript Language and Microsoft Visual Basic for Applications. In Microsoft Visual Basic for Applications:

- a Global Const is treated as a Const. An equivalent would be Public Const.
- there are differences in the behavior of the Declare statement:
  - Forward declarations to functions are not available.
  - The BasicLib attribute is not recognized and should be converted to Lib.
  - The Ordinal attribute will not be treated as an ordinal number of a procedure of an external dll unless it is prefixed by "#".
- prompted user input in the form of the Input or Line Input statement are not available.
- the Print statement when used without a file number should be changed to the equivalent Debug.Print statement.
- can not access clipboard objects are not accessible.
- the Erl function is not recognized.

Dialog Box Capabilities and Microsoft Visual Basic for Applications
Microsoft Visual Basic for Applications does not have a syntax to create or run dialog boxes. In response to this, the CognosScript Language has a set of functions and statements to enable the use of dialog boxes (they are similar to those in Word).

Microsoft Visual Basic for Applications does provide dialog box handling statements and functions. However, the CognosScript dialog functions and statements will not work directly in Visual Basic for Applications. You must port the dialog scripts to custom user forms.
Differences Between the CognosScript Language and Word Basic

Word Basic is a version of Visual Basic that was included in earlier versions Microsoft Word. Word Basic supports dialog boxes, but it does not support objects. The topics below describe some of the differences you will notice between the CognosScript Language and Word Basic.

Dialog Box Capabilities

The dialog box capabilities in the CognosScript Language and Word are very similar. Word does offer some statements and functions that the CognosScript Language does not, such as DlgFilePreview. As well, the CognosScript Language offers some features that Word does not, such as:

- Button
- Button Group
- Caption
- DropComboBox
- StaticComboBox

In response to the need for certain types of dialog box support, the CognosScript Language offered some dialog box options before Word Basic did. Later, Word Basic came out with their own syntax for these options. As a result, there are differences in the way the two languages handle dialog boxes.

Button vs. PushButton

Button is the original CognosScript Language syntax; PushButton is the Word Basic syntax. The two are interchangeable, and the CognosScript Editor supports both. PushButton is preferred.

Dialog Box Units

The measurement units used in the two dialog box syntaxes are different. The CognosScript Editor supports both, and you can choose to use either.

Since many of our clients have built scripts based on the original CognosScript units, those are the ones used in the Examples. As a result, if you use Word units, some of the dialog boxes created in the Examples may look odd.

User Input Mechanisms

There are slight differences in some of the mechanisms for user input:

<table>
<thead>
<tr>
<th>The CognosScript Language</th>
<th>Word Basic</th>
</tr>
</thead>
<tbody>
<tr>
<td>StaticComboBox or ComboBox (in the CognosScript Language, these are interchangeable)</td>
<td>ComboBox (Word Basic supports only this syntax)</td>
</tr>
<tr>
<td>DropComboBox</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Chapter 1: PowerPlay OLE Automation
## Chapter 2: Objects

You work with the following objects for IBM® Cognos® PowerPlay® OLE automation.

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<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
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<td>AdvancedQuery Object</td>
<td>Represents an advanced query containing categories based on certain criteria specified in the subset definition.</td>
</tr>
<tr>
<td>Application Object</td>
<td>This is the main PowerPlay Application object.</td>
</tr>
<tr>
<td>CategoryList Object</td>
<td>Maintains a list of categories from a multidimensional cube.</td>
</tr>
<tr>
<td>Child Object</td>
<td>References a specific Child object in a collection.</td>
</tr>
<tr>
<td>Column Object</td>
<td>An object used to manipulate a column in a report.</td>
</tr>
<tr>
<td>Dimension Object</td>
<td>An object containing a dimension in the DimensionLine object from a PowerCube.</td>
</tr>
<tr>
<td>DimensionLine Object</td>
<td>Maintains a list of Dimension objects.</td>
</tr>
<tr>
<td>Exception Object</td>
<td>Defines a new exception for a report.</td>
</tr>
<tr>
<td>FindQuery Object</td>
<td>Searches categories for a particular string.</td>
</tr>
<tr>
<td>Graph Object</td>
<td>Enables the manipulation of displays in a PowerPlay report.</td>
</tr>
<tr>
<td>Layer Object</td>
<td>An object used to manipulate a layer in a report.</td>
</tr>
<tr>
<td>Level Object</td>
<td>An object used to return a level in a report.</td>
</tr>
<tr>
<td>ParentageQuery Object</td>
<td>Performs a query based on levels within a report.</td>
</tr>
<tr>
<td>Print Object</td>
<td>An object used to manipulate the printing parameters of a PowerPlay report and initiate a print job.</td>
</tr>
<tr>
<td>Range Object</td>
<td>An object used to specify the numerical ranges for exceptions in PowerPlay reports.</td>
</tr>
</tbody>
</table>
### Name | Description
--- | ---
Report Object | An object that contains data from one or more cubes.
Row Object | An object used to manipulate a row in a report.
SaveAsPDF Object | Saves a report as a PDF or portable document format file (.pdf).
ValueRestriction Object | Applies restrictions to AdvancedQuery results based on values that exceed or fall below a specified number or values that belong to a specified range.

## AdvancedQuery Object

**Description**

Represents an advanced query containing categories based on certain criteria specified in the subset definition.

**Discussion**

Use the AdvancedQuery object to specify which categories are to appear in a report using one or more of the following criteria

- a dimension
- a drill-down path
- one or more levels
- one or more qualifiers (optional)
- one or more find queries (optional)

The combination of criteria is known as a query. When a query is placed in a report, the categories that are specified by the criteria are added to the report. Whenever the report is opened, the query is automatically re-executed. Any new categories that fit the specified criteria appear in the report and any categories that no longer match the criteria do not appear in the report.

To maximize the query capabilities, you can use the results of the FindQuery subset in the AdvancedQuery. First create the FindQuery object, and then use the subset data in the AdvancedQuery.

The Item index for the AdvancedQuery and FindQuery objects starts at 1.

The Find queries only apply to the lowest level.

When an AdvancedQuery has more than one level and contains a ValueRestriction query, the value restriction only applies to the lowest level. There can only be one value restriction per AdvancedQuery.
For an AdvancedQuery, do not change the dimension when the query is valid (this change invalidates all the levels).

For an AdvancedQuery, the order and structure of the subset definition are

Name
Dimension
Level
Find
Include
Exclude
ValueRestriction
Execute
AddToReport

<table>
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<tr>
<th>Name</th>
<th>Description</th>
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<tbody>
<tr>
<td>AddToReport Method</td>
<td>Adds query results to a report.</td>
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<tr>
<td>Exclude Method</td>
<td>Sets the categories to exclude from the query.</td>
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<tr>
<td>Execute Method</td>
<td>Runs an advanced query on the cube.</td>
</tr>
<tr>
<td>Find Method</td>
<td>Specifies the name of the FindQuery object to include in an AdvancedQuery.</td>
</tr>
<tr>
<td>Include Method</td>
<td>Sets the categories to include in the query.</td>
</tr>
<tr>
<td>Item Method</td>
<td>Returns a category from the AdvancedQuery object.</td>
</tr>
<tr>
<td>Level Method</td>
<td>Sets the level used by the AdvancedQuery object to retrieve categories for the query.</td>
</tr>
<tr>
<td>Remove Method</td>
<td>Removes the AdvancedQuery object from the Report-Queries collection.</td>
</tr>
<tr>
<td>ValueRestriction Method</td>
<td>Returns the value restriction for an AdvancedQuery object.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
</tbody>
</table>
### Name | Description
---|---
**Count Property** | Returns a value giving the number of categories that satisfy the Subset.

**Dimension Property** | Sets or returns the dimension from which categories are returned.

**LevelList Property** | Returns the list of levels for a specified drill-down path.

**Name Property** | Sets or returns the name of the subset.

**Type Property** | Returns a query object type.

---

**Example**

This example creates a FindQuery (type1) subset definition which searches for all products that begin with "Star". Then an AdvancedQuery (type 3) subset definition is created using the Find subset definition results. The subset of "Products" beginning with the name "Star" is then added to the report as columns.

```vba
Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objFind As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objFind = objPPRep.ReportQueries.Add(1)
    With objFind
        .Name = "Find Star"
        .Dimension = "Products"
        .SearchShortName = False
        .SearchText = "Star"
        .Pattern = 2
    End With
    Set objAdvanced = objPPRep.ReportQueries.Add(3)
    With objAdvanced
        .Name = "Star Products"
        .Dimension = "Products"
        .Level "Product Id"
        .Find objFind.Name
        .Execute
    End With
End Sub
```
Related Topics

- "FindQuery Object" (p. 36)
- "ParentageQuery Object" (p. 45)
- "Report Object" (p. 51)
- "ReportQueries" (p. 80)
- "ReportQueries Method" (p. 231)

Application Object

Description
This is the main IBM® Cognos® PowerPlay® Application object.

Discussion
Use this object to gain control of the application. The Application object lets you start PowerPlay from within an OLE automation script. You can declare an object variable and then use the CreateObject method to create a PowerPlay Application object.

You can select an Application object in the following ways:

- CreateObject("CognosPowerPlay.Application") starts another instance of PowerPlay.
- GetObject (, "CognosPowerPlay.Application" ) selects the active application.
- Use the Application method with any other object.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activate Method</td>
<td>Sets the focus on the Application object.</td>
</tr>
<tr>
<td>Active Method</td>
<td>Returns the active Report object.</td>
</tr>
<tr>
<td>DeleteAllDataSourceInfo Method</td>
<td>Deletes security access information from memory for all PowerCubes.</td>
</tr>
<tr>
<td>DeleteAllMDCAccessInfo Method</td>
<td>Deletes PowerCube security access information from memory for all cubes.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>DeleteMDCAccessInfo Method</td>
<td>Deletes PowerCube security access information from memory for the specified cube.</td>
</tr>
<tr>
<td>Maximize Method</td>
<td>Maximizes the Application object window.</td>
</tr>
<tr>
<td>Minimize Method</td>
<td>Minimizes the Application object window.</td>
</tr>
<tr>
<td>Quit Method</td>
<td>Exits PowerPlay.</td>
</tr>
<tr>
<td>Reports Method</td>
<td>Returns one Report object or the entire collection.</td>
</tr>
<tr>
<td>Restore Method</td>
<td>Restores the Application object window to its original size and position.</td>
</tr>
<tr>
<td>SetDataSourceInfo Method</td>
<td>Stores security information for a data source in memory.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>Caption Property</td>
<td>Returns the title of the Application object window.</td>
</tr>
<tr>
<td>DefaultAlternateDirectory Property</td>
<td>Sets or returns the directory to save updates to a read-only report.</td>
</tr>
<tr>
<td>DefaultCubeDirectory Property</td>
<td>Sets or returns the default path for multidimensional cube files (.mdc).</td>
</tr>
<tr>
<td>DefaultMacroDirectory Property</td>
<td>Sets or returns the default path for macro files.</td>
</tr>
<tr>
<td>DefaultReportDirectory Property</td>
<td>Sets or returns the default path for PowerPlay report files.</td>
</tr>
<tr>
<td>FullName Property</td>
<td>Returns the full name, including the location, of the Application object.</td>
</tr>
<tr>
<td>LogonPrompt Property</td>
<td>Sets or returns whether the application prompts for logon or security information.</td>
</tr>
<tr>
<td>Name Property</td>
<td>Returns the name of the Application object.</td>
</tr>
<tr>
<td>Path Property</td>
<td>Returns the path of the Application object.</td>
</tr>
</tbody>
</table>
### Name | Description
--- | ---
RefreshSubCube Property | Sets or returns whether the sub-cube is refreshed automatically.
ShareDimensionLine Property | Sets or returns whether open reports share a dimension line.
UserControl Property | Sets or returns whether the Application object is under user control.
Version Property | Returns the version number of PowerPlay.
Visible Property | Sets or returns whether the Application object is visible to the user.

### Example
This example creates an instance of the PowerPlay Application object and shows some its properties to the user. In order to link to a running PowerPlay application, replace the CreateObject function with the GetObject function.

```vba
Sub Main()
    Dim objPPlayApp as Object
    Set objPPlayApp = CreateObject("CognosPowerPlay.Application")
    objPPlayApp.Visible = 1
    MsgBox "The name of the Application is " & objPPlayApp.Name
    MsgBox "The location of the Application is " & objPPlayApp.Path
    MsgBox "The Application version is " & objPPlayApp.Version
    Set objPPlayApp = Nothing
End Sub
```

**Related Topics**
- "Methods" (p. 87)
- "Properties" (p. 283)

### CategoryList Object

**Description**
Maintains a list of categories from a multidimensional cube.

**Discussion**
Use this object to select categories from a cube or create new categories, and add all or some of these categories to the report.
In order to add categories to a report, first create a CategoryList object by calling the CategoryList method, which is a Report method, and then use it to identify the required categories.

These categories can be existing ones which are found in a cube, or new ones created when the CategoryList object is passed to the report. Select existing categories from the MDC file using the Add method, or create new categories by setting one or more of the following properties to True: Average, Intersection, and Sum.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add Method (CategoryList)</td>
<td>Adds one or more categories to a CategoryList object.</td>
</tr>
<tr>
<td>Remove Method</td>
<td>Removes all categories from the CategoryList object.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>Average Property</td>
<td>Sets or returns whether to calculate the average of the selected categories.</td>
</tr>
<tr>
<td>Count Property</td>
<td>Returns the number of categories in the CategoryList object.</td>
</tr>
<tr>
<td>Each Property</td>
<td>Sets or returns whether all selected and new categories or just the new categories appear in the Report object.</td>
</tr>
<tr>
<td>Intersect Property</td>
<td>Sets or returns whether to determine the values at the intersection of selected categories from different dimensions.</td>
</tr>
<tr>
<td>ShareOf Property</td>
<td>Sets or returns whether to show the values in selected categories as a percentage of their higher-level category.</td>
</tr>
<tr>
<td>Sum Property</td>
<td>Sets or returns whether to calculate the sum of selected categories.</td>
</tr>
</tbody>
</table>

**Example**

This example adds categories to the columns and rows in the report.

```vbscript
Sub Main()
    Dim objPPRep as Object
    Dim objCatList as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New "C:\Cubes and Reports\Great " & _
      "Outdoors.mdc", False
```
Set objCatList = objPPRep.CategoryList
objPPRep.Visible = True
objCatList.Add 1, "Products", "Outdoor Products"
objPPRep.Columns.Add objCatList
objCatList.Add 1, "Locations", "Far East"
objPPRep.Rows.Add objCatList
Set objCatList = Nothing
Set objPPRep = Nothing

End Sub

Related Topics

- "Methods" (p. 87)
- "Properties" (p. 283)

Child Object

Description

References a specific Child object in a collection.

Discussion

Use this object when you want to obtain the name of a child from the collection. The child object lets you isolate categories one level below another category along a drill-down path without the need to know the name of the child category.

You can also use the Item method from the Children collection to obtain the name of a Child object.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name Property</td>
<td>Sets or returns the name of the Child object.</td>
</tr>
</tbody>
</table>

Example

This example obtains the name of the child of the first category in the Rows collection, then displays its name.

Sub Main

Dim objPPRep As Object
Dim objFirstRow As Object
Dim strChild As String
Set objPPRep = GetObject(,"CognosPowerPlay.Report")
Set objFirstRow = objPPRep.Rows.Item(1)
strChild = objFirstRow.Children.Item(1).Name
MsgBox strChild & " is a child of the " & objFirstRow.Name & " category.", , "Child Object"
Column Object

Description
An object used to manipulate a column in a report.

Discussion
In order to use this object, first add categories to the report from the CategoryList object or open an existing report.

You can perform calculations, drill-up, drill-down, hide, rank and remove Column objects. You use an index to refer to the position of a Column object in the Columns collection.

Certain methods are only available in Reporter mode.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulation Method</td>
<td>Accumulates all the values of the categories in the Column object.</td>
</tr>
<tr>
<td>Activate Method</td>
<td>Sets the focus on the Column object.</td>
</tr>
<tr>
<td>Addition Method (Objects)</td>
<td>Adds a constant value or category to the Column object.</td>
</tr>
<tr>
<td>AddLowestLevelCategories Method (Reporter)</td>
<td>Adds the lowest-level categories to a report.</td>
</tr>
<tr>
<td>Average Method (Objects) (Reporter)</td>
<td>Determines the average between either a constant value or another category and the Column object.</td>
</tr>
<tr>
<td>CanDrillDown Method</td>
<td>Returns whether you can drill down the Column object.</td>
</tr>
<tr>
<td>CanDrillUp Method</td>
<td>Returns whether you can drill up the Column object.</td>
</tr>
<tr>
<td>Children Method</td>
<td>Returns the next child in the hierarchy for the Column object.</td>
</tr>
<tr>
<td>CumPercentOfBase Method</td>
<td>Adds a Cumulative Percent of Base Column object using a Row object as the base category.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Division Method</td>
<td>Divides the Column object by either a constant value or another category.</td>
</tr>
<tr>
<td>DrillDown Method</td>
<td>Drills down the Column object.</td>
</tr>
<tr>
<td>DrillUp Method</td>
<td>Drills up the Column object.</td>
</tr>
<tr>
<td>Exponentiation Method</td>
<td>Raises the Column object to the power of either another category or a constant value.</td>
</tr>
<tr>
<td>Hide Method</td>
<td>Hides the Column object.</td>
</tr>
<tr>
<td>Maximum Method (Objects) (Reporter)</td>
<td>Determines the maximum between the Column object and a constant value or another category.</td>
</tr>
<tr>
<td>Minimum Method (Objects) (Reporter)</td>
<td>Determines the minimum between the Column object and a constant value or another category.</td>
</tr>
<tr>
<td>Multiplication Method (Objects)</td>
<td>Multiplies a constant value or another category to the Column object.</td>
</tr>
<tr>
<td>Percent Method</td>
<td>Adds a percent Column object based on either another category or a constant value.</td>
</tr>
<tr>
<td>PercentGrowth Method</td>
<td>Calculates the percentage change between two categories or measures.</td>
</tr>
<tr>
<td>PercentOfBase Method</td>
<td>Adds a Percent of Base Column object using a Row object as the base category.</td>
</tr>
<tr>
<td>Rank2 Method</td>
<td>Ranks and sorts the Row objects based on the Column object.</td>
</tr>
<tr>
<td>Remove Method</td>
<td>Removes the Column object from the report.</td>
</tr>
<tr>
<td>Rollup Method</td>
<td>Groups categories containing calculated values to create a new, dynamic calculation.</td>
</tr>
<tr>
<td>Select Method</td>
<td>Selects the Column object.</td>
</tr>
<tr>
<td>SelectBlank Method</td>
<td>Selects a specific blank column.</td>
</tr>
</tbody>
</table>
### Name

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subtraction Method (Objects)</strong></td>
<td>Subtracts a constant value or another category from the Column object, or subtracts the Column object from the category or constant value.</td>
</tr>
<tr>
<td><strong>Unselect Method</strong></td>
<td>Unselects the Column object.</td>
</tr>
<tr>
<td><strong>UnselectBlank Method</strong></td>
<td>Unselects a specific blank column.</td>
</tr>
<tr>
<td><strong>Application Property</strong></td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td><strong>CellText Property</strong></td>
<td>Returns the text in a cell.</td>
</tr>
<tr>
<td><strong>CellValueAlignment Property</strong></td>
<td>Returns the alignment applied to a cell value in a report.</td>
</tr>
<tr>
<td><strong>CellValueFontColor Property</strong></td>
<td>Returns the font color applied to a cell value in a report.</td>
</tr>
<tr>
<td><strong>CellValueFontName Property</strong></td>
<td>Returns the name of the font applied to a cell value in a report.</td>
</tr>
<tr>
<td><strong>CellValueFontSize Property</strong></td>
<td>Returns the size of the font applied to a cell value in a report.</td>
</tr>
<tr>
<td><strong>Exception Property</strong></td>
<td>Sets or returns the exception for the Column object.</td>
</tr>
<tr>
<td><strong>Index Property</strong></td>
<td>Returns the position of the Column object in the Columns collection.</td>
</tr>
<tr>
<td><strong>IsAlternate Property</strong></td>
<td>Returns whether the drill-down path is primary or alternate.</td>
</tr>
<tr>
<td><strong>IsCalculatedCategory Property</strong></td>
<td>Returns whether the category is a calculated category.</td>
</tr>
<tr>
<td><strong>LabelAlignment Property</strong></td>
<td>Returns the alignment applied to a category label in a report.</td>
</tr>
<tr>
<td><strong>LabelFontColor Property</strong></td>
<td>Returns the font color applied to a category label in a report.</td>
</tr>
<tr>
<td><strong>LabelFontName Property</strong></td>
<td>Returns the name of the font applied to a category label in a report.</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LabelFontSize Property</td>
<td>Returns the size of the font applied to a category label in a report.</td>
</tr>
<tr>
<td>Level Property</td>
<td>Returns the level of the category in a dimension.</td>
</tr>
<tr>
<td>Name Property</td>
<td>Sets or returns the name of the Column object.</td>
</tr>
<tr>
<td>NestedName Property</td>
<td>Returns the nested name for a category.</td>
</tr>
<tr>
<td>ParentCategory Property</td>
<td>Returns the name of the parent category for the object.</td>
</tr>
<tr>
<td>Precedence Property</td>
<td>Sets or returns the precedence used in complex calculations.</td>
</tr>
<tr>
<td>Style Property</td>
<td>Sets or returns the style used for the Column object.</td>
</tr>
<tr>
<td>TopLevelParentCategory Property</td>
<td>Returns the name of the dimension for the object.</td>
</tr>
</tbody>
</table>

**Example**

This example opens a report, looks for the Column object "Tents" in the Columns collection, changes the name to "Old Tents", and saves the report.

```vbs
Sub Main()
    Dim objPPRep as Object
    Dim objPPCol as Object
    Set objPPRep = CreateObject ("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\sample1.ppr"
    Set objPPCol = objPPRep.Columns.Item("Tents")
    objPPCol.Name = "Old Tents"
    objPPRep.Save
    Set objPPCol = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "CategoryList Object" (p. 25)

**Dimension Object**

**Description**

An object containing a dimension in the DimensionLine object from a PowerCube.
Discussion

Use this object to change the default settings for dimensions in the DimensionLine object and to determine the properties of the dimension. Each Dimension object includes different levels of categories. You use the object to reference an item in a row, column or layer.

Special categories and alternate drill paths are also recognized by OLE automation. For example, a dimension "Years" may have the two regular categories "1995" and "1996", and three other categories named "Current Month", "QTD", and "Last Month" that represent special categories and alternate drill paths.

Performing a count on the "Years" Dimension

Msgbox Report.DimensionLine.Item("Years").Count

will return "5" because the regular categories and special categories are all visible to OLE automation.

It is possible to filter on a special category by naming it as

Report.DimensionLine.Item("Years").Change("Current Month")

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Method</td>
<td>Changes the current category for the Dimension object.</td>
</tr>
<tr>
<td>ChangeToParent Method</td>
<td>Changes the current category for the Dimension object to the category one level higher.</td>
</tr>
<tr>
<td>ChangeToTop Method</td>
<td>Changes the current category for the Dimension object to top-level category.</td>
</tr>
<tr>
<td>Children Method</td>
<td>Returns the next child category in the hierarchy for the current dimension.</td>
</tr>
<tr>
<td>HasParent Method</td>
<td>Returns whether the current category has a parent.</td>
</tr>
<tr>
<td>Levels Method</td>
<td>Returns all levels available in the dimension for a category.</td>
</tr>
<tr>
<td>Parent Method</td>
<td>Returns the name of the parent category.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>BlankWhenDividedByZero Property</td>
<td>Set or returns whether a numeric value divided by zero appears as zero or blanks.</td>
</tr>
<tr>
<td>BlankWhenMissing Property</td>
<td>Sets or returns whether missing numeric values appear as zero or blanks.</td>
</tr>
</tbody>
</table>
### Name | Description
--- | ---
**BlankWhenZero Property** | Sets or returns whether zero numeric values are shown as zeros or blanks.
**Count Property** | Returns the number of categories one level below the current category.
**Index Property** | Returns the position of the Dimension object in the DimensionLine object.
**IsAlternate Property** | Returns whether the drill-down path is primary or alternate.
**IsCalculatedCategory Property** | Returns whether the category is a calculated category.
**Level Property** | Returns the level of the category in a dimension.
**Measure Property** | Sets or returns the value and symbol for a specified currency.
**Name Property** | Sets or returns the name of the Dimension object.
**Visible Property** | Sets or returns whether the Dimension Line object is visible to the user.

### Example
This example changes two of the current categories (one from the Year dimension, the other from the Product dimension) for the DimensionLine object in the current report.

```vba
Sub Main()
    Dim objPPRep as Object
    Dim objPPDim1 as Object
    Dim objPPDim2 as Object
    Set objPPRep = GetObject("c:\cognos\change.ppr")
    Set objPPDim1 = objPPRep.DimensionLine.Item("Years")
    Set objPPDim2 = objPPRep.DimensionLine.Item("Products")
    objPPDim1.Change ("1996")
    objPPDim2.Change ("Outdoor Products")
    Set objPPDim2 = Nothing
    Set objPPDim1 = Nothing
    Set objPPRep = Nothing
End Sub
```

### Related Topics
- "DimensionLine Object" (p. 34)
**DimensionLine Object**

**Description**
Maintains a list of Dimension objects.

**Discussion**
The DimensionLine object includes the categories used to filter data from each dimension in the cube. The DimensionLine object contains Dimension objects.

You can automate changes to the appearance of the dimension line for a report. You can make the DimensionLine invisible to the user either when you open a report or after the report opens.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Method</td>
<td>Returns a Dimension object from the DimensionLine object.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>Count Property</td>
<td>Returns the number of Dimension objects in the DimensionLine object.</td>
</tr>
<tr>
<td>Visible Property</td>
<td>Sets or returns whether the DimensionLine object is visible to the user.</td>
</tr>
</tbody>
</table>

**Example**
This example changes two of the current categories for the DimensionLine object in the current report.

```vbnet
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = GetObject("C:\Cubes and Reports\Sample.ppr")
    objPPRep.DimensionLine.Item("Years").Change("1995")
    objPPRep.DimensionLine.Item("Products").Change("Go Sport Line")
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "Dimension Object" (p. 31)
Exception Object

Description
Defines a new exception for a report.

Discussion
This object is the basis for identifying exceptions within the report data. An exception enables you to highlight information in a report that meets a specified criteria. You must define a range to which the exception is applied and the style to apply to the exception. Use the UpperBoundary and LowerBoundary methods to determine the range to apply formatting when the information in the report meets the conditions set by the exception range. After you define an Exception object, it can be applied to categories.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ranges Method</strong></td>
<td>Returns one Range object or the entire collection.</td>
</tr>
<tr>
<td><strong>Remove Method</strong></td>
<td>Removes the Exception object from the Report object.</td>
</tr>
<tr>
<td><strong>SetDrivingCategory Method</strong></td>
<td>Sets the driving category for the Exception object.</td>
</tr>
<tr>
<td><strong>SetMacro Method</strong></td>
<td>Sets the name and style of the macro used in the Exception object.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Application Property</strong></td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td><strong>DrivingCategory Property</strong></td>
<td>Returns the driving category for the Exception object.</td>
</tr>
<tr>
<td><strong>DrivingDimension Property</strong></td>
<td>Returns the driving dimension for the Exception object.</td>
</tr>
<tr>
<td><strong>MacroName Property</strong></td>
<td>Sets or returns the name of the macro associated with an Exception object.</td>
</tr>
<tr>
<td><strong>MacroStyle Property</strong></td>
<td>Sets or returns the name of the style associated with the macro.</td>
</tr>
<tr>
<td><strong>Name Property</strong></td>
<td>Sets or returns the name of the Exception object.</td>
</tr>
</tbody>
</table>

Example
This example opens a report and displays the driving fields for the first Exception object.

Sub Main()
    Dim objPPRep as Object
Chapter 2: Objects

Set objPPRep = CreateObject("CognosPowerPlay.Report")
objPPRep.Open "C:\Cubes and Reports\Exception.ppr"
MsgBox "Driving Category:" & _
    objPPRep.Exceptions.Item(1).DrivingCategory
MsgBox "Driving Dimension:" & _
    objPPRep.Exceptions.Item(1).DrivingDimension
Set objPPRep = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)

FindQuery Object

Description
Searches categories for a particular string.

Discussion
Use this object to locate an individual category or all categories matching a specified SearchText string. When specifying a SearchText string in the subset definition, you can also specify advanced patterns using the Patterns property.

When you use FindQuery to search for data within a report, you can search for the category that matches your search criteria. If you use FindQuery to search for data within a cube, it creates a query that enables you to locate all categories that match your specified search criteria. You can then use these FindQuery results within an AdvancedQuery object.

A FindQuery search does not include hidden categories inside the report.

The Item index for the FindQuery object starts at 1.

For a FindQuery, the order and structure of the subset definition (the components of the FindQuery object) are
- Name
- Dimension
- SearchShortName
- SearchDescription
- SearchText
- Pattern
- Execute
- AddToReport
If you want to use FindQuery in combination with AdvancedQuery object, define the FindQuery first.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AddToReport Method</td>
<td>Adds query results to a report.</td>
</tr>
<tr>
<td>Execute Method</td>
<td>Runs the find operation on a cube.</td>
</tr>
<tr>
<td>Item Method</td>
<td>Returns the FindQuery object from the ReportQueries collection.</td>
</tr>
<tr>
<td>Remove Method</td>
<td>Removes the FindQuery object from the ReportQueries collection.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>Count Property</td>
<td>Returns a value giving the number of categories that satisfy the subset.</td>
</tr>
<tr>
<td>Dimension Property</td>
<td>Sets or returns the dimension from which categories are returned.</td>
</tr>
<tr>
<td>Name Property</td>
<td>Sets or returns the name of the subset.</td>
</tr>
<tr>
<td>Pattern Property</td>
<td>Sets search criteria for a subset definition.</td>
</tr>
<tr>
<td>SearchDescription Property</td>
<td>Sets or returns whether the FindQuery object searches the category descriptions in a cube.</td>
</tr>
<tr>
<td>SearchShortName Property</td>
<td>Sets or returns whether the FindQuery object searches short or long category names.</td>
</tr>
<tr>
<td>SearchText Property</td>
<td>Sets or returns the search string used in the subset definition of a FindQuery query.</td>
</tr>
<tr>
<td>Type Property</td>
<td>Returns a query object type.</td>
</tr>
</tbody>
</table>

**Example**

This example creates a FindQuery subset definition that searches for all products that begin with the name "Star".

```vba
Sub Main()
    Dim strCubePath As String
```
Dim objPPRep As Object
Dim objFind As Object
strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
Set objPPRep = CreateObject("CognosPowerPlay.Report")
objPPRep.New strCubePath, 1
objPPRep.ExplorerMode = False
objPPRep.Visible = True
Set objFind = objPPRep.ReportQueries.Add(1)
With objFind
  .Name = "Find Star"
  .Dimension = "Products"
  .SearchShortName = False
  .SearchText = "Star"
  .Pattern = 2
End With
Set objFind = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "AdvancedQuery Object" (p. 20)
- "ParentageQuery Object" (p. 45)
- "ReportQueries Method" (p. 231)
- "Reports" (p. 81)

Graph Object

Description
Enables the manipulation of displays in a IBM® Cognos® PowerPlay® report.

Discussion
Graphical objects communicate comparisons, relationships, and trends. When you have a large amount of data in a report, you can use a Graph object as a different means of representing the data. You can also use the Graph object attributes to present data more effectively, such as by using the swap methods to swap layers, rows and columns in the report. You can add and remove Graph objects and determine the type of display selected.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activate Method</td>
<td>Sets the focus on the Graph object.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Depth Method</strong></td>
<td>Returns whether the Graph object is three-dimensional (3D).</td>
</tr>
<tr>
<td><strong>Remove Method</strong></td>
<td>Removes the Graph object from the report.</td>
</tr>
<tr>
<td><strong>SetType Method</strong></td>
<td>Sets the Graph object type.</td>
</tr>
<tr>
<td><strong>Vertical Method</strong></td>
<td>Returns whether the Graph object is a vertical display.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Application Property</strong></td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td><strong>DataGridlines Property</strong></td>
<td>Sets or returns whether the gridline settings are on or off for a crosstab.</td>
</tr>
<tr>
<td><strong>EnableUserColumnSummaryLabel Property</strong></td>
<td>Sets or returns whether a user-defined label is used for</td>
</tr>
<tr>
<td></td>
<td>the innermost summary column in a nested crosstab.</td>
</tr>
<tr>
<td><strong>EnableUserRowSummaryLabel Property</strong></td>
<td>Sets or returns whether a user-defined label is used for</td>
</tr>
<tr>
<td></td>
<td>the innermost summary row in a nested crosstab.</td>
</tr>
<tr>
<td><strong>HideRankCategory Property</strong></td>
<td>Sets or returns whether the rank category is hidden.</td>
</tr>
<tr>
<td><strong>IndentTotalsLevel Property</strong></td>
<td>Sets or returns the current indent level for summary cells in a nested</td>
</tr>
<tr>
<td></td>
<td>crosstab.</td>
</tr>
<tr>
<td><strong>Index Property</strong></td>
<td>Returns the position of the Graph object in the Graphs collection.</td>
</tr>
<tr>
<td><strong>KeepSummaryVisible Property</strong></td>
<td>Sets or returns whether the summary category will remain visible on all</td>
</tr>
<tr>
<td></td>
<td>scrolled pages.</td>
</tr>
<tr>
<td><strong>LabelGridlines Property</strong></td>
<td>Sets or returns whether the gridlines are on or off for category labels in</td>
</tr>
<tr>
<td></td>
<td>a nested crosstab.</td>
</tr>
<tr>
<td><strong>Layout Property</strong></td>
<td>Sets or returns the current layout style in a nested crosstab.</td>
</tr>
<tr>
<td><strong>MaxPrintedBars Property</strong></td>
<td>Sets or returns the maximum number of bars on a single printed page.</td>
</tr>
</tbody>
</table>
### Chapter 2: Objects

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MaxVisibleBars Property</strong></td>
<td>Sets or returns the maximum number of bars visible on a single page of scrolled data.</td>
</tr>
<tr>
<td><strong>NamesShown Property</strong></td>
<td>Sets or returns whether category names appear beside pie chart slices.</td>
</tr>
<tr>
<td><strong>NestedCharts Property (Explorer)</strong></td>
<td>Sets or returns whether multiple charts that represent summarized data appear in one display.</td>
</tr>
<tr>
<td><strong>ShowSummaryBreakdown Property (Explorer)</strong></td>
<td>Sets or returns whether to show the breakdown of summary rows and columns in a crosstab.</td>
</tr>
<tr>
<td><strong>ShowSummaryColumn Property (Explorer)</strong></td>
<td>Sets or returns whether to show the summary column.</td>
</tr>
<tr>
<td><strong>ShowSummaryRow Property (Explorer)</strong></td>
<td>Sets or returns whether to show the summary row.</td>
</tr>
<tr>
<td><strong>ShowTies Property</strong></td>
<td>Sets or returns whether to show label ties.</td>
</tr>
<tr>
<td><strong>StatsLineCaption Property</strong></td>
<td>Sets or returns the caption for a given statistical line on a graph.</td>
</tr>
<tr>
<td><strong>StatsLineColor Property</strong></td>
<td>Sets or returns the color for a given statistical line on a graph.</td>
</tr>
<tr>
<td><strong>StatsLineOn Property</strong></td>
<td>Sets or returns a statistical line on a graph.</td>
</tr>
<tr>
<td><strong>StatsLineStyle Property</strong></td>
<td>Sets or returns the line style of a given statistical line on a graph.</td>
</tr>
<tr>
<td><strong>StatsLineUserValue Property</strong></td>
<td>Sets a custom value for a statistical line on a graph.</td>
</tr>
<tr>
<td><strong>Type Property</strong></td>
<td>Returns the Graph object type.</td>
</tr>
<tr>
<td><strong>UserColumnSummaryLabel Property</strong></td>
<td>Sets or returns the user-defined label for the innermost summary column in a nested crosstab.</td>
</tr>
<tr>
<td><strong>UserRowSummaryLabel Property</strong></td>
<td>Sets or returns the user-defined label for the innermost summary row in a nested-crosstab.</td>
</tr>
<tr>
<td><strong>UseScrolling Property</strong></td>
<td>Sets or returns whether scrolling is enabled.</td>
</tr>
<tr>
<td><strong>ValuesAutoFit Property</strong></td>
<td>Sets or returns whether value labels fit within graph bars and pie segments.</td>
</tr>
</tbody>
</table>

---

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### Names and Descriptions

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ValuesFontColor Property</strong></td>
<td>Sets or returns the font color used for the graph value labels.</td>
</tr>
<tr>
<td><strong>ValuesFontName Property</strong></td>
<td>Sets or returns the font name used for the value labels.</td>
</tr>
<tr>
<td><strong>ValuesFontSize Property</strong></td>
<td>Sets or returns the font size used for the graph value labels.</td>
</tr>
<tr>
<td><strong>ValuesFontStyle Property</strong></td>
<td>Sets or returns the font style used for the graph value labels.</td>
</tr>
<tr>
<td><strong>ValuesPosition Property</strong></td>
<td>Sets or returns the position of value labels on some graph types.</td>
</tr>
<tr>
<td><strong>ValuesShown Property</strong></td>
<td>Sets or returns whether value labels appear next to pie chart slices.</td>
</tr>
</tbody>
</table>

### Example

This example opens a report, and shows the display type for the first display in the report.

```vba
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Graph.ppr"
    MsgBox "The type of graph is" & _
        objPPRep.Graphs.Item(1).Type & "."
    Set objPPRep = Nothing
End Sub
```

### Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)

---

### Layer Object

**Description**

An object used to manipulate a layer in a report.

**Discussion**

The Layer object represents the third set of categories, along with columns and rows that you can add to a report. You can perform calculations, drill-up, drill-down, hide, rank and remove Layer objects. You use an index to refer to the position of a Layer object in the Layers collection.
To use this object, first add categories to the report from the CategoryList object or open an existing report.

Certain methods are only available in Reporter mode.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activate Method</td>
<td>Sets the focus on the Layer object.</td>
</tr>
<tr>
<td>Addition Method (Objects)</td>
<td>Adds a constant value or a category to the Layer object.</td>
</tr>
<tr>
<td>AddLowestLevelCategories Method (Reporter)</td>
<td>Adds the lowest-level categories to a report.</td>
</tr>
<tr>
<td>Average Method (Objects) (Reporter)</td>
<td>Determines the average between either a constant value or another category and the Layer object.</td>
</tr>
<tr>
<td>CanDrillDown Method</td>
<td>Returns whether you can drill down the Layer object.</td>
</tr>
<tr>
<td>CanDrillUp Method</td>
<td>Returns whether you can drill up the Layer object.</td>
</tr>
<tr>
<td>Children Method</td>
<td>Returns the next child in the hierarchy for the Layer object.</td>
</tr>
<tr>
<td>Division Method</td>
<td>Divides the Layer object by either a constant value or another category.</td>
</tr>
<tr>
<td>DrillDown Method</td>
<td>Drills down the Layer object.</td>
</tr>
<tr>
<td>DrillUp Method</td>
<td>Drills up the Layer object.</td>
</tr>
<tr>
<td>Exponentiation Method</td>
<td>Raises the Layer object to the power of either another category or a constant value.</td>
</tr>
<tr>
<td>Maximum Method (Objects) (Reporter)</td>
<td>Determines the maximum between the Layer object and a constant value or another category.</td>
</tr>
<tr>
<td>Minimum Method (Objects) (Reporter)</td>
<td>Determines the minimum between the Layer object and a constant value or another category.</td>
</tr>
<tr>
<td>Multiplication Method (Objects)</td>
<td>Multiplies a constant value or another category to the Layer object.</td>
</tr>
<tr>
<td>Percent Method</td>
<td>Adds a percent Layer object based on either another category or a constant value.</td>
</tr>
<tr>
<td>Remove Method</td>
<td>Removes the Layer object from the Report object.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Rollup Method</td>
<td>Groups categories containing calculated values to create a new, dynamic calculation.</td>
</tr>
<tr>
<td>Select Method</td>
<td>Selects the Layer object.</td>
</tr>
<tr>
<td>Subtraction Method (Objects)</td>
<td>Subtracts a constant value or another category from the Layer object and the reverse.</td>
</tr>
<tr>
<td>Unselect Method</td>
<td>Unselect the Layer object.</td>
</tr>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>Index Property</td>
<td>Returns the position of the Layer object in the Layers collection.</td>
</tr>
<tr>
<td>IsAlternate Property</td>
<td>Returns whether the drill-down path is primary or alternate.</td>
</tr>
<tr>
<td>IsCalculatedCategory Property</td>
<td>Returns whether the category is a calculated category.</td>
</tr>
<tr>
<td>LabelFontColor Property</td>
<td>Returns the font color applied to a category label in a report.</td>
</tr>
<tr>
<td>LabelFontName Property</td>
<td>Returns the name of the font applied to a category label in a report.</td>
</tr>
<tr>
<td>LabelFontSize Property</td>
<td>Returns the size of the font applied to a category label in a report.</td>
</tr>
<tr>
<td>Level Property</td>
<td>Returns the level of the category in a dimension.</td>
</tr>
<tr>
<td>NestedName Property</td>
<td>Returns the nested name for a category.</td>
</tr>
<tr>
<td>ParentCategory Property</td>
<td>Returns the name of the parent category for the object.</td>
</tr>
<tr>
<td>Precedence Property</td>
<td>Sets or returns the precedence used in complex calculations.</td>
</tr>
<tr>
<td>Style Property</td>
<td>Sets or returns the style used for the Layer object.</td>
</tr>
<tr>
<td>TopLevelParentCategory Property</td>
<td>Returns the name of the dimension for the object.</td>
</tr>
</tbody>
</table>
Example
This example gets an open report, removes the first and second layer, subtracts the new second layer from the new first layer, and performs maximum calculation on all the layers.

Sub Main()
    Dim objPPRep As Object
    Set objPPRep = GetObject("C:\Cubes and Reports\Sample.ppr"
)
    objPPRep.Visible = 1
    objPPRep.ExplorerMode = 0
    objPPRep.Layers.Subset(1,2).Remove
    objPPRep.Layers.Subset(1,2).Subtraction
    objPPRep.Layers.Maximum
    objPPRep.Save
    Set objPPRep = Nothing
End Sub

Related Topics
- "CategoryList Object" (p. 25)

Level Object

Description
An object used to return a level in a report.

Discussion
A level is an object containing common or default attributes for all of its member categories. Drilling down on a dimension drills down on categories from one level to another. Data in each Dimension object is organized into a series of Level objects. Each dimension may contain one or more levels of data. Use the Item method to access a Level object in the Levels collection.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>Name Property</td>
<td>Returns the name of the Level object.</td>
</tr>
</tbody>
</table>

Example
This example uses the Item method from the Levels collection to access a Level object for a dimension.

Sub Main
    Dim objPPRep As Object
    Dim objDimension As Object
    Dim objLevel As Object
    Dim intx As Integer

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Dim strLevelList As String
Set objPPRep = GetObject(,"CognosPowerPlay.Report")
Set objDimension = objPPRep.DimensionLine.Item(1)
For intx = 1 to objDimension.Levels.Count
    Set objLevel = objDimension.Levels.Item(intx)
    strLevelList = strLevelList & chr$(10) &
    objLevel.Name
    Set objLevel = Nothing
Next intx
MsgBox "The levels in the " & objDimension.Name
    & " dimension are:" & chr$(10) & strLevelList
Set objDimension = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)

**ParentageQuery Object**

**Description**
Performs a query based on levels within a report.

**Discussion**
Use this object to query a report based on the level specified in the subset definition.

There are several variations of the ReportQuery object: AdvancedQuery, FindQuery, and ParentageQuery objects. A subset is the result of a query. It is a group of selected categories added to a Report object. For the ParentageQuery object, a subset is all the categories for a specified level.

The Item index for the ParentageQuery object starts at 1.

For a ParentageQuery, the order and structure of the subset definition (the components of the ParentageQuery object) are

- Name
- Category
- LevelsDown
- LowestLevel
- Execute
- AddToReport
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<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AddToReport Method</td>
<td>Adds query results to a report.</td>
</tr>
<tr>
<td>Category Method</td>
<td>Sets the parent category or dimension for the Parentage-Query subset definition.</td>
</tr>
<tr>
<td>Execute Method</td>
<td>Runs a parentage query on a cube.</td>
</tr>
<tr>
<td>Item Method</td>
<td>Returns the ParentageQuery object from the Report-Queries collection.</td>
</tr>
<tr>
<td>Remove Method</td>
<td>Removes the ParentageQuery object from the Report-Queries collection.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>Count Property</td>
<td>Returns a value giving the number of categories that satisfy the subset.</td>
</tr>
<tr>
<td>LevelsDown Property</td>
<td>Sets the number of levels down the hierarchy for specifying the next level Parentage subsets.</td>
</tr>
<tr>
<td>LowestLevel Property</td>
<td>Sets whether the query uses the next lower level or lowest level of the parent category.</td>
</tr>
<tr>
<td>Name Property</td>
<td>Sets or returns the name of the subset.</td>
</tr>
<tr>
<td>Type Property</td>
<td>Returns a query object type.</td>
</tr>
</tbody>
</table>

Example

This example creates a ParentageQuery (type 2) subset definition that returns all categories one level below Channels. Then the categories that are one level below Channels are added to the report as the first nesting level of rows.

```vbs
Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objCategory As Object
    Dim objParent As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
```
objPPRep.Visible = True
Set objParent = objPPRep.ReportQueries.Add(2)
With objParent
    .Name = "Sales Channels"
    .Category "Channels"
    .LowestLevel = False
    .LevelsDown = 1
    .Execute
    .AddToReport 0,1,6
End With
Msgbox "The first category added was " & _
    objParent.Item(1).Name & "," , "Subset"
Set objParent = Nothing
Set objPPRep = Nothing
End Sub

Related Topics

- "AdvancedQuery Object" (p. 20)
- "FindQuery Object" (p. 36)
- "Report Object" (p. 51)
- "ReportQueries" (p. 80)
- "ReportQueries Method" (p. 231)

Print Object

Description
An object used to manipulate the printing parameters of a IBM® Cognos® PowerPlay® report and initiate a print job.

Discussion
This object is the basis for determining how a report prints. Through automation, you can set printing options such as

- which layers to print
- which rows to print
- which selected displays to print when showing more than one display
- which parts of the display to print
- the page layout view
- colors as patterns
- which pages to print
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- the maximum number of pages to print
- the number of copies to print

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PrintOut Method</td>
<td>Prints the Report object.</td>
</tr>
<tr>
<td>ResetPrintOptionsToDefault Method</td>
<td>Resets print options back to the default settings.</td>
</tr>
<tr>
<td>SetChartToPrint Method</td>
<td>Specifies which Graph object of a report to print.</td>
</tr>
<tr>
<td>SetListOfLayersToPrint Method</td>
<td>Specifies the range of layers of the report to print.</td>
</tr>
<tr>
<td>SetListOfRowsToPrint Method</td>
<td>Specifies the range of rows of the report to print.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>AxisOnAllPages Property</td>
<td>Sets or returns whether the axis and labels appear on every page of the printed report.</td>
</tr>
<tr>
<td>ChartTitleOnAllPages Property</td>
<td>Sets or returns whether titles appear on every page of the printed report.</td>
</tr>
<tr>
<td>Collate Property</td>
<td>Sets or returns whether the Report object collates during printing.</td>
</tr>
<tr>
<td>Copies Property</td>
<td>Sets or returns the number of copies to print.</td>
</tr>
<tr>
<td>FitToPage Property</td>
<td>Sets or returns whether the report is scaled to fit on one page.</td>
</tr>
<tr>
<td>IncludeLegend Property</td>
<td>Sets or returns whether the legend prints with the report.</td>
</tr>
<tr>
<td>PrintAllCharts Property</td>
<td>Sets or returns whether all displays print on the same page.</td>
</tr>
<tr>
<td>PrintColorsAsPatterns Property</td>
<td>Sets or returns whether colors print as patterns or as colors.</td>
</tr>
<tr>
<td>PrintEntireReport Property</td>
<td>Sets or returns whether to print the entire report, including all displays, layers, and rows.</td>
</tr>
</tbody>
</table>
### PrintPageLayout Property
Sets or returns whether to print all displays visible in the page layout or page width view on the same page.

### PrintSelectedDisplay Property
Sets or returns whether to print the selected or currently active Graph object.

### SummaryColumnOnAllPages Property
Sets or returns whether to show the summary column category on every page of a printed report.

### SummaryRowOnAllPages Property
Sets or returns whether to show the summary row category on every page of a printed report.

#### Example
This example opens a report and prints one copy of all the data for the first graphical display only.

```vbscript
Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppr"
    Set objRepPrt = objPPRep.Print
    objRepPrt.PrintAllCharts = False
    objRepPrt.SetListOfRowsToPrint objPPrep.Rows
    objRepPrt.SetListOfLayersToPrint objPPRep.Layers
    objRepPrt.SetChartToPrint objPPRep.Graphs.Item(1)
    objRepPrt.IncludeLegend = False
    objRepPrt.ChartTitleOnAllPages = True
    objRepPrt.SummariesOnAllPages = True
    objRepPrt.AxisOnAllPages = True
    objRepPrt.Collate = True
    objRepPrt.PrintOut
    Set objRepPrt = Nothing
    Set objPPrep = Nothing
End Sub
```

#### Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)
Range Object

Description
An object used to specify the numerical ranges for exceptions in IBM® Cognos® PowerPlay® reports.

Discussion
You can set lowest and highest values for use with Exception objects. The values in this object determine whether a cell value has failed an exception.

You can group the Range objects in an Exception object into a Ranges collection. Use a Ranges collection to operate on the entire group of Range objects at once rather than one at a time.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove Method</td>
<td>Removes the Range object from the Exception object.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>Index Property</td>
<td>Returns the position of the Range object in the Ranges collection.</td>
</tr>
<tr>
<td>LowerBoundary Property</td>
<td>Sets or returns the value defined for the lower boundary of the Range object.</td>
</tr>
<tr>
<td>Style Property</td>
<td>Sets or returns the name of the style defined for the Range object.</td>
</tr>
<tr>
<td>UpperBoundary Property</td>
<td>Sets or returns the value defined for the upper boundary of the Range object.</td>
</tr>
</tbody>
</table>

Example
This example shows how to return a Range object and returns the value defined for the lower boundary of the range in an Exception object.

Sub Main
    Dim objPPRep As Object
    Dim objPPRange As Object
    Set objPPRep = GetObject("C:\Cubes and Reports\Exception.ppr")
    objPPRep.Visible = 1
    Set objPPRange = objPPRep.Exceptions.item(1).Ranges.Item(1)
    MsgBox "Lower boundary is " & objPPRange.LowerBoundary
    Set objPPRange = Nothing
    Set objPPRep = Nothing
End Sub
Report Object

Description
An object that contains data from one or more cubes.

Syntax A
GetObject(pathname)

Syntax B
GetObject( , class )

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PathName</td>
<td>Required. Specifies the path and file name for the object to retrieve. Type: String</td>
</tr>
<tr>
<td>Class</td>
<td>Required. Specifies a string containing the class of the object, &quot;CognosPowerPlay.Report&quot;. Type: String</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activate Method</td>
<td>Sets the focus on the Report object.</td>
</tr>
<tr>
<td>AddBlanks Method (Reporter)</td>
<td>Adds a single blank row or column to a nested crosstab.</td>
</tr>
<tr>
<td>CategoryList Method</td>
<td>Creates a CategoryList object used to identify categories to be inserted in the Report object.</td>
</tr>
<tr>
<td>CellValue Method</td>
<td>Gets the value of a cell in a Report object.</td>
</tr>
<tr>
<td>Close Method</td>
<td>Closes the Report object.</td>
</tr>
<tr>
<td>Columns Method</td>
<td>Returns a collection that contains all the Column objects.</td>
</tr>
<tr>
<td>Copy Method</td>
<td>Copies the Row, Column, or Layer objects currently selected in the Report object to the Clipboard.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Cut Method (Reporter)</td>
<td>Moves the Row, Column, or Layer object currently selected in the Report object to the Clipboard.</td>
</tr>
<tr>
<td>DeleteSelected Method</td>
<td>Deletes selected objects in a collection.</td>
</tr>
<tr>
<td>DimensionLine Method</td>
<td>Returns a DimensionLine object for the current Report object.</td>
</tr>
<tr>
<td>Exceptions Method</td>
<td>Returns one Exception object or the entire collection.</td>
</tr>
<tr>
<td>FindNext Method</td>
<td>Finds the next matching category label in a report.</td>
</tr>
<tr>
<td>FindPrevious Method</td>
<td>Finds the previous matching category label in a report.</td>
</tr>
<tr>
<td>Forecast Method (Explorer)</td>
<td>Creates a specified number of forecast categories based on the existing time dimensions.</td>
</tr>
<tr>
<td>GetDataNow Method</td>
<td>Updates the data in the Report object.</td>
</tr>
<tr>
<td>Graphs Method</td>
<td>Returns one Graph object or the entire collection.</td>
</tr>
<tr>
<td>HideSelected Method</td>
<td>Hides selected objects in a collection.</td>
</tr>
<tr>
<td>HideUnselected Method</td>
<td>Hides any object in a collection that is not selected.</td>
</tr>
<tr>
<td>Layers Method</td>
<td>Returns one Layer object or the entire collection.</td>
</tr>
<tr>
<td>Maximize Method</td>
<td>Maximizes the Report object window.</td>
</tr>
<tr>
<td>Minimize Method</td>
<td>Minimizes the Report object window.</td>
</tr>
<tr>
<td>Paste Method (Reporter)</td>
<td>Pastes the contents of the Clipboard into the selected categories of the Report object.</td>
</tr>
<tr>
<td>PDFFile Method</td>
<td>Sets the file name of the PDF object when it is saved.</td>
</tr>
<tr>
<td>Print Method</td>
<td>Returns a Print object.</td>
</tr>
<tr>
<td>PublishToPortal Method</td>
<td>Creates a report in the IBM® Cognos® BI content store. Users access the report using IBM Cognos Connection.</td>
</tr>
<tr>
<td>ReportQueries Method</td>
<td>Returns a ReportQueries collection.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Restore Method</strong></td>
<td>Restores the Report object window to its original size and position.</td>
</tr>
<tr>
<td><strong>Rows Method</strong></td>
<td>Returns one Row object or the entire collection.</td>
</tr>
<tr>
<td><strong>Save Method</strong></td>
<td>Saves one or all Report objects.</td>
</tr>
<tr>
<td><strong>Select Method</strong></td>
<td>Selects all the categories in the Report object.</td>
</tr>
<tr>
<td><strong>SizeSelected Method</strong></td>
<td>Applies a size to selected objects.</td>
</tr>
<tr>
<td><strong>StyleSelected Method</strong></td>
<td>Applies a style to the selected object.</td>
</tr>
<tr>
<td><strong>SwapColumnsAndLayers Method</strong></td>
<td>Exchanges the positions of the Column objects and Layer objects.</td>
</tr>
<tr>
<td><strong>SwapRowsAndColumns Method</strong></td>
<td>Exchanges the positions of the Row objects and Column objects.</td>
</tr>
<tr>
<td><strong>SwapRowsAndLayers Method</strong></td>
<td>Exchanges the positions of the Row objects and Layer objects.</td>
</tr>
<tr>
<td><strong>UnhideAllCategories Method</strong></td>
<td>Makes all hidden categories visible.</td>
</tr>
<tr>
<td><strong>Unselect Method</strong></td>
<td>De-selects all the categories in the Report object.</td>
</tr>
<tr>
<td><strong>UpdatePublishedReport Method</strong></td>
<td>Updates a report previously published to the IBM Cognos BI content store.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Application Property</strong></td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td><strong>AutomaticExceptions Property</strong></td>
<td>Sets or returns whether automatic highlighting of exceptions is on or off.</td>
</tr>
<tr>
<td><strong>AutomaticExceptionSensitivity Property</strong></td>
<td>Sets or returns the exceptional highlighting sensitivity.</td>
</tr>
<tr>
<td><strong>CalculatedCategories Property</strong></td>
<td>Sets or returns whether calculated categories are on or off, or whether a</td>
</tr>
<tr>
<td></td>
<td>PowerCube contains calculated categories.</td>
</tr>
<tr>
<td><strong>CubeName Property</strong></td>
<td>Returns the file name of the cube for the active report.</td>
</tr>
</tbody>
</table>
### Name | Description
--- | ---
**ExplorerMode Property** | Sets or returns whether the Report object is an Explorer or Reporter report.

**FooterText Property** | Sets or returns the text in the footer of a report.

**FullName Property** | Returns the full name, including the location, of the Report object.

**GetDataAutomatically Property** | Sets or returns whether the Report object retrieves data automatically each time it is modified.

**HeaderText Property** | Sets or returns the text in the header of a report.

**Index Property** | Returns the position of the Report object in the Reports collection.

**Name Property** | Returns the name of the Report object.

**Path Property** | Returns the path of the Report object.

**Saved Property** | Returns whether the Report object has been saved.

**ShareDimensionLine Property** | Sets or returns whether open reports share a dimension line.

**ShowValuesAs Property (Explorer)** | Sets or returns how to show values in a report.

**Suppress8020 Property (Explorer)** | Sets or returns the 80/20 suppress mode for report dimensions.

**SuppressZeros Property** | Sets or returns the suppress mode for the Report object.

**TitleText Property** | Sets or returns the text in the title of a report.

**Visible Property** | Sets or returns whether the Report object is visible to the user.

### Discussion
This object is the basis for building and managing a report. Use this object to set and operate on the attributes of a report. Each Report object is a separate PowerPlay report.

Use the GetObject function when there is a current instance of the Report object or if you want to create the object with a file already loaded. If there is no current instance and you do not want the object started with a file loaded, use the CreateObject function.
Use only the following syntax to retrieve an existing PowerPlay report with the GetObject function. Using other syntax will cause an error.

**Example**

This example opens an IBM® Cognos® PowerPlay report and sets a number of properties.

```vba
Sub Main()
    Dim objPPRep As Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open("C:\Cubes and Reports\Sample1.ppr")
    objPPRep.ExplorerMode = True
    objPPRep.Visible = True
    objPPRep.ShowValuesAs = 2
    objPPRep.ShareDimensionLine = 1
    objPPRep.Suppress8020 = 3
    objPPRep.SuppressZeros = 3
    objPPRep.CalculatedCategories = True
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Methods" (p. 87)
- "Properties" (p. 283)

**Row Object**

**Description**

An object used to manipulate a row in a report.

**Discussion**

A Row object is a category that shows related information in a horizontal list. To use this object, first add categories to the report from the CategoryList object or open an existing report.

You can perform calculations, drill-up, drill-down, hide, rank and remove Row objects. You use an index to refer to the position of a Row object in the Rows collection.

Certain methods are only available in Reporter mode.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulation Method</td>
<td>Accumulates all the values of the categories in the Row object.</td>
</tr>
<tr>
<td>Activate Method</td>
<td>Sets the focus on the Row object.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Addition Method (Objects)</td>
<td>Adds a constant value or a category to the Row object.</td>
</tr>
<tr>
<td>AddLowestLevelCategories Method (Reporter)</td>
<td>Adds the lowest-level categories to a report.</td>
</tr>
<tr>
<td>Average Method (Objects) (Reporter)</td>
<td>Determines the average between either a constant value or another category and the Row object.</td>
</tr>
<tr>
<td>CanDrillDown Method</td>
<td>Returns whether you can drill down the Row object.</td>
</tr>
<tr>
<td>CanDrillUp Method</td>
<td>Returns whether you can drill up the Row object.</td>
</tr>
<tr>
<td>Children Method</td>
<td>Returns the next child in the hierarchy for the Row object.</td>
</tr>
<tr>
<td>CumPercentOfBase Method</td>
<td>Adds a Cumulative Percent of Base Row object using a Column object as the base category.</td>
</tr>
<tr>
<td>Division Method</td>
<td>Divides the Row object by either a constant value or another category.</td>
</tr>
<tr>
<td>DrillDown Method</td>
<td>Drills down the Row object.</td>
</tr>
<tr>
<td>DrillUp Method</td>
<td>Drills up the Row object.</td>
</tr>
<tr>
<td>Exponentiation Method</td>
<td>Raises the Row object to the power of either another category or a constant value.</td>
</tr>
<tr>
<td>Hide Method</td>
<td>Hides the Row object.</td>
</tr>
<tr>
<td>Maximum Method (Objects) (Reporter)</td>
<td>Determines the maximum between either a constant value or another category and the Row object.</td>
</tr>
<tr>
<td>Minimum Method (Objects) (Reporter)</td>
<td>Determines the minimum between either a constant value or another category and the Row object.</td>
</tr>
<tr>
<td>Multiplication Method (Objects)</td>
<td>Multiplies a constant value or another category by the Row object.</td>
</tr>
<tr>
<td>Percent Method</td>
<td>Adds a percent Row object based on either another category or a constant value.</td>
</tr>
<tr>
<td>PercentGrowth Method</td>
<td>Calculates the percentage change between two categories or measures.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>PercentOfBase Method</strong></td>
<td>Adds a Percent of Base Row object using a Column object as the base category.</td>
</tr>
<tr>
<td><strong>Rank2 Method</strong></td>
<td>Ranks and sorts the Column objects based on the Row object.</td>
</tr>
<tr>
<td><strong>Remove Method</strong></td>
<td>Removes the Row object from the report.</td>
</tr>
<tr>
<td><strong>Rollup Method</strong></td>
<td>Groups categories containing calculated values to create a new, dynamic calculation.</td>
</tr>
<tr>
<td><strong>Select Method</strong></td>
<td>Selects the Row object.</td>
</tr>
<tr>
<td><strong>SelectBlank Method</strong></td>
<td>Selects a specific blank row.</td>
</tr>
<tr>
<td><strong>Subtraction Method (Objects)</strong></td>
<td>Subtracts a constant value or another category from the Row object, or subtracts the Row object from the category or constant value.</td>
</tr>
<tr>
<td><strong>Unselect Method</strong></td>
<td>De-selects the Row object.</td>
</tr>
<tr>
<td><strong>UnselectBlank Method</strong></td>
<td>Unselects a specific blank row.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Application Property</strong></td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td><strong>CellText Property</strong></td>
<td>Returns the text in a cell.</td>
</tr>
<tr>
<td><strong>CellValueAlignment Property</strong></td>
<td>Returns the alignment applied to a cell value in a report.</td>
</tr>
<tr>
<td><strong>CellValueFontColor Property</strong></td>
<td>Returns the font color applied to a cell value in a report.</td>
</tr>
<tr>
<td><strong>CellValueFontName Property</strong></td>
<td>Returns the name of the font applied to a cell value in a report.</td>
</tr>
<tr>
<td><strong>CellValueFontSize Property</strong></td>
<td>Returns the size of the font applied to a cell value in a report.</td>
</tr>
<tr>
<td><strong>Exception Property</strong></td>
<td>Sets or returns the exception for the Row object.</td>
</tr>
<tr>
<td><strong>Index Property</strong></td>
<td>Returns the position of the Row object in the Rows collection.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>IsAlternate Property</td>
<td>Returns whether the drill-down path is primary or alternate.</td>
</tr>
<tr>
<td>IsCalculatedCategory Property</td>
<td>Returns whether the category is a calculated category.</td>
</tr>
<tr>
<td>LabelAlignment Property</td>
<td>Returns the alignment applied to a category label in a report.</td>
</tr>
<tr>
<td>LabelFontColor Property</td>
<td>Returns the font color applied to a category label in a report.</td>
</tr>
<tr>
<td>LabelFontName Property</td>
<td>Returns the name of the font applied to a category label in a report.</td>
</tr>
<tr>
<td>LabelFontSize Property</td>
<td>Returns the size of the font applied to a category label in a report.</td>
</tr>
<tr>
<td>Level Property</td>
<td>Returns the level of the category in a dimension.</td>
</tr>
<tr>
<td>Name Property</td>
<td>Sets or returns the name of the Row object.</td>
</tr>
<tr>
<td>NestedName Property</td>
<td>Returns the nested name for a category.</td>
</tr>
<tr>
<td>ParentCategory Property</td>
<td>Returns the name of the parent category for the object.</td>
</tr>
<tr>
<td>Precedence Property</td>
<td>Sets or returns the precedence used in complex calculations.</td>
</tr>
<tr>
<td>Style Property</td>
<td>Sets or returns the style used for the Row object.</td>
</tr>
<tr>
<td>TopLevelParentCategory Property</td>
<td>Returns the name of the dimension for the object.</td>
</tr>
</tbody>
</table>

**Example**

This example opens a report, looks for the Column object "1996" in the Columns collection, changes the name to "Last Year", and saves the report.

```vba
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject ("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppr"
    objPPRep.Rows.Item("1996").Name = "Last Year"
    objPPRep.Save
    Set objPPRep = Nothing
End Sub
```
SaveAsPDF Object

Description
Saves a report as a PDF or portable document format file (.pdf).

Discussion
This object is the foundation for saving a report in PDF format. Use this object to set and operate on the attributes of a report. A PDF is useful for distributing standard reports using Adobe® Reader and provides quality multipage output. PDFs are compact, portable, and platform-independent so you can capture the original look and feel of a document (including all fonts, images, graphics, and formatting).

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Save Method</td>
<td>Saves the report as a PDF.</td>
</tr>
<tr>
<td>SetChartToSave Method</td>
<td>Specifies which Graph object to save in a PDF.</td>
</tr>
<tr>
<td>SetListOfLayersToSave Method</td>
<td>Specifies the range of layers to save in a PDF.</td>
</tr>
<tr>
<td>SetListOfRowsToSave Method</td>
<td>Specifies the range of rows to save in a PDF.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>AxisOnAllPages Property</td>
<td>Sets or returns whether the axis and labels appear on every page of the printed report or PDF.</td>
</tr>
<tr>
<td>ChartTitleOnAllPages Property</td>
<td>Sets or returns whether the display titles appear on every page of the PDF.</td>
</tr>
<tr>
<td>IncludeLegend Property</td>
<td>Sets or returns whether the legend appears in a PDF.</td>
</tr>
<tr>
<td>SaveAllCharts Property</td>
<td>Sets or returns whether all Graph objects in a report are saved in portable document format (.pdf).</td>
</tr>
<tr>
<td>SaveEntireReport Property</td>
<td>Sets or returns whether to save the entire report as a PDF.</td>
</tr>
</tbody>
</table>
### Name Description

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SummariesOnAllPages Property</td>
<td>Sets or returns whether to show the summary column category on every page of a PDF.</td>
</tr>
<tr>
<td>SummaryRowOnAllPages Property</td>
<td>Sets or returns whether to show the summary row category on every page of a PDF.</td>
</tr>
</tbody>
</table>

**Example**

This example opens a report, sets options for saving the report, and then saves the report as a PDF.

```vbs
Sub Main()
    Dim objPDF as Object
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open( "c:\Cognos\sample.ppr" )
    objPPRep.visible( TRUE )
    Set objPDF = objPPRep.PDFFile( "c:\Cognos\PDFSample" , True )
    With objPDF
        .SaveEntireReport = False
        .AxisOnAllPages = True
        .ChartTitleOnAllPages = False
        .IncludeLegend = True
        .SetChartToSave objPPRep.Graphs.Item(1)
        .SetListOfLayersToSave objPPRep.Layers
        .SetListOfRowsToSave objPPRep.Rows
    End With
    objPDF.Save
    Set objPPRep = Nothing
    Set objPDF = Nothing
End Sub
```

**ValueRestriction Object**

**Description**

Applies restrictions to AdvancedQuery results based on values that exceed or fall below a specified number or values that belong to a specified range.

**Discussion**

Use this object to limit the number of categories for the results of an AdvancedQuery.

A ValueRestriction object must be defined before it can be used by the AdvancedQuery object. You can only use a ValueRestriction with an AdvancedQuery object. Once you define a ValueRestriction
and use it with an AdvancedQuery object, running the advanced query will apply the ValueRestriction to the query results.

When an AdvancedQuery object that has more than one level uses a ValueRestriction query, the value restriction only applies to the lowest level.

For a ValueRestriction, the order of the components is important. The Dimension property must be set before the Measure, Operator, Operand1, Operand2, and Count properties and the DimensionFilter method. The Name property can be set anywhere within the filter definition.

If you use values from a measure based on a percentage, you must use the decimal format when entering a value. For example, if you restrict an AdvancedQuery to profit margin values greater than 20 percent, use .20.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DescriptionName</td>
<td>Sets the filter category for an indexed dimension.</td>
</tr>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>Count Property</td>
<td>Sets or returns the number of categories the ValueRestriction results should contain when the operator is either &quot;Smallest&quot; or &quot;Largest&quot;.</td>
</tr>
<tr>
<td>Dimension Property</td>
<td>Sets or returns the dimension from which categories are returned.</td>
</tr>
<tr>
<td>DimensionSettings Property</td>
<td>Returns a comma-separated string of all the dimension line settings for the ValueRestriction.</td>
</tr>
<tr>
<td>Measure Property</td>
<td>Sets or returns the name of measure whose values are used for a value restriction.</td>
</tr>
<tr>
<td>Name Property</td>
<td>Sets or returns the name of the ValueRestriction object.</td>
</tr>
<tr>
<td>Operand1 Property</td>
<td>Sets or returns the value used to compare report cell values based on a specified operator.</td>
</tr>
<tr>
<td>Operand2 Property</td>
<td>Sets or returns the second value when the Between operator is used to specify a range.</td>
</tr>
<tr>
<td>Operator Property</td>
<td>Sets or returns the operator used for a value restriction.</td>
</tr>
</tbody>
</table>
Example
This example creates an advanced subset that selects countries from the Locations dimension. The value restriction (type 4) limits the results to return only those countries whose Revenue values for Sports Chains are between 25,000 and 100,000.

```
Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objValue As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objValue = objPPRep.ReportQueries.Add(4)
    With objValue
        .Name = "25000-100000"
        .Dimension = "Locations"
        .Measure = "Revenue"
        .Operator = "between"
        .Operand1 = 25000
        .Operand2 = 100000
        .DimensionFilter 4, "Sports Chain"
    End With
    Set objAdvanced = objPPRep.ReportQueries.Add(3)
    With objAdvanced
        .Name = "Locations"
        .Dimension = "Locations"
        .Level "Country"
        .ValueRestriction objValue.Name
        .Execute
        .AddToReport 0,1,3
    End With
    Set objPPRep = Nothing
    Set objAdvanced = Nothing
    Set objValue = Nothing
End Sub
```

Related Topics
- "AdvancedQuery Object" (p. 20)
- "ParentageQuery Object" (p. 45)
- "ReportQueries Method" (p. 231)
- "Reports" (p. 81)
**PowerPlay Query Objects**

The following diagram shows the query object relationships.

```
Report Object -> Reports Collection
               |        |
               |        |
               |        |
               ReportQueries Collection
               |
               |        |
               AdvancedQuery Object
               |
               FindQuery Object
               |
               ParentageQuery Object
               |
               ValueRestriction Object
```

**PowerPlay Objects**

The following diagram shows the report object relationships.

```
Application

Report

Row
- Rows
- Column
- Columns
- Layer
- Layers

ReportQueries
- AdvancedQuery
- FindQuery
- ParentageQuery
- ValueRestriction

CategoryList
- Print

Exception
- Child
- Exceptions
- Range
- Ranges

Reports
```
Chapter 3: Collections

You work with the following collections for IBM® Cognos® PowerPlay® OLE automation.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td>Maintains a list of child objects.</td>
</tr>
<tr>
<td>Columns</td>
<td>Maintains a list of Column objects in a report.</td>
</tr>
<tr>
<td>Exceptions</td>
<td>Maintains a list of Exception objects in a report.</td>
</tr>
<tr>
<td>Graphs</td>
<td>Maintains a list of Graph objects in a Report object.</td>
</tr>
<tr>
<td>Layers</td>
<td>Maintains a list of Layer objects in a report.</td>
</tr>
<tr>
<td>Levels</td>
<td>Maintains a list of Level objects in a report.</td>
</tr>
<tr>
<td>Ranges</td>
<td>Maintains a list of Range objects in a report.</td>
</tr>
<tr>
<td>ReportQueries</td>
<td>Maintains a list of query objects in a report.</td>
</tr>
<tr>
<td>Reports</td>
<td>Maintains a list of Report objects.</td>
</tr>
<tr>
<td>Rows</td>
<td>Maintains a list of Row objects in a report.</td>
</tr>
</tbody>
</table>

Related topics
- "Objects" (p. 19)
- "Properties" (p. 283)
- "Methods" (p. 87)

Children

Description
Maintains a list of child objects.

Discussion
Use this collection to access a specific child object in the hierarchy and to determine how many child objects are at a specific level within the hierarchy. For example, you can use this method to obtain the names of the children of the first category in the Columns collection. This collection applies to Columns, Dimensions, Layers, and Rows.
Calculated Categories cannot have children, while alternate categories can.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item Method</strong></td>
<td>Returns a child object from the Children collection.</td>
</tr>
<tr>
<td><strong>Count Property</strong></td>
<td>Returns the number of Child objects in the collection.</td>
</tr>
</tbody>
</table>

**Example**

These examples obtain the name of the children of the first category in the Columns, Dimensions, Layers, and Rows collections, then return the number of items and names of the children in each of the respective collections.

**Column**

Sub Main()

    Dim objPPRep As Object
    Dim objChildrenCols As Object
    Dim strColChild As String
    Dim strColChildren As String
    Dim intx As Integer
    Set objPPRep = GetObject(,"PowerPlay.Report")
    Set objChildrenCols = objPPRep.Columns.Item(1).Children
    For intx = 1 to objChildrenCols.Count
        strColChild = objChildrenCols.Item(intx).Name
        strColChildren = strColChildren & chr$(10) & _
            strColChild
    Next intx
    MsgBox "The " & objPPRep.Columns.Item(1).Name & _
        " category has " & objChildrenCols.Count & _
        " children." & chr$(10) & chr$(10) & _
        "They are: " & chr$(10) & strColChildren, , "Column Children"
    Set objChildrenCols = Nothing
    Set objPPRep = Nothing
End Sub

**Dimension**

Sub Main()

    Dim objPPRep As Object
    Dim objDimension As Object
    Dim strName As String
Dim intx as Integer
Set objPPRep = GetObject(,"CognosPowerPlay.Report")
Set objDimension = objPPRep.DimensionLine.Item(1)
objDimension.ChangeToTop
If objDimension.HasParent = 0 Then
    MsgBox "The " & objDimension.Name & " dimension has " & 
    "no parent."
    For intx = 1 to objDimension.Children.Count
        strName = objDimension.Children.Item(intx).Name
        objDimension.Change strName
        MsgBox "The parent for the " & objDimension.Name & 
        " dimension is " & objDimension.Parent
        
        Next intx
    End If
Set objDimension = Nothing
Set objPPRep = Nothing
End Sub

Layer
Sub Main()
    Dim objPPRep As Object
    Dim objChildrenLayers As Object
    Dim strLayerChild As String
    Dim strLayerChildren As String
    Dim intx As Integer
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objChildrenLayers = objPPRep.Layers.Item(1).Children
    For intx = 1 to objChildrenLayers.Count
        strLayerChild = objChildrenLayers.item(intx).Name
        strLayerChildren = strLayerChildren & chr$(10) & 
        strLayerChild
        Next intx
    MsgBox "The " & objPPRep.Layers.Item(1).Name & 
    " category has " & objChildrenLayers.Count & 
    " children." & chr$(10) & chr$(10) & 
    "They are: " & chr$(10) & strLayerChildren,
    "Layer Children"
Set objChildrenLayers = Nothing
Set objPPRep = Nothing
End Sub

Row
Sub Main()
    Dim objPPRep As Object
    Dim objChildrenRows As Object
    Dim strRowChild As String
    Dim strRowChildren As String
    Dim intx As Integer
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objChildrenRows = objPPRep.Rows.Item(1).Children
    For intx = 1 to objChildrenRows.Count
        strRowChild = objChildrenRows.item(intx).Name
        strRowChildren = strRowChildren & chr$(10) & strRowChild
    Next
    MsgBox "The " & objPPRep.Rows.Item(1).Name & " category has " & objChildrenRows.Count & " children."
    MsgBox "They are: " & chr$(10) & strRowChildren,
    "Row Children"
    Set objChildrenRows = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
• "Methods" (p. 87)
• "Properties" (p. 283)

Columns

Description
Maintains a list of Column objects in a report.

Discussion
Collections are generic objects that group or list other types of objects. You can group the Column objects in a Report object into a Columns collection. Using a Columns collection, you can operate on the entire group of Column objects at once rather than one at a time.

You can perform calculations on and sort the Column objects that are in the Columns collection.
To use this collection, first add categories to the report from the CategoryList object, and then add Column objects, or just open an existing report that has columns.

Certain methods are only available in Reporter mode.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulation Method</td>
<td>Accumulates all the values of the categories in an object or a collection.</td>
</tr>
<tr>
<td>Active Method</td>
<td>Returns the active Column object.</td>
</tr>
<tr>
<td>Add Method (Columns, Layers, Rows)</td>
<td>Adds a Column object to the Columns collection.</td>
</tr>
<tr>
<td>Addition Method (Collections)</td>
<td>Adds a constant value or a category to all Column objects in the Columns collection.</td>
</tr>
<tr>
<td>AddLevel Method</td>
<td>Adds a column level to the collection of columns in a nested crosstab.</td>
</tr>
<tr>
<td>AddLowestLevelCategories Method (Reporter)</td>
<td>Adds the lowest-level categories to a report.</td>
</tr>
<tr>
<td>Average Method (Collections) (Reporter)</td>
<td>Returns the average of a constant value or a column, and either one or more columns.</td>
</tr>
<tr>
<td>CumPercentOfBase Method</td>
<td>Adds Cumulative Percent of Base Column objects using a Row object as the base category.</td>
</tr>
<tr>
<td>DeleteExplorerRank Method</td>
<td>Deletes the rank category from an Explorer report.</td>
</tr>
<tr>
<td>Division Method</td>
<td>Divides all the Column objects in the collection by either a constant value or another category.</td>
</tr>
<tr>
<td>Exponentiation Method</td>
<td>Raises all the Column objects to the power of either another category or a constant value.</td>
</tr>
<tr>
<td>Hide Method</td>
<td>Hides all Column objects in the collection.</td>
</tr>
<tr>
<td>Item Method</td>
<td>Returns a Column object from the Columns collection.</td>
</tr>
<tr>
<td>ItemAtLevel Method</td>
<td>Returns a Column object from a nested report.</td>
</tr>
<tr>
<td>ItemAtLevel Method</td>
<td>Determines the maximum between each Column object in the collection and either a constant value or another category.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Minimum Method (Collections)</strong> (Reporter)</td>
<td>Determines the minimum between each Column object in the collection and either a constant value or another category.</td>
</tr>
<tr>
<td>Multiplication Method (Collections)</td>
<td>Multiplies a constant value or a category to all the Column objects in the collection.</td>
</tr>
<tr>
<td>Percent Method</td>
<td>Adds percent Column objects based on either a category or a constant value.</td>
</tr>
<tr>
<td>PercentOfBase Method</td>
<td>Adds Percent of Base Column objects using a Row object as the base category.</td>
</tr>
<tr>
<td>Remove Method</td>
<td>Removes all Column objects from the Report object.</td>
</tr>
<tr>
<td>Select Method</td>
<td>Selects all Column objects.</td>
</tr>
<tr>
<td>Sort Method</td>
<td>Sorts columns in ascending or descending order.</td>
</tr>
<tr>
<td>Subset Method</td>
<td>Returns a subset of the Column objects in the Columns collection.</td>
</tr>
<tr>
<td>Subtraction Method (Collections)</td>
<td>Subtracts a constant value or a category from all the Column objects in the collection or subtracts all the Column objects from a constant value or a category.</td>
</tr>
<tr>
<td>Unselect Method</td>
<td>De-selects all Column objects in the collection.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>Count Property</td>
<td>Returns the number of Column objects in the collection.</td>
</tr>
<tr>
<td>DimensionLineIndex Property</td>
<td>Returns the position of a dimension line item to maintain a list of Layer, Row, and Column objects.</td>
</tr>
<tr>
<td>Exception Property</td>
<td>Sets the exception for all the Column objects in the collection.</td>
</tr>
<tr>
<td>Style Property</td>
<td>Sets the style used for all the Column objects in the collection.</td>
</tr>
</tbody>
</table>
**Name**  
**Description**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>topLevelCategory Property (Explorer)</td>
<td>Returns the name of the dimension for the collection.</td>
</tr>
</tbody>
</table>

**Example**

This example creates a new report in Reporter mode. It multiplies all columns by 10%, and removes the old columns. Finally, it saves and closes the report.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objNewCol As Object
    Dim strOldCol As String
    Dim intx as Integer
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New "C:\Cubes and Reports\Great Outdoors.mdc", True
    objPPRep.ExplorerMode = False
    For intx = 1 To objPPRep.Columns.Count
        strOldCol = objPPRep.Columns.Item(intx).Name
        Set objNewCol = objPPRep.Columns.Item(intx).Multiplication(1.10)
        MsgBox "The new column name is " & objNewCol.Name
        objPPRep.Columns.Item(strOldCol).Remove
    Next intx
    objPPRep.SaveAs "C:\Cubes and Reports\10perc.ppr"
    objPPRep.Close
    Set objNewCol = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Column Object" (p. 28)
- "Columns Method" (p. 138)

**Exceptions**

**Description**

Maintains a list of Exception objects in a report.

**Discussion**

Collections are generic objects that group or list other types of objects. You can group the Exception objects in a Report object into an Exceptions collection. Use an Exceptions collection to operate on an entire group of Exception objects at once rather than one at a time.
You can use the Exceptions collection to return the number of Exception objects in a report.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add Method (Exceptions)</td>
<td>Adds an Exception object to the Exceptions collection.</td>
</tr>
<tr>
<td>Item Method</td>
<td>Returns an Exception object from the Exceptions collection.</td>
</tr>
<tr>
<td>Remove Method</td>
<td>Removes all Exception objects from the Report object.</td>
</tr>
</tbody>
</table>

**Applications Property**
Returns the Application object.

**Count Property**
Returns the number of Exception objects in the Exceptions collection.

**Example**

This example opens a report and displays the driving fields for the first Exception object.

```vbscript
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Exception.ppr"
    MsgBox "Driving Category:" & _
          objPPRep.Exceptions.Item(1).DrivingCategory
    MsgBox "Driving Dimension:" & _
          objPPRep.Exceptions.Item(1).DrivingDimension
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "Exception Object" (p. 35)

**Graphs**

**Description**
Maintains a list of Graph objects in a Report object.

**Discussion**
Collections are generic objects that group or list other types of objects. You can group the Graphs objects in a Report object into a Graphs collection. Using a Graphs collection, you can operate on the entire group of Graph objects at once rather than one at a time.
Graphs present report data in a number of formats that emphasize different statistical features. For example, pie charts show the relationship of a category to the whole whereas clustered bar graphs show the trend of categories over time.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Method</td>
<td>Returns the active Graph object.</td>
</tr>
<tr>
<td>Add Method (Graphs)</td>
<td>Adds a Graph object to the Graphs collection.</td>
</tr>
<tr>
<td>Item Method</td>
<td>Returns one Graph object from the Graphs collection.</td>
</tr>
<tr>
<td>Remove Method</td>
<td>Removes all Graph objects from the Report object.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>Count Property</td>
<td>Returns the number of Graph objects in the Graphs collection.</td>
</tr>
<tr>
<td>DataGridlines Property</td>
<td>Sets whether the gridlines settings are on or off for a crosstab</td>
</tr>
<tr>
<td>EnableUserColumnSummaryLabel Property</td>
<td>Sets whether a user-specified label is used for the innermost summary column in a nested crosstab.</td>
</tr>
<tr>
<td>EnableUserRowSummaryLabel Property</td>
<td>Returns whether a user-specified label is used for the innermost summary row in a nested crosstab.</td>
</tr>
<tr>
<td>HideRankCategory Property</td>
<td>Sets whether the rank category is hidden.</td>
</tr>
<tr>
<td>IndentTotalsLevel Property</td>
<td>Sets the current indent level for summary cells on nested crosstabs in the collection.</td>
</tr>
<tr>
<td>KeepSummaryVisible Property</td>
<td>Sets whether the summary category will remain visible on all scrolled pages.</td>
</tr>
<tr>
<td>LabelGridlines Property</td>
<td>Sets whether the gridlines are on or off for category labels in a nested crosstab.</td>
</tr>
<tr>
<td>Layout Property</td>
<td>Sets the current layout style for nested crosstabs in the collection.</td>
</tr>
<tr>
<td>MaxPrintedBars Property</td>
<td>Sets the maximum number of bars on a single printed page</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>MaxVisibleBars Property</td>
<td>Sets the maximum number of bars visible on a single page of scrolled data.</td>
</tr>
<tr>
<td>NamesShown Property</td>
<td>Sets or returns whether category names appear beside pie chart slices.</td>
</tr>
<tr>
<td>ShowSummaryBreakdown Property (Explorer)</td>
<td>Sets or returns whether to show the breakdown of summary rows and columns in a crosstab.</td>
</tr>
<tr>
<td>ShowSummaryColumn Property (Explorer)</td>
<td>Sets whether to show the summary column for crosstabs in the collection.</td>
</tr>
<tr>
<td>ShowSummaryRow Property (Explorer)</td>
<td>Sets whether to show the summary row for crosstabs in the collection.</td>
</tr>
<tr>
<td>ShowTies Property</td>
<td>Sets whether to show label ties.</td>
</tr>
<tr>
<td>StatsLineCaption Property</td>
<td>Sets or returns the caption for a given statistical line on a graph.</td>
</tr>
<tr>
<td>StatsLineColor Property</td>
<td>Sets or returns the color for a given statistical line on a graph.</td>
</tr>
<tr>
<td>StatsLineOn Property</td>
<td>Sets or returns a statistical line on a graph.</td>
</tr>
<tr>
<td>StatsLineStyle Property</td>
<td>Sets or returns the line style of a given statistical line on a graph.</td>
</tr>
<tr>
<td>StatsLineUserValue Property</td>
<td>Sets a custom value for a statistical line on a graph.</td>
</tr>
<tr>
<td>UseScrolling Property</td>
<td>Sets or returns whether scrolling is enabled.</td>
</tr>
<tr>
<td>UserColumnSummaryLabel Property</td>
<td>Sets or returns the user-defined label for the innermost summary column in a nested crosstab.</td>
</tr>
<tr>
<td>UserRowSummaryLabel Property</td>
<td>Sets or returns the user-defined label for the innermost summary row in a nested-crosstab.</td>
</tr>
<tr>
<td>ValuesAutoFit Property</td>
<td>Sets whether value labels fit within graph bars and pie segments.</td>
</tr>
<tr>
<td>ValuesFontColor Property</td>
<td>Sets the font color used for the value labels for graphs in the collection.</td>
</tr>
</tbody>
</table>
### Name

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ValuesFontName Property</strong></td>
<td>Sets the font name used for the value labels for graphs in the collection.</td>
</tr>
<tr>
<td><strong>ValuesFontSize Property</strong></td>
<td>Sets the font size used for the value labels for graphs in the collection.</td>
</tr>
<tr>
<td><strong>ValuesPosition Property</strong></td>
<td>Sets the position of value labels on some graph types in the collection.</td>
</tr>
<tr>
<td><strong>ValuesShown Property</strong></td>
<td>Sets or returns whether value labels appear next to pie chart slices.</td>
</tr>
</tbody>
</table>

### Example

This example opens a report, adds a new Graph object to the Graphs collection, and saves the report.

```vba
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Trend.ppr"
    objPPRep.Graphs.Add 5
    objPPRep.Save
    objPPRep.Close
    Set objPPRep = Nothing
End Sub
```

### Related Topics
- "Graph Object" (p. 38)
- "Report Object" (p. 51)

### Layers

**Description**

Maintains a list of Layer objects in a report.

**Discussion**

Collections are generic objects that group or list other types of objects. You can group the Layer objects in a Report object into a Layers collection. Use a Layers collection, to operate on the entire group of Layer objects at once rather than one at a time.

To use this collection, first add categories to the report from the CategoryList object, and then add Layer objects, or just open an existing report that has layers.
Certain methods are only available in Reporter mode.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Method</td>
<td>Returns the active Layer object.</td>
</tr>
<tr>
<td>Addition Method (Collections)</td>
<td>Adds a constant value or a category to all Layer objects in the Layers collection.</td>
</tr>
<tr>
<td>AddLevel Method</td>
<td>Adds a layer level to the collection of layers in a nested crosstab.</td>
</tr>
<tr>
<td>AddLowestLevelCategories Method (Reporter)</td>
<td>Adds the lowest-level categories to a report.</td>
</tr>
<tr>
<td>Average Method (Collections) (Reporter)</td>
<td>Returns the average of a constant value or a layer, and either one or more layers.</td>
</tr>
<tr>
<td>Division Method</td>
<td>Divides all the Layers in the collection by either a constant value or another category.</td>
</tr>
<tr>
<td>Exponentiation Method</td>
<td>Raises all the Layer objects to the power of either a constant value or another category.</td>
</tr>
<tr>
<td>Item Method</td>
<td>Returns a Layer object from the Layers collection.</td>
</tr>
<tr>
<td>Maximum Method (Collections) (Reporter)</td>
<td>Determines the maximum between each Layer object in the collection and either a constant value or another category.</td>
</tr>
<tr>
<td>Minimum Method (Collections) (Reporter)</td>
<td>Determines the minimum between each Layer object in the collection and either a constant value or another category.</td>
</tr>
<tr>
<td>Multiplication Method (Collections)</td>
<td>Multiplies a constant value or a category to all the Layer objects in the collection.</td>
</tr>
<tr>
<td>Percent Method</td>
<td>Adds percent Layer objects based on either a category or a constant value.</td>
</tr>
<tr>
<td>Remove Method</td>
<td>Removes all Layer objects from the Report object.</td>
</tr>
<tr>
<td>Select Method</td>
<td>Selects all Layer objects in the collection.</td>
</tr>
</tbody>
</table>
### Name | Description
--- | ---
**Sort Method** | Sorts layers in ascending or descending order.
**Subset Method** | Returns a subset of the Layer objects from the Layers collection.
**Subtraction Method (Collections)** | Subtracts a constant value or category from the Layer objects in the collection or subtracts all the Layer objects from a constant value or a category.
**Unselect Method** | De-selects all Layer objects in the collection.

### Name | Description
--- | ---
**Application Property** | Returns the Application object.
**Count Property** | Returns the number of Layer objects in the collection.
**DimensionLineIndex Property** | Returns the position of a dimension line item to maintain a list of layer, row, and column objects.
**Exception Property** | Sets the exception for all Layer objects in the collection.
**Style Property** | Sets the style used for all Layer objects in the collection.
**TopLevelCategory Property (Explorer)** | Returns the name of the dimension for the collection.

### Example
This example gets an open report, removes the first and second layer, subtracts the new second layer from the new first layer, and performs maximum calculation on all the layers.

```vba
Sub Main()
    Dim objPPApp As Object
    Dim objPPRep As Object
    Set objPPApp = GetObject( , "CognosPowerPlay.Application"

    Set objPPRep = GetObject("C:\Cubes and Reports\Sample1.ppr")
    objPPRep.Visible = True
    objPPApp.Reports(1).ExplorerMode = False
    objPPApp.Reports(1).Layers.Subset(1,2).Remove
    objPPApp.Reports(1).Layers.Subset(1,2).Subtraction
    objPPApp.Reports(1).Layers.Maximum

    Set objPPRep = Nothing
    Set objPPApp = Nothing
End Sub
```
Related Topics

- "CategoryList Object" (p. 25)
- "Layer Object" (p. 41)
- "Report Object" (p. 51)

Levels

Description
Maintains a list of Level objects in a report.

Discussion
Use a Levels collection to operate on the group of Level objects. For example, you can group the Level objects in a Dimension object into a Levels collection.

Use the Items method to access a Level object in a Levels collection. The index for the item method starts at 1.

There is a Levels collection for the Dimension object.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Method</td>
<td>Returns a Level object at a given index in the collection.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>Count Property</td>
<td>Returns the number of Level objects in the collection.</td>
</tr>
</tbody>
</table>

Example
This example displays all levels for the first dimension of the dimension line.

Sub Main()
    Dim objPPRep As Object
    Dim objDimension As Object
    Dim objLevel As Object
    Dim strLevelList As String
    Dim intx As Integer
    Set objPPRep = GetObject("CognosPowerPlay.Report")
    Set objDimension = objPPRep.DimensionLine.Item(1)
    For intx = 1 to objDimension.Levels.Count
        Set objLevel = objDimension.Levels.Item(intx)
        strLevelList = strLevelList & chr$(10) & objLevel.Name
        Set objLevel = Nothing
Next intx
    MsgBox "The levels in the " & objDimension.Name & 
    " dimension are:" & chr$(10) & strLevelList
    Set objDimension = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
• "Level Object" (p. 44)

Ranges

Description
Maintains a list of Range objects in a report.

Discussion
Collections are generic objects that group or list other types of objects. You can group the Range objects in an Exception object into a Ranges collection. Use a Ranges collection to operate on the entire group of Range objects at once rather than one at a time.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add Method (Ranges)</td>
<td>Adds a Range object to the Ranges collection.</td>
</tr>
<tr>
<td>Item Method</td>
<td>Returns a Range object from the Ranges collection.</td>
</tr>
<tr>
<td>Remove Method</td>
<td>Removes all Range objects from the Exception object.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>Count Property</td>
<td>Returns the number of Range objects in the collection.</td>
</tr>
<tr>
<td>MaximumNumberOfRanges Property</td>
<td>Returns the maximum number of Range objects definable for an Exception object.</td>
</tr>
</tbody>
</table>

Example
This example shows how to return a Ranges collection and returns the maximum number of Range objects that you can define for the Exception object.

Sub Main()
    Dim objPPRep As Object
    Dim objPPRange As Object
Set objPPRep = GetObject(“C:\Cubes and Reports\Exception.ppr”)  
objPPRep.Visible = True  
Set objPPRange = objPPRep.Exceptions.item(1).Ranges  
MsgBox “The maximum number of ranges: ” & objPPRange.MaximumNumberOfRanges  
Set objPPRange = Nothing  
Set objPPRep = Nothing  
End Sub

Related Topics
- "Exception Object" (p. 35)
- "Range Object" (p. 50)

ReportQueries

Description
Maintains a list of query objects in a report.

Discussion
ReportQueries is a collection of query objects. Collections are generic objects that group or list other types of objects. You can group query objects in a Report object into a ReportQueries collection. Using a ReportQueries collection, you can operate on the entire group of ReportQueries objects at once rather than one at a time.

To use this collection, you can add categories to the report from the CategoryList object, and then create query objects; or just open an existing report that has queries.

The ReportQueries collection is a special object that belongs to the Report object. There are several variations of the query objects that belong to the ReportQueries collection; the FindQuery, ParentageQuery, and AdvancedQuery.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Method</td>
<td>Returns a query object from the ReportQueries collection.</td>
</tr>
<tr>
<td>Remove Method</td>
<td>Removes all query objects from the ReportQueries collection.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
</tbody>
</table>
**Name** | **Description**
---|---
Count Property | Returns the number of objects in the collection.

**Example**
This example creates a FindQuery subset definition that searches for all products that begin with the name "Star".

```vbs
Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objFind As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objFind = objPPRep.ReportQueries.Add(1)
    With objFind
        .Name = "Find Star"
        .Dimension = "Products"
        .SearchShortName = False
        .SearchText = "Star"
        .Pattern = 2
    End With
    Set objFind = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "AdvancedQuery Object" (p. 20)
- "FindQuery Object" (p. 36)
- "ParentageQuery Object" (p. 45)
- "Value Restriction Object" (p. 60)

**Reports**

**Description**
Maintains a list of Report objects.
**Discussion**

Collections are generic objects that group or list other types of objects. You can group the Report objects in an Application object into a Reports collection. Use a Reports collection to operate on an entire group of Report objects at once rather than one at a time.

When you use the Add method or the Open method for the Reports collection, you must capture the new Report object or it will terminate. For example, you must use the following to capture the new report created from the OUTDOORS.MDC using the object, PPRep1:

Set PPRep1 = PPApp.Reports.Add("c:\cognos\outdoors.mdc")

Using

PPApp.Reports.Add("c:\cognos\outdoors.mdc")

will terminate the report.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Method</td>
<td>Returns the active Report object.</td>
</tr>
<tr>
<td>Add Method (Reports)</td>
<td>Adds a Report object to the Reports collection.</td>
</tr>
<tr>
<td>Close Method</td>
<td>Closes all Report objects in the collection.</td>
</tr>
<tr>
<td>Item Method</td>
<td>Returns a Report object from the Reports collection.</td>
</tr>
<tr>
<td>Open Method (Reports)</td>
<td>Opens a collection of Reports objects.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>Count Property</td>
<td>Returns the number of Report objects in the collection.</td>
</tr>
</tbody>
</table>

**Example**

This example adds a two reports to the collection and then and makes the first report in the collection visible.

```vbscript
Sub Main()
    Dim objPPApp As Object
    Dim objTest As Object
    Set objPPApp = CreateObject("CognosPowerPlay.Application")
    objPPApp.Visible = True
    Set objTest = objPPApp.Reports.Add _
        ("C:\Cubes and Reports\Great Outdoors.mdc")
    Set objTest = objPPApp.Reports.Open _
        ("C:\Cubes and Reports\Exception.ppr")
End Sub
```
Msgbox "The number of reports in the collection is " _
   &objPPApp.Reports.Count
Msgbox "The name of the first report in the collection is " _
   &objPPApp.Reports(1).Name
objPPApp.Reports(1).Visible = True
Set objTest = Nothing
Set objPPApp = Nothing
End Sub

Related Topics

- "Report Object" (p. 51)

Rows

Description

Maintains a list of Row objects in a report.

Discussion

Collections are generic objects that group or list other types of objects. You can group Row objects in a Report object into a Rows collection. Use a Rows collection to operate on an entire group of Row objects at once rather than one at a time.

To use this collection, first add categories to the report from the CategoryList object, and then add Row objects, or just open an existing report that has rows.

Certain methods are only available in Reporter mode.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulation Method</td>
<td>Accumulates all the values of the categories in the Rows collection.</td>
</tr>
<tr>
<td>Active Method</td>
<td>Returns the active Row object.</td>
</tr>
<tr>
<td>Add Method (Columns, Layers, Rows)</td>
<td>Adds a Row object to the Rows collection.</td>
</tr>
<tr>
<td>Addition Method (Collections)</td>
<td>Adds a constant value or a category to all Row objects in the Rows collection.</td>
</tr>
<tr>
<td>AddLevel Method</td>
<td>Adds a row level to the collection of rows in a nested crosstab.</td>
</tr>
<tr>
<td>AddLowestLevelCategories Method (Reporter)</td>
<td>Adds the lowest-level categories to a report.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>Average Method (Collections) (Reporter)</td>
<td>Returns the average of a constant value or a row, and either one or more rows.</td>
</tr>
<tr>
<td>CumPercentOfBase Method</td>
<td>Adds Cumulative Percent of Base Row objects using a Column object as the base category.</td>
</tr>
<tr>
<td>DeleteExplorerRank Method</td>
<td>Deletes the rank category from an Explorer report.</td>
</tr>
<tr>
<td>Division Method</td>
<td>Divides all the Row objects in the collection by either a constant value or another category.</td>
</tr>
<tr>
<td>Exponentiation Method</td>
<td>Raises all the Rows to the power of either another category or a constant value.</td>
</tr>
<tr>
<td>Hide Method</td>
<td>Hides all Row objects in the collection.</td>
</tr>
<tr>
<td>Item Method</td>
<td>Returns a Row object from the Reports collection.</td>
</tr>
<tr>
<td>ItemAtLevel Method</td>
<td>Returns a Row object from a nested report.</td>
</tr>
<tr>
<td>Maximum Method (Collections) (Reporter)</td>
<td>Determines the maximum between each Row object in the collection and either a constant value or another category.</td>
</tr>
<tr>
<td>Minimum Method (Collections) (Reporter)</td>
<td>Determines the minimum between each Row object in the collection and either a constant value or another category.</td>
</tr>
<tr>
<td>Multiplication Method (Collections)</td>
<td>Multiplies a constant value or a category to all the Row objects in the collection.</td>
</tr>
<tr>
<td>Percent Method</td>
<td>Adds percent Row objects based on either a category or a constant value.</td>
</tr>
<tr>
<td>PercentOfBase Method</td>
<td>Adds Percent of Base Row objects using a Column object as the base category.</td>
</tr>
<tr>
<td>Remove Method</td>
<td>Removes all Row objects from the Report object.</td>
</tr>
<tr>
<td>Select Method</td>
<td>Selects all Row objects in the collection.</td>
</tr>
<tr>
<td>Sort Method</td>
<td>Sorts rows in ascending or descending order.</td>
</tr>
</tbody>
</table>
### Name

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subset Method</strong></td>
<td>Returns a subset of the Row objects in the Rows collection.</td>
</tr>
<tr>
<td><strong>Subtraction Method</strong></td>
<td>Subtracts a constant value or a category from the Row objects in the collection, or subtracts all the Row objects from a constant value or a category.</td>
</tr>
<tr>
<td><strong>Unselect Method</strong></td>
<td>De-selects all Row objects in the collection.</td>
</tr>
</tbody>
</table>

### Name

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Application Property</strong></td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td><strong>Count Property</strong></td>
<td>Returns the number of Row objects in the collection.</td>
</tr>
<tr>
<td><strong>DimensionLineIndex Property</strong></td>
<td>Returns the position of an dimension line item to maintain a list of layer, row, and column objects.</td>
</tr>
<tr>
<td><strong>Exception Property</strong></td>
<td>Sets the exception for all Row objects in the collection.</td>
</tr>
<tr>
<td><strong>Style Property</strong></td>
<td>Sets the style used for all Row objects in the collection.</td>
</tr>
<tr>
<td><strong>TopLevelCategory Property (Explorer)</strong></td>
<td>Returns the name of the dimension for the collection.</td>
</tr>
</tbody>
</table>

### Example

This example adds the first three rows, and also adds column one and column four.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objNewCol As Object
    Dim objNewRows As Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    objPPRep.ExplorerMode = False
    Set objNewRows = objPPRep.Rows.Subset(1,3).Addition
    MsgBox "The sum of the first three rows is " & objPPRep.CellValue(objNewRows(1).Index,1)
    objPPRep.Columns.Item(1)
    MsgBox "The sum of columns 1 and 4 is " & objPPRep.CellValue(1,objNewCol.Index)
    Set objNewRows = Nothing
    Set objNewCol = Nothing
    Set objPPRep = Nothing
End Sub
```
End Sub

Related Topics

- "Report Object" (p. 51)
- "Row Object" (p. 55)
## Chapter 4: Methods

You work with the following methods for IBM® Cognos® PowerPlay® OLE automation.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulation Method</td>
<td>Accumulates all the values of the categories in an object or a collection.</td>
</tr>
<tr>
<td>Activate Method</td>
<td>Sets the focus on an object.</td>
</tr>
<tr>
<td>Active Method</td>
<td>Returns the active object in the collection.</td>
</tr>
<tr>
<td>ActiveReport Method</td>
<td>Returns the active Report object for the Application object.</td>
</tr>
<tr>
<td>Add Method (CategoryList)</td>
<td>Adds one or more categories to a CategoryList object.</td>
</tr>
<tr>
<td>Add Method (Columns, Layers, Rows)</td>
<td>Adds one or more objects a collection, or to an object that maintains a list of other objects.</td>
</tr>
<tr>
<td>Add Method (Exceptions)</td>
<td>Adds an Exception object to the Exceptions collection.</td>
</tr>
<tr>
<td>Add Method (Graphs)</td>
<td>Adds a Graph object to the Graphs collection.</td>
</tr>
<tr>
<td>Add Method (Ranges)</td>
<td>Adds a Range object to the Ranges collection.</td>
</tr>
<tr>
<td>Add Method (Reports)</td>
<td>Adds a Report object to the Reports collection.</td>
</tr>
<tr>
<td>AddBlanks Method (Reporter)</td>
<td>Adds a single blank row or column to a nested crosstab.</td>
</tr>
<tr>
<td>Addition Method (Collections)</td>
<td>Adds a constant value or a category to one or more objects in the collection.</td>
</tr>
<tr>
<td>Addition Method (Objects)</td>
<td>Adds a constant value or a category to an object.</td>
</tr>
<tr>
<td>AddLevel Method</td>
<td>Adds a row, column, or layer level to a nested crosstab.</td>
</tr>
<tr>
<td>AddLowestLevelCategories Method</td>
<td>Adds the lowest-level categories to a report.</td>
</tr>
<tr>
<td>(Reporter)</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>AddToReport Method</td>
<td>Adds query results to a report.</td>
</tr>
<tr>
<td>AddToReportAtSpecificNestingLevel Method</td>
<td>Adds query results to a report at a specific nesting level.</td>
</tr>
<tr>
<td>Add Method (CategoryList)</td>
<td>Returns the average of a constant value or a category, and either one or more categories.</td>
</tr>
<tr>
<td>Average Method (Objects) (Reporter)</td>
<td>Determines the average between a constant value or another category and an object.</td>
</tr>
<tr>
<td>CanDrillDown Method</td>
<td>Returns whether you can drill down the category object.</td>
</tr>
<tr>
<td>CanDrillUp Method</td>
<td>Returns whether you can drill up the category object.</td>
</tr>
<tr>
<td>Category Method</td>
<td>Sets the parent category or dimension for the Parentage-Query subset definition.</td>
</tr>
<tr>
<td>CategoryList Method</td>
<td>Creates a CategoryList object which is used to identify categories to be inserted in the Report object.</td>
</tr>
<tr>
<td>CellValue Method</td>
<td>Gets the value of a cell in a Report object.</td>
</tr>
<tr>
<td>Change Method</td>
<td>Changes the current category for the Dimension.</td>
</tr>
<tr>
<td>ChangeToParent Method</td>
<td>Changes the current category for the Dimension object to the category one level higher in the hierarchy.</td>
</tr>
<tr>
<td>ChangeToTop Method</td>
<td>Changes the current category for the Dimension object to top-level category.</td>
</tr>
<tr>
<td>Children Method</td>
<td>Returns the next child in the hierarchy for an object.</td>
</tr>
<tr>
<td>Close Method</td>
<td>Closes one or all the Report objects.</td>
</tr>
<tr>
<td>Columns Method</td>
<td>Returns a collection that contains all the Column objects.</td>
</tr>
<tr>
<td>Copy Method</td>
<td>Copies the Row, Column, or Layer objects currently selected in the report to the Clipboard.</td>
</tr>
<tr>
<td>CumPercentOfBase Method</td>
<td>Adds one or more Cumulative Percent of Base category using a category from a different dimension as the base.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Cut Method (Reporter)</td>
<td>Moves the Row, Column, or Layer objects currently selected to the Clipboard.</td>
</tr>
<tr>
<td>DeleteAllMDCAccessInfo Method</td>
<td>Deletes PowerCube security access information from memory for all cubes.</td>
</tr>
<tr>
<td>DeleteExplorerRank Method</td>
<td>Deletes the rank category from an Explorer report.</td>
</tr>
<tr>
<td>DeleteDataSourceInfo Method</td>
<td>Deletes PowerCube security access information from memory for the specified cube.</td>
</tr>
<tr>
<td>DeleteAllDataSourceInfo Method</td>
<td>Deletes security access information from memory for all PowerCubes.</td>
</tr>
<tr>
<td>DeleteMDCAccessInfo Method</td>
<td>Deletes security access information for a local PowerCube from memory.</td>
</tr>
<tr>
<td>DeleteSelected Method</td>
<td>Deletes selected objects from a Report collection.</td>
</tr>
<tr>
<td>DeploymentOptions Method</td>
<td>Returns the distribution options for a report published to the IBM Cognos portal.</td>
</tr>
<tr>
<td>Depth Method</td>
<td>Returns whether the Graph object is three-dimensional (3D).</td>
</tr>
<tr>
<td>DimensionFilter Method</td>
<td>Sets the filter category for an indexed dimension.</td>
</tr>
<tr>
<td>DimensionLine Method</td>
<td>Returns a DimensionLine object for the current Report object.</td>
</tr>
<tr>
<td>Division Method</td>
<td>Divides one or more categories by either a constant value or another category.</td>
</tr>
<tr>
<td>DrillDown Method</td>
<td>Drills down the category object.</td>
</tr>
<tr>
<td>DrillUp Method</td>
<td>Drills up the category object.</td>
</tr>
<tr>
<td>Exceptions Method</td>
<td>Returns one Exception object or the entire collection.</td>
</tr>
<tr>
<td>Exclude Method</td>
<td>Sets the categories to exclude from the query.</td>
</tr>
<tr>
<td>Execute Method</td>
<td>Runs a query on the cube.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Exponentiation Method</td>
<td>Raises one or more categories to the power of either another category or a constant value.</td>
</tr>
<tr>
<td>Find Method</td>
<td>Specifies the name of the FindQuery object to include in an AdvancedQuery.</td>
</tr>
<tr>
<td>FindNext Method</td>
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<tr>
<td>Layers Method</td>
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<td>Logon Method</td>
<td>Logs on to IBM Cognos BI as an authenticated user to provide the application object access to secured IBM Cognos BI resources such as packages.</td>
</tr>
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<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Logoff Method</td>
<td>Revokes authentication to all IBM Cognos BI namespaces for the application object. Even if you used multiple namespaces in the session, you logoff only once.</td>
</tr>
<tr>
<td>Maximize Method</td>
<td>Maximizes the object window.</td>
</tr>
<tr>
<td>Maximum Method (Collections) (Reporter)</td>
<td>Determines the maximum between either a constant value or a category, and one or more categories.</td>
</tr>
<tr>
<td>Maximum Method (Objects) (Reporter)</td>
<td>Determines the maximum between either a constant value or a category, and one or more categories.</td>
</tr>
<tr>
<td>Minimize Method</td>
<td>Minimizes the object window.</td>
</tr>
<tr>
<td>Minimum Method (Collections) (Reporter)</td>
<td>Determines the minimum between either a constant value or a category, and one or more categories.</td>
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<td>Minimum Method (Objects) (Reporter)</td>
<td>Determines the minimum between either a constant value or a category, and one or more categories.</td>
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<td>Multiplies a constant value or a category by an object.</td>
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<td>Opens a collection of Report objects.</td>
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<td>Sets the file name of the PDF object when it is saved.</td>
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<tr>
<td>Name</td>
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<td>------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
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</tr>
<tr>
<td>Reports Method</td>
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<tr>
<td>Name</td>
<td>Description</td>
</tr>
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<td>------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SelectAllDimensions Method</td>
<td>Selects all the dimension objects in the dimension line that can be filtered when a report is opened in the IBM Cognos portal.</td>
</tr>
<tr>
<td>SelectBlank Method</td>
<td>Selects a specific blank row or column.</td>
</tr>
<tr>
<td>SetChartToPrint Method</td>
<td>Specifies which Graph object of a report to print.</td>
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</tr>
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<tr>
<td>SetListOfLayersToSave Method</td>
<td>Specifies the range of layers to save in a PDF.</td>
</tr>
<tr>
<td>SetListOfRowsToPrint Method</td>
<td>Specifies the range of rows of the report to print.</td>
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<tr>
<td>SetListOfRowsToSave Method</td>
<td>Specifies the range of rows to save in a PDF.</td>
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<tr>
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<td>Sets the name and style for the macro used by the Exception object.</td>
</tr>
<tr>
<td>SetMDCAccessInfo Method</td>
<td>Stores PowerCube security access information in memory.</td>
</tr>
<tr>
<td>SetType Method</td>
<td>Sets the Graph object type.</td>
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<tr>
<td>SizeSelected Method</td>
<td>Applies a size to selected objects.</td>
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<td>Sort Method</td>
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<tr>
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</tr>
<tr>
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<td>Subtracts a constant value or a category from one or more categories in the collection, or subtracts all categories from a constant value or another category.</td>
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<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
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<tbody>
<tr>
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<td>Subtracts a constant value or another category from an object, or subtracts an object from the category or constant value.</td>
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<td>SwapRowsAndColumns Method</td>
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<td>Exchanges the positions of the Row objects and Layer objects.</td>
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<tr>
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</tr>
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<td>Unselects a specific blank row or column.</td>
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<td>Clears all selected dimension objects in the dimension line that can be filtered when a report is opened in the IBM Cognos portal.</td>
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<td>Returns the value restriction for an AdvancedQuery object.</td>
</tr>
<tr>
<td>Vertical Method</td>
<td>Returns whether the Graph object is a vertical display.</td>
</tr>
</tbody>
</table>

### Accumulation Method

**Description**
Accumulates all the values of the categories in an object or a collection.

**Syntax**

```
object.Accumulation [Operand]
```

**Applies To**
- Column Object
- Columns
Row Object

Rows

Discussion
You cannot accumulate values over layers.

Depending on whether the method was applied to an object or a collection, the results are returned respectively as either an object or a collection.

The result of each calculation is stored in a new category which is added beside the Row or Column object, or to the end of the Rows or Columns collection.

When you accumulate the values in a collection, a new category is created for each object in the collection. For example, five columns are created when the Accumulation method is used in a collection of five columns.

References to the position of an object in the collection are not valid after you use this method.

Crossing accumulated categories produces an undefined result.

Notes
When you accumulate values in Explorer mode, the Summary Categories are exempt and therefore show N/A values. N/A values are also shown at the intersection point of a rank, other accumulation, or a business calculation such as Cumulative Percent of Base.

In Explorer mode, if more than one category is selected, the Accumulate calculation is disabled.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operand</td>
<td>Optional. Specifies either a constant value or a category object. Type: Variant</td>
</tr>
</tbody>
</table>

Return Type
Object

Example
This example returns an open report, accumulates all columns and all rows, and returns new rows and new columns.

Sub Main()
  Dim objPPRep As Object
  Set objPPRep = GetObject("C:\Cubes and Reports\Sample2.ppx")
  objPPRep.ExplorerMode = False
  objPPRep.Columns.Accumulation
  objPPRep.Rows.Accumulation
  Set objPPRep = Nothing
End Sub
Chapter 4: Methods

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)
- "Column Object" (p. 28)
- "Columns" (p. 68)
- "Row Object" (p. 55)
- "Rows" (p. 83)

Activate Method

Description
Sets the focus on an object.

Syntax
object.Activate

Applies To
Application Object
Column Object
Graph Object
Layer Object
Report Object
Row Object

Discussion
Use this method to
- activate the Graph object
- activate the Layer object, and moves the cursor to that category
- activate the Column or Row object and moves the cursor to that category
- activate a Report object, and brings it to the front of all the Report objects in the same Application object
- activate the application, and brings it in front of all the other applications if the Visible method is True

For example, when you create an automation procedure that involves several different reports, you can set the focus on the different objects involved. For example, if the macro opens four different reports, use the Activate method to shift the focus to one that is not currently active.
Related Topics

- "Application Object" (p. 23)
- "Column Object" (p. 28)
- "Graph Object" (p. 38)
- "Layer Object" (p. 41)
- "Report Object" (p. 51)
- "Row Object" (p. 55)

Return Type

Nothing

Example

This example establishes a link to an already opened report in order to modify its content. Using the Application method, the IBM® Cognos® PowerPlay® application is brought to the front and made active.

```vba
Sub Main()
    Dim objRep As Object
    MsgBox "The name of the current report is " & objRep.Name
    If objRep.Saved = False Then
        objRep.Save
        MsgBox "Changes to the report have been saved."
    Else
        MsgBox "No changes have been made to the report."
    End If
    Set objRep = Nothing
End Sub
```

Active Method

Description

Returns the active object in the collection.

Syntax

`object.Active`

Applies To

- Columns
- Graphs
Layers
Reports
Rows

Discussion
Use this method to gain control of the active object in a collection. For example, when you have multiple Graph objects in a report, use this method to identify the single active graph object in the collection of Graph objects.

Related Topics
● "Columns" (p. 68)
● "Graphs" (p. 72)
● "Layers" (p. 75)
● "Reports" (p. 81)
● "Rows" (p. 83)

Return Type
Object

Example
This example adds a stacked bar graph to the report and shows the graph type of the active graph.

Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Trend.ppx"
    objPPRep.Graphs.Add 5
    MsgBox "The active graph type is " & objPPRep.Graphs.Active.Type
    objPPRep.Save
    objPPRep.Close
    Set objPPRep = Nothing
End Sub

ActiveReport Method

Description
Returns the active Report object for the Application object.

Syntax
Application.ActiveReport
Applies To
Application Object

Discussion
Use this method to gain control of the active report in the application. For example, when you open multiple reports, use this method to return the active Report object, without the need to specify the name of the Report object.

Return Type
Object

Example
This example adds a report to the Reports collection so that there are multiple reports open. The ActiveReport method sets the focus on the last report that you opened or added to the collection.

Sub Main()
    Dim objPPRep As Object
    Dim objPPApp As Object
    Dim objReports As Object
    Set objPPApp = GetObject(, "CognosPowerPlay.Application")
    Set objReports = objPPApp.Reports
    Set objPPRep = objReports.Add("C:\Cubes and Reports\Sample1.ppx")
    objPPRep.Visible = True
    MsgBox "There are " & objReports.Count & " reports open."
    Set objPPRep = objPPApp.ActiveReport
    MsgBox "The name of the active report is " & objPPRep.Name
    Set objPPRep = Nothing
    Set objReports = Nothing
    Set objPPApp = Nothing
End Sub

Related Topics
● "Application Object" (p. 23)

Add Method (CategoryList)

Description
Adds one or more categories to a CategoryList object.

Syntax
CategoryList.Add Level, Dimension[, Category]
**Applies To**
CategoryList Object

**Discussion**
To add categories to a report, first create a CategoryList object by calling the CategoryList method, which is a Report method, and then use it to identify the required categories. Then use this method to select existing categories from the multidimensional cube file (.mdc).

For CategoryList objects, the Add method is used to select categories out of all the possible categories in order to add them to the CategoryList object. The added categories are the ones found on Level n of the specified Dimension or Category.

In ReporterMode, the Level parameter can be any number. In ExplorerMode, if the Level parameter isn’t zero, the value will be ignored. In ExplorerMode, the "Add" method is a drill down or filter action where the macro replaces categories, whereas in ReporterMode, it is an additive action where the macro adds categories without replacing existing ones.

If no Category names are specified, then all categories at the specified level below the dimension are added to the CategoryList object.

If one Category name is specified, then all categories at the specified level below the Category name are added to the CategoryList object.

A subsequent Category name must be child of the previous Category name. Up to 10 Category names can be specified.

For example, in
- `Catlist.Add 0, "Years"

the Years dimension category (and none of its children) are added to the report.

- `Catlist.Add 2,"Dimension","Category1","Category2"

categories in the second level below Category2 are added to the CategoryList object. Category1 specifies a category from the first level of Dimension, and Category2 identifies a child of Category1.

A Dimension is required before categories can be added to it.

References to the position of an object in the collection are not valid after you use this method.

**Notes**
If category names are unique within the specified dimension, then lower-level category names can be specified without having to specify their parent category. For example, in

`Catlist.Add 2, "Dimension","Category1"

categories in the second level below Category1 are added to the CategoryList object and Category1 could be a category of the third level of dimension Dimension. Although syntactically correct, this approach does not make it obvious to someone reading the macro exactly which level the categories added are from.
<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>Required. Specifies the number below a specified dimension or category, in which to find the categories to be added. Zero means the specified dimension or category. Type: Integer See the Notes in Discussion regarding this parameter.</td>
</tr>
<tr>
<td>Dimension</td>
<td>Required. Specifies the dimension name or index to add, or in which to find the categories to be added. Type: String</td>
</tr>
<tr>
<td>Category</td>
<td>Optional. Zero or more category names can be specified in order to identify the exact category desired or to identify the starting category from which to add children. The maximum is 10. Type: String</td>
</tr>
</tbody>
</table>

**Return Type**
Object

**Example**
This example adds rows to a Reporter report. The rows are categories below the 2008 Q1 category of the Years dimension.

```vba
Sub Main()
    Dim objMDCCats As Object
    Dim objPPRep As Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objMDCCats = objPPRep.CategoryList
    objMDCCats.Add 1, "Years","2008","2008 Q1"
    objPPRep.Rows.Add objMDCCats
    objPPRep.Save
    Set objPPRep = Nothing
    Set objmdcCats = Nothing
End Sub
```

**Related Topics**
- "Methods" (p. 87)
- "Properties" (p. 283)
Add Method (Columns, Layers, Rows)

Description
Adds one or more objects a collection, or to an object that maintains a list of other objects.

Syntax
\textit{collection.Add} \text{CategoryList}[,\text{NestingLevel}]

Applies To
Columns
Layers
Rows

Discussion
Use this method to add the categories identified in a \text{CategoryList} object to the columns, layers, or rows of the report.

References to the position of an object in the collection are not valid after you use this method.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>\text{CategoryList}</td>
<td>Required. Specifies the \text{CategoryList} object without having to identify the dimension if the category label is unique. Type: Object</td>
</tr>
<tr>
<td>\text{NestingLevel}</td>
<td>Optional: A value indicating the nesting level to add the categories to. Default: 0 (top level) Type: Variant</td>
</tr>
</tbody>
</table>

Return Type
Object

Example
This example adds a new level of categories as layers to a report.

\textsf{Sub Main()}\n\begin{verbatim}
  Dim objCubeCategories As Object
  Dim objPPRep As Object
  Const level_0 = 0
  Const level_1 = 1
  Const add_to_current = 0
  Const add_to_all = 1
\end{verbatim}
Const as_parent = 0
Const as_child = 1
Set objPPRep = CreateObject("CognosPowerPlay.Report")
objPPRep.New "C:\Cubes and Reports\Great Outdoors.mdc", -1
objPPRep.ExplorerMode = False
objPPRep.Visible = True
Set objCubeCategories = objPPRep.CategoryList
objCubeCategories.Add level_1, "Locations"
objPPRep.Layers.Add objCubeCategories
Set objCubeCategories = Nothing
Set objPPRep = Nothing
End Sub

Related Topics

● "Methods" (p. 87)
● "Properties" (p. 283)

Add Method (Exceptions)

Description

Adds an Exception object to the Exceptions collection.

Syntax

Exceptions.Add Identifier

Applies To

Exceptions

Discussion

The Add method adds an Exception object to an Exceptions collection. The Identifier is the name to be given to the added object.

When you create an exception using the Add method, it is not a shared exception, and will not be added to the ppexcept.ini file.

References to the position of an object in the collection are not valid after you use this method.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>Required. Specifies the exception name.</td>
</tr>
<tr>
<td>Type: String</td>
<td></td>
</tr>
</tbody>
</table>
**Return Type**
Object

**Example**
This example creates an exception with one range and then applies it to a new report. The style that is applied to the exception must be predefined.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim strExceptionName As String
    strExceptionName = "At Least 400 Thousand"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New "C:\Cubes and Reports\Great Outdoors.mdc", True
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    objPPRep.Exceptions.Add strExceptionName
    objPPRep.Columns.Exception = strExceptionName
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "Methods" (p. 87)
- "Properties" (p. 283)

---

**Add Method (Graphs)**

**Description**
Adds a Graph object to the Graphs collection.

**Syntax**
`Graphs.Add GraphType[, Depth][, Vertical]`

**Applies To**
Graphs

**Discussion**
A Graph object is the same as a display in the user interface.
Use the following list to set the Graph object type:
- 0 (Crosstab)
- 1 (Pie)
2 (3-D)
3 (Bar)
4 (Cluster)
5 (Stack)
6 (Line)
7 (Multi-Line)
8 (Correlated)
9 (Scatter)

References to the position of an object in the collection are not valid after you use this method.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GraphType</td>
<td>Required. Specifies the Graph object type to add. Type: Integer</td>
</tr>
<tr>
<td>Depth</td>
<td>Optional. Specifies whether the Graph object is three-dimensional (3D). Applies only to graph types 1, 3, 4, and 5. Default: True (for Type 1, 3, 4 and 5) Type: Boolean</td>
</tr>
<tr>
<td>Vertical</td>
<td>Optional. Specifies whether the Graph object is a vertical display. If the property is False, it applies only to graph type 3. Default: True Type: Boolean</td>
</tr>
</tbody>
</table>

**Return Type**
Object

**Example**
This example adds a new display type to the active report. The display added is a horizontal, three-dimensional, bar graph.

```vbnet
Sub Main()
    Dim objPPRep As Object
    Dim objPPGraph As Object
    Dim objGraphs As Object
    Const type_bar = 3
    Const three_d = True
```
Const horizontal = False
Set objPPRep = GetObject(, "CognosPowerPlay.Report")
Set objGraphs = objPPRep.Graphs
Set objPPGraph = objGraphs.Add _
   (type_bar, three_d, horizontal)
Set objPPGraph = Nothing
Set objGraphs = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)

### Add Method (Ranges)

**Description**

Adds a Range object to the Ranges collection.

**Syntax**

`Ranges.Add LowerBoundary, UpperBoundary, Style`

**Applies To**

`Ranges`

**Discussion**

You must define a range to which an exception is applied and where a specified style is also applied to the exception. Use the `UpperBoundary` and `LowerBoundary` methods of the Range object to determine the range to apply formatting when the information in the report meets the conditions set by the exception range.

You can define multiple value ranges for one exception, and attach a formatting style to each range. References to the position of an object in the collection are not valid after you use this method.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LowerBoundary</td>
<td>Required. Specifies the lower boundary of the range. Type: Variant</td>
</tr>
<tr>
<td>UpperBoundary</td>
<td>Required. Specifies the upper boundary of the range. Type: Variant</td>
</tr>
<tr>
<td>Parameters</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Style</td>
<td>Required. Specifies the name of the style to be used for the range. Type: Variant</td>
</tr>
</tbody>
</table>

**Return Type**

Object

**Example**

This example creates an exception with one range and then applies it to a new report. The style that is applied to the exceptions must be predefined.

```vbs
Sub Main()
    Dim objPPRep As Object
    Dim strExceptionName As String
    strExceptionName = "At Least 400 Thousand"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New "C:\Cubes and Reports\Great Outdoors.mdc", True
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    objPPRep.Exceptions.Add strExceptionName
    objPPRep.Columns.Exception = strExceptionName
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Methods" (p. 87)
- "Properties" (p. 283)

---

**Add Method (ReportQueries)**

**Description**

Adding a query object to the ReportQueries collection.

**Syntax**

```
ReportQueries.Add Type
```

**Applies To**

ReportQueries
Discussion

Use this method to create and add a new query, and return the new query object. You can group query objects from a Report object into a ReportQueries collection. You can use this method to add categories to the report from the CategoryList object, and then create query objects.

The ReportQueries collection is a special object that belongs to the Report object. There are several variations of the query objects that belong to the ReportQueries collection; the FindQuery, ParentageQuery, and AdvancedQuery.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Required. Specifies a numerical value that identifies the type of query to add to the query object. 1 = Find Query 2 = Parentage Query 3 = Advanced Query 4 = ValueRestriction Query Type: Integer</td>
</tr>
</tbody>
</table>

Return Type

Object

Example

This example creates an AdvancedQuery (type 3) subset definition that retrieves all categories belonging to Europe. This subset is then added to the report as rows.

```vbscript
Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode False
    objPPRep.Visible = True
    Set objAdvanced = objPPRep.ReportQueries.Add(3)
    With objAdvanced
        .Name "European Countries"
        .Dimension "Locations"
        .Level "Country"
        .Include "Europe"
        .Execute
        .AddToReport 1,1,3
    End With
    MsgBox "Name: " & objAdvanced.Name & chr$(10) & ", Dimension: " & objAdvanced.Dimension & chr$(10) & "Type: " & objAdvanced.Type & chr$(10)
End Sub
```
Related Topics

- "AddToReport Method" (p. 119)
- "AdvancedQuery Object" (p. 20)
- "FindQuery Object" (p. 36)
- "ParentageQuery Object" (p. 45)

Add Method (Reports)

Description
Adds a Report object to the Reports collection.

Syntax
Reports.Add MDCName

Applies To
Reports

Discussion
The Add method opens an existing report or cube and adds it to the Reports collection.

When you use the Add method for the Reports collection, you must capture the new Report object or it will terminate. For example, you must use the following to capture the new report created from the outdoors.mdc using the object, objPPRep1:

Set objPPRep1 = objPPApp.Reports.Add("c:\cognos\outdoors.mdc")

Using
objPPApp.Reports.Add("c:\cognos\outdoors.mdc")

terminates the report.
## Parameters

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDCName</td>
<td>Required. Specifies the name of the MDC (cube) to be opened. Type: String</td>
</tr>
</tbody>
</table>

## Return Type

Object

## Example

This example adds an existing report to the Reports collection and makes it visible in the active instance of IBM® Cognos® PowerPlay®.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objPPApp As Object
    Dim objReports As Object
    Set objPPApp = GetObject(, "CognosPowerPlay.Application")
    Set objReports = objPPApp.Reports
    Set objPPRep = objReports.Add("C:\Cubes and Reports\Sample1.ppx")
    objPPRep.Visible = True
    MsgBox "There are " & objReports.Count & " reports open."
    Set objPPRep = Nothing
    Set objReports = Nothing
    Set objPPApp = Nothing
End Sub
```

## Related Topics

- "Methods" (p. 87)
- "Properties" (p. 283)

### AddBlanks Method (Reporter)

#### Description

Adds a single blank row or column to a nested crosstab.

#### Syntax

```
Report.AddBlanks
```

#### Applies To

Report Object
**Discussion**

Use this method to improve the appearance of a crosstab by separating groups of rows or columns with blank spaces. Blank rows and columns can be resized, moved, deleted, or formatted.

Blank rows and columns are not intended to contain values. To add columns, layers, and rows that will contain values, use the Add or AddLevel methods.

AddBlanks is used in conjunction with the Select method. After objects are selected in a report using Select, you can use AddBlanks to add a blank (row or column) immediately after each selected member. The hierarchy of the nested crosstab is respected; that is, an inserted blank will appear at the same level as the corresponding selected member. Blank rows or columns belong to a list that in turn, belong to the selected member.

Using Rows as an example, all selected rows and selected blank rows will have new blank rows inserted below them.

This example uses the ItemAtLevel property to avoid blank rows at a specific position:

```vba
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    objPPRep.Rows.ItemAtLevel("Environmental Line",1).Select
    objPPRep.Rows.ItemAtLevel("Recycled Products",0).Select
    objPPRep.Rows.ItemAtLevel("Outdoor Products",1).Select
    objPPRep.Rows.AddBlanks
    objPPRep.Save
    Set objPPRep = Nothing
End Sub
```

Blank rows are not matched with blank layers when rows and layers are swapped; however, when the rows and layers are swapped again, the blank rows will reappear.

AddBlanks applies only to nested crosstabs in Reporter. If the display is not a nested crosstab, the method generates an error.

AddBlanks returns True if successful and False if unsuccessful.

**Return Type**

Boolean

**Example**

This example uses the AddBlanks method to add a blank row before the last row and a blank column before the last column in the active report.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim intRow As Integer
    Dim intColumn As Integer
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    objPPRep.ExplorerMode = False
    intRow = objPPRep.Rows.Count - 1
    intColumn = objPPRep.Cols.Count - 1
    objPPRep.Rows.Insert(intRow)
    objPPRep.Cols.Insert(intColumn)
    objPPRep.Rows.AddBlanks
    objPPRep.Save
    Set objPPRep = Nothing
End Sub
```
Addition Method (Collections)

Description
Adds a constant value or a category to one or more objects in the collection.

Syntax
\( collection.Addition \) [Operand]

Applies To
Columns
Layers
Rows

Discussion
This method can also add multiple categories together.

Depending on whether the method was applied to an object or a collection, the results are returned respectively as an object or a collection.

References to the position of an object in the collection are not valid after you use this method.
<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operand</td>
<td>Optional. Specifies either a constant value or a category object. If you specify this parameter, the method calculates the addition for each category and operand pair and creates a new category for each result. Type: Variant</td>
</tr>
</tbody>
</table>

**Return Type**

Object

**Example**

This example adds the first three rows and also adds column one and column four.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objNewCol As Object
    Dim objNewRow As Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    Set objNewRow = objPPRep.Rows.Subset(1, 3).Addition
    MsgBox "The sum of the first three rows is " _
        & objPPRep.CellValue(objNewRow(1).Index,1)
    _
    & objPPRep.CellValue(objNewRow(1).Index,1)
    MsgBox " The sum of column one and column four is " _
    & objPPRep.CellValue(1,objNewCol.Index)
    objPPRep.Save
    Set objNewRow = Nothing
    Set objNewCol = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Column Object" (p. 28)
- "Columns" (p. 68)
- "Layer Object" (p. 41)
- "Layers" (p. 75)
- "Row Object" (p. 55)
- "Rows" (p. 83)
Addition Method (Objects)

Description
Adds a constant value or a category to an object.

Syntax
```
object.Addition(Operand)
```

Applies To
- Column Object
- Layer Object
- Row Object

Discussion
Use this method to calculate the addition for the category and the operand, and creates a new category for each result.

In Explorer mode, the operands of the calculation must be from the same dimension and from the same axis.

Depending on whether the method was applied to an object or a collection, the results are returned respectively as an object or a collection.

In Explorer mode, the new calculation is inserted directly after the last operand. In Reporter mode, the new calculation is inserted directly after the active row or column.

In Explorer mode, if you change a report by removing a level, drilling, filtering or nesting, then all calculations that can not be created in the changed report disappear.

References to the position of an object in the collection are not valid after you use this method.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operand</td>
<td>Required. Specifies either a constant value or a category object. Type: Variant</td>
</tr>
</tbody>
</table>

Return Type
Object

Example
This example adds 6 to a column and then returns the sum in a new column in the report.

```vbnet
Sub Main()
    Dim objPPRep as Object
    Dim objPPCol as Object
    Set objPPRep = CreateObject ("CognosPowerPlay.Report")
```

114 IBM Cognos PowerPlay Client
objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
Set objPPCol = objPPRep.Columns.Item("Tents")
objPPCol.Addition(6)
objPPRep.Save
Set objPPCol = Nothing
Set objPPRep = Nothing
End Sub

**Related Topics**
- "Column Object" (p. 28)
- "Columns" (p. 68)
- "Layer Object" (p. 41)
- "Layers" (p. 75)
- "Row Object" (p. 55)
- "Rows" (p. 83)

## AddLevel Method

**Description**
Adds a row, column, or layer level to a nested crosstab.

**Syntax**

`collection.AddLevel CubeCategories, Level, Action, Position`

**Applies To**
- Columns
- Layers
- Rows

**Discussion**
Use this method to insert a collection of Category objects into a nested crosstab at the current position of the cursor at the specified level. The new level contains the categories in the category list.

The level can be inserted at a nesting level or group level (child categories for a parent category), depending on the setting of the Action parameter. Adding a group level adds the categories to all the categories at the given level that are part of the same group. The level can be either a parent or a child, depending on the setting of the Position parameter.

The level is set using the Level parameter, where 0 indicates the level closest to the actual data (that is, the lowest level row or column), 1 indicates the next level up, and so on. For example, where a
financial crosstab has levels for Years and Months and then data, level 0 is Months and level 1 is 
Years.

AddLevel applies only to nested crosstabs. If the graph displayed is not a nested crosstab, the method 
generates an error.

In Explorer mode, when you add a level from the same dimension, the Action parameter is ignored.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CubeCategories</td>
<td>Required. Specifies a collection of Category objects to be added to the given Dimension (rows, columns, or layers) and the specified level.</td>
</tr>
<tr>
<td>Level</td>
<td>Required. Specifies the nesting level in which to add the categories.</td>
</tr>
<tr>
<td>Action</td>
<td>Required. Specifies where to add the level:</td>
</tr>
<tr>
<td></td>
<td>1 = add at the group level. 0 = add at the nesting level</td>
</tr>
<tr>
<td></td>
<td>Note: Set this parameter to 1 (group) when the Position parameter is set to False (parent).</td>
</tr>
<tr>
<td>Position</td>
<td>Required. Specifies whether the category is added as a parent or child.</td>
</tr>
<tr>
<td></td>
<td>False = parent level True = child level</td>
</tr>
</tbody>
</table>

Return Type
Object

Example
This example adds a new nesting level of categories, as rows, to a report and then adds a new 
nesting level of columns.

Sub Main()
  Dim objCubeCategories As Object
  Dim objPPRep As Object
  Const level_0 = 0
  Const level_1 = 1
  Const add_to_current = 0
  Const add_to_all = 1
  Const as_parent = 0
Const as_child = 1
Set objPPRep = CreateObject("CognosPowerPlay.Report")
objPPRep.New "C:\Cubes and Reports\Great Outdoors.mdc",
-1
objPPRep.ExplorerMode = False
objPPRep.Visible = True
Set objCubeCategories = objPPRep.CategoryList()
objCubeCategories.Add level_1, "Channels"
objPPRep.Rows.AddLevel objCubeCategories, level_0, _
    add_to_all, as_child
objCubeCategories.Remove
objCubeCategories.Add level_1, "Locations"
objPPRep.Columns.AddLevel objCubeCategories, level_0, _
    add_to_all, as_child
Set objCubeCategories = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
• "AddBlanks Method (Reporter)" (p. 110)

AddLowestLevelCategories Method (Reporter)

Description
Adds the lowest-level categories to a report.

Syntax
object.AddLowestLevelCategories [Rollup]

Applies To
Column Object
Columns
Layer Object
Layers
Row Object
Rows

Discussion
If a Reporter report contains a parent category, this method is used to insert the lowest-level child categories after the specified parent category.
This method cannot be performed on a category that does not currently exist in the report, however it can operate on a category previously added in the macro. In this case, the lowest-level child categories are inserted after the current cursor position.

Tip: This method can be useful within the After Doc Open administrative macro if the user wants to open a report that shows the lowest level categories.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rollup</td>
<td>Optional. Specifies whether to add rollup categories to a report. Valid values are True = add rollup categories False = do not add rollup categories Default: True Type: Boolean</td>
</tr>
</tbody>
</table>

**Return Type**
Nothing

**Example**
This example adds the lowest-level children of the first row category that is in the report.

```vbscript
Sub Main()
    Dim objReport As Object
    Set objReport = GetObject ("c:\Cubes and Reports\Sample2.ppx")
    objReport.ExplorerMode = False
    objReport.Rows.Item(1).AddLowestLevelCategories True
    objReport.Rows.Item(1).Remove
    MsgBox "The parent category has been removed."
    Set objReport = Nothing
End Sub
```

**Related Topics**
- "Column Object" (p. 28)
- "Columns" (p. 68)
- "Layer Object" (p. 41)
- "Layers" (p. 75)
- "Row Object" (p. 55)
- "Rows" (p. 83)
AddToReport Method

Description
Adds query results to a report.

Syntax
object.AddToReport InsertItem, InsertPoint, LevelAction

Applies To
AdvancedQuery Object
FindQuery Object
ParentageQuery Object

Discussion
Use this method to add query results to the rows, columns, or layers in a report. You can specify where to insert the subset in the report and how it is to be inserted.

You define a subset using the AdvancedQuery, FindQuery, or ParentageQuery objects, and then use the Execute method to run the query based on the properties specified for the subset definition. This method inserts the subset into the report at a specified location.

The AddToReport method does not allow you to specify at which level the row or column will be added. A new method, AddToReportAtSpecificNestingLevel (p. 121), allows you to specify the desired nesting level.

The AddToReport method should be the last component within the subset definition for a query.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>InsertItem</td>
<td>Required. Specifies where to insert a subset in a report. 0 = Row 1 = Column 2 = Layer Type: Integer</td>
</tr>
<tr>
<td>InsertPoint</td>
<td>Required. Specifies the index in the report to add the subset. Rows, Columns, and Layers start at index 1. Type: Long</td>
</tr>
</tbody>
</table>
Parameter | Description
---|---
LevelAction | Required. Specifies the action to perform when adding a row, column, or layer into a set.
0 = None (nothing is allowed) 1 = (reserved for future use) 2 = Insert Before (short drop zone nesting (parent)) 3 = Insert After (short drop zone nesting (parent)) 4 = Add sibling category Before (same level) 5 = Add sibling category After (same level) 6 = Group Before (insert a new nesting group - long drop zone) 7 = Group After (insert a new nesting group - long drop zone)
Type: Integer
Note: Using 0 inserts the subset into the rows, columns or layers where no rows, columns or layers currently exist. If the rows, columns or layers exist, then using this value does nothing.

Return Type
Integer

Example
This example creates a FindQuery (type 1) subset definition that searches for all products that begin with the name "Star". The subset of Products that the query finds beginning with Star is then added to the report as columns.

Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objFind As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objFind = objPPRep.ReportQueries.Add(1)
    With objFind
        .Name = "Find Star"
        .Dimension = "Products"
        .SearchShortName = False
        .SearchText = "Star"
        .Pattern = 2
    End With
    Set objAdvanced = objPPRep.ReportQueries.Add(3)
With objAdvanced
  .Name = "Star Products"
  .Dimension = "Products"
  .Level "Product Id"
  .Find objFind.Name
  .Execute
  .AddToReport 1,1,3
End With
Set objAdvanced = Nothing
Set objFind = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "Execute Method" (p. 162)

AddToReportAtSpecificNestingLevel Method

Description
Adds query results to a report at a specific nesting level.

Syntax
object.AddToReportAtSpecificNestingLevel InsertItem, InsertPoint, LevelAction

Applies To
AdvancedQuery Object
FindQuery Object
ParentageQuery Object

Discussion
Use this method to add query results to the rows or columns in a report. You can specify where to insert the subset in the report and how it is to be inserted. Also, you can specify at which nesting level to insert the query results.

You define a subset using the AdvancedQuery, FindQuery, or ParentageQuery objects, and then use the Execute method to run the query based on the properties specified for the subset definition. This method inserts the subset into the report at a specified location.

The AddToReportAtSpecificNestingLevel method should be the last component within the subset definition for a query.
<table>
<thead>
<tr>
<th><strong>Parameter</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>InsertItem</td>
<td>Required. Specifies where to insert a subset in a report. 0 = Row 1 = Column. Type: Integer</td>
</tr>
<tr>
<td>InsertPoint</td>
<td>Required. Specifies the index in the report to add the subset. Rows, Columns, and Layers start at index 1. Type: Long</td>
</tr>
<tr>
<td>LevelAction</td>
<td>Required. Specifies the action to perform when adding a row or column into a set. 0 = None (nothing is allowed) 1 = (reserved for future use) 2 = Insert Before (short drop zone nesting (parent)) 3 = Insert After (short drop zone nesting (parent)) 4 = Add sibling category Before (same level) 5 = Add sibling category After (same level) 6 = Group Before (insert a new nesting group - long drop zone) 7 = Group After (insert a new nesting group - long drop zone) Type: Integer Note: Using 0 inserts the subset into the rows or columns where no rows or columns currently exist. If the rows or columns exist, then using this value does nothing.</td>
</tr>
<tr>
<td>InsertLevel</td>
<td>Required. Specifies the nesting level at which to insert the query results. The numbering for the OLE nesting levels starts at the category furthest from the report edge. For example, for a report that contains the following nesting on the row axis: Products -&gt; Retailers -&gt; Locations The corresponding OLE nesting levels will be: Locations - 1 Retailers - 2 Products - 3 Type: Integer</td>
</tr>
</tbody>
</table>

**Return Type**

Integer
Example
This example creates a FindQuery (type 1) subset definition that searches for all products that begin with the name "Star". The subset of Products that the query finds beginning with Star is then added to the report as columns.

Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objFind As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objFind = objPPRep.ReportQueries.Add(1)
    With objFind
        .Name = "Find Star"
        .Dimension = "Products"
        .SearchShortName = False
        .SearchText = "Star"
        .Pattern = 2
    End With
    Set objAdvanced = objPPRep.ReportQueries.Add(3)
    With objAdvanced
        .Name = "Star Products"
        .Dimension = "Products"
        .Level "Product Id"
        .Find objFind.Name
        .Execute
        .AddToReportAtSpecificNestingLevel 1,1,3
    End With
    Set objAdvanced = Nothing
    Set objFind = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "Execute Method" (p. 162)
- "AddToReport Method" (p. 119)
Average Method (Collections) (Reporter)

**Description**
Returns the average of a constant value or a category, and either one or more categories.

**Syntax**
`collection.Average [Operand]`

**Applies To**
Columns
Layers
Rows

**Discussion**
This method is only available if the Report object is in Reporter mode (ExplorerMode property set to False).

Depending on whether the method was applied to an object or a collection, the results are returned respectively as an object or a collection. The new calculation is inserted directly after the active row or column.

References to the position of an object in the collection are not valid after you use this method.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operand</td>
<td>Required. Specifies either a constant value or a category object. Type: Variant</td>
</tr>
</tbody>
</table>

**Return Type**
Object

**Example**
This example determines the average of the first three rows and the average of column one and four in a Reporter report.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objNewCol As Object
    Dim objNewRow As Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    objPPRep.ExplorerMode = False
    Set objNewRow = objPPRep.Rows.Subset(1, 3).Average
    MsgBox "The average of the first three rows is " & objPPRep.CellValue(objNewRow(1).Index,1)
End Sub
```
MsgBox " The average of column one and column four is " & objPPRepCellValue(1, objNewCol.Index)
objPPRep.Save
Set objNewRow = Nothing
Set objNewCol = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
● "Column Object" (p. 28)
● "Columns" (p. 68)
● "Layer Object" (p. 41)
● "Layers" (p. 75)
● "Row Object" (p. 55)
● "Rows" (p. 83)

Average Method (Objects) (Reporter)

Description
Determines the average between a constant value or another category and an object.

Syntax
\texttt{object.Average(Operand)}

Applies To
Column Object
Layer Object
Row Object

Discussion
The method calculates the average for each category and operand pair, and creates a new category for the result.

This method is only available if the Report object is in Reporter Mode (ExplorerMode property set to False).

Depending on whether the method was applied to an object or a collection, the results are returned respectively as an object or a collection. The new calculation is inserted directly after the active row or column.
References to the position of an object in the collection are not valid after you use this method.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operand</td>
<td>Required. Specifies either a constant value or a category object.</td>
</tr>
<tr>
<td></td>
<td>Type: Variant</td>
</tr>
</tbody>
</table>

**Return Type**
Object

**Example**
This example returns the average of values in one column and a constant value in a new column.

```vba
Sub Main()
    Dim objPPRep as Object
    Dim objPPCol as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    objPPRep.ExplorerMode = False
    Set objPPCol = objPPRep.Columns.Item("Tents")
    objPPCol.Average(67000)
    objPPRep.Save
    Set objPPCol = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "Column Object" (p. 28)
- "Columns" (p. 68)
- "Layer Object" (p. 41)
- "Layers" (p. 75)
- "Row Object" (p. 55)
- "Rows" (p. 83)

**CanDrillDown Method**

**Description**
Returns whether you can drill down the category object.
**Syntax**

object.CanDrillDown

**Applies To**

- Column Object
- Layer Object
- Row Object

**Discussion**

Use this method to determine whether you can show child categories. A drill down category is the immediate descendant (child) of a category that defines the properties of a drill-down path.

If this method is True, you can drill down the category. If False, you will receive an error when you attempt to drill down the category. Use the DrillDown method on the category to drill down to the next level.

**Return Type**

Boolean

**Example**

This example determines whether you can drill down on a row, and if you can, drills down to the next level.

```vbscript
Sub Main()
    Dim objPPRep as Object
    Dim objPPCol as Object
    Dim objPPRow as Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    Set objPPCol = objPPRep.Columns.Item("Outdoor Products")
    Set objPPRow = objPPRep.Rows.Item("1997")
    If objPPCol.CanDrillDown Then
        objPPCol.DrillDown
    End If
    If objPPRow.CanDrillUp Then
        objPPRow.DrillUp
    End If
    Set objPPRow = Nothing
    Set objPPCol = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Column Object" (p. 28)
- "Layer Object" (p. 41)
CanDrillUp Method

Description
Returns whether you can drill up the category object.

Syntax
object.CanDrillUp

Applies To
Column Object
Layer Object
Row Object

Discussion
Use this method to determine whether you can remove the child categories and add the parent and sibling categories. You can drill up in any hierarchy where you have drilled down. For example, you can drill up to Locations from its child category Europe. Drilling up gives you a broader perspective of a Dimension object.

If this method returns True, you can drill up on the category. If False, you will receive an error when you attempt to drill up on the category. Use the DrillUp method on the category to drill up to the next level.

Return Type
Boolean

Example
This example determines whether you can drill up on a column, and if you can, drills down to the next level.

Sub Main()
    Dim objPPRep as Object
    Dim objPPCol as Object
    Dim objPPRow as Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    Set objPPCol = objPPRep.Columns.Item("Outdoor Products")
    Set objPPRow = objPPRep.Rows.Item("1997")
    If objPPCol.CanDrillDown Then
        objPPCol.DrillDown
    End If
    If objPPRow.CanDrillUp Then
        objPPRow.DrillUp
    End If
End Sub
Related Topics

- "Column Object" (p. 28)
- "Layer Object" (p. 41)
- "Row Object" (p. 55)

Category Method

Description
Sets the parent category or dimension for the ParentageQuery subset definition.

Syntax
ParentageQuery.Category(Category[, AncestorOfCategory])

Applies To
ParentageQuery Object

Discussion
Use this method to specify the dimension name or category name for the ParentageQuery to start the query. The name of the category or dimension used is considered to be the parent.

Note: The order of the components in the subset definition is important. First, specify the Category method, followed by the LevelsDown and LowestLevels properties, and then the Execute and AddToReport methods. Set the Name property anywhere within the subset definition.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td>Required. Specifies the dimension or category name of the string to search for, or you can use it to return the name of the category found based on the name you specified. Type: String</td>
</tr>
<tr>
<td>AncestorOfCategory</td>
<td>Optional. Specifies the ancestor of the category when the category is not unique. Type: Variant</td>
</tr>
</tbody>
</table>

Return Type
None
Example

This example creates a ParentageQuery (type 2) subset definition that returns all categories one level below Channels. The categories that are one level below Channels are then added to the report as the first nesting level of rows.

Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objCategory As Object
    Dim objParent As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objParent = objPPRep.ReportQueries.Add(2)
    With objParent
        .Name = "Sales Channels"
        .Category "Channels"
        .LowestLevel = False
        .LevelsDown = 1
        .Execute
        .AddToReport 0,1,6
    End With
    MsgBox "The first category added was " & _
            objParent.Item(1).Name & ".", ,"Subset"
    Set objParent = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics

- "ParentageQuery Object" (p. 45)

CategoryList Method

Description

Creates a CategoryList object used to identify categories to be inserted in the Report object.

Syntax

Report.CategoryList

Applies To

Report Object
Discussion

To add categories to a report, first create a CategoryList object by using the CategoryList method in the report and then use it to identify the required categories. These can be existing categories found in a cube, or new ones created when the CategoryList object is passed to the report. Use the Add method to select existing categories from the MDC file. When you set the Average, Intersection, or Sum properties to True, each property creates a new category to determine the average, intersection, and sum of the selected category.

Use the Add method to add the identified categories to the report.

References to the position of an object in the collection are not valid after you use this method.

Return Type

Object

Example

This example creates a report and attaches a cube to it. Then it adds existing categories from the YEARS dimension to the rows, adds existing categories from the PRODUCTS dimension to the columns, and adds a new average category to the columns.

Sub Main()
    Dim objReport as Object
    Dim objCatList as Object
    Set objReport = CreateObject("CognosPowerPlay.Report")
    objReport.New "C:\Cubes and Reports\Great Outdoors.mdc", False
    objReport.Visible = True
    Set objCatList = objReport.CategoryList()
    objCatList.Add 1, "Years", "2008"
    objCatList.Each = True
    objReport.Rows.Add objCatList
    objCatList.Remove
    objCatList.Add 1, "Products"
    objCatList.Each = True
    objCatList.Average = True
    objReport.columns.Add objCatList
    objReport.SaveAs "New Report.ppx"
    Set objCatList = Nothing
    Set objReport = Nothing
End Sub

Related Topics

- "CategoryList Object" (p. 25)
- "ActiveReport Method" (p. 98)
- "Report Object" (p. 51)
CellValue Method

Description
Gets the value of a cell in a report.

Syntax
Report.CellValue([Row], [Column], [Layer])

Applies To
Report Object

Discussion
If any parameter is left out, the method uses the currently active row, column, or layer. You can use the Activate method to move the cursor to the appropriate cell.

If the current cursor position is not on a cell containing data, the method can fail.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row</td>
<td>Optional. Specifies the row number as an index or Row object the cell is in. Type: Integer or Object</td>
</tr>
<tr>
<td>Column</td>
<td>Optional. Specifies the column number or Column object the cell is in. Type: Integer or Object</td>
</tr>
<tr>
<td>Layer</td>
<td>Optional. Specifies the layer number or Layer object the cell is in. Type: Integer or Object</td>
</tr>
</tbody>
</table>

Return Type
Double

Example
This example opens a report, and determines if independent stores met expectations for Outdoor products in the first quarter of 2008 and shows a message to indicate whether it did.

Sub Main()
    Dim objPPRep As Object
    Dim dValue As Double
    Set objPPRep = GetObject(“C:\Cubes and Reports\Sample1.ppx”)
    dValue = objPPRep.CellValue(objPPRep.Rows.item(“2008 Q 1”), _
                                objPPRep.Columns.item(“Outdoor Products”), _
                            132 IBM Cognos PowerPlay Client
If dValue > 100000 Then
    MsgBox "Results met expectations"
Else
    MsgBox "Results are below expectations"
End If
Set objPPRep = Nothing
End Sub

Related Topics
● "Column Object" (p. 28)
● "Layer Object" (p. 41)
● "ActiveReport Method" (p. 98)
● "Report Object" (p. 51)
● "Row Object" (p. 55)

Change Method

Description
Changes the current category for the Dimension object.

Syntax
Dimension.Change(CategoryLabel)

Applies To
Dimension Object

Discussion
Use this method to focus on a different category level. The report then shows either more or less
detail about the key performance indicator. Changing the current category for the Dimension object,
is the same as changing the filter for the Dimension.

References to the position of an object in the collection are not valid after you use this method.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CategoryLabel</td>
<td>Required. Specifies the category label or index to be made active.</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
</tr>
</tbody>
</table>

Return Type
Nothing
**Example**

This example changes two of the current categories for the DimensionLine object in the current report.

```vba
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = GetObject ("C:\Cubes and Reports\Sample1.ppx")
    objPPRep.DimensionLine.Item("Years").Change("1997")
    objPPRep.DimensionLine.Item("Products").Change ("Go Sport Line")
    objPPRep.Save
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "Dimension Object" (p. 31)

**ChangeToParent Method**

**Description**
Changes the current category for the Dimension object to the category one level higher in the hierarchy.

**Syntax**

```
Dimension.ChangeToParent
```

**Applies To**
Dimension Object

**Discussion**
Use this method to identify a higher-level category in the hierarchy that summarizes the current-level categories, first. If it does not find any categories, it looks for the first higher-level category in the hierarchy that did not summarize the current-level categories.

References to the position of an object in the collection are not valid after you use this method.

**Return Type**
Nothing

**Example**

This example changes the current category for the Measures dimension to the category one level higher in the hierarchy.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objDimension as Object
```
ChangeToTop Method

Description
Changes the current category for the Dimension object to top-level category.

Syntax
Dimension.ChangeToTop

Applies To
Dimension Object

Discussion
Use this method to go directly to the top-level category for the dimension. References to the position of an object in the collection are not valid after you use this method.

Return Type
Nothing

Example
This example changes the current category of the Measures dimension to the category at the top of the hierarchy.
Sub Main()
    Dim objPPRep As Object
    Dim objDimension As Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objDimension = objPPRep.DimensionLine.Item("Measures")
    objDimension.ChangeToTop
    objDimension.Change "Product Cost"
    objDimension.BlankWhenZero = True
    objDimension.BlankWhenMissing = False
    objDimension.BlankWhenDividedByZero = False
Set objDimension = Nothing
Set objPPRep = Nothing
End Sub
Children Method

**Description**
Returns the next child in the hierarchy for an object.

**Syntax**
`object.Children`

**Applies To**
- Column Object
- Dimension Object
- Layer Object
- Row Object

**Discussion**
Use this method to obtain the children for the Column, Dimension, Layer, and Row objects. The Children method accesses the different children for the current category. For example, the 1998 Q1 category has three children: 1998/January, 1998/February, and 1998/March.

For Dimensions, use the Change method to point to a specific category, the ChangeToTop method to point to the top level, and the ChangeToParent method to point one level higher in the hierarchy.

**Return Type**
Object

**Example**
This example gets the name of the children of the first category in the columns collection, then returns the number of items and names of the children in the collection.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objChildrenCols As Object
    Dim strColChild As String
    Dim strColChildren As String
    Dim intx As Integer
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objChildrenCols = objPPRep.Columns.Item(1).Children
    For Each item In objChildrenCols
        Set strColChildren = item.Name
        Set strColChild = item.Name
        Set intx = item.Count
        Print strColChild, strColChildren, intx
    Next item
End Sub
```
For intx = 1 to objChildrenCols.Count
    strColChild = objChildrenCols.Item(intx).Name
    strColChildren = strColChildren & chr$(10)
    & _
    strColChild
Next intx
MsgBox "The " & objPPRep.Columns.Item(1).Name & _
    " category has " & objChildrenCols.Count & _
    " children." & chr$(10) & chr$(10) &
    "They are: " & _
    chr$(10) & strColChildren, , "Column Children"
Set objChildrenCols = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "Change Method" (p. 133)
- "ChangeToParent Method" (p. 134)
- "ChangeToTop Method" (p. 135)
- "Child Object" (p. 27)
- "Children" (p. 65)
- "Column Object" (p. 28)
- "Dimension Object" (p. 31)
- "Layer Object" (p. 41)
- "Row Object" (p. 55)

Close Method

Description
Closes one or all the Reports objects.

Syntax
object.Close

Applies To
Report Object
Reports
**Discussion**
When you use the Close method on a Report object, it closes without saving any modifications made since it was last saved. When you use the Close method on a Reports collection, it closes all reports without saving any modifications. If the application or reports are visible and have been modified, you are prompted to save before closing. If the application and reports are invisible, you are not prompted to save before closing.

This method breaks any OLE connections to the report. To open the report again or any other report, you must use CreateObject("CognosPowerPlay.Report") followed by the New or Open method.

**Return Type**
Nothing

**Example**
This example closes the open report without saving it.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objPPCol As Object
    Set objPPRep = GetObject("C:\Cubes and Reports\Sample1.ppx")
    Set objPPCol = objPPRep.Columns.Item(1)
    Set objPPCol = objPPRep.Columns(1)
    MsgBox "The name of the first column is " & objPPRep.Columns.Item(1).Name & " using the Item method."
    MsgBox "The name of the first column is " & objPPRep.Columns(1).Name & " using column index."
    objPPRep.Close
    Set objPPCol = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "ActiveReport Method" (p. 98)
- "Report Object" (p. 51)
- "Reports" (p. 81)
- "Reports Method" (p. 233)

**Columns Method**

**Description**
Returns a collection that contains all the Column objects.
**Syntax**

*Report.Columns*

**Applies To**

*Report Object*

**Discussion**

If no index is specified all the Column objects in the collection are returned, otherwise the method returns the specified Column object.

**Return Type**

Object

**Example**

This example shows two different ways of returning the same Column object from an existing report.

Sub Main()
    Dim objPPRep As Object
    Dim objPPCol As Object
    Set objPPRep = GetObject("C:\Cubes and Reports\Sample1.ppx")
    Set objPPCol = objPPRep.Columns.Item(1)
    Set objPPCol = objPPRep.Columns(1)
    MsgBox "The name of the first column is " & objPPRep.Columns.Item(1).Name & " using the Item method."
    MsgBox "The name of the first column is " & objPPRep.Columns(1).Name & " using column index."
    objPPRep.Close
    Set objPPCol = Nothing
    Set objPPRep = Nothing
End Sub

**Related Topics**

- "Column Object" (p. 28)
- "Columns" (p. 68)
- "ActiveReport Method" (p. 98)
- "Report Object" (p. 51)
Copy Method

Description
Copies the Row, Column, or Layer objects currently selected in the Report object to the Clipboard.

Syntax
Report.Copy

Applies To
Report Object

Discussion
Use the Select method to select the categories you want to copy.

Return Type
Nothing

Example
This example opens two reports, copies columns from one report, pastes them into the second report, and saves the second report.

Sub Main()
    Dim objPPRep1 as Object
    Dim objPPRep2 as Object
    Set objPPRep1 = CreateObject("CognosPowerPlay.Report")
    Set objPPRep2 = CreateObject("CognosPowerPlay.Report")
    objPPRep1.Open "C:\Cubes and Reports\Sample1.ppx"
    objPPRep2.Open "C:\Cubes and Reports\Sample2.ppx"
    objPPRep1.ExplorerMode = False
    objPPRep2.ExplorerMode = False
    objPPRep1.Columns.Item("Back Packs").Select
    objPPRep1.Copy
    objPPRep2.Paste
    objPPRep2.Save
    objPPRep1.Close
    objPPRep2.Close
    Set objPPRep1 = Nothing
    Set objPPRep2 = Nothing
End Sub

Related Topics
- "Column Object" (p. 28)
- "Layer Object" (p. 41)
- "Report Object" (p. 51)
CumPercentOfBase Method

**Description**
Adds one or more cumulative percent of base categories using a category from a different dimension as the base.

**Syntax**
```
object.CumPercentOfBase(BaseCategory)
```

**Applies To**
- Column Object
- Columns
- Row Object
- Rows

**Discussion**
To determine the cumulative percent of base for a row, you can only use a column as the base category. To determine the cumulative percent of base for a column, you can only use a row as the base category.

Depending on whether the method was applied to an object or a collection, the results are returned respectively as an object or a collection.

In Explorer mode, the new calculation is inserted directly after the last operand. In Reporter mode, the new calculation is inserted directly after the active row or column.

References to the position of an object in the collection are not valid after you use this method.

In Explorer mode, if you change a report by removing a level, drilling, filtering or nesting, then all calculations that can not be created disappear.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BaseCategory</td>
<td>Required. Specifies the category on which the calculation is based.</td>
</tr>
<tr>
<td></td>
<td>Type: Object</td>
</tr>
</tbody>
</table>

**Return Type**
Object
Example
This example calculates the cumulative percent of base for the Columns collection, using 2008 as the base category.

Sub Main()
    Dim objPPRep as Object
    Dim objPPRes as Object
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
    objPPRep.SaveAs "MyNewReport"
    Set objPPRep = Nothing
End Sub

Related Topics
- "Column Object" (p. 28)
- "Columns" (p. 68)
- "Row Object" (p. 55)
- "Rows" (p. 83)

Cut Method (Reporter)

Description
Moves the Row, Column, or Layer objects currently selected in the Report object to the Clipboard.

Syntax
Report.Cut

Applies To
Report Object

Discussion
Use the Select method to select the categories you want to cut.
References to the position of an object in the collection are not valid after you use this method.
This method is only available if the Report object is in Reporter Mode (the ExplorerMode property is False).

Return Type
Nothing

Example
This example opens a report, cuts the column "Outdoor Products", and saves the report.
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    objPPRep.ExplorerMode = False
    objPPRep.Columns.Item ("Outdoor Products").Select
    objPPRep.Visible = True
    objPPRep.Cut
    objPPRep.Save
    objPPRep.Close
    Set objPPRep = Nothing
End Sub

Related Topics
● "Column Object" (p. 28)
● "Layer Object" (p. 41)
● "Report Object" (p. 51)
● "Row Object" (p. 55)
● "Select Method" (p. 242)

DeleteExplorerRank Method

Description
Deletes the rank category from an Explorer report.

Syntax
<collection>.DeleteExplorerRank

Applies To
Columns
Rows

Discussion
Use this method to remove the row or column that shows the rank ordinals for a category. You can remove rank categories when you update a report and no longer require this detail, or if you add nested categories to the report and must recalculate the category rank ordinals.

If an Explorer report includes a column that shows the rank ordinals for a category, use the Columns collection and this property to permanently delete the category. If an Explorer report includes a row that shows the rank ordinals for a category, use the Rows collection and this property to permanently delete the category.
This property does not delete the rank category if the report is in Reporter mode. To delete a rank category from a Reporter report, use the DeleteSelected method.

**Return Type**

Integer

**Example**

This example removes the column that shows the rank ordinals for rows in the active report.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objRslt As Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    objPPRep.Columns.DeleteExplorerRank
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Rank2 Method" (p. 225)

---

**DeleteAllDataSourceInfo Method**

**Description**

Deletes security access information for all PowerCube data sources from memory.

**Syntax**

```
Application.DeleteAllDataSourceInfo
```

**Applies To**

Application Object

**Discussion**

Use this method to remove the access information records for all data sources stored in memory by the SetDataSourceInfo method.

To delete access information for a single data source from memory, use the DeleteDataSourceInfo method.

This method can be used to prevent unauthorized users from opening subsequent reports based on the same data source after all desired reports are open. A good situation to use this method is AfterDocOpen macro for the last report to be opened.

**Return Type**

Nothing
Example
This example opens two reports, each based on a different data source, and then removes all security access information that has been stored for both of these data sources.

Sub Main()
    Dim objPPApp As Object
    Dim objPPRep1 As Object
    Dim objPPRep2 As Object
    Dim strMDCName As String
    Set objPPRep1 = CreateObject("CognosPowerPlay.Report")
    Set objPPRep2 = CreateObject("CognosPowerPlay.Report")
    Set objPPApp = objPPRep.Application
    strMDCName = "C:\Cubes and Reports\Sample1.mdc"
    objPPApp.SetDataSourceInfo "local", strMDCName, "cube_password1"
    objPPRep1.Open("C:\Cubes and Reports\Sample1.ppx")
    strMDCName = "C:\Cubes and Reports\Sample2.mdc"
    objPPApp.SetDataSourceInfo "local", strMDCName, "cube_password2"
    objPPRep2.Open("C:\Cubes and Reports\Sample2.ppx")
    objPPApp.DeleteAllDataSourceInfo
    Set objPPRep = Nothing
    Set objPPApp = Nothing
End Sub

Related Topics
● "Application Object" (p. 23)

DeleteAllMDCAccessInfo Method

Description
Deletes security access information for all local PowerCubes from memory.

Syntax
Application.DeleteAllMDCAccessInfo

Applies To
Application Object

Discussion
Use this method to remove all access information records stored in memory by the SetMDCAccessInfo method.

To delete the access information record for a single PowerCube, use the DeleteMDCAccessInfo method.
Use the DeleteAllMDCAccessInfo method to prevent unauthorized users from opening subsequent reports based on the same PowerCube after all desired reports are open. A good situation to use this method is in the after doc open macro for the last report to be opened.

**Return Type**
Nothing

**Example**
This example opens two reports, each based on a different PowerCube, and then removes all security access information that has been stored for both cubes.

```vba
Sub Main()
    Dim objPPApp As Object
    Dim objPPRep1 As Object
    Dim objPPRep2 As Object
    Dim strMDCName As String
    Set objPPRep1 = CreateObject("CognosPowerPlay.Report")
    Set objPPRep2 = CreateObject("CognosPowerPlay.Report")
    Set objPPApp = objPPRep.Application
    strMDCName = "C:\Cubes and Reports\Sample1.mdc"
    objPPApp.SetMDCAccessInfo strMDCName, "", "cube_password1"
    objPPRep1.Open("C:\Cubes and Reports\Sample1.ppx")
    strMDCName = "C:\Cubes and Reports\Sample2.mdc"
    objPPApp.SetMDCAccessInfo strMDCName, "", "cube_password2"
    objPPRep2.Open("C:\Cubes and Reports\Sample2.ppx")
    objPPApp.DeleteAllMDCAccessInfo
    Set objPPRep = Nothing
    Set objPPApp = Nothing
End Sub
```

**Related Topics**
- "Application Object" (p. 23)

---

**DeleteDataSourceInfo Method**

**Description**
Deletes security access information for a PowerCube data source from memory.

**Syntax**

```
Application.DeleteDataSourceInfo(ConnectionType, Location)
```

**Applies To**

Application Object
Discussion
Use this method to remove the access information records, such as cube password, stored in memory by the SetDataSourceInfo method.

To delete all data source access information records from memory, use the DeleteAllDataSourceInfo method.

This method can be used to prevent unauthorized users from opening subsequent reports based on the same data source after all desired reports are open. A good situation to use this method is AfterDocOpen macro for the last report to be opened.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection Type</td>
<td>Required. Identifies whether the connection type is for a local cube or a remote package. This parameter can be either &quot;local&quot; or &quot;remote&quot;. Type: String</td>
</tr>
<tr>
<td>Location</td>
<td>Required.</td>
</tr>
<tr>
<td></td>
<td>If the connection type is local, then a fully qualified local cube is expected. For example, &quot;C:\Cubes\Great Outdoors.mdc&quot;</td>
</tr>
<tr>
<td></td>
<td>If the connection type is remote, then a package search path in native encoding is expected. For example, &quot;/content/package[@name=Great Outdoors]&quot;</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
</tr>
</tbody>
</table>

Return Type
Boolean

Example
This example sets the cube security access information record and then opens a report based on the password protected cube. Next, the data source security access record is deleted from memory.

Sub Main()
    Dim objPPApp As Object
    Dim objPPRep As Object
    Dim strMDCName As String
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    Set objPPApp = objPPRep.Application
    strMDCName = "C:\Cubes and Reports\Sample1.mdc"
    objPPApp.SetDataSourceInfo "local", strMDCName, "cube_password"
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    objPPApp.DeleteDataSourceInfo("local", strMDCName)
    Set objPPRep = Nothing
DeleteMDCAccessInfo Method

Description
Deletes security access information for a local PowerCube from memory.

Syntax
Application.DeleteMDCAccessInfo(MDCName)

Applies To
Application Object

Discussion
Use this method to remove the access information records for a local PowerCube stored in memory by the SetMDCAccessInfo method.

To delete all access information records from memory, use the DeleteAllMDCAccessInfo method.

This method can be used to prevent unauthorized users from opening subsequent reports based on the local PowerCube after all desired reports are open. A good situation to use this method is AfterDocOpen macro for the last report to be opened.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDCName</td>
<td>Required. Specifies the MDC (cube) name of a local PowerCube. This string must match the name that was used in the SetMDCAccessInfo Method. The name is not case sensitive. Type: String</td>
</tr>
</tbody>
</table>

Return Type
Boolean

Example
This example sets the cube security access information record and then opens a report based on the password protected cube. Next, the security access record is deleted from memory.

Sub Main()
    Dim objPPApp As Object
    Dim objPPRep As Object
    Dim strMDCName As String
Set objPPRep = CreateObject("CognosPowerPlay.Report")
Set objPPApp = objPPRep.Application
strMDCName = "C:\Cubes and Reports\Sample1.mdc"
objPPApp.SetMDCAccessInfo strMDCName, "", "cube_password"
objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
objPPApp.DeleteMDCAccessInfo(strMDCName)
Set objPPRep = Nothing
Set objPPApp
End Sub

Related Topics
• "Application Object" (p. 23)

DeleteSelected Method

Description
Deletes selected objects from a Report collection.

Syntax
Report.DeleteSelected

Applies To
Report Object

Discussion
Use this method in conjunction with the Select method. After objects are selected in a collection using Select, you can remove them using DeleteSelected.

ReturnType
Boolean

Example
This example searches for and deletes all rows that begin with "Star."
Sub Main()
    Dim objPPRep As Object
    Dim intFound As Integer
    Const begins_with = 2
    Const current_layer = False
    Const rows = 1
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
    objPPRep.Rows.Item(1).Activate
    intFound = 1
    Do
intFound = objPPRep.FindNext("Star", begins_with, current_layer, rows)
If intFound = -1 Then
    objPPRep.Rows.Active.Select
    objPPRep.DeleteSelected
End If
Loop While intFound <> 0
Set objPPRep = Nothing
End Sub

Related Topics
• "Select Method" (p. 242)

DeploymentOptions Method

Description
Returns the distribution options for a report published to the IBM Cognos portal.

Syntax
Report.DeploymentOptions

Applies To
Report Object

Discussion
Use this method so that a report author can set the prompt properties and PDF options for a report published to the IBM Cognos portal. The report author must explicitly set up the deployment options for a report. These options are saved with the report.

Return Type
Object

Example
This example uses the DeploymentOptions method to set up the prompt properties for a report.
Sub Main()
    Dim objPPRep as Object
    Dim objDeploymentOptions as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objDeploymentOptions = objPPRep.DeploymentOptions
    objDeploymentOptions.PromptForCurrency = True
    objDeploymentOptions.PromptForLongShortNames = True
    objDeploymentOptions.PromptForZeroSuppression = True
objDeploymentOptions.PromptForSwapRowsAndColumns = True
objDeploymentOptions.PromptForDimension(1) = True
objDeploymentOptions.PromptForDimension(2) = True
objDeploymentOptions.PromptForDimension("Years") = True
objPPRep.Save
Set objDeploymentOptions = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
• "PromptForCurrency Property" (p. 399)
• "PromptForDimension Property" (p. 400)
• "PromptForLongShortNames Property" (p. 402)
• "PromptForZeroSuppression Property" (p. 404)

Depth Method

Description
Returns whether the Graph object is three-dimensional (3D).

Syntax
Graph.Depth

Applies To
Graph Object

Discussion
This method applies specifically to Graph object Type 1 (Pie), 3 (Simple Bar), 4 (Clustered Bar), 5 (Stacked Bar), and 8 (Correlation). To set this method, use the Add method for Graph collections, or the SetType method for Graph objects. When the display type is 0, 6, 7 or 9, the depth method is always False. For display type 2, it is always True.

Default: True (Pie, Simple Bar, Clustered Bar, Stacked Bar, Correlation)

Return Type
Boolean

Example
This example changes the display type for the first Graph object to a three-dimensional cluster bar, and displays the settings for the Graph object for an open report.

Sub Main()
    Dim objPPRep as Object
Dim objPPGph as Object
Set objPPRep = GetObject( , "CognosPowerPlay.Report")
Set objPPGph = objPPRep.Graphs.Item(1)
objPPGph.SetType 4, 1, 1
MsgBox "The Graph object type is " & objPPGph.Type & "."
If objPPGph.Depth = -1 Then
    MsgBox "The graph is 3D."
Else
    MsgBox "The graph is not 3D."
End If
Set objPPGph = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
● "Graph Object" (p. 38)

DimensionFilter Method

Description
Sets the filter category for an indexed dimension.

Syntax
ValueRestriction.DimensionFilter Index, CategoryName

Applies To
ValueRestriction Object

Discussion
Use this method to specify the category name from a specific dimension to filter a value restriction. For a ValueRestriction query, only specify the DimensionFilter method when you require another dimension other than the current dimension line.

Note: For a ValueRestriction, the order of the components is important. The Dimension property must be set before the Measure, Operator, Operand1, Operand2, and Count properties and the DimensionFilter method. The Name property can be set anywhere within the filter definition.

Default: First dimension
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>Required. Specifies the dimension index to return from the dimension line. The DimensionFilter index starts at 1 and increments by 1, from left to right, for each dimension in the dimension line as they appear in the dimension line of the user interface. Type: Integer</td>
</tr>
<tr>
<td>CategoryName</td>
<td>Required. Specifies the name of the category to filter for the specified dimension.</td>
</tr>
</tbody>
</table>

**Return Type**

Nothing

**Example**

This example creates an advanced subset that selects countries from the Locations dimension. The value restriction (type 4) limits the results to return only those countries whose Revenue values for Sports Chains are between 25,000 and 100,000.

```vba
Sub Main()
  Dim strCubePath As String
  Dim objPPRep As Object
  Dim objValue As Object
  Dim objAdvanced As Object
  strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
  Set objPPRep = CreateObject("CognosPowerPlay.Report")
  objPPRep.New strCubePath, 1
  objPPRep.ExplorerMode = False
  objPPRep.Visible = True
  Set objValue = objPPRep.ReportQueries.Add(4)
  With objValue
    .Name = "25000-100000"
    .Dimension = "Locations"
    .Measure = "Revenue"
    .Operator = "between"
    .Operand1 = 25000
    .Operand2 = 100000
    .DimensionFilter 4, "Sports Chain"
  End With
  Set objAdvanced = objPPRep.ReportQueries.Add(3)
  With objAdvanced
    .Name = "Locations"
  End With
End Sub
```
Chapter 4: Methods

```
.Dimension = "Locations"
.Level "Country"
.ValueRestriction objValue.Name
.Execute
.AddToReport 0,1,3
End With
Msgbox "The Dimension Line Settings for this " & 
  "report are:" & chr$(10) & chr$(10)
& _
  objValue.DimensionSettings, , "Dimension Line"
Set objAdvanced = Nothing
Set objValue = Nothing
Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Methods" (p. 87)
- "Properties" (p. 283)

### DimensionLine Method

**Description**

Returns a DimensionLine object for the current Report object.

**Syntax**

```
Report.DimensionLine
```

**Applies To**

Report Object

**Discussion**

Use this method to find out where you are in the data as the dimension line shows the category used to filter the data from each dimension in the cube. For Explorer reports, the dimension line changes when you drill down or up, or when you filter out unnecessary information. For Reporter reports, the dimension line only changes when you use automation to filter out unnecessary information.

Use the DimensionLine object to get each individual dimension before setting up filters.

**Return Type**

Object
Example
This example changes two of the current categories for the DimensionLine object in the current report.

Sub Main()
    Dim objPPRep as Object
    Set objPPRep = GetObject ("C:\Cubes and Reports\Sample1.ppx")
    objPPRep.DimensionLine.Item("Years").Change("1997")
    objPPRep.DimensionLine.Item("Products").Change _
       ("Go Sport Line")
    objPPRep.Save
    Set objPPRep = Nothing
End Sub

Related Topics
- "DimensionLine Object" (p. 34)
- "ActiveReport Method" (p. 98)
- "Report Object" (p. 51)

Division Method

Description
Divides one or more categories by either a constant value or another category.

Syntax
object.Division(Operand [, Reverse])

Applies To
- Column Object
- Columns
- Layer Object
- Layers
- Row Object
- Rows

Discussion
This method always requires an operand since the calculation is done on a pair of values. A category is created for the results of the division. You can reverse the division so the Operand is the divisor. In Explorer mode, the operands of the calculation must be from the same dimension and from the same axis.
Depending on whether the method was applied to an object or a collection, the results are returned respectively as an object or a collection.

In Explorer mode, the new calculation is inserted directly after the last operand. In Reporter mode, the new calculation is inserted directly after the active row or column.

References to the position of an object in the collection are not valid after you use this method.

In Explorer mode, if you change a report by removing a level, drilling, filtering or nesting, then all calculations that can not be created in the changed report disappear.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operand</td>
<td>Required. Specifies either a constant value or a category object. Type: Variant</td>
</tr>
<tr>
<td>Reverse</td>
<td>Optional. Specifies whether the Operand is the divisor or the dividend. Possible values are False = Operand is the divisor True = Operand is the dividend Default: False Type: Boolean</td>
</tr>
</tbody>
</table>

Return Type

Object

Example

This example divides the first five rows by a constant value and divides column one by column four.

Sub Main()
    Dim objPPRep As Object
    Dim objRslt As Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    objPPRep.Rows.SubSet(1,5).Division 6
    Set objRslt = objPPRep.Rows.Item(1).Division _
    (objPPRep.Rows.Item(4))
    MsgBox "The result of dividing column 1 by column 4 is " _
    &objPPRep.CellValue(objRslt,1)
    Set objRslt = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics

- "Column Object" (p. 28)
DrillDown Method

Description
Drills down the specified category object.

Syntax
object.DrillDown

Applies To
Column Object
Layer Object
Row Object

Discussion
If you can't drill down a category object, you will receive an error message. Use the CanDrillDown property to determine whether you can drill down the category object.

References to the position of an object in the collection are not valid after you use this method.

Return Type
Nothing

Example
This example determines in an open report whether

- the specified Column object can drill down, and if possible, drills down to the next level
- the specified Row object can drill up, and if possible, drills up to the next level.

Sub Main()
    Dim objPPRep as Object
    Dim objPPCol as Object
    Dim objPPRow as Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    Set objPPCol = objPPRep.Columns.Item("Outdoor Products")
    Set objPPRow = objPPRep.Rows.Item("1997")
    If objPPCol.CanDrillDown Then
        objPPCol.DrillDown
End If
If objPPRow.CanDrillUp Then
    objPPRow.DrillUp
End If
Set objPPRow = Nothing
Set objPFCol = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)
- "Column Object" (p. 28)
- "Layer Object" (p. 41)
- "Row Object" (p. 55)

DrillUp Method

Description
Drills up the category object.

Syntax
object.DrillUp

Applies To
Column Object
Layer Object
Row Object

Discussion
In Explorer mode, this method shows a higher-level category. In Reporter mode, this method removes lower-level categories from a report. If you can’t drill up a category object, you will receive an error message. Use the CanDrillUp property to determine whether you can drill up the category object.

References to the position of an object in the collection are not valid after you use this method.

Return Type
Nothing

Example
This example determines in an open report whether
- the specified Column object can drill down, and if possible, drills down to the next level
- the specified Row object can drill up, and if possible, drills up to the next level.

```vba
Sub Main()
    Dim objPPRep as Object
    Dim objPPCol as Object
    Dim objPPRow as Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    Set objPPCol = objPPRep.Columns.Item("Outdoor Products")
    Set objPPRow = objPPRep.Rows.Item("1997")
    If objPPCol.CanDrillDown Then
        objPPCol.DrillDown
    End If
    If objPPRow.CanDrillUp Then
        objPPRow.DrillUp
    End If
    Set objPPRow = Nothing
    Set objPPCol = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "Column Object" (p. 28)
- "Layer Object" (p. 41)
- "Row Object" (p. 55)

---

**Exceptions Method**

**Description**
Returns one Exception object or the entire collection.

**Syntax**

```
Report.Exceptions
```

**Applies To**

Report Object

**Discussion**
If no index is specified, an Exceptions collection is returned, otherwise the method returns the requested Exception object.

**Return Type**
Object
Example
This example shows two different ways of returning the same Exception object from an existing report.

Sub Main()
    Dim objPPRep As Object
    Dim objPPExp As Object
    Set objPPRep = GetObject("C:\Cubes and Reports\Exception.ppx")
    Set objPPExp = objPPRep.Exceptions.Item(1)
    MsgBox "The exception is " & objPPRep.Exceptions.Item(1).Name
    Set objPPExp = objPPRep.Exceptions(1)
    MsgBox "The exception is " & objPPRep.Exceptions(1).Name
    Set objPPExp = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
● "Exception Object" (p. 35)
● "Exceptions" (p. 71)
● "ActiveReport Method" (p. 98)
● "Report Object" (p. 51)

Exclude Method

Description
Sets the categories to exclude from the query.

Syntax
AdvancedQuery.Exclude CategoryName [,ParentName]

Applies To
AdvancedQuery Object

Discussion
Use this method in the subset definition to identify the categories to exclude from the query. To exclude more than one category from the query, include multiple Exclude statements in the subset definition for AdvancedQuery object.

If the resulting query finds more than one category that matches the specified label, specify the optional parameter, which can be the parent category or drill-down path of the desired category. The functionality is added to identify the category. For example:

Exclude("CategoryName", "ParentName or drill-down path name")
Note: The order of the components in the subset definition is important. First, specify the Dimension property, followed by the Level method. The Include, Exclude, and Find methods are optional and can appear in any order following the Dimension and Level properties. The Name property is required and can be set anywhere within the subset definition. Specify Execute, followed by the AddToReport method last.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CategoryName</td>
<td>Required. Specifies the name of the category to exclude from the query.</td>
</tr>
<tr>
<td>ParentName</td>
<td>Optional. Specifies the name of the ancestor category of the category to exclude from the subset. For example, two countries may have the same city name. Use the country name (the ancestor) to differentiate between the two cities.</td>
</tr>
</tbody>
</table>

**Return Type**

Nothing

**Example**

This example creates an AdvancedQuery (type 3) subset definition that retrieves all categories except those belonging to Europe. This subset is then added to the report as layers.

```vbs
Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objCatList As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objCatList = objPPRep.CategoryList()
    objCatList.Add 0, "Locations"
    objPPRep.Layers.Add objCatList
    Set objAdvanced = objPPRep.ReportQueries.Add(3)
    With objAdvanced
        .Name = "Americas & Far East"
        .Dimension = "Locations"
        .Level "Country"
        .Exclude "Europe"
    End With
```
Execute

PostExecute 2,1,4

End With

Msgbox "Name: " & objAdvanced.Name & chr$(10) & 
"Dimension: " & objAdvanced.Dimension & 
chr$(10) & 
"Level List: " & objAdvanced.LevelList & 
chr$(10) & 
"Query Type Code: " & objAdvanced.Type & 
chr$(10) & 
"Number of Categories: " & objAdvanced.Count & 
chr$(10) & 
"First Category: " & objAdvanced.Item(1).Name, 
"Subset"

Set objAdvanced = Nothing
Set objCatList = Nothing
Set objPPRep = Nothing
End Sub

Related Topics

- "AdvancedQuery Object" (p. 20)
- "Include Method" (p. 183)

Execute Method

Description

Runs a query on the cube.

Syntax

object.Execute

Applies To

AdvancedQuery Object
FindQuery Object
ParentageQuery Object

Discussion

Use this method to run the query to create a data subset. Subsets are defined by creating the object (AdvancedQuery, FindQuery, or ParentageQuery) and setting the applicable properties for the type of query. This resulting subset definition is run using the Execute method.
Return Type
Nothing

Example
This example runs an AdvancedQuery (type 3) subset definition that retrieves all categories except those belonging to Europe. This subset is then added to the report as layers.

Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objCatList As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objCatList = objPPRep.CategoryList()
    objCatList.Add 0,"Locations"
    objPPRep.Layers.Add objCatList
    Set objAdvanced = objPPRep.ReportQueries.Add(3)
    With objAdvanced
        .Name = "Americas & Far East"
        .Dimension = "Locations"
        .Level "Country"
        .Exclude "Europe"
        .Execute
        .AddToReport 2,1,4
    End With
    MsgBox "Name: " & objAdvanced.Name & chr$(10)
    & _
    "Dimension: " & objAdvanced.Dimension &
    chr$(10) & _
    "Level List: " & objAdvanced.LevelList &
    chr$(10) & _
    "Query Type Code: " & objAdvanced.Type &
    chr$(10) & _
    "Number of Categories: " & objAdvanced.Count
    & _
    chr$(10) & _
    "First Category: " & objAdvanced.Item(1).Name,
    _
    "Subset"
    Set objAdvanced = Nothing
    Set objCatList = Nothing
    Set objPPRep = Nothing
End Sub
Exponentiation Method

Description
Raises one or more categories to the power of either another category or a constant value.

Syntax

```
object.Exponentiation(Operand [, Reverse])
```

Applies To
Column Object
Columns
Layer Object
Layers
Row Object
Rows

Discussion
This method always requires an Operand since the calculation is done on a pair of values. A category is created for the result of the exponentiation. You can reverse the exponentiation.

Depending on whether the method was applied to an object or a collection, the results are returned respectively as an object or a collection. The new calculation is inserted directly after the active row or column.

This method can also raise a constant value to the power of one or more categories.

References to the position of an object in the collection are not valid after you use this method. If you change a report by removing a level, drilling, filtering or nesting, then all calculations that cannot be created in the changed report disappear.

Note: In Explorer mode, you cannot perform this calculation on a group of categories. If more than one category is selected, the Exponentiate calculation is disabled.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operand</td>
<td>Required. Specifies either a constant value or a category object. Type: Variant</td>
</tr>
<tr>
<td>Parameters</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Reverse</td>
<td>Optional. Specifies whether the Operand is the value to be exponentiated or the exponent. If True, the Operand is the value to be exponentiated. If False, it is the exponent. Default: False. Type: Boolean</td>
</tr>
</tbody>
</table>

**Return Type**
Object

**Example**
This example raises the values in one column to the power of a constant value and returns the results in a new column.

Sub Main()
    Dim objPPRep as Object
    Dim objPPCol as Object
    Set objPPRep = CreateObject ("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    objPPRep.ExplorerMode = False
    Set objPPCol = objPPRep.Columns.Item("Tents")
    objPPCol.Exponentiation(2)
    objPPRep.Save
    Set objPPCol = Nothing
    Set objPPRep = Nothing
End Sub

**Related Topics**
- "Column Object" (p. 28)
- "Columns" (p. 68)
- "Layer Object" (p. 41)
- "Layers" (p. 75)
- "Row Object" (p. 55)
- "Rows" (p. 83)

**Find Method**

**Description**
Specifies the name of the FindQuery object to include in an AdvancedQuery.
Chapter 4: Methods

Syntax

AdvancedQuery.Find FindSubsetName

Applies To

AdvancedQuery Object

Discussion

Use this method to attach a FindQuery object to the AdvancedQuery object. First, you must create the FindQuery object, then it must be assigned a name. Find filters the query for the AdvancedQuery object by matching the query name and validating its dimension name.

Find can be broken down into two main functional areas: finding within cube data and finding within report data. When dealing with large amounts of data in a report, Find can locate an individual category matching all specified search criteria. If searching for data within a cube, Find creates a query that locates all categories matching all specified criteria.

A search does not include hidden categories inside a report. The Find Method is an optional component within the subset definition for AdvancedQuery.

You must create the FindQuery before adding it to the AdvancedQuery subset.

Note: The order of the components in the subset definition is important. First, specify the Dimension property, followed by the Level method. The Include, Exclude, and Find methods are optional and can appear in any order following the Dimension and Level properties. The Name property is required and can be set anywhere within the subset definition. Specify Execute, followed by the AddToReport method last.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FindSubsetName</td>
<td>Required. Specifies the name of the FindQuery subset to include in the AdvancedQuery query. Type: String</td>
</tr>
</tbody>
</table>

Return Type

String

Example

This example creates a FindQuery (type 1) subset definition that searches for all products that begin with the name "Star". Then an AdvancedQuery (type 3) subset is created using the FindQuery subset definition. The subset of Products that the query finds beginning with Star is then added to the report as columns.

```vbnet
Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objFind As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
```
Set objPPRep = CreateObject("CognosPowerPlay.Report")
objPPRep.New strCubePath, 1
objPPRep.ExplorerMode = False
objPPRep.Visible = True
Set objFind = objPPRep.ReportQueries.Add(1)
With objFind
    .Name = "Find Star"
    .Dimension = "Products"
    .SearchShortName = False
    .SearchText = "Star"
    .Pattern = 2
End With
Set objAdvanced = objPPRep.ReportQueries.Add(3)
With objAdvanced
    .Name = "Star Products"
    .Dimension = "Products"
    .Level "Product Id"
    .Find objFind.Name
    .Execute
    .AddToReport 1,1,3
End With
Set objAdvanced = Nothing
Set objFind = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "AdvancedQuery Object" (p. 20)

FindNext Method

Description
Finds the next matching category label in a report.

Syntax
Report.FindNext (SearchText [, Pattern [, AllLayers [, Dimension]]])

Applies To
Report Object

Discussion
Use this method to locate categories within reports. Use the Execute method to locate categories within a cube.
FindNext looks for the next category in the report that matches the value prescribed by the parameters. If a match is found, True is returned; otherwise, False is returned.

The method's four parameters set the search options. Once the required parameter SearchText is given, the three optional parameters let you determine:

- if the search string is to be found anywhere in a word, at the start of a word only, or the end of a word only
- if pattern matching is set on or off
- if the search text is to match the whole word or any part of the word
- if the search is to be case sensitive
- if the current layer or all layers are to be searched
- if labels in rows, columns, layers or a combination of these are to be searched

If you search all three report dimensions (rows, columns, layers), the search progresses downward one layer at a time in the following order:

- rows in the current layer
- columns in the current layer
- the current layer label

The search ignores any hidden categories inside the report.

When a search returns True (that is, a match was found), the cursor is positioned on the matching label.

In nested crosstabs, FindNext searches for labels in each dimension, beginning at the current cursor position, and moves downward through the hierarchy to the lowest level.

When you set one of the three optional parameters, you must also set any optional parameters to its left, even if just the default is given. For example, to search just the rows dimension (value = 1) for the next label that contains "GO" in the current layer, your code looks like this:

```plaintext
FindNext("GO", 1, FALSE, 1)
```

Even though the second and third parameters use the defaults, they are needed as placeholders when changing the fourth. However, you can omit parameters if you need just the left-hand parameters and those to the right remain at their default settings.

To turn on more than one search option for the Pattern or Dimension parameters, add up the search option values. For example, to search just columns in the current layer for the next label beginning with "GO" with case sensitivity turned on, the code looks like this:

```plaintext
FindNext("GO", 34, FALSE, 1)
```

If you also want to search all rows, columns, and layers (Dimension = 7), the code looks like this:

```plaintext
FindNext("GO", 34, FALSE, 7)
```

Unless you specifically include a value for a parameter, the search option is not in effect. For example, to make a search case sensitive, you must include the value 32.
Adding values that cannot be used together causes an exception error. For example, don’t combine the Contains, Begins With, or Ends With values since they are mutually exclusive. Do not use any of these with MatchWhole. Pattern Matching (Pattern = 8) cannot be used with MatchCase (Pattern = 16) or MatchWhole (Pattern = 32).

Examples of valid combinations include:

- **MatchCase + Pattern Matching = (40)**
- **MatchCase + Contains = (33)**
- **MatchCase + Begins With = (34)**
- **MatchCase + Ends With = (36)**
- **MatchCase + MatchWhole = (48)**

When the Pattern Matching value is used (Pattern = 8), the Find operation recognizes some characters in the text string as wildcards and some metacharacters are treated as reserved characters. If the metacharacters are included, an error message appears. If pattern matching is not used, wildcards and metacharacters are treated as normal characters.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SearchText</td>
<td>Required. Specifies the text to search for. Can contain wildcards if pattern matching (8) is turned on. An empty string is invalid. Type: String</td>
</tr>
</tbody>
</table>
| Pattern | Optional. Specifies the search options. (There are certain reserved characters noted below.) Values are added to set option variations.  

1 = Contains: the search text can be found anywhere in a word  
2 = Begins With: the search text must be found at the start of a word  
4 = Ends With: the search text must be found at the end of a word  
8 = Pattern Matching: certain characters are treated as wildcards (these are listed in the table below)  
16 = MatchWhole: the search text must match the whole word  
32 = MatchCase: the search is case sensitive  

Default: 1  
Type: Integer |
<table>
<thead>
<tr>
<th><strong>Parameter</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>AllLayers</td>
<td>Optional. Specifies whether or not all layers or just the current layer are searched. Valid options are True = all layers False = current layer</td>
</tr>
<tr>
<td></td>
<td>Default: False</td>
</tr>
<tr>
<td></td>
<td>Type: Boolean</td>
</tr>
<tr>
<td>Dimension</td>
<td>Optional. Specifies the scope of the search.</td>
</tr>
<tr>
<td></td>
<td>1 = row labels only 2 = column labels only 3 = row and column labels only 4 = layer labels only 5 = layer and row labels only 6 = layer and column labels only 7 = all labels</td>
</tr>
<tr>
<td></td>
<td>Default: 3</td>
</tr>
<tr>
<td></td>
<td>Type: Integer</td>
</tr>
</tbody>
</table>

**Return Type**

Boolean

**Example**

This example searches for the next row beginning with "Star", if no row is found it tries to find the previous row containing "Star". A message is returned confirming whether a matching row was found.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim intFound As Integer
    Const begins_with = 2
    Const current_layer = False
    Const rows = 1
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
    intFound = objPPRep.FindNext("Star", begins_with, current_layer, rows)
    If intFound = 0 Then
        intFound = objPPRep.FindPrevious("Star", begins_with, current_layer, rows)
    End If
    If intFound <> 0 Then
        objPPRep.Rows.Active.Select
        MsgBox "A row was found and has been selected."
    Else
        MsgBox "No rows found matching criteria."
End Sub
```
End If
Set objPPRep = Nothing
End Sub

Related Topics
● "Execute Method" (p. 162)
● "Find Method" (p. 165)
● "FindPrevious Method" (p. 171)

FindPrevious Method

Description
Finds the previous matching category label in a report.

Syntax
Report.FindPrevious (SearchText [, Pattern [, AllLayers [, Dimension]]])

Applies To
Report Object

Discussion
Use this method to locate categories within reports. Use the Execute method to locate categories
within a cube.

FindPrevious performs a find previous or find up operation and looks for the previous category in
the report that matches the value prescribed by the parameters. If a match is found, True is returned;
otherwise, False is returned.

The method’s four parameters set the search options. Once the required parameter SearchText is
given, the three optional parameters let you determine:

● if the search string is to be found anywhere in a word, at the start of a word only, or the end
  of a word only
● if pattern matching is set on or off
● if the search text is to match the whole word or any part of the word
● if the search is to be case sensitive
● if the current layer or all layers are to be searched
● if labels in rows, columns, layers or a combination of these are to be searched

If you search all three report dimensions (rows, columns, layers), the search progresses upward one
layer at a time in the following order:

● rows in the current layer
columns in the current layer

the current layer label

When a search returns True (that is, a match was found), the cursor is positioned on the matching label.

The search ignores any hidden categories inside the report.

In nested crosstabs, FindPrevious searches for labels in each dimension, beginning at the current cursor position, and moves upward through the hierarchy to the highest level.

When you set one of the three optional parameters, you must also set any optional parameters to its left, even if just the default is given. For example, to search just the rows dimension (value = 1) for the previous label which contains "GO" in the current layer, your code looks like this:

FindPrevious("GO", 1, FALSE, 1)

Even though the second and third parameters use the defaults, they are needed as placeholders when changing the fourth. However, you can omit parameters if you need just the left-hand parameters and those to the right remain at their default settings.

To turn on more than one search option for the Pattern or Dimension parameters, add up the search option values. For example, to search just columns in the current layer for the next label beginning with "GO" with case sensitivity turned on, the code looks like this:

FindPrevious("GO", 34)

If you also want to search all rows, columns, and layers (Dimension = 7), the code looks like this:

FindPrevious("GO", 34, FALSE, 7)

Unless you specifically include a value for a parameter, the search option is not in effect. For example, to make a search case sensitive, you must include the value 32.

Adding values that cannot be used together causes an exception error. For example, do not combine the Contains, Begins With, or Ends With values since they are mutually exclusive, and don't use any of these with MatchWhole. Pattern Matching (Pattern = 8) cannot be used with MatchCase (Pattern = 16) or MatchWhole (Pattern = 32).

Examples of valid combinations include:

- MatchCase + Pattern Matching = (40)
- MatchCase + Contains = (33)
- MatchCase + Begins With = (34)
- MatchCase + Ends With = (36)
- MatchCase + MatchWhole = (48)

When the Pattern Matching value is used (Pattern = 8), the Find operation recognizes some characters in the text string as wildcards and some metacharacters are treated as reserved characters when Pattern Matching is used. If the metacharacters are included, an error message appears. If pattern matching is not used, wildcards and metacharacters are treated as normal characters.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SearchText</td>
<td>Required. Specifies the text to search for. Can contain wildcards if pattern matching (8) is turned on. An empty string is invalid.</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
</tr>
<tr>
<td>Pattern</td>
<td>Optional. Specifies the search options. (There are certain reserved characters noted below.) Values are added to set option variations.</td>
</tr>
<tr>
<td></td>
<td>1 = Contains: the search text can be found anywhere in a word. 2 = Begins With: the search text must be found at the start of a word 4 = Ends With: the search text must be found at the end of a word 8 = Pattern Matching: certain characters are treated as wildcards (these are listed in the table below) 16 = MatchWhole: the search text must match the whole word 32 = MatchCase: the search is case sensitive</td>
</tr>
<tr>
<td></td>
<td>Default: 1</td>
</tr>
<tr>
<td></td>
<td>Type: Integer</td>
</tr>
<tr>
<td>AllLayers</td>
<td>Optional. Specifies whether or not all layers or just the current layer are searched. Valid options are</td>
</tr>
<tr>
<td></td>
<td>True = all layers False = current layer</td>
</tr>
<tr>
<td></td>
<td>Default: False</td>
</tr>
<tr>
<td></td>
<td>Type: Boolean</td>
</tr>
<tr>
<td>Dimension</td>
<td>Optional. Specifies the scope of the search.</td>
</tr>
<tr>
<td></td>
<td>1 = row labels only 2 = column labels only 3 = row and column labels only 4 = layer labels only 5 = layer and row labels only 6 = layer and column labels only 7 = all labels</td>
</tr>
<tr>
<td></td>
<td>Default: 3</td>
</tr>
<tr>
<td></td>
<td>Type: Integer</td>
</tr>
</tbody>
</table>

**Return Type**

Boolean

**Example**

This example searches for the next row beginning with "Star", if no row is found it tries to find the previous row containing "Star". A message is returned confirming whether a matching row was found.
Sub Main()
    Dim objPPRep As Object
    Dim intFound As Integer
    Const begins_with = 2
    Const current_layer = False
    Const rows = 1
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
    intFound = objPPRep.FindNext("Star", begins_with, _
        current_layer, rows)
    If intFound = 0 Then
        intFound = objPPRep.FindPrevious("Star", _
            begins_with, current_layer, rows)
    End If
    If intFound <> 0 Then
        objPPRep.Rows.Active.Select
        MsgBox "A row was found and has been selected."
    Else
        MsgBox "No rows found matching criteria."
    End If
    Set objPPRep = Nothing
End Sub

Related Topics
- "Execute Method" (p. 162)
- "Find Method" (p. 165)
- "FindNext Method" (p. 167)

Forecast Method (Explorer)

Description
Creates a specified number of forecast categories based on the existing time dimensions.

Syntax
Report.Forecast

Applies To
Report Object

TERMS OF USE
The forecasting methods utilized in the Forecasting Function are based on the statistical analysis of historical information drawn from underlying data sources. The accuracy of the forecasted values is subject to many variables, including the accuracy of the underlying historical data and external
events which could affect the validity of that underlying historical data for forecasting purposes. The Forecasting Function is to be used only as a guide of the future values for the measures being forecasted and is not intended to be used as the basis for complex financial or business decisions.

Cognos makes no representations as to the accuracy of the actual future values and does not guarantee any specific results. You use the Forecasting Function and the data it generates at your own risk. The Forecasting Function may contain errors or produce inaccurate calculations. You accept the Forecasting Function and the documentation "AS IS". IN NO EVENT SHALL COGNOS BE LIABLE FOR DAMAGES OF ANY KIND INCLUDING, WITHOUT LIMITATION, DIRECT, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, RESULTING FROM THE USE OF THE FORECASTING FUNCTION OR THE INTERPRETATION OF THE DATA RESULTING THEREFROM.

Discussion
This method is available only if the Report object is in Explorer mode (the ReporterMode property is False).

You can use one of the following time series forecasting methods:

- The Trend forecasting method is based on the linear regression technique of time series forecasting. Trend forecasting gives the best forecasting reliability when the driving factors of your business affect your measures in a linear fashion. Use the Trend forecasting method when you have only two data values representing two time periods in your historic data.

- The Growth forecasting method is based on the exponential regression technique of time series forecasting. Growth forecasting gives you the best forecasting reliability when the driving factors of your business affect your measures exponentially.

- The Autoregression forecasting method is based on the auto-correlational approach to time series forecasting. Autoregression forecasting detects the linear, non-linear, and seasonal fluctuations in historical data and projects these trends into the future. Autoregression provides the best forecasting reliability when the driving factors underlying your business are affected by seasonal fluctuations. Use the Autoregression method when you have historic data representing a large number of time periods (for example, more than 24 monthly periods).

The Rows or Columns must contain time categories. The forecast horizon is limited to the number of time categories in the report. For example, if there are two year categories in the report (2008, 1997), the maximum horizon value is two.

If the horizon value is zero, existing forecasts are removed from the report.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method</td>
<td>Required. Specifies the forecast method to be used. IBM® Cognos® PowerPlay® provides the Trend, Growth, and Autoregression methods of forecasting. The forecast method is 1 for Trend, 2 for Growth, and 3 for Autoregression. Type: Short</td>
</tr>
</tbody>
</table>
### Parameter Description

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HorizonValue</td>
<td>Required. Specifies the number of forecasts to be returned. The forecast horizon is limited to the number of time categories in the report.</td>
</tr>
<tr>
<td></td>
<td><strong>Type:</strong> Short</td>
</tr>
</tbody>
</table>

### Return Type

Nothing

### Example

This example returns an open report, confirms that the report is in Explorer mode, verifies that either the Column objects or the Row objects contain time categories, verifies that the horizon value is valid, and enters a forecast horizon value of two.

```vbscript
Sub Main()
    Dim objPPRep As Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open("C:\Great Outdoors.mdc")
    objPPRep.ExplorerMode = True
    objPPRep.Visible = True
    objPPRep.Forecast 1,2
    Set objPPRep = Nothing
End Sub
```

### Related Topics

"Report Object" (p. 51)

---

### GetDataNow Method

#### Description

Updates the data in the Report object.

#### Syntax

`Report.GetDataNow`

#### Applies To

Report Object

#### Discussion

In a situation where data is constantly fluctuating, the data can be immediately updated using the GetDataNow Method. By using the Scheduler with a macro that uses GetDataNow to update reports, you can do so at 2:00AM when the network traffic is low.
**Return Type**
Nothing

**Example**
This example opens a report, and if the GetDataAutomatically property is set to False, the GetDataNow method updates the data in the report.

```vba
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    objPPRep.Visible = True
    If objPPRep.GetDataAutomatically = 0 Then
        objPPRep.GetDataNow
    End if
    objPPRep.Close
    Set objPPrep = Nothing
End Sub
```

**Related Topics**
- "GetDataNow Method" (p. 176)
- "ActiveReport Method" (p. 98)
- "Report Object" (p. 51)

**Graphs Method**

**Description**
Returns one Graph object or the entire collection.

**Syntax**
```
Report.Graphs
```

**Applies To**
Report Object

**Discussion**
If no index is specified, a Graphs collection object is returned, otherwise the method returns the requested Graph object.

**Return Type**
Object
Example
This example opens a report, and shows the display type for the first display in the report.

Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Graph.ppx"
    MsgBox "The type of graph is" & _
        objPPRep.Graphs.Item(1).Type & "."
    Set objPPRep = Nothing
End Sub

Related Topics
● "Graph Object" (p. 38)
● "Graphs" (p. 72)
● "ActiveReport Method" (p. 98)
● "Report Object" (p. 51)

HasParent Method

Description
Returns whether the current category has a parent.

Syntax
Dimension.HasParent

Applies To
Dimension Object

Discussion
Use this method to determine if the current category has a parent category. Top level, alternate,
and calculated categories do not have a parent. Use the Parent method to return the name of the
parent category.

True indicates that there is a parent, and False indicates no parent.

Return Type
Boolean

Example
For the category that the first dimension is filtered on, this example determines if it has a parent
category, whether it is visible, and displays the parent name.

Sub Main()
Sub ChangesDimensionProperties()

Dim objPPRep As Object
Dim objDimension As Object
Dim strName As String
Dim strVisible As String
Set objPPRep = GetObject(,"CognosPowerPlay.Report")
Set objDimension = objPPRep.DimensionLine.Item(1)
objDimension.ChangeToTop

If objDimension.HasParent = 0 Then
    MsgBox "The " & objDimension.Name & " dimension has " & 
            "no parent."
    strName = objDimension.Children.Item(1).Name
    objDimension.Change strName
    If objDimension.Visible = -1 Then
        strVisible = "visible"
    Else
        strVisible = "not visible"
    End If
    MsgBox "The " & objDimension.Name & " dimension is " & 
            strVisible & "." & chr$(10) & chr$(10) & 
            "Its parent is " & objDimension.Parent & 
            "." & chr$(10) & chr$(10)
End If

Set objDimension = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "Dimension Object" (p. 31)
- "ChangeToParent Method" (p. 134)

---

**Hide Method**

**Description**
Hides the category.

**Syntax**

```
object.Hide
```

**Applies To**

- Column Object
- Columns
Row Object

Rows

Discussion
Use this method to hide a single category or a collection of categories in a Report object. To reveal them, use the UnhideAllCategories method on the Report object. References to the position of an object in the collection are not valid after you use this method.

You cannot hide summary categories.

Return Type
Nothing

Example
This example opens a report and hides the column "Tents".

Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.opp"
    objPPRep.Columns.Item("Tents").Hide
    objPPRep.Save
    objPPRep.Close
End Sub

Related Topics
- "Column Object" (p. 28)
- "Columns" (p. 68)
- "Report Object" (p. 51)
- "Row Object" (p. 55)
- "Rows" (p. 83)
- "UnhideAllCategories Method" (p. 273)

HideSelected Method

Description
Hides selected objects in a collection.

Syntax
Report.HideSelected
Applies To

Report Object

Discussion

Use this method in conjunction with the Select method. Once objects are selected in a collection using Select, you can hide them using HideSelected. To reveal all hidden objects, use the Unhide method. It returns True if it is successful; otherwise, it returns False if an error occurs.

Return Type

Boolean

Example

This example searches for and hides all rows that begin with "Star."

Sub Main()
    Dim objPPRep As Object
    Dim intFound As Integer
    Const begins_with = 2
    Const current_layer = False
    Const rows = 1
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
    objPPRep.Rows.Item(1).Activate
    intFound = 1
    Do While intFound <> 0
        intFound = objPPRep.FindNext("Star", begins_with,
           current_layer, rows)
        If intFound = -1 Then
            objPPRep.Rows.Active.Select
            objPPRep.HideSelected
        End If
    Loop
    Set objPPRep = Nothing
End Sub

Related Topics

- "HideUnselected Method" (p. 181)
- "Select Method" (p. 242)

HideUnselected Method

Description

Hides any object in a collection that is not selected.
Syntax

Report.HideUnSelected

Applies To

Report Object

Discussion

Use this method in conjunction with the Select method. Once objects are selected in a collection using Select, you can use HideUnselected to hide all objects not currently selected. It returns True if it is successful; otherwise, it returns False if an error occurs.

If you use HideUnselected without first using Select, you will hide everything.

Return Type

Boolean

Example

This example selects the first row which starts with 'Star' and hides all other rows.

Sub Main()
    Dim objPPRep As Object
    Dim intFound As Integer
    Const begins_with = 2
    Const current_layer = False
    Const rows = 1
    Set objPPRep = GetObject(, "CognosPowerPlay_Report")
    objPPRep.Rows.Item(1).Activate
    intFound = 1
    intFound = objPPRep.FindNext("Star", begins_with,
    _
    current_layer, rows)
    If intFound = -1 Then
        objPPRep.Rows.Active.Select
        objPPRep.HideUnselected
    Else
        MsgBox "No rows found."
    End If
    Set objPPRep = Nothing
End Sub

Related Topics

- "HideSelected Method" (p. 180)
- "Select Method" (p. 242)
Include Method

Description
Sets the categories to include in the query.

Syntax
`AdvancedQuery.Include CategoryName [,ParentName]`

Applies To
AdvancedQuery Object

Discussion
Use this method to identify the categories to include in the subset definition for the AdvancedQuery. To include more than one category in the query, specify multiple Include statements in the subset definition for an AdvancedQuery.

If the resulting query finds more than one category that matches the specified label, specify the optional parameter, which can be the parent category or drill-down path of the desired category. The functionality is added to identify the category. For example

```
Include("CategoryName", "ParentName or drill-down path name")
```

Note: The order of the components in the subset definition is important. First, specify the Dimension property, followed by the Level method. The Include, Exclude, and Find methods are optional and can appear in any order following the Dimension and Level properties. The Name property is required and can be set anywhere within the subset definition. Specify Execute, followed by the AddToReport method last.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CategoryName</td>
<td>Required. Specifies the name of the category to include in the subset. Type: String</td>
</tr>
<tr>
<td>ParentName</td>
<td>Optional. Specifies the name of the ancestor category of the category to include in the subset. For example, two countries may have the same city name. Use the country name (the ancestor) to differentiate between the two cities. Type: String</td>
</tr>
</tbody>
</table>

Return Type
Nothing
Example

This example creates an AdvancedQuery (type 3) subset definition that retrieves all categories belonging to Europe. The resulting subset is then added to the report as rows.

Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objAdvanced = objPPRep.ReportQueries.Add(3)
    With objAdvanced
        .Name = "European Countries"
        .Dimension = "Locations"
        .Level "Country"
        .Include "Europe"
        .Execute
        .AddToReport 0,1,3
    End With
    MsgBox "Name: " & objAdvanced.Name & chr$(10) & _
          "Dimension: " & objAdvanced.Dimension & chr$(10) & _
          "Level List: " & objAdvanced.LevelList & chr$(10) & _
          "Query Type Code: " & objAdvanced.Type & chr$(10) & _
          "Number of Categories: " & objAdvanced.Count & chr$(10) & _
          "First Category: " & objAdvanced.Item(1).Name,
    "Subset"
    Set objAdvanced = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics

- "AdvancedQuery Object" (p. 20)
- "Exclude Method" (p. 160)
**Item Method**

**Description**
Returns an object from the collection or the object that maintains a list of other objects.

**Syntax**
```
object.Item(Index)
```

**Applies To**
- AdvancedQuery Object
- Children
- Columns
- DimensionLine Object
- Exceptions
- FindQuery Object
- Graphs
- Layers
- ParentageQuery Object
- Ranges
- Reports
- ReportQueries
- Rows

**Discussion**
Since the Item method is the default method for all collections except Exceptions and Graphs, only the index parameter is required and not the method name. If Item is the default method, the following are equivalent:

```
Collection.Item(3)
Collection(3)
```

For Exceptions and Graphs collections and DimensionLine object, you must use a syntax similar to the following to select an object from them:

```
Set objPPRange = objPPRep.Exceptions.Item(1).Range
```

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>Required. The category label or index of the object to return. For the Graphs collection, only the category index is available. Type: String or Long</td>
</tr>
</tbody>
</table>
Return Type
Object

Example
This example adds column one and column four. In this case, the Item method is used to select the specific rows and columns.

Sub Main()
    Dim objPPRep As Object
    Dim objNewCol As Object
    Dim objNewRow As Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    Set objNewRow = objPPRep.Rows.Subset(1, 3).Addition
    MsgBox "The sum of the first three rows is " _
           & objPPRep.CellValue(objNewRow(1).Index,1)
                   (objPPRep.Columns.Item(1))
    MsgBox " The sum of column one and column four is " _
           & objPPRep.CellValue(1,objNewCol.Index)
    objPPRep.Save
    Set objNewRow = Nothing
    Set objNewCol = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)

ItemAtLevel Method

Description
Returns either a row or column object from a nested report.

Syntax
\textit{collection}.\textit{ItemAtLevel}((Label or Index, Level)

Applies To
  Columns
  Rows
**Discussion**

Use this method to retrieve a row or column from a Rows or Columns collection in a nested crosstab report. The Item method can be used for non-nested reports.

The item to search for is set using the Label parameter. The level where the item resides is set using the Level parameter, where 0 indicates the level closest to the actual data --that is, the lowest level row or column--and 1, means the next level up, and so on. For example, where a crosstab has levels for Years and Months and then data, level 0 is Months and level 1 is Years.

The row or column object returned could span multiple indexes when the level is > 0.

ItemAtLevel is equivalent to Item when level = 0.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Label</td>
<td>Required. Specifies the category label or index of the object to return.</td>
</tr>
<tr>
<td></td>
<td>Type: Variant</td>
</tr>
<tr>
<td>Level</td>
<td>Required. Specifies the value indicating the nesting level in which to add the categories.</td>
</tr>
<tr>
<td></td>
<td>Type: Long</td>
</tr>
</tbody>
</table>

**Return Type**

Object

**Example**

This example selects the last column in the report, applies a style to it and changes the cell size.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim intCount As Integer
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    intCount = objPPRep.Columns.Count
    objPPRep.Columns.ItemAtLevel(intCount,0).Select
    objPPRep.StyleSelected "Good News"
    objPPRep.SizeSelected 100
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Methods" (p. 87)
- "Properties" (p. 283)
Layers Method

**Description**
Returns one Layer object or the entire collection.

**Syntax**
Report.Layers

**Applies To**
Report Object

**Discussion**
A layer is a set of dimension categories that provide details for another dimension and a new perspective on the report results. A report can contain several layers.

If no index is specified, a Layers collection is returned. Otherwise the method returns the requested Layer object.

**Return Type**
Object

**Example**
This example removes the first two layers in a report, shows the sum of the two new first layers in a new layer and shows the maximum of all the layers in a new layer.

Sub Main()
    Dim objPPApp as Object
    Dim objPPRep as Object
    Set objPPRep = GetObject("C:\ Cubes and Reports\Sample1.ppx")
    Set objPPApp = objPPRep.Application
    objPPApp.Visible = True
    objPPApp.Reports.Item(1).ExplorerMode = False
    objPPApp.Reports.Item(1).Layers.Subset(1,2).Remove
    objPPApp.Reports.Item(1).Layers.Subset(1,2).Addition
    objPPApp.Reports.Item(1).Layers.Maximum
    Set objPPRep = Nothing
    Set objPPApp = Nothing
End Sub

**Related Topics**
- "Layer Object" (p. 41)
- "Layers" (p. 75)
- "ActiveReport Method" (p. 98)
- "Report Object" (p. 51)
# Level Method

**Description**
Sets the level used by the AdvancedQuery object to retrieve categories for the query.

**Syntax**

```vba
AdvancedQuery.Level LevelName [,TopCategory]
```

**Applies To**

AdvancedQuery Object

**Discussion**

Use this method to specify one or more levels to identify the categories to be retrieved by the query. The query retrieves all categories for the levels specified in the subset definition. To include more than one Level in the query, specify multiple Level statements in the subset definition for AdvancedQuery. Specify at least one Level to include in the subset. When specifying more than one level, you must use Levels from the same dimension.

Use the LevelList property to return the list of included levels.

Note: The order of the components in the subset definition is important. First, specify the Dimension property, followed by the Level method. The Include, Exclude, and Find methods are optional and can appear in any order following the Dimension and Level properties. The Name property is required and can be set anywhere within the subset definition. Specify Execute, followed by the AddToReport method last.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LevelName</td>
<td>Required. Specifies the name of the level that contains the category used for the search. Type: String</td>
</tr>
<tr>
<td>TopCategory</td>
<td>Optional. Specifies the name of the top-level category for the specified level. Used for selecting levels from alternate drill-down paths. If this parameter is not specified, the level is assumed to be the primary drill-down path. Type: Variant</td>
</tr>
</tbody>
</table>

**Return Type**

Nothing

**Example**

This example creates an AdvancedQuery (type 3) subset definition that retrieves all categories belonging to Europe. The resulting subset is then added to the report as rows.
Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objFind As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objFind = objPPRep.ReportQueries.Add(1)
    With objFind
        .Name = "Find Star"
        .Dimension = "Products"
        .SearchShortName = False
        .SearchText = "Star"
        .Pattern = 2
    End With
    Set objAdvanced = objPPRep.ReportQueries.Add(3)
    With objAdvanced
        .Name = "Star Products"
        .Dimension = "Products"
        .Level "Product Id"
        .Find objFind.Name
        .Execute
        .AddToReport 1,1,3
    End With
    Set objAdvanced = Nothing
    Set objFind = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
● "AdvancedQuery Object" (p. 20)
● "LevelList Property" (p. 361)

Levels Method

Description
Returns all levels available in the dimension for a category.

Syntax
Dimension.Levels([AlternateDrillDown])
**Applies To**  
**Dimension Object**

**Discussion**  
Use this method to return a collection of Level objects for a dimension. To return the collection of Level objects in the primary drill-down path, call this method with no parameter. To return the collection of Level objects in the alternate drill-down path, call this method and specify the AlternateDrillDown parameter with the name of an alternate drill-down path. The objects this method returns represent all the levels available in that dimension, starting from the top-level category. For an alternate drill-down path, this method returns all levels starting at this path.

This method fails when

- the specified drill-down path is not in the dimension or is misspelled
- no levels are found for the dimension or specified drill-down path
- the drill-down path occurred more than once in the dimension
- the drill-down path specified was not an alternate drill-down path

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AlternateDrillDown</td>
<td>Optional. Specifies the name of an alternate drill-down path. All levels starting at the alternate drill-down path are returned. This parameter is not case-sensitive. Type: String</td>
</tr>
</tbody>
</table>

**Return Type**  
Object

**Example**  
This example returns a list of Level objects for the dimension. The category is being filtered for the dimension line index.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objDimension As Object
    Dim objLevel As Object
    Dim strLevelList As String
    Dim intx As Integer
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objDimension = objPPRep.DimensionLine.Item(1)
    For intx = 1 To objDimension.Levels.Count
        Set objLevel = objDimension.Levels.Item(intx)
        strLevelList = strLevelList & Chr$(10) & objLevel.Name
        Set objLevel = Nothing
    Next intx
End Sub
```
Logon Method

Description
Logs on to IBM Cognos BI as an authenticated user to provide the application object access to secured IBM Cognos BI resources such as packages.

Syntax
object.Logon Namespace, UserID, Password

Applies To
Application Object

Discussion
You can repeat the logon method to log on to multiple namespaces. When you use this technique access permissions are a union of the permissions granted for each log on.

When you use the Logon method on an Application object, the method closes all reports using a remote package. If the application is visible and the reports that are using a remote package have been modified, you are prompted to save before closing. If the application is invisible, you are not prompted to save before closing.

If there is only one IBM Cognos BI namespace, you can use an empty string for Namespace. For example, Logon "", "username", "password"

When single sign-on is configured in an IBM Cognos BI namespace, only the namespace parameter is required. For example, Logon "namespace"

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Namespace</td>
<td>Required. Specifies the IBM Cognos BI namespace to log on to.</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>UserID</td>
<td>Optional. Specifies the user ID credential for the IBM Cognos BI namespace. Type: String</td>
</tr>
<tr>
<td>Password</td>
<td>Optional. Specifies the password credential for the user ID. Type: String</td>
</tr>
</tbody>
</table>

**Return Type**

Nothing

**Example**

This example logs into an IBM Cognos BI namespace, opens a report using a remote secured package, and then logs off.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objPPApp As Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    Set objPPApp = objPPRep.Application
    objPPApp.Logon "Cognos", "UserA", "PwdA"
    objPPRep.Open "D:\PPlay1.ppx"
    objPPApp.Logoff
    Set objPPRep = Nothing
    Set objPPApp = Nothing
End Sub
```

**Related Topics**

- "Methods" (p. 87)

---

**Logoff Method**

**Description**

Revoices authentication to all IBM Cognos BI namespaces for the application object. Even if you used multiple namespaces in the session, you logoff only once.

**Syntax**

```vba
object.Logoff
```

**Applies To**

Application Object
Discussion
When you use the Logoff method on an application object, the method closes all reports using a remote package. If the application is visible and the reports that are using a remote package have been modified, you are prompted to save the reports. If the application is invisible, you are not prompted to save any modified reports.

Return Type
Nothing

Example
This example logs into an IBM Cognos BI namespace, opens a report using a remote secured package, and then logs off.

Sub Main()
    Dim objPPRep As Object
    Dim objPPApp As Object
    Set objPPRep = CreateObject("CognosPowerPlay_Report")
    Set objPPApp = objPPRep.Application
    objPPApp.Logon "Cognos", "UserA", "PwdA"
    objPPRep.Open "D:\PPlay1.ppx"
    objPPApp.Logoff
    Set objPPRep = Nothing
    Set objPPApp = Nothing
End Sub

Related Topics
- "Methods" (p. 87)

Maximize Method

Description
Maximizes the object window.

Syntax
object.Maximize

Applies To
Application Object
Report Object

Discussion
This method cannot reveal any hidden windows. To do so, use the Visible attribute of either the Application or Report object.
Return Type
Nothing

Example
This example simply finds a visible instance of IBM® Cognos® PowerPlay® and maximizes it.

Sub Main()
    Dim objPPApp as Object
    objPPApp.Visible = True
    objPPApp.Activate
    objPPApp.Maximize
    Set objPPApp = Nothing
End Sub

Related Topics
● "Application Object" (p. 23)
● "ActiveReport Method" (p. 98)
● "Report Object" (p. 51)

Maximum Method (Collections) (Reporter)

Description
Determines the maximum between either a constant value or a category, and one or more categories.

Syntax
\[\text{collection}.\text{Maximum}([\text{Operand}])\]

Applies To
Columns
Layers
Rows

Discussion
This method can also determine the maximum of multiple categories.
This method is only available if the Report object is in Reporter Mode (ExplorerMode property set to False).
For Column, Layer, and Row objects, the method determines a maximum for each category and operand pair, and creates a new category for each result.
Depending on whether the method was applied to an object or a collection, the results are returned respectively as an object or a collection. The new calculation is inserted directly after the active row or column.
References to the position of an object in the collection are not valid after you use this method.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operand</td>
<td>Optional. Specifies either a constant value or a category object. If you do not specify this parameter, the method creates a category to display the maximum of all the categories in the collection. If you specify this parameter, this method determines a maximum from each category and creates a new category for each result.</td>
</tr>
</tbody>
</table>

**Return Type**

Object

**Example**

This example determines the maximum of the first three rows and of column one and four.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objNewCol As Object
    Dim objNewRow As Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    objPPRep.ExplorerMode = False
    Set objNewRow = objPPRep.Rows.Subset(1, 3).Maximum
    MsgBox "The maximum of the first three rows is " & objPPRep.CellValue(objNewRow(1).Index, 1)
    MsgBox " The maximum of column one and column four is " & objPPRep.CellValue(1, objNewCol.Index)
    objPPRep.Save
    Set objNewRow = Nothing
    Set objNewCol = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Column Object" (p. 28)
- "Columns" (p. 68)
- "Layer Object" (p. 41)
- "Layers" (p. 75)
Maximum Method (Objects) (Reporter)

**Description**
Determines the maximum between either a constant value or a category, and one or more categories.

**Syntax**

```
object.Maximum(Operand)
```

**Applies To**
- Column Object
- Layer Object
- Row Object

**Discussion**
For Column, Layer, and Row objects, the method determines a maximum for each category and operand pair, and creates a new category for each result. This method can also determine the maximum of multiple categories.

Depending on whether the method was applied to an object or a collection, the results are returned respectively as an object or a collection. The new calculation is inserted directly after the active row or column.

This method is only available if the Report object is in Reporter Mode (the ExplorerMode property is False).

References to the position of an object in the collection are not valid after you use this method.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operand</td>
<td>Required. Specifies either a constant value or a category object. If you do not specify this parameter, this method creates a category to display the maximum of all the categories in the collection. If you specify this parameter, this method determines a maximum from each category and creates a new category for each result. Type: Variant</td>
</tr>
</tbody>
</table>

**Return Type**
Object
Example
This example compares a constant value with the values in a column and returns the maximum of the two values in a new column.

Sub Main()
    Dim objPPRep as Object
    Dim objPPCol as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    objPPRep.ExplorerMode = False
    Set objPPCol = objPPRep.Columns.Item("Tents")
    objPPCol.Maximum 80000
    objPPRep.Save
    Set objPPCol = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
● "Column Object" (p. 28)
● "Columns" (p. 68)
● "Layer Object" (p. 41)
● "Layers" (p. 75)
● "Row Object" (p. 55)
● "Rows" (p. 83)

Minimize Method

Description
Minimizes the object window.

Syntax
object.Minimize

Applies To
Application Object
Report Object

Discussion
This method does not reveal any hidden windows. To do so, use the Visible attribute of either the Application or Report object.
**Return Type**
Nothing

**Example**
This example finds a visible instance of IBM® Cognos® PowerPlay® and minimizes it.

```
Sub Main()
    Dim objPPApp as Object
    objPPApp.Visible = True
    objPPApp.Activate
    objPPApp.Minimize
    Set objPPApp = Nothing
End Sub
```

**Related Topics**
- "Application Object" (p. 23)
- "ActiveReport Method" (p. 98)
- "Report Object" (p. 51)

---

**Minimum Method (Collections) (Reporter)**

**Description**
Determines the minimum between either a constant value or a category, and one or more categories.

**Syntax**
```
collection.Minimum(Operand)
```

**Applies To**
- Columns
- Layers
- Rows

**Discussion**
This method can also determine the minimum of multiple categories.

This method is only available if the Report object is in Reporter Mode (the ExplorerMode property is False).

Depending on whether the method was applied to an object or a collection, the results are returned respectively as an object or a collection. The new calculation is inserted directly after the active row or column.

References to the position of an object in the collection are not valid after you use this method.
Description

Parameters | Description
--- | ---
Operand | Optional. Specifies either a constant value or a category object. If you do not specify this parameter, this method creates a category to display the minimum of all the categories in the collection. If you specify this parameter, the method determines a minimum from each category and creates a new category for each result.

Type: Variant

Return Type

Object

Example

This example determines the maximum of the first three rows and of column one and four.

Sub Main()
    Dim objPPRep As Object
    Dim objNewCol As Object
    Dim objNewRow As Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    objPPRep.ExplorerMode = False
    Set objNewRow = objPPRep.Rows.SubSet(1, 3).Minimum
    MsgBox "The minimum of the first three rows is " _
        & objPPRep.CellValue(objNewRow(1).Index, 1)
    {objPPRep.Columns.Item(1))
    MsgBox "The minimum of columns 1 and 4 is " _
        & objPPRep.CellValue(1, objNewCol.Index)
    Set objNewRow = Nothing
    Set objNewCol = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics

- "Column Object" (p. 28)
- "Layer Object" (p. 41)
- "Report Object" (p. 51)
- "Row Object" (p. 55)
Minimum Method (Objects) (Reporter)

**Description**
Determines the minimum between either a constant value or a category, and one or more categories.

**Syntax**
`object.Minimun(Operand)`

**Applies To**
- Column Object
- Layer Object

**Discussion**
For Column, Layer, and Row objects, the method determines a minimum for each category and operand pair and creates a new category for each result.

This method can also determine the minimum of multiple categories.

This method is only available if the Report object is in Reporter Mode (the ExplorerMode property is False).

Depending on whether the method was applied to an object or a collection, the results are returned respectively as an object or a collection. The new calculation is inserted directly after the active row or column.

References to the position of an object in the collection are not valid after you use this method.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operand</td>
<td>Required. Specifies either a constant value or a category object. Type: Variant</td>
</tr>
</tbody>
</table>

**Return Type**
Object

**Example**
This example compares a constant value with the values in a column and returns the minimum of the two values in a new column.

```vba
Sub Main()
    Dim objPPRep as Object
    Dim objPPCol as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    objPPRep.ExplorerMode = False
    Set objPPCol = objPPRep.Columns.Item("Tents")
```
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```vba
    objPPCol.Minimum(60000)
    objPPRep.Save
    Set objPPCol = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "Column Object" (p. 28)
- "Layer Object" (p. 41)
- "Report Object" (p. 51)
- "Row Object" (p. 55)

**Multiplication Method (Collections)**

**Description**
Multiplies a constant value or a category by one or more categories.

**Syntax**
```
collection.Multiplication[(Operand)]
```

**Applies To**
- Columns
- Layers
- Rows

**Discussion**
This method can also multiply multiple categories together.

Depending on whether the method was applied to an object or a collection, the results are returned respectively as an object or a collection.

In Explorer mode, the new calculation is inserted directly after the last operand. In Reporter mode, the new calculation is inserted directly after the active row or column.

References to the position of an object in the collection are not valid after you use this method.

In Explorer mode, if you change a report by removing a level, drilling, filtering or nesting, then all calculations that can not be created in the changed report disappear.
### Multiplication Method (Objects)

#### Description

Multiplies a constant value or a category by an object.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operand</td>
<td>Optional. Specifies either a constant value or a category object. If you do not specify this parameter, this method creates a category to display the results of the multiplication of all the categories in the collection. If you specify this parameter, this method determines a result from each category and a new category is created for each result. Type: Variant</td>
</tr>
</tbody>
</table>

**Return Type**

Object

**Example**

This example multiplies the first five rows by a constant value and multiplies column one by column four.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objRslt As Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    objPPRep.Rows.SubSet(1,5).Multiplication 6
    Set objRslt = objPPRep.Rows.Item(1).Multiplication
    (objPPRep.Rows.Item(4))
    MsgBox "The result of multiplying column 1 by column 4 is " &
    objPPRep.CellValue(objRslt,1)
    Set objRslt = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Column Object" (p. 28)
- "Layer Object" (p. 41)
- "Report Object" (p. 51)
- "Row Object" (p. 55)
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Syntax

object.Multiplication(Operand)

Applies To

Column Object
Layer Object
Row Object

Discussion

For Column, Layer, and Row objects, the method determines a result for each category and operand pair, and creates a new category for each result.

Depending on whether the method was applied to an object or a collection, the results are returned respectively as an object or a collection.

In Explorer mode, the new calculation is inserted directly after the last operand. In Reporter mode, the new calculation is inserted directly after the active row or column.

References to the position of an object in the collection are not valid after you use this method.

In Explorer mode, if you change a report by removing a level, drilling, filtering or nesting, then all calculations that can not be created in the changed report disappear.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operand</td>
<td>Required. Specifies either a constant value or a category object. Type: Variant</td>
</tr>
</tbody>
</table>

Return Type

Object

Example

This example multiplies the values in a column by 6 and returns the product in a new column.

Sub Main()

    Dim objPPRep as Object
    Dim objPPCol as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "DC:\ Cubes and Reports\Sample1.ppx"
    Set objPPCol = objPPRep.Columns.Item("Tents")
    objPPCol.Multiplication(6)
    objPPRep.Save
    Set objPPCol = Nothing
    Set objPPRep = Nothing

End Sub
New Method

**Description**

Creates a new Report object.

**Syntax**

```
Report.New ConnectionType, Location [, Timeout [, ExplorerMode]]
```

**Applies To**

Report Object

**Discussion**

Use this method to fully initialize a new Report object that was created using `CreateObject("CognosPowerPlay.Report")`.

When using the `CreateObject` method to create a new report, use the `New` method to complete the initialization process.

In order to avoid this two-step approach, use the `GetObject` method to pass the MDC file name as the only parameter. For example, `GetObject( "c:\cognos\samples\outdoors.mdc" )`.

Use the `ConnectionType` and `Location` parameters to create a report based on a local cube or remote package. For remote connections the IBM Cognos BI server must be running.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ConnectionType</code></td>
<td>Required. Identifies whether the connection type is for a local cube or remote package. This parameter can be either &quot;local&quot; or &quot;remote&quot;. Type: String</td>
</tr>
</tbody>
</table>

Related Topics

- "Column Object" (p. 28)
- "Layer Object" (p. 41)
- "Report Object" (p. 51)
- "Row Object" (p. 55)
### Parameters

| **Location** | Required. If the connection type is local, then a fully qualified local cube is expected.  
> Example, "C:\Cubes\Great Outdoors.mdc"

If the connection type is remote, then a package search path in native encoding is expected.  
> Example, "/content/package[@name=Great Outdoors]"

**Type:** String |
| **Timeout** | Optional. Is the amount of time to allow users to attempt to connect to the specified IBM Cognos BI server, for example 45. The default is 60 seconds.  
**Type:** Integer |
| **ExplorerMode** | Optional. Specifies whether Explorer or Reporter mode is use for the document.  
False (0) = Reporter  
True (-1) = Explorer  
**Type:** Boolean |

### Return Type

Nothing

### Example

This example adds a new level of categories as layers to new report.

```vba
Sub Main()
    Dim objCubeCategories As Object
    Dim objPPRep As Object
    Const level_0 = 0
    Const level_1 = 1
    Const add_to_current = 0
    Const add_to_all = 1
    Const as_parent = 0
    Const as_child = 1
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New "local", "C:\Cubes and Reports\Great Outdoors.mdc"
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objCubeCategories = objPPRep.CategoryList
    objCubeCategories.Add level_1, "Locations"
```
```vbscript
objPPRep.Layers.Add objCubeCategories
Set objCubeCategories = Nothing
Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "ActiveReport Method" (p. 98)
- "Report Object" (p. 51)

---

**Open Method (Reports)**

**Description**
Opens a collection of Report objects.

**Syntax**

```vbscript
Reports.Open(Report)
```

**Applies To**

Reports

**Discussion**
When using CreateObject to open an existing report, use the Open method to complete the initialization process.

To avoid this two-step approach, you can use GetObject and include the report file name and extension as the only parameter. For example, `GetObject("C:\Cognos\Sample.ppx")`.

You cannot open a report generated in Extensible Markup Language (.xml) that is not a IBM® Cognos® PowerPlay® portable report (.ppx).

When you use the Open method for the Reports collection, you must capture the new Report object or it will terminate. For example, you must use the following to capture the report opened using the object, PPRep1:

```vbscript
Set objPPRep1 = objPPApp.Reports.Open("c:\Cognos\Outdoors.ppx")
```

Using

```vbscript
objPPApp.Reports.Open("c:\Cognos\Outdoors.ppx")
```

will terminate the report.

**Parameters**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report</td>
<td>Required. Specifies the PowerPlay report to open. Type: String</td>
</tr>
</tbody>
</table>
Return Type
Object

Example
This example opens all PowerPlay reports in the specified directory and converts them to use a remote cube on the connection "Great Outdoors".

Sub Main()
    Dim objPPRep As Object
    Dim strPath As String
    Dim strExtension As String
    Dim strFolder As String
    strPath = "C:\Reports\"
    strExtension = "*.ppx"
    strFolder = Dir$(strPath & strExtension, 16)
    If strFolder <> "" Then
        Do Until strFolder = ""
            Set objPPRep = CreateObject("CognosPowerPlay.Report")
            objPPRep.Open strPath & strFolder, "Great Outdoors.mdc"
            objPPRep.Save
            objPPRep.Close
            Set objPPRep = Nothing
        Loop
    End If
    strFolder = Dir
End Sub

Related Topics
• "ActiveReport Method" (p. 98)
• "Reports" (p. 81)

Open Method (Report)

Description
Opens an existing Report object.

Syntax
Report.Open(Report [,ConnectionType, Location[,Timeout]])

Applies To
Report Object
**Discussion**

When using CreateObject to open an existing report, use the Open method to complete the initialization process.

To avoid this two-step approach, you can use GetObject and include the report file name and extension as the only parameter. For example, GetObject("C:\Cognos\Sample.ppx").

You cannot open a report generated in Extensible Markup Language (.xml) that is not a IBM® Cognos® PowerPlay® portable report (.ppx).

When you use the Open method for the Reports collection, you must capture the new Report object or it will terminate. For example, you must use the following to capture the report opened using the object, PPRep1:

```vbscript
Set objPPRep1 = objPPApp.Reports.Open("c:\Cognos\Outdoors.ppx")
```

Using

```vbscript
objPPApp.Reports.Open("c:\Cognos\Outdoors.ppx")
```

will terminate the report.

The ConnectionType, Location, and Timeout parameters are commonly used to override the reference to the local cube which was used when the report was created. When using this method without specifying the optional parameters, PowerPlay will look for the report in the following places (in order):

- user defined path
- current directory
- report path
- preference path (if it exists)
- directory of the executable
- windows system directory
- windows directory
- paths listed in the path environment variable
- relative path across the local drives and then the connected drives

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report</td>
<td>Required. Specifies the PowerPlay report to open. Type: String</td>
</tr>
<tr>
<td>ConnectionType</td>
<td>Required. Identifies whether the connection type is for a local cube or remote package. This parameter can be either &quot;local&quot; or &quot;remote&quot;. Type: String</td>
</tr>
<tr>
<td>Parameters</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| Location   | Required. If the connection type is local, then a fully qualified local cube is expected.  
Example, "C:\Cubes\Great Outdoors.mdc"  
If the connection type is remote, then a package search path in native encoding is expected.  
Example, "/content/package[@name=Great Outdoors]"  
Type: String |
| Timeout    | Optional. Is the amount of time to allow users to attempt to connect to the specified server, for example 45. The default is 60 seconds.  
Type: Integer |

**Return Type**

Nothing

**Example**

This example opens a report, makes it visible and adds a stacked bar graph.

```vba
Sub Main()
    Dim objPReport as Object
    Set objPReport = CreateObject("CognosPowerPlay.Report")
    objPReport.Open "local" "C:\Cubes and Reports\Trend.ppx"
    objPReport.Visible
    objPReport.Graphs.Add 5
    MsgBox "The active graph type is " _
        & objPReport.Graphs.Active.Type
    objPReport.Save
    objPReport.Close
    Set objPReport = Nothing
End Sub
```

**Related Topics**

- "Methods" (p. 87)
- "Properties" (p. 283)

**Parent Method**

**Description**

Returns the name of the parent category.
**Syntax**

*Dimension.Parent*

**Applies To**

*Dimension Object*

**Discussion**

Use this method to identify the name of the parent category in the dimension. Top level, alternate, and calculated categories do not have a parent.

Use the Has Parent method to determine if the current category has a parent category. If the Parent method is used when there is no parent, an error occurs.

**Return Type**

String

**Example**

For the category that the first dimension is filtered on, this example determines if it has a parent category, whether it is visible, and displays the parent name.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objDimension As Object
    Dim strName As String
    Dim strVisible As String
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
    Set objDimension = objPPRep.DimensionLine.Item(1)
    objDimension.ChangeToTop
    If objDimension.HasParent = 0 Then
        MsgBox "The " & objDimension.Name & " dimension has " & _
            "no parent."
        strName = objDimension.Children.Item(1).Name
        objDimension.Change strName
        If objDimension.Visible = -1 Then
            strVisible = "visible"
        Else
            strVisible = "not visible"
        End If
        MsgBox "The " & objDimension.Name & " dimension is " & _
            strVisible & "." & chr$(10) & chr$(10)
        strVisible & " its parent is " & objDimension.Parent & _
            ",."
    End If
    Set objDimension = Nothing
```
Set objPPRep = Nothing
End Sub

Related Topics
- "Dimension Object" (p. 31)
- "HasParent Method" (p. 178)

Paste Method (Reporter)

Description
Pastes the contents of the Clipboard into the selected categories of the Report object.

Syntax
Report.Paste

Applies To
Report Object

Discussion
It is possible to paste between reports, using the same multidimensional cube.
This method is only available if the Report object is in Reporter Mode (ExplorerMode property set to False).

Return Type
Nothing

Example
This example opens two reports, copies columns from one report, pastes them into the second report, and saves the second report.

Sub Main()
    Dim objPPRep1 as Object
    Dim objPPRep2 as Object
    Set objPPRep1 = CreateObject("CognosPowerPlay.Report")
    Set objPPRep2 = CreateObject("CognosPowerPlay.Report")
    objPPRep1.Open "C:\Cubes and Reports\Sample1.ppx"
    objPPRep2.Open "C:\Cubes and Reports\Sample2.ppx"
    objPPRep1.ExplorerMode = False
    objPPRep2.ExplorerMode = False
    objPPRep1.Columns.Item("Back Packs").Select
    objPPRep1.Copy
    objPPRep2.Paste
    objPPRep2.Save
    objPPRep1.Close
End Sub

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objPPRep2.Close
Set objPPRep1 = Nothing
Set objPPRep2 = Nothing
End Sub

Related Topics

- "ActiveReport Method" (p. 98)
- "Report Object" (p. 51)

**PDFFile Method**

**Description**

Sets the file name of the PDF object when it is saved.

**Syntax**

`Report.PDFFile(FileName, Overwrite)`

** Applies To**

Report Object

**Discussion**

Use this method to identify the fully-qualified name for saving a report as a PDF. You must use the `Save` method to save the report as a PDF.

You can specify the `Overwrite` parameter to determine whether to overwrite an existing PDF.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FileName</td>
<td>Required. Specifies the name of the PDF to save. The fully-qualified name must be enclosed in quotation marks with the .pdf file extension, such as &quot;c:\Cognos\pdf\PDFSample.pdf&quot;. Type: String</td>
</tr>
<tr>
<td>Overwrite</td>
<td>Required. Specifies whether you can overwrite saved reports as PDFs. If True, saving the report as a PDF will overwrite another file with the same name in the same location. If False, the file will save as a PDF only if the name is unique for the specified location. Default: False Type: Boolean</td>
</tr>
</tbody>
</table>
**Return Type**
Nothing

**Example**
This example opens a report, sets a name to save the report as a PDF file, sets options for saving the report, and then saves the report in portable document format (.pdf).

```vba
Sub Main()
    Dim objPDF as Object
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open( "c:\Cognos\sample.ppx" )
    objPPRep.Visible( TRUE )
    Set objPDF = objPPRep.PDFFile( "c:\Cognos\PDFSample" , True )
    With objPDF
        .SaveEntireReport = False
        .SaveAllCharts = True
        .AxisOnAllPages = True
        .ChartTitleOnAllPages = False
        .IncludeLegend = True
        .SetListOfLayersToSave objPPRep.Layers
        .SetListOfRowsToSave objPPRep.Rows
    End With
    objPDF.Save
    Set objPPRep = Nothing
    Set objPDF = Nothing
End Sub
```

**Related Topics**
- "Save Method" (p. 238)

**Percent Method**

**Description**
Adds one or more percent categories based on either a category or a constant value.

**Syntax**
object.Percent(Operand [, Reverse])

**Applies To**
- Column Object
- Columns
- Layer Object
Layers
Row Object
Rows

Discussion
This method always requires an Operand since the method calculates the percent on a pair of values. It creates a category for the result of the percent. The percent is reversible.

Depending on whether the method was applied to an object or a collection, the results are returned respectively as an object or a collection.

In Explorer mode, the new calculation is inserted directly after the last operand. In Reporter mode, the new calculation is inserted directly after the active row or column.

References to the position of an object in the collection are not valid after you use this method.

In Explorer mode, if you change a report by removing a level, drilling, filtering or nesting, then all calculations that can not be created in the changed report disappear.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operand</td>
<td>Required. Specifies either a constant value or a category object. Type: Variant</td>
</tr>
<tr>
<td>Reverse</td>
<td>Optional. Specifies whether the results show the value of the category as a percentage of the Operand or the opposite. False = the results show the value of the category as a percentage of the operand True = the results show opposite. Type: Boolean</td>
</tr>
</tbody>
</table>

Return Type
Object

Example
This example takes the percent of individual rows based on the value of a Summary row

Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New "C:\Cubes and Reports\Great Outdoors.mdc",True
    objPPRep.Visible = True
    objPPRep.Rows.SubSet _
        ("2008","1997").Percent objPPRep.Rows("Years")
    objPPRep.SaveAs "Percent Report.ppx"
PercentGrowth Method

Description
Calculates the percentage change between two categories or measures.

Syntax
`object.PercentGrowth(Operand [, Reverse])`

Applies To
Column Object
Row Object

Discussion
Use this method to calculate the magnitude and direction of the percentage growth between values in selected rows or columns over time or across categories.

This method requires an operand because the calculation is performed on a pair of values. In Explorer mode, the operands of the calculation must be from the same dimension, from the same axis, and from the same level.

In Explorer mode, the new calculation category is inserted directly after the last operand category. In Reporter mode, the new calculation category is inserted directly after the active row or column

References to the position of an object in the collection are not valid after you use this method.

In Explorer mode, if you change a report by removing a level, drilling, filtering or nesting, all calculations that can not be created in the changed report disappear.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operand</td>
<td>Required. Specifies a category object. Type: Object</td>
</tr>
</tbody>
</table>
### Parameters

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reverse</td>
<td>Optional. Specifies whether to reverse the order of the operands. Default: False Type: Boolean</td>
</tr>
</tbody>
</table>

### Return Type

Object

### Example

This example calculates the percentage growth between row 1 and row 2 and inserts the result as a new row.

```vbscript
Sub Main()
    Dim objPPRep As Object
    Dim objRslt As Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    Set objRslt = objPPRep.Rows.Item(1).PercentGrowth
        (objPPRep.Rows.Item(2))
    Set objRslt = Nothing
    Set objPPRep = Nothing
End Sub
```

### Related Topics

- "Addition Method (Collections) " (p. 112)
- "Addition Method (Objects) " (p. 114)
- "CumPercentOfBase Method" (p. 141)
- "Division Method " (p. 155)
- "Multiplication Method (Collections) " (p. 202)
- "Multiplication Method (Objects) " (p. 203)
- "Percent Method " (p. 214)
- "Subtraction Method (Collections) " (p. 267)
- "Subtraction Method (Objects) " (p. 269)
PercentOfBase Method

Description
Adds one or more percent of base categories using a category from a different dimension as the base.

Syntax

object.PercentOfBase(BaseCategory)

Applies To
Column Object
Columns
Row Object
Rows

Discussion
To determine the percent of base for a row, use a column as the base category. To determine the percent of base for a column, use a row as the base category.

Depending on whether the method was applied to an object or a collection, the results are returned respectively as an object or a collection. The new calculation is inserted directly after the last operand.

References to the position of an object in the collection are not valid after you use this method.

In Explorer mode, if you change a report by removing a level, drilling, filtering or nesting, then all calculations that can not be created in the changed report disappear.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BaseCategory</td>
<td>Required. Specifies the category on which the calculation is based.</td>
</tr>
<tr>
<td></td>
<td>Type: Object</td>
</tr>
</tbody>
</table>

Return Type
Object

Example
This example calculated the percent of base for the Columns collection, using 2008 as the base category.

Sub Main()

    Dim objPPRep as Object
    Dim objPPRes as Object
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
objPPRep.SaveAs "New Report.ppx"
Set objPPRep = Nothing
Set objPPRes = Nothing

End Sub

Related Topics
• "Column Object" (p. 28)
• "Columns" (p. 68)
• "Row Object" (p. 55)
• "Rows" (p. 83)

Print Method

Description
Returns a Print object.

Syntax
Report.Print

Applies To
Report Object

Discussion
You can set the properties of the Print object to determine
• the number of copies
• whether colors will print as patterns
• which rows and layers to print
• where to print the display's titles, summary categories, legends, axis and labels
• whether the copies are collated
• whether to print all displays or only the selected display

Return Type
Object

Example
This example opens a report and prints one copy of all the data for the second graphical display only.
Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample2.ppx"
    Set objRepPrt = objPPRep.Print
    objRepPrt.PrintAllCharts = False
    objRepPrt.SetListOfRowsToPrint objPPrep.Rows
    objRepPrt.SetListOfLayersToPrint objPPRep.Layers
    objRepPrt.SetChartToPrint objPPRep.Graphs.Item(2)
    objRepPrt.IncludeLegend = True
    objRepPrt.ChartTitleOnAllPages = True
    objRepPrt.SummariesOnAllPages = True
    objRepPrt.AxisOnAllPages = True
    objRepPrt.Collate = True
    objRepPrt.Copies = 1
    objRepPrt.PrintOut
    Set objRepPrt = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "Print Object" (p. 47)
- "ActiveReport Method" (p. 98)

PrintOut Method

Description
Prints the Report object.

Syntax
*Print*.PrintOut

Applies To
Print Object

Discussion
If you use the SetListOfRowsToPrint and SetListOfLayersToPrint methods, you must set them before using the PrintOut method. If you do not set these methods you receive "Invalid method or property error" for the PrintOut method.

After calling the PrintOut method, the Print object is re-initialized. To reuse this object, if you do not want to apply the default settings, you must reset the properties.
**Return Type**

Nothing

**Example**

This example opens a report and prints one copy, and then resets the properties of the Print object to use the default settings and prints two copies.

```vba
Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample2.ppx"
    Set objRepPrt = objPPRep.Print
    objRepPrt.PrintAllCharts = False
    objRepPrt.SetListOfRowsToPrint objPPRep.Rows
    objRepPrt.SetListOfLayersToPrint objPPRep.Layers
    objRepPrt.SetChartToPrint objPPRep.Graphs.Item(2)
    objRepPrt.IncludeLegend = True
    objRepPrt.ChartTitleOnAllPages = True
    objRepPrt.SummariesOnAllPages = True
    objRepPrt.AxisOnAllPages = True
    objRepPrt.Collate = True
    objRepPrt.Copies = 1
    objRepPrt.PrintOut
    objRepPrt.Copies = 2
    objRepPrt.PrintOut
    Set objRepPrt = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Print Method" (p. 219)
- "Print Object" (p. 47)
- "PrintOut Method" (p. 220)
- "SetListOfLayersToPrint Method" (p. 252)
- "SetListOfRowsToPrint Method" (p. 254)

---

**PublishToPortal Method**

**Description**

Creates a report in the IBM Cognos BI content store. Users access the report using IBM Cognos Connection.
Syntax

`Report.PublishToPortal ReportName, TargetFolderSearchPath [, ReportDescription]`

Applies To

Report Object

Discussion

Use this method to publish a report to the IBM Cognos BI content store. After you publish the report, web-based users can access a PDF version of the report using IBM Cognos Connection.

To use this method you must

- specify a report that uses remote package as the data source
- be a user with authorized access to the remote package
- have write-access to a folder on the IBM Cognos BI server

If the report is successfully published, the method returns True.

If the target folder already contains an object with the same name as the report, you will receive an error indicating the publish failed.

**NOTE:** To allow updates to a published report, you must save the report after you publish. If you do not save the report after publishing, you can not republish using the same report name.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ReportName</td>
<td>Required. Specifies the name displayed in IBM Cognos Connection. Type: String</td>
</tr>
<tr>
<td>TargetFolderSearchPath</td>
<td>Required. Specifies the search path of the folder that will contain the report. Type: String</td>
</tr>
<tr>
<td>ReportDescription</td>
<td>Optional. Specifies a description of the report to display in IBM Cognos Connection. Type: String</td>
</tr>
</tbody>
</table>

**Return Type**

Boolean

**Example**

This example publishes a report to the IBM Cognos BI content store for display in IBM Cognos Connection.

```vbnet
Sub Main()
    Dim objPPRepRemote As Object
```
Quit Method

Description
Exits IBM® Cognos® PowerPlay®.

Syntax
Application.Quit

Applies To
Application Object

Discussion
This method is the same as using the Exit command (File menu) in the application. The method prompts the user to save the changes for each modified visible report. After closing all visible reports, the method hides the application and, if no documents are using the application, the application will terminate.

Return Type
Nothing

Example
This example creates an instance of the PowerPlay Application object and shows some its properties to the user before the application closes.

Sub Main()
  Dim objPPlayApp as Object
  Set objPPlayApp = CreateObject("CognosPowerPlay.Application")
  objPPlayApp.Visible = 1
  MsgBox "The name of the Application is " & objPPlayApp.Name
  MsgBox "The location of the Application is " _
    & objPPlayApp.Path
  MsgBox "The Application version is " & objPPlayApp.Version
  objPPlayApp.Quit
Set objPPlayApp = Nothing
Ranges Method

Description
Returns one Range object or the entire collection.

Syntax
Exception.Ranges

Applies To
Exception Object

Discussion
If no index is specified, a Ranges collection is returned, otherwise the Ranges method returns the requested Range object.

Return Type
Object

Example
This example creates an exception with one range and then applies it to a new report. The style that is applied to the exception must be predefined.

Sub Main()
    Dim objPPRep As Object
    Dim strExceptionName As String
    strExceptionName = "At Least 400 Thousand"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New "C:\Cubes and Reports\Great Outdoors.mdc", True
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    objPPRep.Exceptions.Add strExceptionName
    objPPRep.Columns.Exception = strExceptionName
    Set objPPRep = Nothing
End Sub

Related Topics
• "Application Object" (p. 23)
• "Exception Object" (p. 35)
**Rank2 Method**

**Description**
Ranks and sorts Row or Column objects.

**Syntax**
```
object.Rank2([ShowCount],[ PortionToShow],[ SortOrder],[ RankSequence],[ AutoRank])
```

**Applies To**
- Column Object
- Row Object

**Discussion**
Rank2 sorts and ranks a Column object based on a Row object, or a Row object based on a Column object.

If one of its parameters is not included, a comma is required as a placeholder. When a parameter is not specified, its corresponding entry in your IBM® Cognos® PowerPlay® preferences settings is used.

You can set the number of categories to rank using the ShowCount parameter. If this parameter is not included, all categories appear.

In automatic rank mode (AutoRank = 1), changing data values or adding new values causes a re-rank action.

Rank2 behaves differently from the Sort method in that Rank2 adds a rank sequence column to the report. By setting the RankSequence parameter, you can have the highest value or the lowest value ranked first.

References to the position of an object in the collection are not valid after you use this method.

Although it is not included in the PowerPlay methods list, the Rank method continues to provide backwards compatibility for existing PowerPlay 5.2x macros. The Rank function maps its parameters to the new ranking functionality and then calls Rank2. The Rank method has 4 parameters: ShowCount, PortionToShow, SortOrder, and ShowRankCategory, whereas the Rank2 method has 5 parameters: ShowCount, PortionToShow, SortOrder, RankSequence, and AutoReRank. (ShowRankCategory from the Rank method is an optional parameter where you specified whether the new rank category was visible).

Existing macros that use the Rank method attempt to map the settings to PowerPlay versions 6.0 and later functionality for ranking automation. We strongly recommend that you update existing macros that use the Rank method to use the Rank2 method. The Rank function continues to exist to support macros that have not been changed to use the new ranking OLE method, Rank2.
### Parameters

<table>
<thead>
<tr>
<th>Description</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional. Specifies the number of categories to show. If not used, the Preferences setting is used. Type: Variant</td>
<td>ShowCount</td>
</tr>
<tr>
<td>Optional. Specifies what will be visible. If not used, the Preferences setting is used. 0 = All 1 = Top n, where n is the number of rows or columns. 2 = Bottom n, where n is the number of rows or columns. Type: Variant</td>
<td>PortionToShow</td>
</tr>
<tr>
<td>Optional. Specifies how categories will be sorted. If not used, the Preferences setting is used. 0 = none 1 = descending 2 = ascending Type: Variant</td>
<td>SortOrder</td>
</tr>
<tr>
<td>Optional. Specifies whether the highest value or lowest value will be the highest ranked ordinal (1): 0= lowest value is ordinal 1 1= highest value is ordinal 1 Type: Variant</td>
<td>RankSequence</td>
</tr>
<tr>
<td>Optional. Specifies a value that states if rows are re-ranked automatically when the report changes. If True, the rows are automatically re-ranked. Type: Boolean</td>
<td>AutoRank</td>
</tr>
</tbody>
</table>

### Return Type

Nothing

### Example

This example ranks columns based on the last row. The rank shows the top five columns in ascending order. The highest value will have ordinal one and auto re-rank will be activated.

```vbnet
Sub Main()
    Dim objPPRep As Object
    Dim intLastRow As Integer
    Const show_five = 5
    Const top_five = 1
    Const rank_high = 1
    Const re_rank = 1
```
Const ascending = 2
Set objPPRep = GetObject(, "CognosPowerPlay.Report")
If objPPRep.Graphs.Active.Type <> 0 Then
    objPPRep.Graphs.Active.SetType 0
End If
intLastRow = objPPRep.Rows.Count
objPPRep.Rows.Item(intLastRow).Rank2 = show_five, top_five, ascending, rank_high, re_rank
Set objPPRep = Nothing
End Sub

Related Topics
- "Column Object" (p. 28)
- "Row Object" (p. 55)

Remove Method

Description
Removes a single object or all objects from a collection.

Syntax
object.Remove

Applies To
AdvancedQuery Object
CategoryList Object
Column Object
Columns
Exception Object
Exceptions
FindQuery Object
Graph Object
Graphs
Layer Object
Layers
ParentageQuery Object
Range Object
Ranges
ReportQueries
Row Object

Rows

Discussion
Removing a collection object deletes all the objects contained by the object. The Remove method associated with the ReportQueries collection, removes a specific object in the collection.

A blank row or column belongs to the category immediately before a row or column. When a Row or Column object is removed from a report, the blank row or column after it is also removed.

References to the position of an object in the collection are not valid after you use this method.

When you remove an exception using the Remove method, it will not remove the exception from the PPEXCEPT.INI file. It will only remove the exception from that instance of the report. When you reopen the report, the removed exception, if it is shared, will reappear. To remove a shared exception, use the Highlight Exceptions dialog box.

Return Type
Nothing

Example
This example removes one column and one row from the open report.

Sub Main()
    Dim objPPRep As Object
    SET objPPRep = GetObject(, "CognosPowerPlay.Report")
    objPPRep.ExplorerMode = False
    objPPRep.Columns.Item("2008 Q 1").Remove
    objPPRep.Rows.Item("Far East").Remove
    objPPRep.Save
    objPPRep.Close
    Set objPPRep = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)

Remove Method (ReportQueries)

Description
Removes all query objects from the ReportQueries collection.

Syntax

ReportQueries.Remove (RemoveCategoriesFromReport)
Applies To
ReportQueries

Discussion
Use this method to remove all query objects from the ReportQueries collection. To remove only a single item, get the specific item from the collection using the Item method, and then use the Remove method on the individual report query.

The RemoveCategoriesFromReport parameter determines what action to perform. If True, the syntax

```vbnet
objPPrep.ReportQueries.Remove(True)
```

removes all queries and categories from the report. If False, the syntax

```vbnet
Set objQuery = objPPrep.ReportQueries.Item(1)
objQuery.Remove(False)
```

removes a single query from the report at the specified index, and also removes the categories.

Any object references made prior to using this method are not valid afterward.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RemoveCategoriesFromReport</td>
<td>Required. Specifies whether to remove subset categories from the report.</td>
</tr>
<tr>
<td></td>
<td>True = the categories are removed from the report False = leaves the categories in the report and breaks the subset.</td>
</tr>
<tr>
<td></td>
<td>Type: Boolean</td>
</tr>
</tbody>
</table>

Return Type
Nothing

Example
This example counts the number of subset definitions in the active report and deletes them, if they exist.

```vbnet
Sub Main()
    Dim objPPRep As Object
    Dim intCount As Integer
    Dim intx As Integer
    Set objPPRep = GetObject,,,,"CognosPowerPlay.Report")
    intCount = objPPRep.ReportQueries.Count
    If intCount = 0 Then
        MsgBox "There are no subset definitions in this" & 
            " report.", , "Subsets"
    Else
        objPPRep.ReportQueries.Item(1).Remove True
    End If
```

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Msgbox "1 subset definition has been removed.",
' _
"Subsets"
intCount = objPPRep.ReportQueries.Count
If intCount > 0 Then
    objPPRep.ReportQueries.Remove False
    Msgbox intCount & " subset definition(s)
    " & _
        "have been removed.", , "Subsets"
End If
End If
Set objPPRep = Nothing
End Sub

Related Topics
• "Add Method (ReportQueries)" (p. 107)
• "ReportQueries" (p. 80)
• "ReportQueries Method" (p. 231)

RemoveLevel Method

Description
Removes a column, layer, or row level from a nested crosstab in a report.

Syntax
collection.RemoveLevel(NestingLevel)

Applies To
Columns
Layers
Rows

Discussion
Use this method to remove unwanted data from a report. Removing a level only removes the data
for that level. In a nested crosstab report, you can remove any level at any time without deleting
the children of the deleted level. For example, you can have a crosstab with three levels of nesting
based on years (nesting level 2), quarters (nesting level 1), and months (nesting level 0). You can
remove the quarters level, and the report will show two levels of nesting: years and months.
Removing the middle level (quarters) does not remove the lowest level (months).

In Explorer mode, this method applies only to nested crosstabs. If the graph shown is not a nested
crosstab, the method generates an error.

In Reporter mode, you can remove a level, even if it is not in a nested crosstab.
An error occurs if the nesting level is invalid.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NestingLevel</td>
<td>Required. Specifies the nested level to remove from the display. A nesting level of 0 specifies the inner-most level, 1 for the next level up, and continues to increment by 1 for each level in the report. Type: Integer</td>
</tr>
</tbody>
</table>

**Return Type**
Nothing

**Example**
This example displays the name of the first column and row nesting level, and then removes levels from the report.

```vba
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New "C:\Cognos\sample.mdc", True
    objPPRep.Visible = True
    objPPRep.ExplorerMode = False
    MsgBox "Nested name of first column: " & _
        objPPRep.Columns.Item(1).NestedName
    MsgBox "Nested name of first row: " & _
        objPPRep.Rows.Item(1).NestedName
    objPPRep.Rows.RemoveLevel(1)
    objPPRep.Columns.RemoveLevel(1)
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "AddLevel Method" (p. 115)
- "Levels Method" (p. 190)

**ReportQueries Method**

**Description**
Returns a ReportQueries collection.

**Syntax**
Report.ReportQueries
Applies To

Report Object

Discussion

Use this method to access the ReportQueries collection when creating or defining a subset definition using the AdvancedQuery, FindQuery, ParentageQuery, or ValueRestriction objects.

The ReportQueries collection can be blank or already contain existing subset definitions. For example, an existing report may already have subset definitions defined.

Return Type

Object

Example

This example creates an AdvancedQuery (type 3) subset definition that retrieves all categories except those belonging to Europe. This subset is then added to the report as layers.

Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objCatList As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objCatList = objPPRep.CategoryList()
    objCatList.Add 0, "Locations"
    objPPRep.Layers.Add objCatList
    Set objAdvanced = objPPRep.ReportQueries.Add(3)
    With objAdvanced
        .Name = "Americas & Far East"
        .Dimension = "Locations"
        .Level "Country"
        .Exclude "Europe"
        .Execute
        .addToReport 2, 1, 4
    End With
    MsgBox "Name: " & objAdvanced.Name & chr$(10)
    & "Dimension: " & objAdvanced.Dimension & chr$(10) & 
    & "Level List: " & objAdvanced.LevelList & chr$(10) & 
    & "Query Type Code: " & objAdvanced.Type & chr$(10) & 

"Number of Categories: " & objAdvanced.Count & 
chr$(10) & _
"First Category: " & objAdvanced.Item(1).Name,
_ 
"Subset"
Set objAdvanced = Nothing
Set objCatList = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "Add Method (ReportQueries)" (p. 107)
- "AddToReport Method" (p. 119)
- "AdvancedQuery Object" (p. 20)
- "FindQuery Object" (p. 36)
- "ParentageQuery Object" (p. 45)
- "ReportQueries" (p. 80)

Reports Method

Description
Returns one Report object or the entire collection.

Syntax
*Application*.Reports

Applies To
Application Object

Discussion
If no index is specified, a Reports collection is returned. Otherwise the method returns the requested Report object.

Return Type
Object

Example
This example manipulates the first object in the Reports collection.

Sub Main()
    Dim objPPApp as Object
    Dim objPPRep as Object
Set objPPRep = GetObject("C:\Cubes and Reports\Layer2.ppx")
Set objPPApp = objPPRep.Application
objPPApp.Visible = True
objPPApp.Reports.Item(1).ExplorerMode = False
objPPApp.Reports.Item(1).Layers.Subset(1,2).Remove
objPPApp.Reports.Item(1).Layers.Subset(1,2).Addition
objPPApp.Reports.Item(1).Layers.Maximum
Set objPPRep = Nothing
Set objPPApp = Nothing
End Sub

Related Topics

- "Application Object" (p. 23)
- "Report Object" (p. 51)
- "Reports" (p. 81)

ResetPrintOptionsToDefault Method

Description

Resets print options back to the default settings.

Syntax

```
objPrint.ResetPrintOptionsToDefault
```

Applies To

Print Object

Discussion

Print options are initialized to the options saved with the report. Unless a print macro overrides a property, its state will correspond to the way in which the author saved the report.

This method applies all default print options as opposed to the settings saved with the report.

Return Type

Nothing

Example

This example opens a report and prints it using the default settings as opposed to the print settings saved with the report.

```
Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
```
```
objPPRep.Open "C:\Cubes and Reports\Sample2.ppx"
Set objRepPrt = objPPRep.Print
objRepPrt.ResetPrintOptionsToDefault.
objRepPrt.PrintOut
Set objRepPrt = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
● "Methods" (p. 87)
● "Properties" (p. 283)
● "Print Object" (p. 47)

Restore Method

Description
Restores the object window to its original size and position.

Syntax
object.Restore

Applies To
Application Object
Report Object

Discussion
This method does not reveal any hidden windows. To do so, use the Visible attribute of either the application or a Report object.

Return Type
Nothing

Example
This example finds a visible instance of IBM® Cognos® PowerPlay® and restores it.
Sub Main()
    Dim objPPApp as Object
    Set objPPApp = GetObject( ,"CognosPowerPlay.Application"
)
    objPPApp.Restore
    Set objPPApp = Nothing
End Sub
```
Rollup Method

Description
Groups categories containing calculated values to create a new, dynamic calculation.

Syntax

\[
object.\text{Rollup} \ (\text{Operand})
\]

Applies To

- Column Object
- Layer Object
- Row Object

Discussion
Rollup lets you select an arbitrary group of numeric categories from within a report and perform a rollup calculation on them. The nature of the calculation depends on the measure of the categories used in the rollup. Only categories that reside in the same Dimension object can be included in the rollup.

For objects, the Operand parameter sets the starting point for the rollup, whereas the object specification sets the ending point. For example, here the Operand parameter sets the starting point at the second column in the report, while the end point is the fourth column.

\[
\text{objPPrep.Columns.Item(4).Rollup} \ (\text{PPrep.Columns.Item(2)})
\]

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operand</td>
<td>Required. Specifies a Category object.</td>
</tr>
<tr>
<td></td>
<td>Type: Variant</td>
</tr>
</tbody>
</table>

Return Type
Object

Example
This example finds the first row in the report beginning with the word Star, and performs a dynamic rollup using the first row and the found row.

Sub Main()
    Dim objPPRep As Object
Dim intFound As Integer
Dim intIndex As Integer
Dim objRollup As Object
Set objPPRep = GetObject(,"CognosPowerPlay.Report")
objPPRep.ExplorerMode False
objPPRep.Rows.Item(1).Activate
intFound = objPPRep.FindNext("Star", 2, False, 1)
If intFound <> 0 Then
    intIndex = objPPRep.Rows.Active.Index
    Set objRollup = objPPRep.Rows.Item(intIndex).Rollup(objPPRep.Rows.Item(1))
Else
    MsgBox "No matching rows were found.",,"Not Found"
End If
Set objPPRep = Nothing
End Sub

Related Topics

- "Methods" (p. 87)

**Rows Method**

**Description**
Returns one Row object or the entire collection.

**Syntax**

*Report.Rows*

** Applies To**
*Report Object*

**Discussion**
If no index is specified, the method returns a Rows collection. Otherwise, it returns the requested Row object.

**Return Type**
Object

**Example**
This example uses the Rows and AddBlanks methods to add a blank row before the last row.

```
Sub Main()
    Dim objPPRep As Object
    Dim intRow As Integer
dim intColumn As Integer
```

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Set objPPRep = GetObject(,"CognosPowerPlay.Report")  
objPPRep.ExplorerMode = False  
intRow = objPPRep.Rows.Count - 1  
intColumn = objPPRep.Columns.Count - 1  
objPPRep.Rows.Item(intRow).Select  
objPPRep.AddBlanks  
objPPRep.Rows.Unselect  
objPPRep.Columns.Item(intColumn).Select  
objPPRep.AddBlanks  
objPPRep.Columns.Unselect  
objPPRep.Rows.ItemAtLevel(intRow,0).SelectBlank(1)  
objPPRep.Columns.ItemAtLevel(intColumn,0).SelectBlank(1)  
Msgbox " A blank row and column have been added "      
   "and selected.",64,"Blanks"  
objPPRep.Rows.ItemAtLevel(intRow,0).UnselectBlank(1)  
objPPRep.Columns.ItemAtLevel(intColumn, _      
 0).UnselectBlank(1)  
Msgbox " The blank row and column have now been "      
   "unselected.",64,"Blanks"  
objPPRep.Save  
Set objPPRep = Nothing

Related Topics

- "Report Object" (p. 51)
- "Row Object" (p. 55)
- "Rows" (p. 83)

Save Method

Description
Saves one or all Report objects.

Syntax
object.Save

Applies To
Report Object
SaveAsPDF Object
Discussion
Use this method to save changes to an existing report that you have already named and saved by using the SaveAs method. If you use the Save method to save a new report for the first time, you will get an error because the macro cannot determine the name of the file to save. This method will overwrite the existing report. Use only when you are certain you want to save the changes.

You can also use this method to save a report as a PDF. Use this method when you want to capture the original report (including all fonts, images, graphics, and formatting), regardless of which client the report was created in. A PDF is useful for distributing standard reports using Adobe® Reader and provides quality multipage output. PDF files are compact, portable, and platform-independent. Rows and layers that are suppressed or hidden do not appear in the Rows and Layers when saving the report as a PDF.

Return Type
Nothing

Example
This example multiplies a column in a report by 10 percent. The report is then saved and closed.

Sub Main()
    Dim objPPRep As Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    objPPRep.ExplorerMode = False
    objPPRep.Columns("2008 Q 1").Multiplication(1.10)
    objPPRep.Save
    objPPRep.Close
    Set objPPRep = Nothing
End Sub

This example opens a report, sets options for saving the report, and then saves the report as a PDF.

Sub Main()
    Dim objPDF as Object
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open( "c:\Cognos\sample.ppx" )
    objPPRep.visible( TRUE )
    Set objPDF = objPPRep.PDFFile( "c:\Cognos\PDFSample", True )
    With objPDF
        .SaveEntireReport = False
        .SaveAllCharts = True
        .AxisOnAllPages = True
        .ChartTitleOnAllPages = False
        .IncludeLegend = True
        SetChartToSave objPPRep.Graphs.Item( 1 )
        .SetListOfLayersToSave objPPRep.Layers
        .SetListOfRowsToSave objPPRep.Rows
    End With
End Sub
SaveAs Method

Description
Saves the Report object with a different name and, if desired, a different format.

Syntax
Report.SaveAs FileName [, Format [, Overwrite[, Password]]]

Applies To
Report Object

Discussion
Use the SaveAs method to save a new report for the first time, to save an existing report with a different file name than the original report, or to save an existing report in a different file format than the original report. SaveAs is the only method that can be used to write the data in formats other than IBM® Cognos® PowerPlay® report. The following formats are available:

- PowerPlay portable report (.ppx)
- MDC (multidimensional cube)
- ASCII file, which looks like a screen capture of the report and which the PowerPlay application cannot open
- Excel Spreadsheet (.xls), which the PowerPlay application cannot open

In Windows, if the extension of the FileName is different than the selected filter, the proper extension is appended to FileName.

PowerPlay can save reports generated in the Extensible Markup Language (.xml) as PowerPlay portable reports (.ppx). Users can read these reports on both a Windows and UNIX platform. Most web browsers can read this standard report format.

Use the SavePDF method to save the report in portable document format (.pdf).

Default: PowerPlay report (.ppx)
### Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FileName</strong></td>
<td>Required. Specifies the new name of the report. Type: String</td>
</tr>
<tr>
<td><strong>Format</strong></td>
<td>Optional. Specifies the format in which the data will be saved. The format values are 1 = not supported 2 = MDC (multidimensional cube) 3 = ASCII or CSV (comma separated values) 4 = Excel Spreadsheet 5 = PowerPlay Portable Report Default: 5 Type: Variant</td>
</tr>
<tr>
<td><strong>Overwrite</strong></td>
<td>Optional. Specifies whether to overwrite an existing file. If True, this save action will overwrite another file if it has the same name; if False, the file will be written only if the name is unique for that folder/directory. Default: True Type: Boolean</td>
</tr>
<tr>
<td><strong>Password</strong></td>
<td>Optional. Specifies a password used to secure the output. Currently, only used for the MDC format. Type: String</td>
</tr>
</tbody>
</table>

### Return Type

Nothing

### Example

This example saves an existing report with a different file name than the original report.

```vba
Sub Main()
    Dim objPPRep as Object
    Dim objPPRes as Object
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
    Set objPPRes = objPPRep.Columns.CumPercentOfBase _
                    (objPPRep.Rows.Item("2008"))
    objPPRep.SaveAs "MyNewReport"
    Set objPPRep = Nothing
End Sub
```

### Related Topics

- "ActiveReport Method" (p. 98)
- "Report Object" (p. 51)
Select Method

**Description**
Selects categories.

**Syntax**

```plaintext
object.Select
```

**Applies To**

- Column Object
- Columns
- Layer Object
- Layers
- Report Object
- Row Object
- Rows

**Discussion**

Use this method to select categories in an object. To clear selected categories, use the Unselect method.

**Return Type**

Nothing

**Example**

This example opens a report, selects the column "Outdoor Products", and copies it to the Clipboard.

```vbs
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    objPPRep.Columns.Item("Outdoor Products").Select
    objPPRep.Copy
    objPPRep.Close
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Methods" (p. 87)
- "Properties" (p. 283)
- "Column Object" (p. 28)
- "Layer Object" (p. 41)
**SelectAllDimensions Method**

**Description**
Selects all the dimension objects in the dimension line that can be filtered when a report is opened in the IBM Cognos portal.

**Syntax**
```
DeploymentOptions.SelectAllDimensions
```

**Discussion**
Use this property when a report author specifies that a report consumer can filter a report is opened in the IBM Cognos portal. The user can filter unnecessary information from any dimension so that only the required information appears in the report.

This method is useful when the number of dimension objects is large. To select individual dimension objects, one at a time, use the PromptForDimension property.

When you use this method, you can filter all Dimension objects, including those that are hidden in the dimension line.

**Return Type**
Nothing

**Example**
This example specifies the prompts that the report consumer sees when the report is opened in the IBM Cognos portal. This example also specifies that the report consumer can filter all the dimensions in the dimension line list.

```vba
Sub Main()
    Dim objPPRep as Object
    Dim objDeploymentOptions as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objDeploymentOptions = objPPRep.DeploymentOptions
    objDeploymentOptions.PromptForCurrency = True
    objDeploymentOptions.PromptForLongShortNames = True
    objDeploymentOptions.PromptForZeroSuppression = True
    objDeploymentOptions.PromptForSwapRowsAndColumns = True
    objDeploymentOptions.SelectAllDimensions
    objPPRep.Save
    Set objDeploymentOptions = Nothing
    Set objPPRep = Nothing
End Sub
```
Related Topics

- "UnselectAllDimensions Method" (p. 275)

SelectBlank Method

Description

Selects a specific blank row or column.

Syntax

object.SelectBlank BlankNumber

Applies To

Column Object
Row Object

Discussion

Use SelectBlank in conjunction with the Item and ItemAtLevel methods in crosstab reports. When a crosstab has blank rows or columns, SelectBlank selects the nth blank after the specified non-blank row or column item in the collection as determined by BlankNumber parameter.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BlankNumber</td>
<td>Required. A value indicating a blank item. BlankNumber acts as an index, where the first blank is 1, the second is 2, and so on. Type: Long</td>
</tr>
</tbody>
</table>

Return Type

Nothing

Example

This example uses the AddBlanks method to add a blank row before the last row and a blank column before the last column in the active report. It applies to crosstab reports in Reporter mode only.

Sub Main()
    Dim objPPRep As Object
    Dim intRow As Integer
    Dim intColumn As Integer
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    objPPRep.ExplorerMode = False
    intRow = objPPRep.Rows.Count - 1
    intColumn = objPPRep.Columns.Count - 1
    objPPRep.Rows.Item(intRow).Select
```vba
objPPRep.AddBlanks
objPPRep.Rows.Unselect
objPPRep.Columns.Item(intColumn).Select
objPPRep.AddBlanks
objPPRep.Columns.Unselect
objPPRep.Rows.ItemAtLevel(intRow,0).SelectBlank(1)
Msgbox " A blank row and column have been added "
    & "and selected.",64,"Blanks"
objPPRep.Rows.ItemAtLevel(intRow,0).UnselectBlank(1)
objPPRep.Columns.ItemAtLevel(intColumn,0).UnselectBlank(1)
Msgbox " The blank row and column have now been "
    & "unselected.",64,"Blanks"
Set objPPRep = Nothing
End Sub

Related Topics
  ● "SelectBlank Method" (p. 244)
  ● "UnselectBlank Method" (p. 276)

SetChartToPrint Method

Description
Specifies which Graph object of a report to print.

Syntax
Print.SetChartToPrint (GraphObject)

Applies To
Print Object

Discussion
Use this method to print all data of a specified Graph object. If this method is not invoked, the
default is to print all data of the currently active Graph object in the report.

This method is only meaningful when the PrintAllCharts property set to False.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GraphObject</td>
<td>Required. Specifies the Graph object to print.</td>
</tr>
<tr>
<td></td>
<td>Type: Object</td>
</tr>
</tbody>
</table>
**Return Type**
Nothing

**Example**
This example opens a report and prints one copy of all the data for the second graphical display only. This example includes the display title, summary category, and axis on all pages; and excludes the legend.

```
Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Trend.ppx"
    Set objRepPrt = objPPRep.Print
    objRepPrt.PrintAllCharts = False
    objRepPrt.SetListOfRowsToPrint objPPrep.Rows
    objRepPrt.SetListOfLayersToPrint objPPRep.Layers
    objRepPrt.SetChartToPrint objPPRep.Graphs.Item(2)
    objRepPrt.IncludeLegend = False
    objRepPrt.ChartTitleOnAllPages = True
    objRepPrt.SummariesOnAllPages = True
    objRepPrt.AxisOnAllPages = True
    objRepPrt.Copies = 1
    objRepPrt.PrintOut
    Set objRepPrt = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "Methods" (p. 87)
- "Properties" (p. 283)
- "Graph Object" (p. 38)
- "Print Method" (p. 219)
- "Print Object" (p. 47)
- "PrintAllCharts Property" (p. 393)

**SetChartToSave Method**

**Description**
Specifies which Graph object to save in a PDF.
**Syntax**

`SaveAsPDF.SetChartToSave(GraphObject)`

**Applies To**

`SaveAsPDF Object`

**Discussion**

Use this method to capture all data associated with a specified Graph object (including all fonts, images, graphics, and formatting) in a PDF.

When saving a report as a PDF, you can only use this method if the `SaveAllCharts` property is set to `False`.

Default: If this method is not invoked, the default is to save all the data of the currently active Graph object in the report.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GraphObject</td>
<td>Required. Specifies which Graph object in the report to save in a PDF.</td>
</tr>
<tr>
<td></td>
<td>Type: Object</td>
</tr>
</tbody>
</table>

**Return Type**

`Nothing`

**Example**

This example opens a report, sets options for saving the report, and then saves the report as a PDF.

```vbscript
Sub Main()
    Dim objPDF as Object
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open( "c:\Cognos\sample.ppx" )
    objPPRep.visible( TRUE )
    Set objPDF = objPPRep.PDFFile( "c:\Cognos\PDFSample", True )
    With objPDF
        .SaveEntireReport = False
        .AxisOnAllPages = True
        .ChartTitleOnAllPages = False
        .IncludeLegend = True
        .SetChartToSave objPPRep.Graphs.Item( 1 )
        .SetListOfLayersToSave objPPRep.Layers
        .SetListOfRowsToSave objPPRep.Rows
    End With
    objPDF.Save
End Sub
```
Set objPPRep = Nothing
Set objPDF = Nothing
End Sub

Related Topics

- "SetListOfLayersToSave Method" (p. 253)
- "SetListOfRowsToSave Method" (p. 256)

SetDataSourceInfo Method

Description
Stores security information for a data source in memory.

Syntax

Application.SetDataSourceInfo Connection Type, Location[, Password, DataSourceConnectionName]

Applies To
Application Object

Discussion

Use this method to provide security information for local PowerCube or remote package using automation. This information must be provided before opening the specified report and data source. For remote packages, if a data source uses more than one data source connection, specify the data source connection to use.

The security parameters are stored in memory for subsequent opening of reports based on the data source. To prevent the opening of subsequent reports, use DeleteDataSourceInfo or DeleteAllDataSourceInfo after all desired reports are open.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection Type</td>
<td>Required. Identifies whether the connection type is for a local cube or a remote package. This parameter can be either &quot;local&quot; or &quot;remote&quot;. Type: String</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Location</td>
<td>Required. If the connection type is local, then a fully qualified local cube is expected. For example, &quot;C:\Cubes\Great Outdoors.mdc&quot; If the connection type is remote, then a package search path in native encoding is expected. For example, &quot;/content/package[@name=Great Outdoors]&quot; Type: String</td>
</tr>
<tr>
<td>Password</td>
<td>Optional. Specifies password required to access the secured cube. Type: String</td>
</tr>
<tr>
<td>Data Source Connection Name</td>
<td>Optional. When a data source includes more than one data source connection, specifies the data source connection name used in IBM Cognos Administration.</td>
</tr>
</tbody>
</table>

**Return Type**
Nothing

**Example**
This example sets the data source security access information record and then opens a report based on a password protected cube. Next, the data source security access record is deleted from memory.

```vba
Sub Main()
    Dim objPPApp As Object
    Dim objPPRep As Object
    Dim strMDCName As String
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    Set objPPApp = objPPRep.Application
    strMDCName = "C:\Cubes and Reports\Sample1.mdc"
    objPPApp.SetDataSourceInfo "local", strMDCName, "cube_password"
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    objPPApp.DeleteDataSourceInfo "local", strMDCName
    Set objPPRep = Nothing
    Set objPPApp = Nothing
End Sub
```

This example sets the data source security access information record and then opens a report based on a remote package containing ambiguous data source connections. Datasource1 refers to the name of the data source connection to use from the package. Next, the data source security access record is deleted from memory.
Sub Main()
    Dim objPPApp As Object
    Dim objPPRep As Object
    Dim strPackageSearchPath As String
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    Set objPPApp = objPPRep.Application
    strPackageSearchPath = "/content/package[@name=GreatOutdoors]"
    objPPApp.SetDataSourceInfo "remote", strPackageSearchPath,, "datasource1"
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    objPPApp.DeleteDataSourceInfo "remote", strPackageSearchPath
    Set objPPRep = Nothing
    Set objPPApp = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)
- "Application Object" (p. 23)

SetDrivingCategory Method

Description
Sets the driving category for the Exception object.

Syntax
Exception.SetDrivingCategory (DrivingCategory, DrivingDimension)

Applies To
Exception Object

Discussion
The DrivingDimension and DrivingCategory pair identifies a unique category to base the exception definition. The selected category is the driving category for each range of values. IBM® Cognos® PowerPlay® compares only the data in the driving category with the range of values specified, and uses the driving category to determine the parts of the report to highlight. When no driving category is specified, PowerPlay searches all categories for which the exception is defined to find values that match the specified range.

The SetDrivingCategory method is case-sensitive. The return values of the SetDrivingCategory method are
0 = Failure 1 = Success
To clear the parameter, DrivingCategory, use ">None". For example, to clear the Exception object, Except1, of the driving category, use the following:

```
Except1.SetDrivingCategory ("<None>", 0)
```

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DrivingCategory</td>
<td>Required. Specifies the identifier for the driving category. This parameter refers to the category label of the row or column desired. Type: Variant</td>
</tr>
<tr>
<td>DrivingDimension</td>
<td>Required. Specifies the category type for the driving category. Possible values are 0 = Rows 1 = Columns Type: Integer</td>
</tr>
</tbody>
</table>

**Return Type**

Boolean

**Example**

This example opens a report, sets the driving category for an existing exception, and saves the changes.

```
Sub Main()
    Dim objPPRep as Object
    Dim objExcept1 as Object
    Set objPPRep = GetObject("C:\Cubes and Reports\test.ppx")
    Set objExcept1 = objPPRep.Exceptions.Item("Overdue")
    objExcept1.SetDrivingCategory "Environmental Line",1
    objPPRep.Columns.Exception = "Overdue"
    objPPRep.Save
    Set objExcept1 = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Methods" (p. 87)
- "Properties" (p. 283)
- "DrivingCategory Property" (p. 326)
- "Exception Object" (p. 35)
- "SetDrivingCategory Method" (p. 250)
SetListOfLayersToPrint Method

Description
Specifies the range of layers of the report to print.

Syntax

Print.SetListOfLayersToPrint (ListOfLayers)

Applies To
Print Object

Discussion
Use this method to specify which report layers to print. This method must be used in conjunction with SetListOfRowsToPrint to have any effect on the printed range. If only one or neither of these methods is invoked, only the current layer and row of the report are printed.

If you use this method, set it before using the PrintOut method. If you do not set this method before the PrintOut method, you receive an "Invalid method or property error" on the PrintOut method.

After calling the PrintOut method, the Print object is destroyed. To reuse this object, you must recreate it in the same macro.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ListOfLayers</td>
<td>Required. Specifies the collection of Layer objects to be printed.</td>
</tr>
<tr>
<td></td>
<td>Type: Object</td>
</tr>
</tbody>
</table>

Return Type
Nothing

Example
This example opens a report and prints one copy of all the data for the second graphical display only.

Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\ Cubes and Reports\Sample2.ppx"
    Set objRepPrt = objPPRep.Print
    objRepPrt.PrintAllCharts = False
    objRepPrt.SetListOfRowsToPrint objPPrep.Rows
    objRepPrt.SetListOfLayersToPrint objPPRep.Layers
    objRepPrt.SetChartToPrint objPPRep.Graphs.Item(2)
    objRepPrt.IncludeLegend = True
SetListOfLayersToSave Method

Description
Specifies the range of layers to save in a PDF.

Syntax
`SaveAsPDF.SetListOfLayersToSave(ListOfLayers)`

Applies To
`SaveAsPDF Object`

Discussion
Use this method in conjunction with the SetListofRowsToSave method to specify the range (layers and rows) to save. If neither of these methods is invoked, only the current layer and row in the report are saved.

When saving this report as a PDF, this method is ignored if the SaveEntireReport property is set to True.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ListOfLayers</td>
<td>Required. Specifies the collection of Layer objects to save in a PDF.</td>
</tr>
<tr>
<td></td>
<td>Type: Object</td>
</tr>
</tbody>
</table>

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)
- "Print Method" (p. 219)
- "Print Object" (p. 47)
- "PrintOut Method" (p. 220)
- "SetListofRowsToPrint Method" (p. 254)
### Return Type

Nothing

### Example

This example opens a report, sets options for saving the report, and then saves the report as a PDF.

```vba
Sub Main()
    Dim objPDF as Object
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open( "c:\Cognos\sample.ppx" )
    objPPRep.visible( TRUE )
    Set objPDF = objPPRep.PDFFile( "c:\Cognos\PDFSample" , True )
    With objPDF
        .SaveEntireReport = False
        .SaveAllCharts = True
        .AxisOnAllPages = True
        .ChartTitleOnAllPages = False
        .IncludeLegend = True
        .SetListOfLayersToSave objPPRep.Layers
        .SetListOfRowsToSave objPPRep.Rows
    End With
    objPDF.Save
    Set objPPRep = Nothing
    Set objPDF = Nothing
End Sub
```

### Related Topics

- "Save Method" (p. 238)
- "SaveEntireReport Property" (p. 409)
- "SetListOfRowsToSave Method" (p. 256)

### SetListOfRowsToPrint Method

#### Description

Specifies the range of rows of the report to print.

#### Syntax

```vba
Print.SetListOfRowsToPrint (ListOfRows)
```

#### Applies To

Print Object
Discussion
Use this method to set the range of rows to print in a report. This method must be used in conjunction with SetListOfLayersToPrint to affect the printed range. If only one or neither of these methods is invoked, the current layer and row of the report are printed.

If you use this method, set it before using the PrintOut method. If you do not set this method before the PrintOut method, you receive an "Invalid method or property error" on the PrintOut method.

After calling the PrintOut method, the Print object is destroyed. To reuse this object, you must recreate it in the same macro.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ListOfRows</td>
<td>Required. Specifies the collection of Row objects to be printed. Type: Object</td>
</tr>
</tbody>
</table>

Return Type
Nothing

Example
This example opens a report and prints one copy of all the data for the second graphical display only.

Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample2.ppx"
    Set objRepPrt = objPPRep.Print
    objRepPrt.PrintAllCharts = False
    objRepPrt.SetListOfRowsToPrint objPPrep.Rows
    objRepPrt.SetListOfLayersToPrint objPPRep.Layers
    objRepPrt.SetChartToPrint objPPRep.Graphs.Item(2)
    objRepPrt.IncludeLegend = True
    objRepPrt.ChartTitleOnAllPages = True
    objRepPrt.SummariesOnAllPages = True
    objRepPrt.AxisOnAllPages = True
    objRepPrt.Collate = True
    objRepPrt.Copies = 1
    objRepPrt.PrintOut
    Set objRepPrt = Nothing
    Set objPPRep = Nothing
End Sub
SetListOfRowsToSave Method

Description
Specifies the range of rows to save in a PDF.

Syntax
`SaveAsPDF.SetListOfRowsToSave (ListOfRows)`

Applies To
SaveAsPDF Object

Discussion
Use this method in conjunction with the SetListOfLayersToSave method to specify the range (layers and rows) to save. If neither of these methods is invoked, only the current layer and row in the report are saved.

When saving this report as a PDF, this method is ignored if the SaveEntireReport property is set to True.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ListOfRows</td>
<td>Required. Specifies the collection of Row objects to save in a PDF.</td>
</tr>
<tr>
<td></td>
<td>Type: Object</td>
</tr>
</tbody>
</table>

Return Type
Nothing

Example
This example opens a report, sets options for saving the report, and then saves the report as a PDF.

```vba
Sub Main()
    Dim objPDF as Object
    Dim objPPRep as Object
```
Set objPPRep = CreateObject("CognosPowerPlay.Report")
objPPRep.Open( "c:\Cognos\sample.ppx" )
objPPRep.visible( TRUE )
Set objPDF = objPPRep.PDFFile( "c:\Cognos\PDFSample" , True )
With objPDF
  .SaveEntireReport = False
  .SaveAllCharts = True
  .AxisOnAllPages = True
  .ChartTitleOnAllPages = False
  .IncludeLegend = True
  .SetListOfLayersToSave objPPRep.Layers
  .SetListOfRowsToSave objPPRep.Rows
End With
objPDF.Save
Set objPPRep = Nothing
Set objPDF = Nothing
End Sub

Related Topics
- "Save Method" (p. 238)
- "SaveEntireReport Property" (p. 409)
- "SetListOfLayersToSave Method" (p. 253)

SetMacro Method

Description
Sets the name and style for the macro used by the Exception object.

Syntax
Exception.SetMacro (Name, Style)

Applies To
Exception Object

Discussion
Use this method to set the name and style for a macro before using the MacroName and MacroStyle properties.

The SetMacro method searches for the specified macro only in the default macro directory. The SetMacro method will not accept a path. You can set the default macro directory using the Preferences command (File menu) or the Application method DefaultMacroDirectory.

The macro called by this method must follow the specified ExceptionMacro format in the Format for Macros Used in the Highlighting Exceptions Dialog Box topic.
### Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Required. Specifies the name of the macro. Type: String</td>
</tr>
<tr>
<td>Style</td>
<td>Required. Specifies the style to associate to this macro. Type: String</td>
</tr>
</tbody>
</table>

### Return Type

Boolean

### Example

This example sets the macro name and style for the first exception in the report.

```vbscript
Sub Main()
    Dim objPPRep as Object
    Dim objPPExpt as Object
    Set objPPRep = GetObject (, "CognosPowerPlay.Report")
    objPPRep.Application.DefaultMacroDirectory = _
        "C:\Samples\PowerPlay\Macros\"
    Set objPPExpt = objPPRep.Exceptions.Item ("GreatRevenue")
    objPPExpt.SetMacro "Report Sorting.mac", "Good News"
    objPPRep.SaveAs "New Exception Report.ppx"
    Set objPPRep = Nothing
End Sub
```

### Related Topics

- "Methods" (p. 87)
- "Properties" (p. 283)
- "DefaultMacroDirectory Property" (p. 320)
- "Exception Object" (p. 35)
- "Highlight Exceptions Macro" (p. 473)
- "MacroName Property" (p. 367)
- "MacroStyle Property" (p. 368)
- "SetMacro Method" (p. 257)

### SetMDCAccessInfo Method

**Description**

Stores security access information for a local PowerCube in memory.
**Syntax**

```
Application.SetMDCAccessInfo MDCName[, cube_password]
```

**Applies To**

Application Object

**Discussion**

Use this method to provide security information for a secured PowerCube using automation. This information must be provided before opening the specified report and MDC file.

The security parameters are stored in memory for subsequent opening of reports based on the PowerCube. To prevent the opening of subsequent reports, use DeleteMDCAccessInfo or DeleteAllMDCAccessInfo after all desired reports are open.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDCName</td>
<td>Required. Specifies the name of a local PowerCube. A &quot;*&quot; can be used as a wildcard so that the programmer can specify the default set of security parameters to use if the MDC name is not found.</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
</tr>
<tr>
<td>cube_password</td>
<td>Optional. Specifies the password for a password protected PowerCube.</td>
</tr>
<tr>
<td></td>
<td>Type: Variant</td>
</tr>
</tbody>
</table>

**Return Type**

Nothing

**Example**

This example sets the cube security access information record and then opens a report based on the password protected cube. Next, the mdc security access record is deleted from memory.

```vba
Sub Main()
    Dim objPPApp As Object
    Dim objPPRep As Object
    Dim strMDCName As String
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    Set objPPApp = objPPRep.Application
    strMDCName = "C:\Cubes and Reports\Sample1.mdc"
    objPPApp.SetMDCAccessInfo strMDCName, ",", "cube_password"
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    objPPApp.DeleteMDCAccessInfo(strMDCName)
    Set objPPRep = Nothing
    Set objPPApp
```

Macro Reference Guide 259
SetType Method

Description
Sets the Graph object type.

Syntax
Graph.SetType(Type[, Depth] [, Vertical])

Applies To
Graph Object

Discussion
Use the following list to set the Graph object type

- 0 (Crosstab)
- 1 (Pie)
- 2 (3-D)
- 3 (Bar)
- 4 (Cluster)
- 5 (Stack)
- 6 (Line)
- 7 (Multi-Line)
- 8 (Correlated)
- 9 (Scatter)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Required. Specifies the Graph object type. Type: Integer</td>
</tr>
</tbody>
</table>
### Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| Depth     | Optional. Specifies whether the Graph object is three-dimensional (3D). Applies specifically to Type 1, 3, 4, and 5.  
False = types 0, 6, 7, 8  
True = type 2  
Default: True (for Graph object types for which this property has meaning)  
Type: Boolean |
| Vertical  | Optional. Specifies whether the Graph object is a vertical display. If the property is False, it applies only to Type 3.  
Default: True  
Type: Boolean |

### Return Type

Nothing

### Example

This example changes the display type for the first Graph object to a three-dimensional cluster bar, and displays the settings for the Graph object for an open report.

```vba
Sub Main()
    Dim objPPRep as Object
    Dim objPPGph as Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    Set objPPGph = objPPRep.Graphs.Item(1)
    objPPGph.SetType 4, 1, 1
    MsgBox "The Graph object type is " & objPPGph.Type & "."
    If objPPGph.Depth = -1 Then
        MsgBox "The graph is not 3D."
    Else
        MsgBox "The graph is 3D."
    End If
    Set objPPGph = Nothing
    Set objPPRep = Nothing
End Sub
```

### Related Topics

- "Methods" (p. 87)
- "Properties" (p. 283)
SizeSelected Method

Description
Applies a size to selected objects.

Syntax
Report.SizeSelected Size

Applies To
Report Object

Discussion
Use this method in conjunction with the Select method. After objects are selected in a report using the Select method, you can use SizeSelected to set a size for all items selected.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>Required. Specifies a size in pixels. Type: Long</td>
</tr>
</tbody>
</table>

Return Type
Boolean

Example
This example selects the last column in the report, applies a style to it, and changes the cell size.

```
Sub Main()
    Dim objPPRep As Object
    Dim intCount As Integer
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    intCount = objPPRep.Columns.Count
    objPPRep.Columns.ItemAtLevel(intCount,0).Select
    objPPRep.StyleSelected "Good News"
    objPPRep.SizeSelected 100
    Set objPPRep = Nothing
End Sub
```

Related Topics
- "Select Method" (p. 242)
Sort Method

Description
Sorts columns, layers, or rows in ascending or descending order.

Syntax
`collection.Sort SortBy, OppDimIndex [, Order[, AutoSort]]`

Applies To
Columns
Layers
Rows

Discussion
Sort arranges data according to criteria set in the parameters. You can sort by values or labels of a column or row, or by the labels of layers. Sorting can be automatic.

In automatic sort mode (AutoSort = True), drilling up or down causes an automatic re-sort of the data using the current parameter settings. If automatic sort mode is not on (AutoSort = False), drilling up or down does not cause a re-sort of the data. Items that are already sorted and any new or changed values remain in the order in which they appear.

There is only one active ordering action per Dimension object; that is, the user can sort by labels or values, but not both, in the same report dimension.

Sort behaves differently from the Rank2 method in that it doesn’t actually add anything to the Report object; it simply re-orders what the user sees on the screen. Rank2 adds a rank sequence column or row to the report.

The sort method always sorts categories that have been suppressed or hidden, since they still exist as part of the report.

Do not use the `OppDimIndex` parameter when sorting on layers.

When any of these parameters are not included, the equivalent Preferences setting is used.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SortBy</td>
<td>Required. Specifies what to sort by.</td>
</tr>
<tr>
<td></td>
<td>0 = no sort 1 = sort by label 2 = sort by value (not valid for layers)</td>
</tr>
<tr>
<td></td>
<td>If 0 is set, the other three parameters have no effect.</td>
</tr>
<tr>
<td></td>
<td>Type: Variant</td>
</tr>
<tr>
<td>Parameters</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>OppDimIndex</td>
<td>Required. Specifies the column or row on which to sort the data. It is always the opposite dimension; that is, rows use a column index and columns use a row index. The index starts at 1. This parameter is not valid for layers. Type: Variant</td>
</tr>
<tr>
<td>Order</td>
<td>Optional. Specifies how to sort the categories. If not used, the Preferences setting is used. 1 = descending, 2 = ascending Default: descending Type: Variant</td>
</tr>
<tr>
<td>AutoSort</td>
<td>Optional. Specifies if rows are sorted automatically when the report changes. If not used, the Preferences setting is used. False (does not auto-sort) True (auto-sorts) Type: Boolean</td>
</tr>
</tbody>
</table>

**Return Type**

Nothing

**Example**

This example sorts columns by the values of the last row.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim intRowIndex As Integer
    Const SortByValue = 2
    Const Descending = 1
    Const NoAutoSort = 0
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
    intRowIndex = objPPRep.Rows.Count
    objPPRep.Columns.Sort _
        SortByValue, intRowIndex, Descending, NoAutoSort
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Rank2 Method" (p. 225)
**StyleSelected Method**

**Description**
Applies a style to selected objects.

**Syntax**

\[ \text{Report}.\text{StyleSelected}\ \text{Style} \]

**Applies To**
Report Object

**Discussion**
Use StyleSelected in conjunction with the Select method. Once objects are selected in a collection using Select, you can use StyleSelected to apply a format style to all items selected.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Style</td>
<td>Required. Specifies the value indicating a predefined style. True = successful False = error Type: String</td>
</tr>
</tbody>
</table>

**Return Type**
Boolean

**Example**

This example selects the last column in the report, applies a style to it, and changes the cell size.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim intCount As Integer
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
    intCount = objPPRep.Columns.Count
    objPPRep.Columns.ItemAtLevel(intCount, 0).Select
    objPPRep.StyleSelected "Good News"
    objPPRep.SizeSelected 100
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "Select Method" (p. 242)
Subset Method

**Description**
Returns a subset of objects from the current collection.

**Syntax**

```plaintext
collection.Subset(IndexOfFirstCategory, IndexOfLastCategory)
```

**Applies To**
Columns
Layers
Rows

**Discussion**
A subset is a group of categories used to isolate information that shares some common criteria. The subset can include all the objects in the collection.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IndexOfFirstCategory</td>
<td>Required. Specifies the index or category name of the first category of the range. Type: Integer</td>
</tr>
<tr>
<td>IndexOfLastCategory</td>
<td>Required. Specifies the index or category name of the last category of the range. Type: Integer</td>
</tr>
</tbody>
</table>

**Return Type**
Object

**Example**
This example uses the Subset method to add the first three rows in the open report.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objNewCol As Object
    Dim objNewRow As Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    Set objNewRow = objPPRep.Rows.Subset(1, 3).Addition
    MsgBox "The sum of the first three rows is " & objPPRep.CellValue(objNewRow(1).Index,1)
    _
    {objPPRep.Columns.Item(1)}
```

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MsgBox "The sum of column one and column four is"
    objPPRep.CellValue(1, objNewCol.Index)
objPPRep.Save
Set objNewRow = Nothing
Set objNewCol = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)
- "Columns" (p. 68)
- "Layers" (p. 75)
- "Rows" (p. 83)

Subtraction Method (Collections)

Description
Subtracts a constant value or a category from one or more categories in the collection, or subtracts all categories from a constant value or another category.

Syntax
(collection.Subtraction[(Operand [, Reverse])]]

Applies To
Columns
Layers
Rows

Discussion
The method can subtract all categories from a constant value or another category. The subtraction is reversible.

Depending on whether the method was applied to an object or a collection, the results are returned respectively as an object or a collection.

In Explorer mode, the new calculation is inserted directly after the last operand. In Reporter mode, the new calculation is inserted directly after the active row or column.

References to the position of an object in the collection are not valid after you use this method.

In Explorer mode, if you change a report by removing a level, drilling, filtering or nesting, then all calculations that can not be created in the changed report disappear.
### Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operand</td>
<td>Optional. Specifies either a constant value or a category object. If you do not specify this parameter, this method creates a category to display the subtraction of all the categories in the collection. If you specify this parameter, this method subtracts the category from the operand, and creates a new category for each result. Type: Variant</td>
</tr>
<tr>
<td>Reverse</td>
<td>Optional. Specifies whether the category is subtracted from the Operand or the opposite. True = the category is subtracted from the Operand False = the Operand is subtracted from the category Type: Boolean</td>
</tr>
</tbody>
</table>

### Return Type

Object

### Example

This example returns the difference between two columns in a new column.

```vbnet
Sub Main()
    Dim objPPRep As Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    objPPRep.ExplorerMode = False
    objPPRep.Columns.Item("Environmental Line").Subtraction _
        objPPRep.Columns.Item("Products")
    objPPRep.Save
    objPPRep.Close
    Set objPPRep = Nothing
End Sub
```

### Related Topics

- "Methods" (p. 87)
- "Properties" (p. 283)
- "Column Object" (p. 28)
- "Layer Object" (p. 41)
- "Report Object" (p. 51)
- "Row Object" (p. 55)
**Subtraction Method (Objects)**

**Description**
Subtracts a constant value or another category from an object, or subtracts an object from the category or constant value.

**Syntax**

```
object.Subtraction(Operand [, Reverse])
```

**Applies To**
- Column Object
- Layer Object
- Row Object

**Discussion**
For Column, Layer, and Row objects, the method subtracts the category from the operand for each category and operand pair, and creates a new category for each result.

Depending on whether the method was applied to an object or a collection, the results are returned respectively as an object or a collection.

In Explorer mode, the new calculation is inserted directly after the last operand. In Reporter mode, the new calculation is inserted directly after the active row or column.

References to the position of an object in the collection are not valid after you use this method.

In Explorer mode, if you change a report by removing a level, drilling, filtering or nesting, then all calculations that can not be created in the changed report disappear.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operand</strong></td>
<td>Required. Specifies either a constant value or a category object.</td>
</tr>
<tr>
<td>Reverse</td>
<td>Optional. Specifies whether the category is subtracted from the Operand or the opposite.</td>
</tr>
<tr>
<td>False = the Operand is subtracted from the category</td>
<td></td>
</tr>
<tr>
<td>True = the category is subtracted from the Operand</td>
<td></td>
</tr>
<tr>
<td>Type: Variant</td>
<td></td>
</tr>
<tr>
<td>Type: Boolean</td>
<td></td>
</tr>
</tbody>
</table>

**Return Type**
Object
Example
This example subtracts a constant value from each value in a column and returns the difference in a new column.

Sub Main()
    Dim objPPRep as Object
    Dim objPPCol as Object
    Set objPPRep = CreateObject ("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    Set objPPCol = objPPRep.Columns.Item("Tents")
    objPPCol.Subtraction(1000)
    objPPRep.Save
    Set objPPCol = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)
- "Column Object" (p. 28)
- "Layer Object" (p. 41)
- "Report Object" (p. 51)
- "Row Object" (p. 55)

SwapColumnsAndLayers Method

Description
Exchanges the positions of the Column objects and Layer objects.

Syntax
Report.SwapColumnsAndLayers

Applies To
Report Object

Discussion
Use this method to exchange the position of categories in a report. You can use other swapping methods to exchange the positions of rows and columns, and rows and layers.

References to the position of an object in the collection are not valid after you use this method.

Return Type
Nothing
Example
This example exchanges the positions of the columns and layers in an open report.

Sub Main()
    Dim objPPRep as Object
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
    objPPRep.SwapColumnsAndLayers
    objPPRep.SaveAs "New Report.ppx"
    Set objPPRep = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)
- "Column Object" (p. 28)
- "Layer Object" (p. 41)
- "Report Object" (p. 51)
- "SwapRowsAndColumns Method" (p. 271)
- "SwapRowsAndLayers Method" (p. 272)

SwapRowsAndColumns Method

Description
Exchanges the positions of the Row objects and Column objects.

Syntax
Report.SwapRowsAndColumns

Applies To
Report Object

Discussion
You can use other swapping methods exchange the positions of columns and layers, and rows and layers.

You can swap rows and columns to analyze information differently in a report, or to change the data in a report so that it will fit the current page size. For example, if the rows contain quarters of the fiscal year and the columns contain products, you can swap them so rows contain products, and columns contain quarters.

References to the position of an object in the collection are not valid after you use this method.
**Return Type**
Nothing

**Example**
This example exchanges the positions of the rows and columns in an open report.

```vba
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
    objPPRep.SwapRowsAndColumns
    objPPRep.SaveAs "New Report.ppx"
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "Methods" (p. 87)
- "Properties" (p. 283)
- "Column Object" (p. 28)
- "Report Object" (p. 51)
- "Row Object" (p. 55)
- "SwapRowsAndColumns Method" (p. 271)
- "SwapRowsAndLayers Method" (p. 272)

---

**SwapRowsAndLayers Method**

**Description**
Exchanges the positions of the Row objects and Layer objects.

**Syntax**

`Report.SwapRowsAndLayers`

**Applies To**
Report Object

**Discussion**
Other methods exchange columns and layers, and rows and columns.

If you use this method on a report that does not have any layers, the rows will become layers and there will be no rows in the report.

References to the position of an object in the collection are not valid after you use this method.
Return Type
Nothing

Example
This example exchanges the positions of the rows and layers in an open report.
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
    objPPRep.SwapRowsAndLayers
    objPPRep.SaveAs "New Report.ppx"
    Set objPPRep = Nothing
End Sub

Related Topics
● "Methods" (p. 87)
● "Properties" (p. 283)
● "Layer Object" (p. 41)
● "Report Object" (p. 51)
● "Row Object" (p. 55)
● "SwapRowsAndColumns Method" (p. 271)
● "SwapRowsAndLayers Method" (p. 272)

UnhideAllCategories Method

Description
Makes all hidden categories visible.

Syntax
Report.UnhideAllCategories

Applies To
Report Object

Discussion
When categories are hidden using the Hide method, they lose all connection to the macro. This is the only method of revealing them.

References to the position of an object in the collection are not valid after you use this method.

Return Type
Nothing
Example
This example reveals all the hidden categories in an open report.

Sub Main()
    Dim objPPRep as Object
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
    objPPRep.UnhideAllCategories
    objPPRep.Save
    Set objPPRep = Nothing
End Sub

Related Topics
● "Methods" (p. 87)
● "Properties" (p. 283)
● "Hide Method" (p. 179)
● "ActiveReport Method" (p. 98)
● "Report Object" (p. 51)

Unselect Method

Description
De-selects categories.

Syntax
object.Unselect

Applies To
Column Object
Columns
Layer Object
Layers
Row Object
Rows

Discussion
Use this method to remove all selections in an object or collection.

Return Type
Nothing
**Example**

This example clears the selected column from an open report.

```vba
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    objPPRep.Columns.Item("Outdoor Products").Select
    objPPRep.Copy
    objPPRep.Columns.Unselect
    objPPRep.Close
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Select Method" (p. 242)
- "SelectBlank Method" (p. 244)
- "UnselectBlank Method" (p. 276)

---

### UnselectAllDimensions Method

**Description**

Cleans all selected Dimension objects in the dimension line that can be filtered when a report is opened in the IBM Cognos portal.

**Syntax**

```
DeploymentOptions.UnselectAllDimensions
```

**Discussion**

Use this property when a report author specifies that a report consumer can filter a report opened in the IBM Cognos portal. The user can filter unnecessary information so that only the required information appears in the report.

This method cleans all selected Dimension objects in the dimension line for the DeploymentOptions object so that the user can use the PromptForDimension property to select specific dimensions or to remove filtering on all dimensions.

**Return Type**

Nothing

**Example**

This example cleans all selected dimensions from the dimension line filter and then specifies the dimensions that a user can filter in a report.

Sub Main()
Dim objPPRep as Object
Dim objDeploymentOptions as Object
Set objPPRep = GetObject(,"CognosPowerPlay.Report")
Set objDeploymentOptions = objPPRep.DeploymentOptions
objDeploymentOptions.PromptForCurrency = True
objDeploymentOptions.PromptForLongShortNames = True
objDeploymentOptions.PromptForZeroSuppression = True
objDeploymentOptions.PromptForSwapRowsAndColumns = True
objDeploymentOptions.UnselectAllDimensions
objDeploymentOptions.Dimension(1) = True
objDeploymentOptions.Dimension(2) = True
objPPRep.Save
Set objDeploymentOptions = Nothing
Set objPPRep = Nothing
End Sub

Related Topics

●  "SelectAllDimensions Method" (p. 243)

UnselectBlank Method

Description
Unselects a specific blank row or column.

Syntax
object.UnselectBlank BlankNumber

Applies To
Column Object
Row Object

Discussion
Use UnselectBlank in conjunction with the Item and ItemAtLevel methods in crosstab reports. When a crosstab has blank rows or columns that have been selected by the SelectBlank method, UnselectBlank turns off the selection of the blank item.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BlankNumber</td>
<td>Required. Specifies the value indicating a blank item. BlankNumber acts as</td>
</tr>
<tr>
<td></td>
<td>an index, where the first blank row or column is 1, the second is 2, and</td>
</tr>
<tr>
<td></td>
<td>so on. Type: Long</td>
</tr>
</tbody>
</table>

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Return Type
Nothing

Example
This example uses the AddBlanks method to add a blank row before the last row and a blank column before the last column in the active report.

Sub Main()
    Dim objPPRep As Object
    Dim intRow As Integer
    Dim intColumn As Integer
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    objPPRep.ExplorerMode = False
    intRow = objPPRep.Rows.Count - 1
    intColumn = objPPRep.Columns.Count - 1
    objPPRep.Rows.Item(intRow).Select
    objPPRep.AddBlanks
    objPPRep.Rows.Unselect
    objPPRep.Columns.Item(intColumn).Select
    objPPRep.AddBlanks
    objPPRep.Columns.Unselect
    objPPRep.Rows.ItemAtLevel(intRow,0).Select
    objPPRep.Columns.ItemAtLevel(intColumn,0).SelectBlank(1)
    MsgBox " A blank row and column have been added "
    & _
        "and selected.",64,"Blanks"
    objPPRep.Rows.ItemAtLevel(intRow,0).UnselectBlank(1)
    objPPRep.Columns.ItemAtLevel(intColumn,0).UnselectBlank(1)
    MsgBox " The blank row and column have now been "
    & _
        "unselected.",64,"Blanks"
    Set objPPRep = Nothing
End Sub

UpdatePublishedReport Method

Description
Updates a report previously published to the IBM Cognos BI content store.

Syntax
Report.UpdatePublishedReport [ReportDescription]

Applies To
Report Object
Discussion
Use this method to update a report that was previously published to the IBM Cognos BI content store using the PublishToPortal method.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ReportDescription</td>
<td>Optional. Specifies a description of the saved report. Type: String</td>
</tr>
</tbody>
</table>

Return Type
Boolean

Example
Sub Main()
    Dim objPPApp As Object
    Dim objPPRepRemote As Object
    Set objPPRepRemote = CreateObject("CognosPowerPlay.Report"
    Set objPPApp = objPPRepRemote.Application
    objPPApp.Visible = True
    objPPRepRemote.Open "C:\PPlay.ppx"
    ' Modify report.....
    objPPRepRemote.UpdatePublishedReport
    objPPRepRemote.Close
    set objPPRepRemote = Nothing
End Sub

Related Topics
- "PublishToPortal Method" (p. 221)

ValueRestriction Method

Description
Returns the value restriction for an AdvancedQuery.

Syntax
AdvancedQuery.ValueRestriction(ValueName)

Applies To
AdvancedQuery Object

Discussion
Use this method to specify the name of the value restriction to filter the results of an AdvancedQuery. The ValueRestriction may include only the categories whose values are:
the n largest or smallest values (specify the Largest or Smallest Operator and the Count property)

- greater than, less than, greater than or equal to, less than or equal to, or equal to a specified value (specify the greater than, less than, greater than or equal to, less than or equal to, or equal to Operator and Operand1.

- within a specified range (specify the Between Operator and both Operand1 and Operand2).

Specify only one value restriction at a time. For example, "Revenue> 10,000 and Units Sold < 30" is not valid.

Do not include functions applied to measures for value restrictions. For example, "Average(Revenue)>500" and "Revenue - Cost in Top 10" are not valid.

Value restrictions apply only to the lowest level categories of the AdvancedQuery results. For example, the result of an AdvancedQuery contains numerous Years and Quarters. When applying a value restriction to select only the top 10 values, the resulting AdvancedQuery contains the top 10 Quarters (the lowest level categories) and their corresponding years. The resulting report has 10 rows (for the top 10 values), but the query may return more than 10 categories.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ValueName</td>
<td>Required. Specifies the name assigned to the ValueRestriction object for the value restriction query. Type: String</td>
</tr>
</tbody>
</table>

**Return Type**

Nothing

**Example**

This example creates an advanced subset that selects countries from the Locations dimension. The value restriction (type 4) limits the results to return only those countries whose Revenue values for Environmental Line are between 25,000 and 100,000.

```vbs
Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objValue As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objValue = objPPRep.ReportQueries.Add(4)
    With objValue
        .Name = "25000-100000"
        .Dimension = "Locations"
    End With
End Sub
```
.Measure = "Revenue"
.Operator = "between"
.Operand1 = 25000
.Operand2 = 100000
.DimensionFilter 2, "Environmental Line"
End With
Set objAdvanced = objPPRep.ReportQueries.Add(3)
With objAdvanced
 .Name = "Locations"
 .Dimension = "Locations"
 .Level "Country"
 .ValueRestriction objValue.Name
 .Execute
 .AddToReport 0,1,3
End With
Set objAdvanced = Nothing
Set objValue = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)

**Vertical Method**

**Description**
Returns whether the Graph object is a vertical display.

**Syntax**

*Graph*.Vertical

**Applies To**
Graph Object

**Discussion**
To set this method, use the Add method for Graph collections, or the SetType method for Graph objects.

Graph type 3 (bar chart) can be either vertical or horizontal in a 2D or 3D graph. This means that graph type 3 can return True (when it is vertical) or False (when it is horizontal).

A crosstab will always return False.

Default: True
**Return Type**

Boolean

**Example**

This example changes the display type for the first Graph object to a three-dimensional cluster bar, and displays the settings for the Graph object for an open report.

```vba
Sub Main()
    Dim objPPRep as Object
    Dim objPPGph as Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    Set objPPGph = objPPRep.Graphs.Item(1)
    objPPGph.SetType 4, 1, 1
    MsgBox "The Graph object type is " & objPPGph.Type & "."
    If objPPGph.Depth = -1 Then
        MsgBox "The graph is not 3D."
    Else
        MsgBox "The graph is 3D."
    End If
    If objPPGph.Vertical = -1 Then
        MsgBox "The graph is oriented vertically."
    Else
        MsgBox "The graph is oriented horizontally."
    End If
    Set objPPGph = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Methods" (p. 87)
- "Properties" (p. 283)
- "Graph Object" (p. 38)
Chapter 4: Methods
Chapter 5: Properties

You work with the following properties for IBM® Cognos® PowerPlay® OLE automation.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Property</td>
<td>Returns the Application object.</td>
</tr>
<tr>
<td>AutomaticExceptions Property</td>
<td>Sets or returns whether automatic highlighting of exceptions is on or off.</td>
</tr>
<tr>
<td>AutomaticExceptionSensitivity Property</td>
<td>Sets or returns the automatic exception sensitivity.</td>
</tr>
<tr>
<td>Average Property</td>
<td>Sets or returns whether to calculate the average of the selected categories in the CategoryList object.</td>
</tr>
<tr>
<td>AxisOnAllPages Property</td>
<td>Sets or returns whether the axis and labels appear on every page of the printed report or PDF.</td>
</tr>
<tr>
<td>BlankWhenDividedByZero Property</td>
<td>Sets or returns whether a numeric value divided by zero appears as zero or blanks.</td>
</tr>
<tr>
<td>BlankWhenMissing Property</td>
<td>Sets or returns whether missing numeric values appear as zero or blanks.</td>
</tr>
<tr>
<td>BlankWhenZero Property</td>
<td>Sets or returns whether zero numeric values appear as zeros or blanks.</td>
</tr>
<tr>
<td>CalculatedCategories Property</td>
<td>Sets or returns whether calculated categories are on or off, or whether a PowerCube contains calculated categories.</td>
</tr>
<tr>
<td>Caption Property</td>
<td>Returns the title of the Application object window.</td>
</tr>
<tr>
<td>CellText Property</td>
<td>Returns the text in a cell.</td>
</tr>
<tr>
<td>CellValueAlignment Property</td>
<td>Returns the alignment applied to a cell value in a report.</td>
</tr>
<tr>
<td>CellValueFontColor Property</td>
<td>Returns the font color applied to a cell value in a report.</td>
</tr>
<tr>
<td>CellValueFontName Property</td>
<td>Returns the name of the font applied to a cell value in a report.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CellValueFontSize Property</td>
<td>Returns the size of the font applied to a cell value in a report.</td>
</tr>
<tr>
<td>ChartTitleOnAllPages Property</td>
<td>Sets or returns whether titles appear on every page of the printed report or PDF.</td>
</tr>
<tr>
<td>Collate Property</td>
<td>Sets or returns whether the Report object collates during printing.</td>
</tr>
<tr>
<td>Copies Property</td>
<td>Sets or returns the number of copies to print.</td>
</tr>
<tr>
<td>Count Property</td>
<td>Returns the number of categories one level below the current category in the Dimension object, or the number objects in a collection.</td>
</tr>
<tr>
<td>CubeName Property</td>
<td>Returns the file name of the cube for the active report.</td>
</tr>
<tr>
<td>DataGridlines Property</td>
<td>Sets or returns whether the gridlines settings are on or off for a crosstab.</td>
</tr>
<tr>
<td>DefaultAlternateDirectory Property</td>
<td>Sets or returns the directory to save updates to a read-only report.</td>
</tr>
<tr>
<td>DefaultCubeDirectory Property</td>
<td>Sets or returns the default path for multi-dimensional cube files (.mdc).</td>
</tr>
<tr>
<td>DefaultMacroDirectory Property</td>
<td>Sets or returns the default path for macro files.</td>
</tr>
<tr>
<td>DefaultReportDirectory Property</td>
<td>Sets or returns the default path for PowerPlay report files.</td>
</tr>
<tr>
<td>Dimension Property</td>
<td>Sets or returns the dimension from which categories are returned.</td>
</tr>
<tr>
<td>DimensionLineIndex Property</td>
<td>Returns the position of a dimension line item to maintain a list of Layer, Row, and Column objects.</td>
</tr>
<tr>
<td>DimensionSettings Property</td>
<td>Returns a comma-separated string of all the dimension line settings for the ValueRestriction.</td>
</tr>
<tr>
<td>DrivingCategory Property</td>
<td>Returns the driving category for the Exception object.</td>
</tr>
<tr>
<td>DrivingDimension Property</td>
<td>Returns the driving dimension for the Exception object.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Each Property</td>
<td>Sets or returns whether all selected and new categories or just the new categories appear in the report.</td>
</tr>
<tr>
<td>EnableUserColumnSummaryLabel Property</td>
<td>Sets or returns whether a user-defined label is used for the innermost summary column in a nested crosstab.</td>
</tr>
<tr>
<td>EnableUserRowSummaryLabel Property</td>
<td>Sets or returns whether a user-defined label is used for the innermost summary row in a nested crosstab.</td>
</tr>
<tr>
<td>Exception Property</td>
<td>Sets or returns the exception for one or more categories.</td>
</tr>
<tr>
<td>ExplorerMode Property</td>
<td>Sets or returns whether the Report object is an Explorer or Reporter report.</td>
</tr>
<tr>
<td>FitToPage Property</td>
<td>Sets or returns whether the report is scaled to fit on one page.</td>
</tr>
<tr>
<td>FooterText Property</td>
<td>Sets or returns the text in the footer of a report.</td>
</tr>
<tr>
<td>FullName Property</td>
<td>Returns the full name, including the location, of either the Application object or the Report object.</td>
</tr>
<tr>
<td>GetDataAutomatically Property</td>
<td>Sets or returns whether the Report object retrieves data automatically each time it is modified.</td>
</tr>
<tr>
<td>HeaderText Property</td>
<td>Sets or returns the text in the header of a report.</td>
</tr>
<tr>
<td>HideRankCategory Property</td>
<td>Sets or returns whether the rank category is hidden.</td>
</tr>
<tr>
<td>IncludeLegend Property</td>
<td>Sets or returns whether the legend appears in a printed report or PDF.</td>
</tr>
<tr>
<td>IndentTotalsLevel Property</td>
<td>Sets or returns the current indent level for summary cells in a nested crosstab.</td>
</tr>
<tr>
<td>Index Property</td>
<td>Returns the position of an object in a collection.</td>
</tr>
<tr>
<td>Intersect Property</td>
<td>Sets or returns whether to determine the values at the intersection of selected categories from different dimensions.</td>
</tr>
<tr>
<td>IsAlternate Property</td>
<td>Returns whether the drill-down path is primary or alternate.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------------------------------</td>
</tr>
<tr>
<td>IsCalculatedCategory Property</td>
<td>Returns whether the category is a calculated category.</td>
</tr>
<tr>
<td>KeepSummaryVisible Property</td>
<td>Sets or returns whether the summary category will remain visible on all scrolled pages.</td>
</tr>
<tr>
<td>LabelAlignment Property</td>
<td>Returns the alignment applied to a cell label in a report.</td>
</tr>
<tr>
<td>LabelFontColor Property</td>
<td>Returns the font color applied to a category label in a report.</td>
</tr>
<tr>
<td>LabelFontName Property</td>
<td>Returns the name of the font applied to a category label in a report.</td>
</tr>
<tr>
<td>LabelFontSize Property</td>
<td>Returns the size of the font applied to a category label in a report.</td>
</tr>
<tr>
<td>LabelGridlines Property</td>
<td>Sets or returns whether the gridlines are on or off for category labels in a nested crosstab.</td>
</tr>
<tr>
<td>Layout Property</td>
<td>Sets or returns the current layout style in a nested crosstab.</td>
</tr>
<tr>
<td>Level Property</td>
<td>Returns the level of the category in a dimension.</td>
</tr>
<tr>
<td>LevelList Property</td>
<td>Returns the list of levels for a specified drill-down path.</td>
</tr>
<tr>
<td>LevelsDown Property</td>
<td>Sets the number of levels down the hierarchy for specifying the next level ParentageQuery subsets.</td>
</tr>
<tr>
<td>LogonPrompt Property</td>
<td>Sets or returns whether the application prompts for logon or security information.</td>
</tr>
<tr>
<td>LowerBoundary Property</td>
<td>Sets or returns the value defined for the lower boundary of the Range object.</td>
</tr>
<tr>
<td>LowestLevel Property</td>
<td>Sets whether the query uses the next lower level or lowest level of the parent category.</td>
</tr>
<tr>
<td>MacroName Property</td>
<td>Sets or returns the name of the macro associated with an Exception object.</td>
</tr>
<tr>
<td>MacroStyle Property</td>
<td>Sets or returns the name of the style associated with the macro used by an Exception object.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>MaximumNumberOfRanges Property</strong></td>
<td>Returns the maximum number of Range objects definable for an Exception object.</td>
</tr>
<tr>
<td><strong>MaxPrintedBars Property</strong></td>
<td>Sets or returns the maximum number of bars on a single printed page.</td>
</tr>
<tr>
<td><strong>MaxVisibleBars Property</strong></td>
<td>Sets or returns the maximum number of bars visible on a single page of scrolled data.</td>
</tr>
<tr>
<td><strong>Measure Property</strong></td>
<td>Sets or returns the name of measure whose values are used for a value restriction.</td>
</tr>
<tr>
<td><strong>MeasureCurrency Property</strong></td>
<td>Sets or returns the value and symbol for a specified currency.</td>
</tr>
<tr>
<td><strong>Name Property</strong></td>
<td>Sets or returns name of the object.</td>
</tr>
<tr>
<td><strong>NamesShown Property</strong></td>
<td>Sets or returns whether category names appear beside pie chart slices.</td>
</tr>
<tr>
<td><strong>NestedCharts Property (Explorer)</strong></td>
<td>Sets or returns whether multiple charts that represent summarized data appear in one display.</td>
</tr>
<tr>
<td><strong>NestedName Property</strong></td>
<td>Returns the nested name for a category.</td>
</tr>
<tr>
<td><strong>Operand1 Property</strong></td>
<td>Sets or returns the value used to compare report cell values based on a specified operator.</td>
</tr>
<tr>
<td><strong>Operand2 Property</strong></td>
<td>Sets or returns the second value when the Between operator is used to specify a range.</td>
</tr>
<tr>
<td><strong>Operator Property</strong></td>
<td>Sets or returns the type of operator used for a value restriction.</td>
</tr>
<tr>
<td><strong>ParentCategory Property</strong></td>
<td>Returns the name of the parent category for the object.</td>
</tr>
<tr>
<td><strong>Path Property</strong></td>
<td>Returns the path of the Report object or the Application object.</td>
</tr>
<tr>
<td><strong>Pattern Property</strong></td>
<td>Sets search criteria for a subset definition.</td>
</tr>
<tr>
<td><strong>Precedence Property</strong></td>
<td>Sets or returns the precedence used in complex calculations.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>PrintAllCharts Property</td>
<td>Sets or returns whether all displays print on the same page.</td>
</tr>
<tr>
<td>PrintColorsAsPatterns Property</td>
<td>Sets or returns whether colors print as patterns or as colors.</td>
</tr>
<tr>
<td>PrintEntireReport Property</td>
<td>Sets or returns whether to print the entire report, including all displays, layers, and rows.</td>
</tr>
<tr>
<td>PrintPageLayout Property</td>
<td>Sets or returns whether to print all displays visible in the page layout or page width view on the same page.</td>
</tr>
<tr>
<td>PrintSelectedDisplay Property</td>
<td>Sets or returns whether to print the selected or currently active Graph object.</td>
</tr>
<tr>
<td>PromptForCurrency Property</td>
<td>Sets or returns whether the report consumer can change the currency in a report published to Upfront.</td>
</tr>
<tr>
<td>PromptForDimension Property</td>
<td>Sets or returns whether a report consumer can filter the specified Dimension object when a report is opened in Upfront.</td>
</tr>
<tr>
<td>PromptForLongShortNames Property</td>
<td>Sets or returns whether the report consumer can change between long and short category names in a report published to Upfront.</td>
</tr>
<tr>
<td>PromptForSwapRowsAndColumns Property</td>
<td>Sets or returns whether the report consumer can swap rows and columns in a report published to Upfront.</td>
</tr>
<tr>
<td>PromptForZeroSuppression Property</td>
<td>Sets or returns whether the report consumer can apply or turn off zero suppression in a report published to Upfront.</td>
</tr>
<tr>
<td>RefreshSubCube Property</td>
<td>Sets or returns whether the sub-cube is refreshed automatically.</td>
</tr>
<tr>
<td>SaveAllCharts Property</td>
<td>Sets or returns whether all Graph objects are saved in a PDF.</td>
</tr>
<tr>
<td>Saved Property</td>
<td>Returns whether the Report object has been saved.</td>
</tr>
<tr>
<td>SaveEntireReport Property</td>
<td>Sets or returns whether to save the entire report as a PDF.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SearchDescription Property</td>
<td>Sets or returns whether the FindQuery object searches the category descriptions in a cube.</td>
</tr>
<tr>
<td>SearchShortName Property</td>
<td>Sets or returns whether the FindQuery object searches short or long category names.</td>
</tr>
<tr>
<td>SearchText Property</td>
<td>Sets or returns the search string used in the subset definition of a FindQuery query.</td>
</tr>
<tr>
<td>ShareDimensionLine Property</td>
<td>Sets or returns whether open reports share a dimension line.</td>
</tr>
<tr>
<td>ShareOf Property</td>
<td>Sets or returns whether to show the values in selected categories as a percentage of the higher-level category.</td>
</tr>
<tr>
<td>ShowSummaryBreakdown Property</td>
<td>Sets or returns whether to show the breakdown of summary rows and columns in a crosstab.</td>
</tr>
<tr>
<td>(Explorer)</td>
<td></td>
</tr>
<tr>
<td>ShowSummaryColumn Property</td>
<td>Sets or returns whether to show the summary column.</td>
</tr>
<tr>
<td>(Explorer)</td>
<td></td>
</tr>
<tr>
<td>ShowSummaryRow Property</td>
<td>Sets or returns whether to show the summary row.</td>
</tr>
<tr>
<td>(Explorer)</td>
<td></td>
</tr>
<tr>
<td>ShowTies Property</td>
<td>Sets or returns whether to show label ties.</td>
</tr>
<tr>
<td>ShowValuesAs Property</td>
<td>Sets or returns how to show values in a report.</td>
</tr>
<tr>
<td>(Explorer)</td>
<td></td>
</tr>
<tr>
<td>StatsLineCaption Property</td>
<td>Sets or returns the caption for a given statistical line on a graph.</td>
</tr>
<tr>
<td>StatsLineColor Property</td>
<td>Sets or returns the color for a given statistical line on a graph.</td>
</tr>
<tr>
<td>StatsLineOn Property</td>
<td>Sets or returns a statistical line on a graph.</td>
</tr>
<tr>
<td>StatsLineStyle Property</td>
<td>Sets or returns the line style of a given statistical line on a graph.</td>
</tr>
<tr>
<td>StatsLineUserValue Property</td>
<td>Sets a custom value for a statistical line on a graph.</td>
</tr>
<tr>
<td>Style Property</td>
<td>Sets or returns the style used for a category, an exception range or set of categories.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sum Property</td>
<td>Sets or returns whether to calculate the sum of selected categories.</td>
</tr>
<tr>
<td>SummariesOnAllPages Property</td>
<td>Sets or returns whether existing summaries appear on every page of a printed report.</td>
</tr>
<tr>
<td>SummaryColumnOnAllPages Property</td>
<td>Sets or returns whether to show the summary column category on every page of a report or PDF.</td>
</tr>
<tr>
<td>SummaryRowOnAllPages Property</td>
<td>Sets or returns whether to show the summary row category on every page of a report or PDF.</td>
</tr>
<tr>
<td>Suppress8020 Property (Explorer)</td>
<td>Sets or returns the 80/20 suppress mode for report dimensions.</td>
</tr>
<tr>
<td>SuppressZeros Property</td>
<td>Sets or returns the suppress mode for the Report object.</td>
</tr>
<tr>
<td>Threshold Property</td>
<td>Sets or returns the maximum printing page limit for the Print object.</td>
</tr>
<tr>
<td>TitleText Property</td>
<td>Sets or returns the text in the title of a report.</td>
</tr>
<tr>
<td>TopLevelCategory Property (Explorer)</td>
<td>Returns the name of the dimension for the object.</td>
</tr>
<tr>
<td>TopLevelParentCategory Property</td>
<td>Returns the name of the dimension for the object.</td>
</tr>
<tr>
<td>Type Property</td>
<td>Returns the object type.</td>
</tr>
<tr>
<td>UpperBoundary Property</td>
<td>Sets or returns the value defined for the upper boundary of the Range object.</td>
</tr>
<tr>
<td>UseFontSubstitution Property</td>
<td>Sets or returns whether to save full font information in a report published to Upfront.</td>
</tr>
<tr>
<td>UserControl Property</td>
<td>Sets or returns whether the Application object is under user control.</td>
</tr>
<tr>
<td>UserColumnSummaryLabel Property</td>
<td>Sets or returns the user-defined label for the innermost summary column in a nested crosstab.</td>
</tr>
<tr>
<td>UserRowSummaryLabel Property</td>
<td>Sets or returns the user-defined label for the innermost summary row in a nested crosstab.</td>
</tr>
<tr>
<td>UseScrolling Property</td>
<td>Sets or returns whether scrolling is enabled.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ValuesAutoFit Property</td>
<td>Sets or returns whether value labels fit within graph bars and pie segments.</td>
</tr>
<tr>
<td>ValuesFontColor Property</td>
<td>Sets or returns the font color used for the graph value labels.</td>
</tr>
<tr>
<td>ValuesFontName Property</td>
<td>Sets or returns the font name used for the value labels.</td>
</tr>
<tr>
<td>ValuesFontSize Property</td>
<td>Sets or returns the font size used for the graph value labels.</td>
</tr>
<tr>
<td>ValuesFontStyle Property</td>
<td>Sets or returns the font style used for the graph value labels.</td>
</tr>
<tr>
<td>ValuesPosition Property</td>
<td>Sets or returns the position of value labels on some graph types.</td>
</tr>
<tr>
<td>ValuesShown Property</td>
<td>Sets or returns whether value labels appear next to pie chart slices.</td>
</tr>
<tr>
<td>Version Property</td>
<td>Returns the version number of PowerPlay.</td>
</tr>
<tr>
<td>Visible Property</td>
<td>Sets or returns whether the object is visible to the user.</td>
</tr>
</tbody>
</table>

**Related Topics**

- "Methods" (p. 87)
- "Collections" (p. 65)
- "Objects" (p. 19)

**Application Property**

**Description**

Returns the Application object.

**Syntax**

`object.Application`

**Applies To**

- AdvancedQuery Object
- Application Object
Chapter 5: Properties

CategoryList Object
Column Object
Columns
Dimension Object
DimensionLine Object
Exception Object
Exceptions
FindQuery Object
Graph Object
Graphs
Layer Object
Layers
Level Object
Levels
ParentageQuery Object
Print Object
Range Object
Ranges
Report Object
ReportQueries
Reports
Row Object
Rows
SaveAsPDF Object
ValueRestriction Object

Discussion
Use this property to gain access to application level settings such as default directories or the current version of the product. It can also be used to place the application on top of all the others, that is make it the active one.

Type
Object

Access
Read
Example
This example returns the name and location of the open report. Then, using the Application property, it brings IBM® Cognos® PowerPlay® to the front and makes it active.

Sub Main()
    Dim objRep As Object
    MsgBox "The name of the current report is " & objRep.Name
    MsgBox "The location of the current report is " & objRep.Path
    If objRep.Saved = False Then
        objRep.Save
        MsgBox "Changes to the report have been saved."
    Else
        MsgBox "No changes have been made to the report."
    End If
    Set objRep = Nothing
End Sub

Related Topics
● "Methods" (p. 87)
● "Properties" (p. 283)
● "Application Object" (p. 23)

AutomaticExceptions Property

Description
Sets or returns whether automatic highlighting of exceptions is on or off.

Syntax
Report.AutomaticExceptions

Applies To
Report Object

Discussion
Use this property to set whether exceptions are automatically highlighted. Automatic exceptions are data driven exceptions (otherwise known as anomalies or outliers). Whenever the crosstab cell values change in a report, the expected value of each cell, based on the row, column, and crosstab totals, is computed and compared to the observed value (the value in the cell). If the difference is significant, the cell value is highlighted as a high (green) or low (red) exception.

This property is only valid when IBM® Cognos® PowerPlay® is in Explorer mode. Otherwise, a message displays indicating that this operation is not available.
Do not use automatic exception highlighting when the row or column is a time dimension.

**Default:** False

**Type**
Boolean

**Access**
Read/Write

**Example**
This example changes the current setting of the AutomaticExceptions property of the active report. For example, if it is True, it changes to False.

```vba
Sub Main()
    Dim objPPRep As Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    If objPPRep.AutomaticExceptions = True Then
        objPPRep.AutomaticExceptions = False
        MsgBox "Automatic Exceptions highlighting " & 
        "has been turned off." , , "Automatic Exceptions"
    Else
        objPPRep.AutomaticExceptions = True
        MsgBox "Automatic Exceptions highlighting " & 
        "has been turned on." , , "Automatic Exceptions"
    End If
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "AutomaticExceptionSensitivity Property" (p. 294)

**AutomaticExceptionSensitivity Property**

**Description**
Sets or returns the automatic exception sensitivity.

**Syntax**

```
Report.AutomaticExceptionSensitivity
```

**Applies To**
Report Object
Discussion
Use this property to identify the sensitivity of data driven exceptions (otherwise known as anomalies or outliers). Every cell value within a report that is within the valid sensitivity range for automatic exceptions (between 1 and 10) will be highlighted. For OLE automation, there are two default highlight styles, red and green. Exceptions that are above the mean of the deviation are automatically highlighted in green; those that are below are highlighted in red. If the user has changed the default automatic exception style, their modified style is used to highlight these exceptions.

Type
Integer

Access
Read/Write

Example
This example requires input from the user to change the AutomaticExceptionsSensitivity property of the active report. The user specifies a value between 1 and 10. Every cell value within the report that is within the this sensitivity range will be highlighted, based on the default automatic exception style.

Sub Main()
    Dim objPPRep As Object
    Dim strValue As String
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    strValue = InputBox("Adjust the Automatic " & 
    "Exception Sensitivity. Enter a value between " & 
    "1 and 10.", "Automatic Exception Sensitivity", 10)
    objPPRep.AutomaticExceptionSensitivity = strValue
    MsgBox "The Automatic Exception Sensitivity " & 
    "has been reset to " & 
    objPPRep.AutomaticExceptionSensitivity & "." 
    , , "Automatic Exceptions"
    Set objPPRep = Nothing
End Sub

Average Property

Description
Sets or returns whether to calculate the average of the selected categories in the CategoryList object.
Syntax

CategoryList.Average

Applies To

CategoryList Object

Discussion

To help plan future or current events, you can use this property to calculate an average. If True, a new category is created in the report which shows the average of all the selected categories in the CategoryList object. For example, you can calculate the average revenue for the first quarter of the year or you can calculate the average profit margin for all products in order to determine if a product is above or below the average.

Default: False

Type

Boolean

Access

Read/Write

Example

This example adds categories from the Go Sports Line and the second quarter of 1996 to a new report, and shows the average for the products in Go Sports Line.

Sub Main

    Dim objPPRep as Object
    Dim objCatList as Object
    Const LARGE_NUMBER = 999
    Set objPPRep = CreateObject( "CognosPowerPlay.Report"
)
    objPPRep.New "C:\Cubes and Reports\Great Outdoors.mdc"
    objPPRep.Visible = True
    Set objCatList = objPPRep.CategoryList
    objCatList.Add LARGE_NUMBER, "Products", "Go Sports Line"
    objCatList.Each = True
    objCatList.Average = True
    objPPRep.Columns.Add objCatList
    objCatList.Remove
    objCatList.Add 1, "Years", "1996", "1996 Q 2"
    objCatList.Each = True
    objCatList.Average = False
    objPPRep.Rows.Add objCatList
    Set objCatList = Nothing
    Set objPPRep = Nothing
End Sub
AxisOnAllPages Property

Description
Sets or returns whether the axis and labels appear on every page of the printed report or PDF.

Syntax
object.AxisOnAllPages

Applies To
Print Object
SaveAsPDF Object

Discussion
Use this property when you want to save the axes and labels on every page of the PDF, or to print a report that shows the axes, labels, and legend on every printed page.

When printing a report, the PrintAllCharts property must be set to False to use this property.

When saving a report as a PDF file, to use this property, the SaveAllCharts property must be set to False, and the SaveEntireReport must be set to True.

If this property is True when you print the report or save the report as a PDF, the axes and labels appear on every page of the report. If False, the axes and labels appear only once.

Default: False

Type
Boolean

Access
Read/Write

Example
This example opens a report and prints one copy of all the data for the second graphical display only. This example includes the display title, summary category, and axis on all pages, turns on the collating option, and includes the legend.

Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
}
objPPRep.Open "C:\Cubes and Reports\Sample2.ppx"
Set objRepPrt = objPPRep.Print
objRepPrt.PrintAllCharts = False
objRepPrt.SetListofRowsToPrint objPPrep.Rows
objRepPrt.SetListofLayersToPrint objPPrep.Layers
objRepPrt.SetChartToPrint objPPRep.Graphs.Item(2)
objRepPrt.IncludeLegend = True
objRepPrt.ChartTitleOnAllPages = True
objRepPrt.SummariesOnAllPages = True
objRepPrt.AxisOnAllPages = True
objRepPrt.Collate = True
objRepPrt.Copies = 1
objRepPrt.PrintOut
Set objRepPrt = Nothing
Set objPPRep = Nothing

End Sub

Related Topics

- "PrintAllCharts Property" (p. 393)
- "SaveAllCharts Property" (p. 406)
- "SaveEntireReport Property" (p. 409)

BlankWhenDividedByZero Property

Description
Sets or returns whether a numeric value divided by zero appears as zero or blanks.

Syntax

```
Dimension.BlankWhenDividedByZero
```

Applies To

Dimension Object

Discussion
Set this property to True when you want the result of zero division to show in a Dimension object as blank spaces rather than a zero (0). Blank spaces are only meaningful in nested crosstabs; not in other graph types.

This property is only available for measures.

Default: False

Type

Boolean
**Access**
Read/Write

**Example**
This example changes the Measure to Product Cost and then sets the Financial Formatting properties.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objDimension as object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objDimension = objPPRep.DimensionLine.Item("Measures")
    objDimension.ChangeToTop
    objDimension.Change "Product Cost"
    objDimension.BlankWhenZero = True
    objDimension.BlankWhenMissing = False
    objDimension.BlankWhenDividedByZero = False
    Set objDimension = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "BlankWhenMissing Property" (p. 299)
- "BlankWhenZero Property" (p. 300)

**BlankWhenMissing Property**

**Description**
Sets or returns whether missing numeric values appear as zero or blanks.

**Syntax**
```
Dimension.BlankWhenMissing
```

** Applies To**
Dimension Object

**Discussion**
Set this property to True when you want missing values in a Dimension object to show as blank spaces rather than an NA or zero. Blank spaces are only meaningful in nested crosstabs; not in other graph types.

This property is only available for measures.

**Default:** False
**Type**  
Boolean

**Access**  
Read/Write

**Example**  
This example changes the Measure to Product Cost and then sets the Financial Formatting properties.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objDimension as object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objDimension = objPPRep.DimensionLine.Item("Measures")
    objDimension.ChangeToTop
    objDimension.Change "Product Cost"
    objDimension.BlankWhenZero = True
    objDimension.BlankWhenMissing = False
    objDimension.BlankWhenDividedByZero = False
    Set objDimension = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**  
- "BlankWhenDividedByZero Property" (p. 298)
- "BlankWhenZero Property" (p. 300)

---

**BlankWhenZero Property**

**Description**  
Sets or returns whether zero numeric values appear as zeros or blanks.

**Syntax**  
 Dimension.BlankWhenZero

**Applies To**  
Dimension Object

**Discussion**  
Set this property to True when you want zero values in a Dimension object to be shown as blank spaces rather than a zero. Blank spaces are only meaningful in nested crosstabs, not in other graph types.

This property is only available for measures.
Default: False

Type
Boolean

Access
Read/Write

Example
This example changes the Measure to Product Cost and then sets the Financial Formatting properties.

Sub Main()
    Dim objPPRep As Object
    Dim objDimension as object
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
    Set objDimension = objPPRep.DimensionLine.Item("Measures")
    objDimension.ChangeToTop
    objDimension.Change "Product Cost"
    objDimension.BlankWhenZero = True
    objDimension.BlankWhenMissing = False
    objDimension.BlankWhenDividedByZero = False
    Set objDimension = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "BlankWhenDividedByZero Property" (p. 298)
- "BlankWhenMissing Property" (p. 299)

CalculatedCategories Property

Description
Sets or returns whether calculated categories are on or off, or whether a PowerCube contains calculated categories.

Syntax
Report.CalculatedCategories

Applies To
Report Object

Discussion
When a cube contains calculated categories, this property returns True; otherwise, it returns False. If the cube has calculated categories, they can be turned off by setting this property to False, or
turned on by setting this property to True. If a cube contains no calculated categories and you attempt to set the property to True, the following error message is returned: "The cube has no calculated categories."

Default: True (for new reports).

Type
Boolean

Access
Read/Write when a cube has calculated categories.
Read when a cube doesn’t have calculated categories.

Example
This example creates a new report, turns calculated categories off, adds categories to the report, then turns the calculated categories on again.

Sub Main()
    Dim objPPRep As Object
    Dim objCategoryList As Object
    Const CubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    If objPPRep.CalculatedCategories = True Then
        objPPRep.CalculatedCategories = False
    End If
    Set objCategoryList = objPPRep.CategoryList()
    objCategoryList.Add 2, "Products", "GO Sport Line"
    objPPRep.Rows.Add objCategoryList
    objCategoryList.Add 1, "Years"
    objPPRep.Columns.Add objCategoryList
    objPPRep.CalculatedCategories = True
    objPPRep.SaveAs "C:\Calculated Categories.ppx"
    Set objCategoryList = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
• "CategoryList Object" (p. 25)

Caption Property

Description
Returns the title of the Application object window.
Syntax

*Application.Caption*

Applies To

*Application Object*

Discussion

Use this property to determine the title of the application in use.

Type

String

Access

Read

Example

This example creates an instance of the IBM® Cognos® PowerPlay® Application object and returns the name, the location and the version of the application and the title of the application window.

```vbnet
Sub Main()
    Dim objPPlayApp as Object
    Set objPPlayApp = CreateObject("CognosPowerPlay.Application")
    objPPlayApp.Visible = 1
    MsgBox "The title of the application is " & objPPlayApp.Caption
    MsgBox "The name of the Application is " & objPPlayApp.Name
    MsgBox "The location of the Application is " & objPPlayApp.Path
    MsgBox "The Application version is " & objPPlayApp.Version
    Set objPPlayApp = Nothing
End Sub
```

Related Topics

- "Methods" (p. 87)
- "Properties" (p. 283)
- "Application Object" (p. 23)

**CellText Property**

Description

Returns the text in a cell.

Syntax

*object.CellText(Index)*
Chapter 5: Properties

**Applies To**
- Column Object
- Row Object

**Discussion**
Use this property to return a calculated result, rank position, or a value in specific location of a report. You can use this property with
- `CellValueAlignment`
- `CellValueFontColor`
- `CellValueFontName`
- `CellValueFontSize`
to determine if there is special formatting applied to the cell.

This property returns text that is in rows and columns that are not hidden in the report.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>Required. Specifies the row or column number of the cell. Use the row number when the property applies to a Column object. Use the column number when the property applies to a Row object. The index starts at 1 and increments by 1, from left to right, for each cell in the chart. Type: Integer</td>
</tr>
</tbody>
</table>

**Return Type**
String

**Example**
This example opens a report, and returns the text within the specified cells.

```vbnet
Sub Main()
    Dim objPPRep As Object
    Set objPPRep = GetObject("C:\Cubes and Reports\Sample.ppx")
    objPPRep.Visible = True
    MsgBox "The text in the fourth cell of the second row is " & objPPRep.Rows.Item(2).CellText(4)
    MsgBox "The text in the third cell of the third column is " & objPPRep.Columns.Item(3).CellText(3)
    Set objPPRep = Nothing
End Sub
```
**Related Topics**
- "ShowValuesAs Property (Explorer)" (p. 421)

## CellValueAlignment Property

**Description**

Returns the alignment applied to a cell value in a report.

**Syntax**

```plaintext
objectCellValueAlignment(Index)
```

**Applies To**

- Column Object
- Row Object

**Discussion**

Use this property to determine the alignment for a row or column cell value. A report author may also choose to use different cell alignments depending on the measure format, including currency type, commas, or percentage signs.

Because the alignment of cell values can vary throughout a report, you must specify an index to refer to a column or row cell.

This property applies to values only. Values can be measures or calculations.

An error occurs if the index reference for this property is out of bounds.

Valid alignment values are

0 = left aligned  1 = center aligned  2 = right aligned  3 = default

**Default:** 3 (report setting, if no alignment set for cell)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>Required. Specifies the row or column number of the cell. Use the row number when the property applies to a Column object. Use the column number when the property applies to a Row object. Type: Integer</td>
</tr>
</tbody>
</table>

**Type**

- Long

**Access**

- Read
Example
This example returns the alignment for the cell value in the second column, fourth row, and in the third column, third row.

Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    MsgBox "The alignment for this cell value is " & objPPRep.Rows.Item(2).CellValueAlignment(4)
    MsgBox "The alignment for this cell value is " & objPPRep.Columns.Item(3).CellValueAlignment(3)
    Set objPPRep = Nothing
End Sub

Related Topics
● "CellValueFontColor Property" (p. 306)
● "CellValueFontName Property" (p. 308)
● "CellValueFontSize Property" (p. 309)

CellValueFontColor Property

Description
Returns the font color applied to a cell value in a report.

Syntax
objectCellValueFontColor(Index)

Applies To
Column Object
Row Object

Discussion
Use this property to determine the font color for a row or column cell value, especially for a crosstab that uses multiple colors to highlight specific measures or categories. A report author may choose to apply different colors to each range in an exception definition.

Because the font color of cell values can vary throughout a report, you must specify an index to refer to a column or row cell.

This property applies to values only. Values can be measures or calculations.

An error occurs if the index reference for this property is out of bounds.

Valid font colors are
0 = Black
128 = Brown
32768 = Green
32896 = Olive
8388608 = Navy
8388736 = Purple
8421376 = Teal
8421504 = Gray
12632256 = Silver
255 = Red
65280 = Lime
65535 = Yellow
16711680 = Blue
1671935 = Fuschia
16776960 = Aqua
16777215 = White
Default: 0 (black)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>Required. Specifies the row or column number of the cell. Use the row number when the property applies to a Column object. Use the column number when the property applies to a Row object. Type: Integer</td>
</tr>
</tbody>
</table>

**Type**
Long

**Access**
Read

**Example**
This example returns the font color for the cell value in the second column, fourth row, and in the third column, third row.

```vba
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject ("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
```
MsgBox "The font color for this cell value is " & objPPRep.Rows.Item(2).CellValueFontColor(4)
MsgBox "The font color for this cell value is " & objPPRep.Columns.Item(3).CellValueFontColor(3)
Set objPPRep = Nothing
End Sub

Related Topics
- "CellValueAlignment Property" (p. 305)
- "CellValueFontName Property" (p. 308)
- "CellValueFontSize Property" (p. 309)

**CellValueFontName Property**

**Description**
Returns the name of the font applied to a cell value in a report.

**Syntax**

`object.CellValueFontName(Index)`

**Applies To**
- Column Object
- Row Object

**Discussion**

Use this property to determine the name of a font used for a row or column cell value, especially for a crosstab that uses multiple fonts to highlight specific measures or categories. A report author may choose to apply different fonts to each range in an exception definition.

Because the font applied to cell values can vary throughout a report, you must specify an index to refer to a column or row cell.

This property applies to values only. Values can be measures or calculations.

An error occurs if the index reference for this property is out of bounds.

**Default:** Arial

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>Required. Specifies the row or column number of the cell. Use the row number when the property applies to a Column object. Use the column number when the property applies to a Row object. Type: Integer</td>
</tr>
</tbody>
</table>
Type
String

Access
Read

Example
This example returns the name of the font applied to the cell value in the second column, fourth row, and in the third column, third row.

Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    MsgBox "The name of the font for this cell value is " & objPPRep.Rows.Item(2).CellValueFontName(4)
    MsgBox "The name of the font for this cell value is " & objPPRep.Columns.Item(3).CellValueFontName(3)
    Set objPPRep = Nothing
End Sub

Related Topics
- "CellValueAlignment Property" (p. 305)
- "CellValueFontColor Property" (p. 306)
- "CellValueFontSize Property" (p. 309)

**CellValueFontSize Property**

**Description**
Returns the size of the font applied to a cell value in a report.

**Syntax**

```
object.CellValueFontSize(Index)
```

**Applies To**
- Column Object
- Row Object

**Discussion**
Use this property to determine the size of a font used for a row or column cell value, especially for a crosstab that uses multiple sizes to highlight specific measures or categories. A report author may choose to apply different font sizes to each range in an exception definition.
Because the font sizes applied to cell values can vary throughout a report, you must specify an index to refer to a column or row cell.

This property applies to values only. Values can be measures or calculations.

An error occurs if the index reference for this property is out of bounds.

**Default:** 10

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>Required. Specifies the row or column number of the cell. Use the row number when the property applies to a Column object. Use the column number when the property applies to a Row object. Type: Integer</td>
</tr>
</tbody>
</table>

**Type**

Long

**Access**

Read

**Example**

This example returns the name of the font applied to the cell value in the second column, fourth row and in the third column, third row.

```vba
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject ("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    MsgBox "The size of the font for this cell value is"
    MsgBox "The name of the font for this cell value is"
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "CellValueAlignment Property" (p. 305)
- "CellValueFontColor Property" (p. 306)
- "CellValueFontName Property" (p. 308)
ChartTitleOnAllPages Property

Description
Sets or returns whether titles appear on every page of the printed report or PDF.

Syntax
object.ChartTitleOnAllPages

Applies To
Print Object
SaveAsPDF Object

Discussion
Use this property when you want to save the title for the chart on every page of the PDF, or to print a report that shows the chart title on every printed page.

When printing a report, the PrintAllCharts property must be set to False to use this property.

When saving a report as a PDF file, the SaveAllCharts property must be set to False to use this property. This property is ignored if you set this property and the SaveEntireReport property is set to True.

If this property is True and the chart has a title, when you print the report or save the report as a PDF, the title appears on every page of the report. If False, the title appears only once.

This method does not apply if your report contains only one crosstab display.

Default: False

Type
Boolean

Access
Read/Write

Example
This example opens a report and prints one copy of all the data for the second graphical display only. This example includes the display title, summary category, and axis on all pages, turns on the collating option, and includes the legend.

Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample2.ppx"
    Set objRepPrt = objPPrep.Print
    objRepPrt.PrintAllCharts = False
    objRepPrt.SetListOfRowsToPrint objPRep.Rows
objRepPrt.SetListOfLayersToPrint objPPRep.Layers
objRepPrt.SetChartToPrint objPPRep.Graphs.Item(2)
objRepPrt.IncludeLegend = True
objRepPrt.ChartTitleOnAllPages = True
objRepPrt.SummariesOnAllPages = True
objRepPrt.AxisOnAllPages = True
objRepPrt.Collate = True
objRepPrt.Copies = 1
objRepPrt.PrintOut
Set objRepPrt = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "PrintAllCharts Property" (p. 393)
- "SaveAllCharts Property" (p. 406)
- "SaveEntireReport Property" (p. 409)

Collate Property

Description
Sets or returns whether the Report object collates during printing.

Syntax
Print.Collate

Applies To
Print Object

Discussion
If True, the report prints collated, if your print driver supports collating. If False, the report prints in a group (that is all copies of the same page at once followed by all copies of the next page.)

Default: False

Type
Boolean

Access
Read/Write
Example
This example opens a report and prints one copy of all the data for the second graphical display only. This example includes the display title, summary category, and axis on all pages; turns on the collating option; and excludes the legend.

Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample2.ppx"
    Set objRepPrt = objPPRep.Print
    objRepPrt.PrintAllCharts = False
    objRepPrt.SetListOfRowsToPrint objPPrep.Rows
    objRepPrt.SetListOfLayersToPrint objPPRep.Layers
    objRepPrt.SetChartToPrint objPPRep.Graphs.Item(2)
    objRepPrt.IncludeLegend = True
    objRepPrt.ChartTitleOnAllPages = True
    objRepPrt.SummariesOnAllPages = True
    objRepPrt.AxisOnAllPages = True
    objRepPrt.Collate = True
    objRepPrt.Copies = 1
    objRepPrt.PrintOut
    Set objRepPrt = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)
- "Print Method" (p. 219)
- "Print Object" (p. 47)
- "Report Object" (p. 51)

Copies Property

Description
Sets or returns the number of copies to print.

Syntax
Print.Copies
Applies To
Print Object

Discussion
This property sets the number of copies of a report to print. If not specified, the default is one copy. A value of zero returns an error. This property is not related to the Threshold property.

Default: 1

Type
Integer

Access
Read/Write

Example
This example opens a report and prints one copy of all the data for the second graphical display only. This example includes the display title, summary category, and axis on all pages; turns on the collating option; and includes the legend.

Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample2.ppx"
    Set objRepPrt = objPPRep.Print
    objRepPrt.PrintAllCharts = False
    objRepPrt.SetListOfRowsToPrint objPPrep.Rows
    objRepPrt.SetListOfLayersToPrint objPPRep.Layers
    objRepPrt.SetChartToPrint objPPRep.Graphs.Item(2)
    objRepPrt.IncludeLegend = True
    objRepPrt.ChartTitleOnAllPages = True
    objRepPrt.SummariesOnAllPages = True
    objRepPrt.AxisOnAllPages = True
    objRepPrt.Collate = True
    objRepPrt.Copies = 1
    objRepPrt.PrintOut
    Set objRepPrt = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)
- "Print Object" (p. 47)
Count Property

Description
Returns
- the number of categories one level below the current category in the Dimension object
- the number of objects in a collection or an object that maintains a list of objects

Syntax
object.Count

Applies To
- AdvancedQuery Object
- CategoryList Object
- Children
- Columns
- Dimension Object
- DimensionLine Object
- Exceptions
- FindQuery Object
- Graphs
- Layers
- ParentageQuery Object
- Ranges
- Reports
- ReportQueries
- Rows

Discussion
Use this property to determine the number of times to run a For...Next Loop. It improves the flexibility of the macro.

The Count property does not apply to the Average category.

Type
Long

Access
Read
Example
This example counts the number of categories one level below the Years category.

Sub Main()
    Dim objPPRep as Object
    Dim objPPDim as Object
    Set objPPRep = GetObject( ,"CognosPowerPlay.Report")
    Set objPPDim = objPPRep.DimensionLine.Item("Years")
    MsgBox "Number of categories one level below: "&objPPDim.Count
    Set objPPDim = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)

CubeName Property

Description
Returns the file name of the cube for the active report.

Syntax
Report.CubeName

Applies To
Report Object

Discussion
Use this property to identify a cube by its name and fully qualified path.

Type
String

Access
Read

Example
This example returns the name of the cube for the active report. The name includes the path and cube file name.

Sub Main()
    Dim objPPRep As Object
    Set objPPRep = GetObject( ,"CognosPowerPlay.Report")
Msgbox "The " & objPPRep.Name & " report is based " & _
"on the following cube." & chr$(10) & _
chr$(10) & objPPRep.CubeName, , "PowerPlay Cube"
Set objPPRep = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)

DataGridlines Property

Description
Sets or returns whether the gridline settings are on or off for a crosstab.

Syntax

object.DataGridlines

Applies To
Graph Object
Graphs

Discussion
Use this method to control the gridlines associated with data in a crosstab. Set this property to True to turn gridlines on, or set this property to False to turn gridlines off.

Default: True

Type
Boolean

Access
Read/Write (Graph)
Write (Graphs)

Example
This example sets the graph object of the active report to a crosstab, sets the data and label gridlines properties to False, specifies the layout to Financial with Totals, and indents the totals to the next level.

Sub Main
    Dim objPPRep as Object
Chapter 5: Properties

Dim objPPGraph as Object
Set objPPRep = GetObject(,"CognosPowerPlay.Report")
Set objPPGraph = objPPRep.Graphs.Item(1)
With objPPGraph
  .SetType 0
  .Layout = 2
  .IndentTotalsLevel = 1
  .DataGridlines = False
  .LabelGridlines = False
Set objPPGraph = Nothing
Set objPPRep = Nothing
End With
End Sub

Related Topics
●  "LabelGridlines Property" (p. 357)

DefaultAlternateDirectory Property

Description
Sets or returns the directory to save updates to a read-only report.

Syntax
Application.DefaultAlternateDirectory

Applies To
Application Object

Discussion
When you save a report using the SaveAs method, it saves to the originating directory. However, read-only reports cannot be over-written. These reports are saved to the specified DefaultAlternateDirectory or to a temporary folder, if the DefaultAlternateDirectory is not specified.

To determine the setting for DefaultAlternateDirectory, use this property.

Type
String

Access
Read/Write

Example
This example sets the 'Alternate path for read-only reports' directory entry in the Directories tab of the Preferences dialog box (File menu). The folder must exist before running this macro.
Sub Main()
Dim objPPRep As Object
Dim strPath as string
Set objPPRep = CreateObject("CognosPowerPlay.Report")
strPath = objPPRep.Application.Path & "\Secure Reports"
MsgBox "The Alternate path for read-only reports 
" & _
   "has been changed to " & chr$(10) & chr$(10)
   ".", 64, "New Path"
Set objPPRep = Nothing
End Sub

**DefaultCubeDirectory Property**

**Description**
Sets or returns the default path for multi-dimensional cube files (.mdc).

**Syntax**

*Application*.DefaultCubeDirectory

**Applies To**

*Application Object*

**Discussion**

After the directory is set, all macros will look for the MDC files in that directory. You can change the directory in the user interface and the change will be reflected in the Application object when you use it, and vice versa.

**Type**

String

**Access**

Read/Write

**Example**

This example sets the default cube directory to point to a subdirectory of the one in which the IBM® Cognos® PowerPlay® application is found. The cube subdirectory, MyCubeDirectory, must exist before you run this macro.

Sub Main()
    Dim objPPRep As Object
    Dim strCubeDirectory as String

Set objPPRep = CreateObject("CognosPowerPlay.Report")
strCubeDirectory = objPPRep.Application.Path & 
"\MyCubeDirectory"
MsgBox "The default cube directory is " _
Set objPPRep = Nothing
End Sub

Related Topics
● "Methods" (p. 87)
● "Properties" (p. 283)
● "Application Object" (p. 23)

DefaultMacroDirectory Property

Description
Sets or returns the default path for macro files.

Syntax
Application.DefaultMacroDirectory

Applies To
Application Object

Discussion
After the directory is set, all macros will look for the macro files in that directory. Changes to the
directory in the user interface will be reflected in the Application object, and vice versa.

Type
String

Access
Read/Write

Example
This example sets the default macro directory to point to a subdirectory of the IBM® Cognos®
PowerPlay® application directory. Once the directory is set, macros will be loaded from that directory
unless a path is specified with the file name. The macro subdirectory, MyMacroDirectory, must
exist before you run this macro.

Sub Main()
    Dim objPPRep As Object
    Dim strMacroDirectory as String
Set objPPRep = CreateObject("CognosPowerPlay.Report")
strMacroDirectory = objPPRep.Application.Path & 
"\MyMacroDirectory"
MsgBox "The default macro directory is " _
Set objPPRep = Nothing
End Sub

Related Topics
• "Methods" (p. 87)
• "Properties" (p. 283)
• "Application Object" (p. 23)

DefaultReportDirectory Property

Description
Sets or returns the default path for IBM® Cognos® PowerPlay® report files.

Syntax
(Application).DefaultReportDirectory

Applies To
Application Object

Discussion
After the directory is set, all macros will look for PowerPlay report files in that directory. Changes to the directory in the user interface will be reflected in the Application object, and vice versa.

Type
String

Access
Read/Write

Example
This example sets the default report directory to point to a subdirectory of the PowerPlay application directory. The report subdirectory, MyReportDirectory, must exist before you run this macro.
Sub Main()
   Dim objPPRep As Object
   Dim strReportDirectory as String
   Set objPPRep = CreateObject("CognosPowerPlay.Report")
"\MyReportDirectory"
MsgBox "The default report directory is " _
Set objPPRep = Nothing
End Sub

**Related Topics**
- "Methods" (p. 87)
- "Properties" (p. 283)
- "Application Object" (p. 23)

**Dimension Property**

**Description**
Sets or returns the dimension from which categories are returned.

**Syntax**

\*object\*.Dimension

**Applies To**
- AdvancedQuery Object
- FindQuery Object
- ValueRestriction Object

**Discussion**
Use this property to set the name of a dimension line for a subset for the AdvancedQuery and FindQuery queries only. When searching for a specific dimension, get the top level dimension line settings first. An invalid dimension line value in the subset definition returns an exception error.

For an AdvancedQuery or FindQuery, use the Execute method to run the subset definition for the query once all related properties are set.

The Dimension property must appear first, in the AdvancedQuery and FindQuery subset definitions.

For a ValueRestriction, the order of the components is important. The Dimension property must be set before the Measure, Operator, Operand1, Operand2, and Count properties and the DimensionFilter method. The Name property can be set anywhere within the filter definition.

**Default:** Entire Cube (FindQuery)

**Type**
String
Access
Read/Write

Example
This example creates a FindQuery (type 1) subset definition that searches for all products that begin with the name Star.

Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objFind As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objFind = objPPRep.ReportQueries.Add(1)
    With objFind
        .Name = "Find Star"
        .Dimension = "Products"
        .SearchShortName = False
        .SearchText = "Star"
        .Pattern = 2
    End With
    Set objFind = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "AdvancedQuery Object" (p. 20)
- "FindQuery Object" (p. 36)

DimensionLineIndex Property

Description
Returns the position of a dimension line item to maintain a list of Layer, Row, and Column objects.

Syntax
\texttt{collection.DimensionLineIndex}

Applies To
- Layers
- Columns
Discussion

Use this property to determine the position number (the index value) assigned to the dimensions within a dimension line.

This property is only available if the Report object is in Explorer mode (the ExplorerMode property is True).

Type

Long

Access

Read

Example

This example returns the Dimension Line index for rows, columns and layers in the active report.

Sub Main()
    Dim objPPRep As Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    objPPRep.ExplorerMode = True
    MsgBox "The Dimension line index for columns is " &
    & objPPRep.Columns.DimensionLineIndex & "."
    MsgBox "The Dimension line index for rows is " &
    & objPPRep.Rows.DimensionLineIndex & "."
    MsgBox "The Dimension line index for layers is " &
    & objPPRep.Layers.DimensionLineIndex & "."
    Set objPPRep = Nothing
End Sub

Related Topics

- "DimensionFilter Method" (p. 152)
- "DimensionLine Method" (p. 154)
- "DimensionLine Object" (p. 34)
- "ValueRestriction Object" (p. 60)

DimensionSettings Property

Description

Returns a comma-separated string of all the dimension line settings for the ValueRestriction.
Syntax

ValueRestriction.DimensionSettings

Applies To

ValueRestriction Object

Discussion

Each dimension has its own folder on the dimension line. For example, the dimensions in the Great Outdoors cube include Years, Products, Locations, Channels and Margin Ranges. Use this property when you want to know the current settings for a dimension line for the ValueRestriction.

Type

String

Access

Read

Example

This example creates an advanced subset that selects countries from the Locations dimension. The value restriction (type 4) limits the results to return only those countries whose Revenue values for Sports Chains are between 25,000 and 100,000. The dimension settings results for the Great Outdoors cube are Years, Products, Locations, Sports Chain, and Margin Ranges.

Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objValue As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objValue = objPPRep.ReportQueries.Add(4)
    With objValue
        .Name = "25000-100000"
        .Dimension = "Locations"
        .Measure = "Revenue"
        .Operator = "between"
        .Operand1 = 25000
        .Operand2 = 100000
        .DimensionFilter 4, "Sports Chain"
    End With
    Set objAdvanced = objPPRep.ReportQueries.Add(3)
    With objAdvanced
Related Topics

- "Methods" (p. 87)
- "Properties" (p. 283)

DrivingCategory Property

Description
Returns the driving category for the Exception object.

Syntax

\[ Exception.DrivingCategory \]

Applies To

Exception Object

Discussion
Use this property to determine the category whose values are compared with those in the Exception object.

Type
String

Access
Read
Example

This example opens a report and displays the driving category and dimension for the first Exception object.

```vba
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Exception.ppx"
    MsgBox "Driving Category:" & objPPRep.Exceptions.Item(1).DrivingCategory
    MsgBox "Driving Dimension:" & objPPRep.Exceptions.Item(1).DrivingDimension
    Set objPPRep = Nothing
End Sub
```

Related Topics

- "Methods" (p. 87)
- "Properties" (p. 283)
- "Graph Object" (p. 38)

DrivingDimension Property

Description

Returns the driving dimension for the Exception object.

Syntax

```
Exception.DrivingDimension
```

Applies To

Exception Object

Discussion

Use this property to determine the Dimension whose values are compared with those in the Exception object.

Type

Long

Access

Read
Example

This example opens a report and displays the driving category and dimension for the first Exception object.

Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Exception.ppx"
    MsgBox "Driving Category:" & objPPRep.Exceptions.Item(1).DrivingCategory
    MsgBox "Driving Dimension:" & objPPRep.Exceptions.Item(1).DrivingDimension
    Set objPPRep = Nothing
End Sub

Related Topics

- "Methods" (p. 87)
- "Properties" (p. 283)
- "Exception Object" (p. 35)

Each Property

Description

Sets or returns whether all selected and new categories or just the new categories appear in the Report object.

Syntax

_CategoryList_.Each

Applies To

_CategoryList_ Object

Discussion

This property must be used in conjunction with one of the Sum, Intersection, or Average properties set to True. If the Each property is set to True, all selected and new categories resulting from Sum, Intersection, or Average being set to True appear in the report. If False, only the Sum, Intersection, or Average categories appear in the report.

Default: False

Type

Boolean
Access
Read/Write

Example
This example creates a new report from the Great Outdoors.mdc, adds categories to the category list as a sum, but the Each property is set to False, so only the Sum category will be shown. The categories are added to the report.

Sub Main
    Dim objPPRep as Object
    Dim objCatList as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New "C:\Cubes and Reports\Great Outdoors.mdc"
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objCatList = objPPRep.CategoryList
    objCatList.Add 1, "Products", _
        "Environmental Line", "Alert Devices"
    objCatList.Each = False
    objCatList.Sum = True
    objPPRep.Columns.Add objCatList
    objCatList.Remove
    objCatList.Add 1, "Years"
    objCatList.Each = True
    objCatList.Sum = False
    objPPRep.Rows.Add objCatList
    Set objCatList = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)
- "CategoryList Object" (p. 25)

EnableUserColumnSummaryLabel Property

Description
Sets or returns whether a user-defined label is used for the innermost summary column in a nested crosstab.

Syntax
object.EnableUserColumnSummaryLabel
**Applies To**
Graph Object
Graphs

**Discussion**
Use this property to specify whether the column uses the higher-level column category or a user-defined name as the label for a summary column. If True, you can use the UserColumnSummaryLabel property to define the name of the label to apply to the column.
The column label is only visible in a crosstab report when the ShowSummaryColumn property is set to True.
**Default:** False

**Type**
Boolean

**Access**
Read/Write (Graph)
Write (Graphs)

**Example**
This example resets the graph object to use user-defined summary labels for rows and columns.

```vba
Sub Main
    Dim objPPRep as Object
    Dim objPPGraph as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objPPGraph = objPPRep.Graphs.Item(1)
    objPPGraph.EnableUserColumnSummaryLabel = True
    objPPGraph.UserColumnSummaryLabel = "Summary Total"
    objPPGraph.EnableUserRowSummaryLabel = True
    objPPGraph.UserRowSummaryLabel = "Summary Total"
    Set objPPGraph = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "EnableUserRowSummaryLabel Property" (p. 330)

---

**EnableUserRowSummaryLabel Property**

**Description**
Sets or returns whether a user-defined label is used for the innermost summary row in a nested crosstab.
Syntax
object.EnableUserRowSummaryLabel

Applies To
Graph Object
Graphs

Discussion
Use this property to specify whether the row uses the higher-level row category or a user-defined name as the label for a summary row. If True, you can use the UserRowSummaryLabel property to define the name of the label to apply to the row.

The row label is only visible in a crosstab report when the ShowSummaryRow property is set to True.

Default: True.

Type
Boolean

Access
Read/Write (Graph)
Write (Graphs)

Example
This example resets the graph object to use user-defined summary labels for rows and columns.

Sub Main
    Dim objPPRep as Object
    Dim objPPGraph as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objPPGraph = objPPRep.Graphs.Item(1)
    objPPGraph.EnableUserColumnSummaryLabel = True
    objPPGraph.UserColumnSummaryLabel = "Summary Total"
    objPPGraph.EnableUserRowSummaryLabel = True
    objPPGraph.UserRowSummaryLabel = "Summary Total"
    Set objPPGraph = Nothing
End Sub

Related Topics
•  "EnableUserColumnSummaryLabel Property" (p. 329)
Exception Property

Description
Sets or returns the exception for one or more categories.

Syntax
object.Exception

Applies To
Column Object
Columns
Layers
Row Object
Rows

Discussion
To identify exceptions used for an object, a name for each exception is required.
To remove an exception, redefine the exception style.

Type
String

Access
Read/Write (Column, Layer, Row)
Write (Columns, Layers, Rows)

Example
This example applies the "Default" exception to the third row and then prints the report.

Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Exception.ppx"
    objPPRep.Rows.Item(3).Exception = "Default"
    Set objRepPrt = objPPRep.Print
    objRepPrt.PrintAllCharts = False
    objRepPrt.SetListOfRowsToPrint objPPrep.Rows
    objRepPrt.SetListOfLayersToPrint objPPRep.Layers
    objRepPrt.SetChartToPrint objPPRep.Graphs.Item(1)
    objRepPrt.IncludeLegend = False
    objRepPrt.ChartTitleOnAllPages = True
    objRepPrt.SummariesOnAllPages = True

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objRepPrt.AxisOnAllPages = True
objRepPrt.Collate = True
objRepPrt.PrintOut
Set objRepPrt = Nothing
Set objPPrep = Nothing
End Sub

Related Topics
● "Column Object" (p. 28)
● "Layer Object" (p. 41)
● "Row Object" (p. 55)

ExplorerMode Property

Description
Sets or returns whether the Report object is an Explorer or Reporter report.

Syntax
Report.ExploreMode

Applies To
Report Object

Discussion
If True, the report is an Explorer report and certain methods and properties are not available. If False, the report is a Reporter report and all methods and properties are available.

Default: True

Type
Boolean

Access
Read/Write

Example
This example creates a new report, sets the report to Reporter mode, and adds categories to the category list as a sum.

Sub Main
    Dim objPPRep as Object
    Dim objCatList as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New "C:\Cubes and Reports\Great Outdoors.mdc"
objPPRep.ExplorerMode = False
objPPRep.Visible = True
Set objCatList = objPPRep.CategoryList
objCatList.Add 1, "Products", _
    "Environmental Line", "Alert Devices"
objCatList.Each = False
objCatList.Sum = True
objPPRep.Columns.Add objCatList
objCatList.Remove
objCatList.Add 1, "Years"
objCatList.Each = True
objCatList.Sum = False
objPPRep.Rows.Add objCatList
Set objCatList = Nothing
Set objPPRep = Nothing
End Sub

Related Topics

- "Row Object" (p. 55)

**FitToPage Property**

**Description**
Sets or returns whether the report is scaled to fit on one page.

**Syntax**
Print.FitToPage

**Applies To**
Print Object

**Discussion**
Use this property when you want to scale down a multiple page report to a single page. Set this property to True to make a scrolling display print on one page. If False, the report prints on as many pages as required.

**Default:** False

**Type**
Boolean

**Access**
Read/Write
Example
This example sets the FitToPage property to True and prints the first display of the active report.

Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objRepPrt = objPPRep.Print()
    With objRepPrt
        .PrintAllCharts = False
        .SetListOfRowsToPrint objPPrep.Rows
        .SetListOfLayersToPrint objPPRep.Layers
        .SetChartToPrint objPPRep.Graphs.Item(1)
        .IncludeLegend = False
        .ChartTitleOnAllPages = True
        .SummariesOnAllPages = True
        .AxisOnAllPages = True
        .Collate = True
        .Copies = 1
        .FitToPage = True
        .PrintOut
    End With
    Set objRepPrt = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "SetChartToPrint Method" (p. 245)
- "SetListOfLayersToPrint Method" (p. 252)
- "SetListOfRowsToPrint Method" (p. 254)

FooterText Property

Description
Sets or returns the text in the footer of a report.

Syntax
Report.FooterText(Format)

Applies To
Report Object
Use this property to set or return the complete text in the footer of a report. Because you can add as many lines to the footer as required, the footer may contain information that is not visible when you view or print the report. You can use automation to view information that the report author included in the footer but did not want the users to see. You can set or return the footer of a report in text or HTML format.

If you set the footer as text, then the footer is left justified and uses the default font size, font color, and font type. To specify multiple lines in a footer, use the ASCII value of a new line character, chr$(10), between the lines of the footer.

If you set the footer of a report using HTML, you can specify complex formats. You can specify the font size, font color, font type, and alignment of the footer text. For example, the following code aligns the footer text to the right, and specifies the font size and color.

```vbscript
strFooter = strFooter + "<P ALIGN="Right"><FONT SIZE=6 COLOR="#0000FF">"
```

When you assign HTML tags to a string, use two sets of quotation marks to distinguish characters within the HTML tag from end of string quotation marks. For example, to assign <P ALIGN="Right"> to a string, use the following syntax:

```vbscript
objPPRep.FooterText(2) = "<P ALIGN="Right">"
```

If you use an external editor to specify HTML, you may have to modify the HTML to get the format you require for the report footer.

A report footer can include IBM® Cognos® PowerPlay® variables or variables expanded to the values that they represent. To specify a variable use the following syntax:

```
[PPVAR]Variable[PPVAR]
```

For example,

```vbscript
objPPRep.FooterText(1) = "[PPVAR]Page #{PPVAR}"
```

You can return the value of the variable or the expanded variable. To return the variable expanded to the value it represents, use the parameter value 11 for text or 12 for HTML.

For example,

```vbscript
objPPRep.FooterText(1) = "Report Printed [PPVAR]Date(ddd, dd MMM, yyy)[PPVAR]"
MsgBox objPPRep.FooterText(1)
```

returns

```
Report Printed [PPVAR]Date(ddd, dd MMM, yyy)[PPVAR]
```

MsgBox objPPRep.FooterText(11)

returns

```
Report Printed Thursday, 13 January, 2000
```
Parameter | Description
---|---
Format | Optional. Specifies the format of the text in the footer of a report. If not specified, the text and variable are returned.

Valid set and return values are

1 = Text 2 = HTML

Valid return values are

11 = Text with variables expanded 12 = HTML with variables expanded

Default: 1
Type: Integer

**Type**
String

**Access**
Read/Write

**Example**

This example specifies two lines of text for the footer of the open report, and shows the footer text.

Sub Main()
    Dim objRep As Object
    Dim strFooterTextLine1 as String
    Dim strFooterTextLine2 as String
    Dim strNewLine as String
    strFooterTextLine1 = "Annual Report"
    strFooterTextLine2 = "[PPVAR]Date(dddd, MMMM dd, yyyy)[PPVAR]"
    strNewLine = chr$(10)
    objRep.FooterText(1) = strFooterTextLine1 + chr$(10)
    + strFooterTextLine2
    MsgBox "The report footer text is: " + objRep.FooterText(11)
    objRep.Save
    Set objRep = Nothing
End Sub

**Related Topics**

- "HeaderText Property" (p. 340)
- "Report Object" (p. 51)
**FullName Property**

**Description**
Returns the full name, including the location, of either the Application object or the Report object.

**Syntax**

```vbnet
object.FullName
```

**Applies To**
- Application Object
- Report Object

**Discussion**
The FullName property of the Application object cannot be modified while the one for a Report object can. To modify the FullName property for a report, use the SaveAs method.

**Type**
String

**Access**
Read

**Example**
This example creates an instance of IBM® Cognos® PowerPlay® and shows the name and location of the Application object.

```vbnet
Sub Main()
    Dim objPPlayApp as Object
    Set objPPlayApp = CreateObject("CognosPowerPlay.Application")
    objPPlayApp.Visible = 1
    MsgBox "The name and location of the application is " & objPPlayApp.FullName
    MsgBox "The application version is " & objPPlayApp.Version
    Set objPPlayApp = Nothing
End Sub
```

**Related Topics**
- "Application Object" (p. 23)
- "Report Object" (p. 51)
GetDataAutomatically Property

**Description**
Sets or returns whether the Report object retrieves data automatically each time it is modified.

**Syntax**
*Report.GetDataAutomatically*

**Applies To**
Report Object

**Discussion**
If True, the data is updated with each report modifying action such as ranking and calculations. If False, calculations, ranking, and other report modifying actions will update the number of columns and rows, but the data will not be updated. Set the property to False when using a large amount of data. Once completed, you can get the data using the GetDataNow method. This way, the Application object is not constantly polling the cube for new information.

**Default:** False

**Type**
Boolean

**Access**
Read/Write

**Example**
This example opens a report, and updates the data in the report using the GetDataNow method, if the GetDataAutomatically property is set to False.

```
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject ("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample2.ppx"
    If objPPRep.GetDataAutomatically = 0 then
        objPPRep.GetDataNow
    End if
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "Report Object" (p. 51)
HeaderText Property

Description
Sets or returns the text in the header of a report.

Syntax
Report.HeaderText(Format)

Applies To
Report Object

Discussion
Use this property to set or return the complete text in the header of a report. Because you can add as many lines to the header as required, the header may contain information that is not visible when you view or print the report. You can use automation to view information that the report author included in the header but did not want the users to see. You can set or return the header of a report in text or HTML format.

If you set the header as text, then the header is left justified and uses the default font size, font color, and font type. To specify multiple lines in a footer, use the ASCII value of a new line character, chr$(10), between the lines of the header.

If you set the header of a report using HTML, you can specify complex formats. You can specify the font size, font color, font type and alignment of the header text. For example, the following code aligns the header text to the right and specifies the font size and color:

```
strFooter = strFooter + "<P ALIGN="Right">"<FONT SIZE=6 COLOR="#0000FF">""
```

When you assign HTML tags to a string, use two sets of quotation marks to distinguish characters within the HTML tag from end of string quotation marks. For example, to assign <P ALIGN="Right"> to a string, use the following syntax:

```
objPPRep.HeaderText(2) = "<P ALIGN="Right">"
```

If you use an external editor to specify HTML, you may have to modify the HTML to get the format you require for the report header.

A report header can include IBM® Cognos® PowerPlay® variables or variables expanded to the values that they represent. To specify a variable, use the following syntax

```
[PPVAR]Variable[PPVAR]
```

For example,

```
objPPRep.HeaderText(1) = "[PPVAR]Page #[PPVAR]"
```

You can return the value of the variable or the expanded variable. To return the variable expanded to the value it represents, use the parameter value 11 for text or 12 for HTML.

For example,

```
objPPRep.HeaderText(1) = "Report Printed [PPVAR]Date(ddd, dd MMM, yyy)[PPVAR]"
MsgBox objPPRep.HeaderText(1)
```
returns

Report Printed [PPVAR]Date(ddd, dd MMM, yyy)[PPVAR]

MsgBox objPPRep.HeaderText(11)
returns

Report Printed Thursday, 13 January, 2000

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format</td>
<td>Optional. Specifies the format of the text in the header of a report. If not specified, the text and variable are returned. Valid set and return values are 1 = Text 2 = HTML Valid return values are 11 = Text with variables expanded 12 = HTML with variables expanded Default: 1 Type: Integer</td>
</tr>
</tbody>
</table>

**Type**

String

**Access**

Read/Write

**Example**

This example specifies the text for the header of the open report and shows the current date.

Sub Main()
    Dim objRep As Object
    Dim strHeaderTextLine1 as String
    Dim strNewLine as String
    strHeaderTextLine1 = "[PPVAR]Date(dddd, MMMM dd, yyyy)[PPVAR]"
    objRep.HeaderText(1) = strHeaderTextLine1
    MsgBox "The report header text is: " & objRep.HeaderText(11)
End Sub
HideRankCategory Property

Description
Sets or returns whether the rank category is hidden.

Syntax
object.HideRankCategory

Applies To
Graph Object
Graphs

Discussion
A rank category is a row or column that identifies ordinal values for categories. If True, the rank category is hidden. If False, it is not hidden. This property is not available with the crosstab display.

Default: True

Type
Boolean

Access
Read/Write (Graph)
Write (Graphs)

Example
This example hides the rank category when a bar display is used in the report "c:\cognos\sample.ppx".

Sub Main()
    Dim objPPRep As Object
    Dim objPPGraph As Object
    Set objPPRep = GetObject ("C:\Cubes and Reports\Sample2.ppx")
    objPPRep.Visible = True
    objPPRep.Activate
    Set objPPGraph = objPPRep.Graphs (1)
    objPPGraph.SetType 3, 1, 1

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objPPGraph.HideRankCategory = True
Set objPPGraph = Nothing
Set objPPRep = Nothing
End Sub

Related Topics

● "Methods" (p. 87)
● "Properties" (p. 283)
● "Graph Object" (p. 38)
● "Graphs" (p. 72)

### IncludeLegend Property

**Description**
Sets or returns whether the legend appears in a printed report or PDF.

**Syntax**
object.IncludeLegend

**Applies To**
Print Object
SaveAsPDF Object

**Discussion**
Use this property when you want to determine whether to show an explanatory list of categories in the report. The list shows the category name and color representing the associated data. The legend does not appear in crosstab, simple bar, single line, and three-dimensional bar displays.

If True, any legend associated with the display appears on a separate page of the report. If False, the legend is not included on the printed report or PDF.

Use the ColorsAsPatterns property to determine if the colors in the legend appear as true colors or as patterns when they are printed.

To use this property when printing a report, the PrintAllCharts property must be set to False.

To use this property when saving a report as a PDF, the SaveAllCharts property must be set to False, and the SaveEntireReport must be set to True.

**Default:** False

**Type**
Boolean

**Access**
Read/Write
Example
This example opens the report and prints one copy of all the data for the second graphical display only. This example includes the legend in the printed report.

Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    Set objRepPrt = objPPRep.Print
    objRepPrt.PrintAllCharts = False
    objRepPrt.SetListOfRowsToPrint objPPrep.Rows
    objRepPrt.SetListOfLayersToPrint objPPRep.Layers
    objRepPrt.SetChartToPrint objPPRep.Graphs.Item(2)
    objRepPrt.IncludeLegend = True
    objRepPrt.ChartTitleOnAllPages = True
    objRepPrt.SummariesOnAllPages = True
    objRepPrt.AxisOnAllPages = True
    objRepPrt.Copies = 1
    objRepPrt.PrintOut
    Set objRepPrt = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
•  "SaveEntireReport Property" (p. 409)

IndentTotalsLevel Property

Description
Sets or returns the current indent level for summary cells in a nested crosstab.

Syntax
object.IndentTotalsLevel

Applies To
Graph Object
Graphs

Discussion
Rows and columns in nested crosstabs can be summarized to display totals. IndentTotalsLevel controls how to indent these total categories. IndentTotalsLevel takes effect in Explorer mode when the Layout property is set to 2-Indent Layout 2. The available options are current level, previous level (if it exists) and align right.
**Default:** Current level

**Type**
Integer

**Access**
Read/Write (Graph)
Write (Graphs)

**Example**
This example sets the graph object of the active report to a crosstab, sets the data and label gridlines properties to false, specifies the layout to Financial with Totals, and indents the totals to the next level.

```vba
Sub Main
    Dim objPPRep As Object
    Dim objPPGraph As Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objPPGraph = objPPRep.Graphs.Item(1)
    With objPPGraph
        .SetType 0
        .Layout = 2
        .IndentTotalsLevel = 1
        .DataGridlines = False
        .LabelGridlines = False
    End With
    Set objPPGraph = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "Layout Property" (p. 358)

**Index Property**

**Description**
Returns the position of an object in a collection.

**Syntax**

```
object.Index
```

**Applies To**
- Column Object
- Dimension Object
Graph Object
Layer Object
Range Object
Row Object
Report Object

Discussion
Use this property to determine the numerical position of an object within a collection.

Type
Long

Access
Read

Example
This example ranks report columns by 1996 results and shows the position of the "GO Sport Line" column to determine its rank among other products.

Sub Main()
    Dim objPPRep as Object
    Dim objPPRank as Object
    Set objPPRep = GetObject( ,"CognosPowerPlay.Report")
    objPPRep.Rows.Item("1996").Rank , , 0, 1
    Set objPPRank = objPPRep.Columns.Item("Go Sport Line")
    MsgBox "The rank of Go Sport Line is " & objPPRank.Index
    Set objPPRank = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "Column Object" (p. 28)
- "Dimension Object" (p. 31)
- "Graph Object" (p. 38)
- "Layer Object" (p. 41)
- "Range Object" (p. 50)
- "Row Object" (p. 55)
Intersect Property

Description
Sets or returns whether to determine the values at the intersection of selected categories from different Dimension objects.

Syntax
CategoryList.Intersect

Applies To
CategoryList Object

Discussion
If True, a new category is created to show the values at the intersection of the selected categories from different dimensions in the CategoryList object.

This property is only available in Reporter reports.

Default: False

Type
Boolean

Access
Read/Write

Example
This example selects Years as columns and shows the intersection of North American and Independent markets of Outdoor Products as rows.

Sub Main
Dim objPPRep as Object
Dim objCatList as Object
Set objPPRep = CreateObject("CognosPowerPlay.Report")
objPPRep.New "C:\Cubes and Reports\Great Outdoors.mdc", False
objPPRep.ExplorerMode = False
objPPRep.Visible = True
Set objCatList = objPPRep.CategoryList
objCatList.Add 1, "Years"
objPPRep.Columns.Add objCatList
objCatList.Remove
objCatList.Add 0, "Products", "Outdoor Products"
objCatList.Add 0, "Channels", "Independent"
objCatList.Add 0, "Locations", "Americas"
objCatList.Each = False
objCatList.Intersect = True
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```vbs
objPPRep.Rows.Add objCatList
Set objCatList = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
● "CategoryList Object" (p. 25)
● "Dimension Object" (p. 31)

IsAlternate Property

Description
Returns whether the drill-down path is primary or alternate.

Syntax
object.IsAlternate

Applies To
Column Object
Dimension Object
Layer Object
Row Object

Discussion
Use this property to identify the type of path for a category. If True (-1), the category is along an alternate drill-down path. False (0) indicates that the category is along the primary drill-down path.

Type
Boolean

Access
Read

Example
This example uses the IsAlternate property to determine the type of drill-down path (primary or alternate).

Sub Main
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objDimension As Object
    Dim strDrill As String
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
```
Set objPPRep = CreateObject("CognosPowerPlay.Report")
objPPRep.New strCubePath, 1
Set objDimension = objPPRep.DimensionLine.Item(4)
objDimension.Change "By Region"
If objDimension.IsAlternate = True Then
    strDrill = "alternate"
Else
    strDrill = "primary"
End If
MsgBox "The " & objDimension.Name & " dimension " & _
    "is from the " & strDrill & " drill path."
Set objDimension = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "Level Object" (p. 44)
- "Levels" (p. 78)
- "Levels Method" (p. 190)

**IsCalculatedCategory Property**

**Description**

Returns whether the category is a calculated category.

**Syntax**

`object.IsCalculatedCategory`

**Applies To**

- Column Object
- Dimension Object
- Layer Object
- Row Object

**Discussion**

Use this property to identify levels that have calculated categories. If True (-1), the category is a calculated category. False (0) indicates that the category is not a calculated category.

**Type**

Boolean
Example
This example uses the IsCalculatedCategory property to determine there is a calculated category.

Sub Main
    Dim objPPRep As Object
    Dim objLayer As Object
    Dim objLevel As Object
    Dim strLevel As String
    Dim strDrill As String
    Dim strCategory As String
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objLayer = objPPRep.Layers.Item(1)
    Set objLevel = objLayer.Level
    strLevel = objLevel.Name
    If objLayer.IsAlternate = True Then
        strDrill = "alternate"
    Else
        strDrill = "primary"
    End If
    If objLayer.IsCalculatedCategory = True Then
        strCategory = ""
    Else
        strCategory = "not"
    End If
    MsgBox "The " & objLayer.Name & " category is a " & _
            strDrill & " drill-down and is " & strCategory & _
            " a calculated category." & chr$(10) & chr$(10) & _
            "It is a member of the " & strLevel & " level."
    Set objLayer = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "Level Object" (p. 44)
- "Levels" (p. 78)
- "Levels Method" (p. 190)
KeepSummaryVisible Property

Description
Sets or returns whether the summary category will remain visible on all scrolled pages.

Syntax
object.KeepSummaryVisible

Applies To
Graph Object
Graphs

Discussion
Use this property to set the summary category to visible on every page of data, or to visible on only the last page of data. If the summary category is hidden or does not exist, this property is not effective.

This property is not available for crosstab, 3-D bar, scatter, and pie displays.

Default: False

Type
Boolean

Access
Read/Write (Graph)
Write (Graphs)

Example
This example changes the scroll bar settings of an active report. The scrolling feature is set to True, maximum visible bars is set to six, maximum printed bars is set to ten, and the summary category is kept hidden until the end of the report.

Sub Main()
    Dim PPRep As Object
    Set PPRep = GetObject(,"CognosPowerPlay.Report")
    PPRep.Graphs.Item(1).UseScrolling = TRUE
    PPRep.Graphs.Item(1).MaxVisibleBars = 6
    PPRep.Graphs.Item(1).MaxPrintedBars = 10
    PPRep.Graphs.Item(1).KeepSummaryVisible = FALSE
    Set PPRep = Nothing
End Sub

Related Topics
● "Graph Object" (p. 38)
LabelAlignment Property

**Description**
Returns the alignment applied to a cell label in a report.

**Syntax**

```
object.LabelAlignment
```

**Applies To**

- Column Object
- Row Object

**Discussion**

Use this property to determine the alignment for row or column labels, especially for a crosstab that uses different formats for each category.

When you return the label alignment setting for a row or column, the LabelAlignment property applies to the active Report object only. The property does not apply to row or column labels in other reports in the Reports Collection. The default column or row label alignment setting for other reports remains unchanged, unless previously set in the application.

Valid alignment values are:

- 0 = left aligned
- 1 = center aligned
- 2 = right aligned
- 3 = default

**Default:** 3 (report setting, if no alignment set for label)

**Type**

Long

**Access**

Read

**Example**

This example returns the alignment for the second row and third column labels.

```
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject ("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    MsgBox "The alignment of the second row label is "
    MsgBox "The alignment of the third row label is "
End Sub
```

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Set objPPRep = Nothing
End Sub

Related Topics
● "LabelFontColor Property" (p. 353)
● "LabelFontName Property" (p. 355)
● "LabelFontSize Property" (p. 356)

LabelFontColor Property

Description
Returns the font color applied to a category label in a report.

Syntax
object.LabelFontColor

Applies To
Column Object
Layer Object
Row Object

Discussion
Use this property to determine the font color applied to a row, column, or layer label, especially for a crosstab that uses multiple colors to emphasize specific categories. A report author may choose to use different colors for category labels to make the report easier to read.

When you return the font color setting for a row, column or layer, the LabelFontColor property applies to the active Report object only. The property does not apply to other reports in the Reports Collection. The default font color setting for the other reports remains unchanged, unless previously set in the application.

Valid font colors are
0 = Black
128 = Brown
32768 = Green
32896 = Olive
8388608 = Navy
8388736 = Purple
8421376 = Teal
8421504 = Gray
12632256 = Silver
255 = Red
65280 = Lime
65535 = Yellow
16711680 = Blue
16711935 = Fuschia
16776960 = Aqua
16777215 = White
Default: 0 (black)

Type
Long

Access
Read

Example
This example returns the font color of the second row, third column, and first layer labels.

Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject ("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    MsgBox "The color of the font for the second row label is " & objPPRep.Rows.Item(2).LabelFontColor
    MsgBox "The color of the font for the third column label is " & objPPRep.Columns.Item(3).LabelFontColor
    MsgBox "The color of the font for the first layer label is " & objPPRep.Layers.Item(1).LabelFontColor
    Set objPPRep = Nothing
End Sub

Related Topics
- "LabelAlignment Property" (p. 352)
- "LabelFontName Property" (p. 355)
- "LabelFontSize Property" (p. 356)
LabelFontName Property

**Description**
Returns the name of the font applied to a category label in a report.

**Syntax**

```
object.LabelFontName
```

**Applies To**

Column Object  
Layer Object  
Row Object

**Discussion**

Use this property to determine the name of the font applied to a row, column, or layer label, especially for a crosstab that uses multiple fonts to emphasize specific categories. A report author may choose to use different fonts for category labels to make the report easier to read.

When you return the font name setting a row, column, or layer, the LabelFontName property applies to the active Report object only. The property does not apply to other reports in the Reports Collection. The default font name setting for the other reports remains unchanged, unless previously set in the application.

**Default:** Arial

**Type**

String

**Access**

Read

**Example**

This example returns the name of the font applied to the second row, third column, and first layer labels.

```
Sub Main()
  Dim objPPRep as Object
  Set objPPRep = CreateObject ("CognosPowerPlay.Report")
  objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
  MsgBox "The name of the font for the second row label is " & objPPRep.Rows.Item(2).LabelFontName
  MsgBox "The name of the font for the third column label is " & objPPRep.Columns.Item(3).LabelFontName
  MsgBox "The name of the font for the first layer label is " & objPPRep.Rows.Item(2).LabelFontName
End Sub
```
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&objPPRep L1ayers.Item(1).LabelFontName
Set objPPRep = Nothing
End Sub

Related Topics
- "LabelAlignment Property" (p. 352)
- "LabelFontColor Property" (p. 353)
- "LabelFontSize Property" (p. 356)

LabelFontSize Property

Description
Returns the size of the font applied to a category label in a report.

Syntax
object.LabelFontSize

Applies To
Column Object
Layer Object
Row Object

Discussion
Use this property to determine the size of the font applied to a row, column, or layer label, especially for a crosstab that uses multiple font sizes to emphasize specific categories. A report author may choose to use different font sizes for category labels to make the report easier to read.

When you return the font size setting a row, column, or layer, the LabelFontSize property applies to the active Report object only. The property does not apply to other reports in the Reports Collection. The default font size setting for the other reports remains unchanged, unless previously set in the application.

Default: 10

Type
Long

Access
Read

Example
This example returns the name of the font applied to the second row, third column, and first layer labels.
Sub Main()
```vba
Dim objPPRep as Object
Set objPPRep = CreateObject("CognosPowerPlay.Report")
objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
MsgBox "The size of the font for the second row label is " _
    &objPPRep.Rows.Item(2).LabelFontSize
MsgBox "The size of the font for the third column label is " _
    &objPPRep.Columns.Item(3).LabelFontSize
MsgBox "The size of the font for the first layer label is " _
    &objPPRep.Layers.Item(1).LabelFontSize
Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "LabelAlignment Property" (p. 352)
- "LabelFontColor Property" (p. 353)
- "LabelFontName Property" (p. 355)

---

**LabelGridlines Property**

**Description**
Sets or returns whether the gridlines are on or off for category labels in a nested crosstab.

**Syntax**

```
object.LabelGridlines
```

**Applies To**
- Graph Object
- Graphs

**Discussion**

Use this method to control the gridlines associated with category labels in nested crosstabs. Set this property to True to turn gridlines on, or set this property to False to turn gridlines off.

**Default:** True

**Type**
- Boolean

**Access**
- Read/Write (Graph)
- Write (Graphs)
Example
This example sets the graph object of the active report to a crosstab, sets the data and label gridlines properties to false, specifies the layout to Financial with Totals, and indents the totals to the next level.

Sub Main
    Dim objPPRep as Object
    Dim objPPGraph as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objPPGraph = objPPRep.Graphs.Item(1)
    With objPPGraph
        .SetType 0
        .Layout = 2
        .IndentTotalsLevel = 1
        .DataGridlines = False
        .LabelGridlines = False
    End With
    Set objPPGraph = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "DataGridlines Property" (p. 317))

Layout Property

Description
Sets or returns the current layout style in a nested crosstab.

Syntax
object.Layout

Applies To
Graph Object
Graphs

Discussion
Sets the layout of nested crosstabs to one of three styles

- 0 = standard
- 1 = indent layout 1
- 2 = indent layout 2 (only available in Explorer mode)

Default: 0
Type
Integer

Access
Read/Write (Graph)
Write (Graphs)

Example
This example sets the graph object of the active report to a crosstab, sets the data and label gridlines properties to false, specifies the layout to Financial with Totals, and indents the totals to the next level.

Sub Main
Dim objPPRep as Object
Dim objPPGraph as Object
Set objPPRep = GetObject(,"CognosPowerPlay.Report")
Set objPPGraph = objPPRep.Graphs.Item(1)
With objPPGraph
  .SetType 0
  .Layout = 2
  .IndentTotalsLevel = 1
  .DataGridlines = False
  .LabelGridlines = False
End With
Set objPPGraph = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
● "IndentTotalsLevel Property" (p. 344))

Level Property

Description
Returns the level of the category in a dimension.

Syntax
object.Level

Applies To
Column Object
Dimension Object
Layer Object
Row Object

Discussion
Use this property to return the level (not the nesting level) of a category. Top level categories in a dimension do not have levels. Alternate categories, calculated categories and some measures, depending on the cube type, do not have levels. If you use this property on a category that has no level, the name of the level returned will be an empty string.

Type
Object

Access
Read

Example
This example uses the Level property to determine the name of the Column object.

Sub Main
    Dim objPPRep As Object
    Dim objColumn As Object
    Dim objLevel As Object
    Dim strLevel As String
    Dim strDrill As String
    Dim strCategory As String
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objColumn = objPPRep.Columns.Item(1)
    Set objLevel = objColumn.Level
    strLevel = objLevel.Name
    If objColumn.IsAlternate = True Then
        strDrill = "alternate"
    Else
        strDrill = "primary"
    End If
    If objColumn.IsCalculatedCategory = True Then
        strCategory = ""
    Else
        strCategory = "not"
    End If
    MsgBox "The " & objColumn.Name & " category is a " & 
        strDrill & " drill-down and is " & strCategory & 
        " a calculated category." & chr$(10) & 
        chr$(10) & "It is a member of the " & strLevel & " level."
    Set objColumn = Nothing

Related Topics

- "Levels Method" (p. 190)

**LevelList Property**

**Description**

Returns the list of levels for a specified drill-down path.

**Syntax**

```
AdvancedQuery.LevelList
```

**Applies To**

AdvancedQuery Object

**Discussion**

Use this property to display a list of levels that you specified in the AdvancedQuery subset definition using the Levels method.

When users drill down on a dimension, they drill down on categories from one level to another. The Levels method returns objects that represent all the levels available in a dimension, starting from the top-level category, for a specified path. You can then use this property to display each of these categories. For example, you may have the following categories at the Country level belonging to Europe:

- Belgium
- Germany
- Spain
- Sweden
- United Kingdom
- France
- Italy

The Levels method returns the categories at this level; however, it is the LevelList property that displays the levels specified within the subset definition.

**Type**

String

**Access**

Read
Example

This example creates an AdvancedQuery (type 3) subset definition that retrieves all categories at the Country level belonging to Europe. The resulting subset is then added to the report as rows. The MsgBox uses the LevelList property to display the levels specified within the subset definition.

Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objAdvanced = objPPRep.ReportQueries.Add(3)
    With objAdvanced
        .Name = "European Countries"
        .Dimension = "Locations"
        .Level "Country"
        .Include "Europe"
        .Execute
        .AddToReport 1,1,3
    End With
    MsgBox "Name: " & objAdvanced.Name & chr$(10) & _
    "Dimension: " & objAdvanced.Dimension & chr$(10) & _
    "Level List: " & objAdvanced.LevelList & chr$(10) & _
    "Query Type Code: " & objAdvanced.Type & chr$(10) & _
    "Number of Categories: " & objAdvanced.Count & chr$(10) & _
    "First Category: " & objAdvanced.Item(1).Name,
    ,"Subset"
    Set objAdvanced = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics

- "Levels Method" (p. 190)
LevelsDown Property

Description
Sets the number of levels down the hierarchy for specifying the next level ParentageQuery subsets.

Syntax
ParentageQuery.LevelsDown

Applies To
ParentageQuery Object

Discussion
Use this property to identify the level below the current dimension for specifying the subset definition for a ParentageQuery. The level specified in the subset definition determines the categories for the subset. If the LowestLevel property is True, do not include the LevelsDown property in the subset definition, because a True value indicates that it is already at the lowest possible level.

The order of the components in the subset definition is important. First, specify the Category method, followed by the LevelsDown and LowestLevel properties, and then the Execute and AddToReport methods. Set the Name property anywhere within the subset definition.

Type
Integer

Access
Write

Example
This example creates a ParentageQuery (type 2) subset definition that returns all categories one level below Channels. Then the categories that are one level below Channels are added to the report as the first nesting level of rows.

Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objCategory As Object
    Dim objParent As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objParent = objPPRep.ReportQueries.Add(2)
    With objParent
        .Name = "Sales Channels"
        .Category "Channels"
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```vba
.LowestLevel = False
.LevelsDown = 1
.Execute
.AddToReport 0, 1, 6
End With
Msgbox "The first category added was " & _
   objParent.Item(1).Name & "," & "," & "Subset"
Set objParent = Nothing
Set objPPRep = Nothing
End Sub
```

Related Topics
- "LowestLevel Property" (p. 366)
- "ParentageQuery Object" (p. 45)

LogonPrompt Property

**Description**
Sets or returns whether the application prompts for logon or security information.

**Syntax**

```
Application.LogonPrompt
```

**Applies To**

Application Object

**Discussion**
Set to True to display a standard logon dialog when a user opens a cube or report with security settings or that requires a username and password to access a database.

If the cube or report being opened is secure and the user has more than one user class, the user class that the user wishes to use will also be prompted for.

**Default:** True

**Type**

Boolean

**Access**

Read/Write

**Example**

This example sets whether the user is prompted with a logon dialog when a cube or report requires user authentication. The default is true (-1), and causes the authentication prompts to be displayed.
If you set this property to false (0), an error message displays stating that the user is not authorized to open the datacube.

Sub Main()
    Dim objPPRep As Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Application.LogonPrompt False
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    Set objPPRep = Nothing
End Sub

**LowerBoundary Property**

**Description**
Sets or returns the value defined for the lower boundary range of the Range object.

**Syntax**

*Range*.LowerBoundary

**Applies To**

Range Object

**Discussion**

Use this method to determine the lower boundary to apply formatting when the information in the report meets the conditions set by the exception range. The lower boundary sets the minimum value for the range. For example, you may want to highlight sales when they reach at least $50,000.

Use the UpperBoundary property to determine the upper boundary of the range.

**Type**

Variant

**Access**

Read/Write

**Example**

This example returns the value defined for the lower boundary of the range in an Exception object.

Sub Main
    Dim objPPRep As Object
    Dim objPPRange As Object
    Set objPPRep = GetObject("C:\Cubes and Reports\Exception.ppx")
    objPPRep.Visible = 1
    Set objPPRange = objPPRep.Exceptions.item(1).Ranges.Item(1)
    MsgBox "Lower boundary is " & objPPRange.LowerBoundary
    Set objPPRange = Nothing
End Sub
Set objPPRep = Nothing
End Sub

**Related Topics**
- "Range Object" (p. 50)

## LowestLevel Property

**Description**
Sets whether the query uses the next lower level or lowest level of the parent category.

**Syntax**

```
ParentageQuery.LowestLevel
```

**Applies To**
ParentageQuery Object

**Discussion**
Use this property to specify whether a subset is based on the lowest level for the specified category. If True, it indicates that the query uses the lowest level of the parent category. If False, use the LevelsDown property to specify how far down the hierarchy to go for the level. False indicates that it uses the next level ParentageQuery. If True, the LevelsDown property is not required in the subset definition, because it indicates that it is already at the lowest possible level.

**Default:** True

The order of the components in the subset definition is important. First, specify the Category method, followed by the LevelsDown and LowestLevel properties, and then the Execute and AddToReport methods. Set the Name property anywhere within the subset definition.

**Type**
Boolean

**Access**
Write

**Example**
This example creates a ParentageQuery (type 2) subset definition that returns all categories one level below Channels. Then the categories that are one level below Channels are added to the report as the first nesting level of rows.

```
Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objCategory As Object
    Dim objParent As Object
```

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strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
Set objPPRep = CreateObject("CognosPowerPlay.Report")
objPPRep.New strCubePath, 1
objPPRep.ExplorerMode = False
objPPRep.Visible = True
Set objParent = objPPRep_ReportQueries.Add(2)
With objParent
    .Name = "Sales Channels"
    .Category = "Channels"
    .LowestLevel = False
    .LevelsDown = 1
    .Execute
    .AddToReport 0,1,6
End With
Msgbox "The first category added was " & _
    objParent.Item(1).Name & ".", ,"Subset"
Set objParent = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "LevelsDown Property" (p. 363)
- "ParentageQuery Object" (p. 45)

MacroName Property

Description
Sets or returns the name of the macro associated with an Exception object.

Syntax
Exception.MacroName

Applies To
Exception Object

Discussion
To define the initial value of this property, use the SetMacro method. This avoids defining a MacroName without associating a style with it.

Type
String
**Access**
Read/Write

**Example**
This example determines the name of the macro associated with an Exception object.

```vbscript
Sub Main()
    Dim objPPRep As Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Exception.ppx"
    MsgBox "Driving Category:" & _
        objPPRep.Exceptions.Item(1).DrivingCategory
    MsgBox "Driving Dimension:" & _
        objPPRep.Exceptions.Item(1).DrivingDimension
    MsgBox "The name of the macro associated with the" & _
        "Exception is " & objPPRep.Exceptions.Item(1).MacroName
    MsgBox "The style of the macro associated with the" & _
        "Exception is " & objPPRep.Exceptions.Item(1).MacroStyle
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "Exception Object" (p. 35)

---

**MacroStyle Property**

**Description**
Sets or returns the name of the style associated with the macro used by an Exception object.

**Syntax**

```
Exception.MacroStyle
```

**Applies To**

Exception Object

**Discussion**
To define the initial value of this property, use the SetMacro method. This avoids associating a style with a non-existent macro.

**Type**

String
**Access**
Read/Write

**Example**
This example determines the style associated with a macro for an Exception object.

```vba
Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Exception.ppx"
    MsgBox "Driving Category:" & objPPRep.Exceptions.Item(1).DrivingCategory
    MsgBox "Driving Dimension:" & objPPRep.Exceptions.Item(1).DrivingDimension
    MsgBox "The name of the macro associated with the Exception is " & objPPRep.Exceptions.Item(1).MacroName
    MsgBox "The style of the macro associated with the Exception is " & objPPRep.Exceptions.Item(1).MacroStyle
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "Exception Object" (p. 35)
- "SetMacro Method" (p. 257)

**MaximumNumberOfRanges Property**

**Description**
Returns the maximum number of Range objects definable for an Exception object.

**Syntax**

```
Ranges.MaximumNumberOfRanges
```

**Applies To**

Ranges

**Discussion**
Use this property to determine the maximum number of ranges that you can define for an exception. Currently an Exception object can have a maximum of 5 ranges. Therefore this property always returns 5.
Chapter 5: Properties

Type
Long

Access
Read

Example
This example shows the maximum number of ranges definable for an exception.

Sub Main
    Dim objPPRep As Object
    Dim objPPRange As Object
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")  
    Set objPPRange = objPPRep.Exceptions.item(1).Ranges
    MsgBox "Maximum Number of Ranges = " & _
        objPPRange.MaximumNumberOfRanges
    Set objPPRange = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "Exception Object" (p. 35)
- "Range Object" (p. 50)

MaxPrintedBars Property

Description
Sets or returns the maximum number of bars on a single printed page.

Syntax
object.MaxPrintedBars

Applies To
Graph Object
Graphs

Discussion
Use this property to set the maximum number of bars to print on each page of the display.
This property is not available for crosstab, 3-D bar, scatter, and pie displays.
Default: 8

Type
Long
**Access**
Read/Write (Graph)
Write (Graphs)

**Example**
This example changes the scroll bar settings of an active report. The scrolling feature is set to True, maximum visible bars is set to six, maximum printed bars is set to ten, and the summary category is kept hidden until the end of the report.

```vbnet
Sub Main()
    Dim objPPRep As Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    objPPRep.Graphs.Item(1).UseScrolling = True
    objPPRep.Graphs.Item(1).MaxVisibleBars = 6
    objPPRep.Graphs.Item(1).MaxPrintedBars = 10
    objPPRep.Graphs.Item(1).KeepSummaryVisible = False
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "Graph Object" (p. 38)
- "Graphs" (p. 72)

**MaxVisibleBars Property**

**Description**
Sets or returns the maximum number of bars visible on a single page of scrolled data.

**Syntax**

```
object.MaxVisibleBars
```

**Applies To**
Graph Object
Graphs

**Discussion**
Use this property to set the number of bars visible on each page of the display.

You must specify a minimum value between 5 and 50.

This property is not available for crosstab, 3-D bar, scatter, and pie displays.

Default: 8
**Type**

Long

**Access**

Read/Write (Graph)

Write (Graphs)

**Example**

This example changes the scroll bar settings of an active report. The scrolling feature is set to True, maximum visible bars is set to six, maximum printed bars is set to ten, and the summary category is kept hidden until the end of the report.

```vba
Sub Main()
    Dim objPPRep As Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    objPPRep.Graphs.Item(1).UseScrolling = True
    objPPRep.Graphs.Item(1).MaxVisibleBars = 6
    objPPRep.Graphs.Item(1).MaxPrintedBars = 10
    objPPRep.Graphs.Item(1).KeepSummaryVisible = False
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Graph Object" (p. 38)
- "Graphs" (p. 72)

## Measure Property

**Description**

Sets or returns the name of measure whose values are used for a value restriction.

**Syntax**

`ValueRestriction.Measure`

**Applies To**

`ValueRestriction Object`

**Discussion**

Use this property to specify the name of a measure that a ValueRestriction object uses to limit the number of categories for the results of an AdvancedQuery.

For a ValueRestriction, the order of the components is important. The Dimension property must be set before the Measure, Operator, Operand1, Operand2, and Count properties and the DimensionFilter method. The Name property can be set anywhere within the filter definition.
Type
String

Access
Read/Write

Example
This example creates an advanced subset that selects countries from the Locations dimension. The value restriction (type 4) limits the results to return only those countries whose Revenue Values for Sports Chains are between 25,000 and 100,000.

Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objValue As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objValue = objPPRep.ReportQueries.Add(4)
    With objValue
        .Name = "25000-100000"
        .Dimension = "Locations"
        .Measure = "Revenue"
        .Operator = "between"
        .Operand1 = 25000
        .Operand2 = 100000
        .DimensionFilter 4, "Sports Chain"
    End With
    Set objAdvanced = objPPRep.ReportQueries.Add(3)
    With objAdvanced
        .Name = "Locations"
        .Dimension = "Locations"
        .Level "Country"
        .ValueRestriction objValue.Name
        .Execute
        .AddToReport 0,1,3
    End With
End Sub
MeasureCurrency Property

Description
Sets or returns the value and symbol for a specified currency.

Syntax
Dimension.MeasureCurrency

Applies To
Dimension Object

Discussion
In IBM® Cognos® PowerPlay®, currency values can be displayed in many of the principal currencies of global commerce. Use MeasureCurrency to change the basic currency used in monetary values and, where applicable, the currency symbol. Type the applicable three-character code as a string parameter.

When used with an empty parameter, this property returns the current code.

When you change the value of MeasureCurrency, PowerPlay recomputes the monetary values using an exchange-rate table supplied by the cube designer via PowerPlay Transformer. For example, if the cube shows currency in dollars and you use the code for Great Britain, "gbr", the cube recomputes the value, switches to values in pounds, and then replaces the dollar sign with the pound currency symbol.

The three-letter country codes are based on an international standard, ISO/IEC (International Standards Organization, International Electrotechnical Commission) specification 3166. For example, the country codes for Sweden, the United States, and Spain are "SWE", "USA", and "ESP", respectively.

The displayed currencies are limited to cube population.

Type
String

Access
Read/Write

Example
This example checks the present currency code and changes "USA" to "CAN."

```vba
Sub Main()
    Dim objPPRep As Object
```

Chapter 5: Properties
Dim objDimension As Object
Set objPPRep = GetObject(, "CognosPowerPlay.Report")
Set objDimension = objPPRep.DimensionLine.Item _
    ("Measures")
objDimension.ChangeToTop
objDimension.Change "Product Cost"
If objDimension.MeasureCurrency = "USA" Then
    objDimension.MeasureCurrency = "CAN"
    MsgBox "The Currency has been changed from" &
    " American to Canadian."
Else
    MsgBox "The currency code is " & objDimension.MeasureCurrency & "."
End If
Set objDimension = Nothing
Set objPPRep = Nothing
End Sub

Related Topics

•  "Methods" (p. 87)
•  "Properties" (p. 283)

Name Property

Description
Sets or returns the name of the object.

Syntax
object.Name

Applies To
AdvancedQuery Object
Application Object
Column Object
Dimension Object
Exception Object
FindQuery Object
Layer Object
ParentageQuery Object
Report Object
Row Object

ValueRestriction Object

Discussion
Change the name of a Column, Exception, Layer, or Row object using an equal sign (=). The name of a Report object can be modified only by using the SaveAs method. You cannot alter the name of the Application, Dimension, or Exception object.

For an AdvancedQuery, FindQuery, or ParentageQuery, use the Name property to specify the name for the query.

For the Name property associated with a ValueRestriction, do not include functions applied to measures. For example, "Average(Revenue)>500" and "Revenue - Cost in Top 10" are not valid. For a Value Restriction query, only specify one value restriction name at a time. For example, "Revenue> 10,000 and Units Sold < 30" is not a valid name for the restriction.

Type
String

Access
Read (Application, Dimension, Exception, Report)
Read/Write (AdvancedQuery, Column, FindQuery, Layer, ParentageQuery, Row, Value Restriction)

Example
This example creates an instance of IBM® Cognos® PowerPlay® and shows the name, location, and version of the application.

Sub Main()
    Dim objPPlayApp as Object
    Set objPPlayApp = CreateObject("CognosPowerPlay.Application")
    objPPlayApp.Visible = 1
    MsgBox "The name of the Application is " & objPPlayApp.Name
    MsgBox "The location of the Application is " & objPPlayApp.Path
    MsgBox "The Application version is " & objPPlayApp.Version
    Set objPPlayApp = Nothing
End Sub

Related Topics
- "Application Object" (p. 23)
- "Column Object" (p. 28)
- "Dimension Object" (p. 31)
- "Layer Object" (p. 41)
- "Report Object" (p. 51)
NamesShown Property

Description
Sets or returns whether category names appear beside pie chart slices.

Syntax
object.NamesShown

Applies To
Graph Object
Graphs

Discussion
This property applies to pie charts only. Set this property to True to label slices by using a category name instead of a category value. However, the legend includes both the category names and values.

If you set the NestedCharts property to True for a single pie chart, the pie will automatically change so that the slice labels are category names instead of values.

Setting the NamesShown property to True automatically sets the ValuesShown property to False.

If you set NamesShown to False for nested charts, no labels appear beside pie chart slices.

Default: False (single charts), True (nested charts)

Type
Boolean

Access
Read/Write (Graph)
Write (Graphs)

Example
This example sets the type for the active graph to a pie chart and uses category names to label the pie chart slices.

Sub Main
Dim objPPRep as Object
Dim objPPGraph as Object
Set objPPRep = GetObject(,"CognosPowerPlay.Report")
Set objPPGraph = objPPRep.Graphs.Item(1)
With objPPGraph
  .SetType 1
  .NamesShown = True
  .ValuesFontColor = 10
NestedCharts Property (Explorer)

Description
Sets or returns whether multiple charts that represent summarized data appear in one display.

Syntax

Graph.NestedCharts

Applies To
Graph Object

Discussion
Use this property to view multiple charts of summarized data in one display. You can show comparisons, relationships, and trends of the report dimensions efficiently, especially if you have a large amount of summary data. For example, use this property for a nested report that generates one single chart for each summary row on ten different displays, to generate a display with multiple charts that show the same information.

If you set this property to True for data that is not nested, the data will show in a single chart, but in nested chart format with row and column labels.

Nested charts plot all the categories that belong in the chart, unlike single charts where you can specify a number by using the MaxVisibleBars property.

When you set this property to True, properties or methods that apply to only single charts are ignored. These properties include

- KeepSummaryVisible
- MaxPrintedBars
- MaxVisibleBars
- ShowSummaryColumn
- ShowSummaryRow
- ShowTies
- UseScrolling
ValuesShown

You can use this property with the SetType method to select the type of charts to show. This property is not shown for crosstabs.

This property is available in Explorer mode only.

**Default:** False

**Type**

Boolean

**Access**

Read/Write

**Example**

This example sets the display of the active graph to show multiple charts.

```vbs
Sub Main
    Dim objPPRep as Object
    Dim objPPGraph as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objPPGraph = objPPRep.Graphs.Item(1)
    With objPPGraph
        .SetType 3
        .HideRankCategory = False
        .KeepSummaryVisible = True
        .MaxVisibleBars = 5
        .ShowTies = True
    End With
    objPPGraph.NestedCharts = True
    objPPRep.SaveAs "NewReport.ppx"
    Set objPPGraph = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "NamesShown Property" (p. 377)
- "ValuesShown Property" (p. 461)

**NestedName Property**

**Description**

Returns the nested name for a category.
**Syntax**

`object.NestedName`

**Applies To**

Column Object  
Layer Object  
Row Object

**Discussion**

Use this property to return a name for a category that takes nesting into account. For example, for the following nested report, the name of the second row is Europe, and the nested name for that row is 2008.Europe.

<table>
<thead>
<tr>
<th>2008</th>
<th>Far East</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Europe</td>
</tr>
<tr>
<td></td>
<td>Middle East</td>
</tr>
</tbody>
</table>

**Type**

String

**Access**

Read

**Example**

This example returns the nested name for the first row, column, and layer within an active report.

```vba
Sub Main()
    Dim objPPRep As Object
    Set objPPRep = GetObject("CognosPowerPlay.Report")
    MsgBox "First column: " & _
      & objPPRep.Columns.Item(1).NestedName
    MsgBox "First row: " & _
      & objPPRep.Rows.Item(1).NestedName
    MsgBox "First layer: " & _
      & objPPRep.Layers.Item(1).NestedName
Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Methods" (p. 87)
- "Properties" (p. 283)
Operand1 Property

Description
Sets or returns the value used to compare report cell values based on a specified operator.

Syntax
ValueRestriction.Operand1

Applies To
ValueRestriction Object

Discussion
Use this property to specify the value used to limit the number of categories for the results of an AdvancedQuery.

When using the Between operator type, you must specify values for the Operand1 and Operand2 properties.

For a ValueRestriction, the order of the components is important. The Dimension property must be set before the Measure, Operator, Operand1, Operand2, and Count properties and the DimensionFilter method. The Name property can be set anywhere within the filter definition.

Do not specify Operand1 if the operator is Largest or Smallest. When you use the Largest or Smallest operator, only the Count property is used. The default value for Count is 10.

Type
Double

Access
Read/Write

Example
This example creates an advanced subset that selects countries from the Locations dimension. The value restriction (type 4) limits the results to return the countries whose sales revenue exceed 125,000.

Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objValue As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objValue = objPPRep.ReportQueries.Add(4)
    With objValue
Chapter 5: Properties

```
.End With
Set objAdvanced = objPPRep.ReportQueries.Add(3)
With objAdvanced
  .Name = "Locations"
  .Dimension = "Locations"
  .Level "Country"
  .ValueRestriction objValue.Name
  .Execute
  .AddToReport 0,1,3
.End With
Set objAdvanced = Nothing
Set objValue = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "Operand2 Property" (p. 382)
- "Operator Property" (p. 384)

Operand2 Property

Description
Sets or returns the second value when the Between operator is used to specify a range.

Syntax
`ValueRestriction.Operand2`

Applies To
ValueRestriction Object

Discussion
Use this property to specify the second value when you use the Between operator to limit the number of categories for the results of an AdvancedQuery.

When you use the Between operator type, you must specify values for theOperand1 and Operand2 properties. If the Between operator type is not specified, any value assigned to this property is ignored.
```
For a ValueRestriction, the order of the components is important. The Dimension property must be set before the Measure, Operator, Operand1, Operand2, and Count properties and the DimensionFilter method. The Name property can be set anywhere within the filter definition.

**Type**
Double

**Access**
Read/Write

**Example**
This example creates an advanced subset that selects countries from the Locations dimension. The value restriction (type 4) limits the results to return only those countries whose Revenue values for Sports Chains are between 25,000 and 100,000.

```vba
Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objValue As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objValue = objPPRep.ReportQueries.Add(4)
    With objValue
        .Name = "25000-100000"
        .Dimension = "Locations"
        .Measure = "Revenue"
        .Operator = "between"
        .Operand1 = 25000
        .Operand2 = 100000
        .DimensionFilter 4, "Sports Chain"
    End With
    Set objAdvanced = objPPRep.ReportQueries.Add(3)
    With objAdvanced
        .Name = "Locations"
        .Dimension = "Locations"
        .Level "Country"
        .ValueRestriction objValue.Name
        .Execute
        .AddToReport 0,1,3
    End With
End Sub
```

Set objPPRep = Nothing
Set objAdvanced = Nothing
Set objValue = Nothing
End Sub

Related Topics
● "Operand1 Property" (p. 381)
● "Operator Property" (p. 384)

Operator Property

Description
Sets or returns the operator used for a value restriction.

Syntax
ValueRestriction.Operator

Applies To
ValueRestriction Object

Discussion
Use this property to specify the operator used to limit the number of categories for the results of an AdvancedQuery.

Operator types available for a value restriction comparison are
● > (greater than)
● < (less than)
● = (equal to)
● >= (greater than or equal to)
● <= (less than or equal to)
● Largest (top n largest values)
● Smallest (bottom n smallest values)
● Between (values within to a specified range)

When using the Between operator, you must specify values for the Operand1 and Operand2 properties. When using the >, <, >=, or <= operator, you must specify a value for the Operand1 property. When using the Largest or Smallest operator, you must specify a value for the Count property.

For a ValueRestriction, the order of the components is important. The Dimension property must be set before the Measure, Operand1, Operand2, and Count properties and the DimensionFilter method. The Name property can be set anywhere within the filter definition.

Type
String
Access
Read/Write

Example
This example creates an advanced subset that selects countries from the Locations dimension. The value restriction (type 4) limits the results to return only those countries whose Revenue values for Sports Chains are between 25,000 and 100,000.

Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objValue As Object
    Dim objAdvanced As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objValue = objPPRep.ReportQueries.Add(4)
    With objValue
        .Name = "25000-100000"
        .Dimension = "Locations"
        .Measure = "Revenue"
        .Operator = "between"
        .Operand1 = 25000
        .Operand2 = 100000
        .DimensionFilter 4, "Sports Chain"
    End With
    Set objAdvanced = objPPRep.ReportQueries.Add(3)
    With objAdvanced
        .Name = "Locations"
        .Dimension = "Locations"
        .Level "Country"
        .ValueRestriction objValue.Name
        .Execute
        .AddToReport 0,1,3
    End With
    Set objPPRep = Nothing
    Set objAdvanced = Nothing
    Set objValue = Nothing
End Sub

Related Topics
- "Operand1 Property" (p. 381)
- "Operand2 Property" (p. 382)
ParentCategory Property

Description
Returns the name of the parent category for the object.

Syntax
object.ParentCategory

Applies To
Column Object
Layer Object
Row Object

Discussion
This property is used during drill up to get the name of the parent category of a row, column, or layer. This property returns an empty string if it is a calculation. The property returns an error if the category is the top level category.

In Reporter reports, this property returns a blank for complex categories such as intersection, rank, and calculation categories where a single rollup parent is unavailable.

In Explorer reports, the parent category name returned for any row or column item applies to all rows and columns.

Type
String

Access
Read

Example
This example returns the parent name of the first row and the parent name of the first column of the currently open report.

Sub Main()
    Dim objPPRep As Object
    Dim objRows As Object
    Dim objCols As Object
    Set objPPRep = GetObject ("CognosPowerPlay.Report")
    objPPRep.Visible = True
    Set objRows = objPPRep.Rows
    Set objCols = objPPRep.Columns
    MsgBox "Row 1's parent is:" _
        & objRows.Item(1).ParentCategory
    MsgBox "Column 1's parent is:" _
        & objCols.Item(1).ParentCategory
Set objRows = Nothing
Set objCols = Nothing
Set objPPRep = Nothing
End Sub

**Related Topics**

- "Column Object" (p. 28)
- "Layer Object" (p. 41)
- "Row Object" (p. 55)

**Path Property**

**Description**

Returns the path of the Report object or the Application object.

**Syntax**

`object.Path`

**Applies To**

- Application Object
- Report Object

**Discussion**

The path of an Application object cannot be changed. The path of a Report object can be changed, but only using the SaveAs method.

**Type**

String

**Access**

Read

**Example**

This example creates an instance of IBM® Cognos® PowerPlay® and shows the name, location, and version of the application.

```vbscript
Sub Main()
    Dim objPPlayApp as Object
    Set objPPlayApp = CreateObject("CognosPowerPlay.Application")
    objPPlayApp.Visible = 1
    MsgBox "The name of the Application is " & objPPlayApp.Name
    MsgBox "The location of the Application is " & objPPlayApp.Path
End Sub
```
Pattern Property

Description
Sets search criteria for a subset definition.

Syntax
`FindQuery.Pattern`

Applies To
FindQuery Object

Discussion
Use this property to control how the SearchText property is used by a subset definition. With Pattern, you can determine if the

- search string is found anywhere in a word, at the start of a word only, or the end of a word only
- pattern matching is on or off
- search text is to match the whole word or any part of the word
- search is case sensitive

Each of the search options has a numeric value. For example, matching the text case equals 32, while matching the text with the end of the word equals 4. Add the different search option values to provide a unique value that sets the overall search options.

Unless a pattern value is given, the search option is not in effect. For example, to make a search case sensitive, the value 32 must be included. Add the values to set various search options. Adding values that cannot be used together causes an exception error. For example, do not combine the Contains, Begins With, or Ends With values because they are mutually exclusive, and do not use any of these with MatchWhole. Also, do not use Pattern Matching with MatchCase or MatchWhole. When the Pattern Matching value is used (Pattern = 8), the Find operation recognizes some characters in the text string as wildcards and some metacharacters are treated as reserved characters when Pattern Matching is used. If the metacharacters are included, an error message appears. If pattern matching is not used, wildcards and metacharacters are treated as normal characters.

Examples of valid combinations include
The order of the components in the subset definition are important. First, set the Dimension property, followed by the SearchShortName, SearchText, and Pattern properties, and then the Execute and AddToReport methods. Set the Name property anywhere within the subset definition.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PatternValue</td>
<td>Required. Specifies a numeric value that determines the search options. It defaults to 1.</td>
</tr>
<tr>
<td></td>
<td>1 - Contains: the search text can be found anywhere in a word 2 - Begins With: the search text must be found at the start of a word 4 - Ends With: the search text must be found at the end of a word 8 - Pattern Matching: certain characters are treated as wildcards 16 - MatchWhole: the search text must match the whole word 32 - MatchCase: the search is case sensitive</td>
</tr>
</tbody>
</table>

**Type**
Integer

**Access**
Write

**Wildcard Characters for Pattern Matching**

<table>
<thead>
<tr>
<th>Wildcard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>^</td>
<td>Match anchored at beginning of string (^ball matches balloon but not baseball).</td>
</tr>
<tr>
<td>$</td>
<td>Match anchored at end of string ($ball matches baseball but not balloon).</td>
</tr>
<tr>
<td>?</td>
<td>Match any character</td>
</tr>
<tr>
<td>#</td>
<td>Match zero or occurrences of the preceding character (or sub-expression)</td>
</tr>
</tbody>
</table>
## Wildcard

<table>
<thead>
<tr>
<th>Wildcard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>@</td>
<td>Match one or more occurrences of the preceding character (or sub-expression)</td>
</tr>
<tr>
<td>~</td>
<td>Match zero or one occurrences of the preceding character (or sub-expression)</td>
</tr>
<tr>
<td>*</td>
<td>Matches zero or more occurrences of any characters.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| [ ]      | Match any character within the brackets; for example, [aeiou] matches a, e, i, o, u. A hyphen between two characters within the brackets indicates a range; for example, [am-px] matches a, m through p and x. A hyphen at the start or end matches itself; for example, [-] matches a hyphen. An exclamation point at the beginning causes the set of characters to be inverted; for example, ![a-m] matches everything except a through m. |
| [ - ]    | Sub-expression. Enables nesting of an expression within the expression, so that repetition and alternative operators can be applied more generally. For example, ab(cd)#e matches a followed by b followed by zero or more cd combinations followed by e. |
| [! ]     | Escape. Match the next character literally. Generally used to allow metacharacters to be treated as normal characters; for example, \? Matches ?. |

## Metacharacters

<table>
<thead>
<tr>
<th>Metacharacter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;</td>
<td>Match the beginning of a word.</td>
</tr>
<tr>
<td>&gt;</td>
<td>Match the end of a word.</td>
</tr>
<tr>
<td>{m,n}</td>
<td>Match at least m and no more than n occurrences of the preceding character (or sub-expression). {n} matches n times. {n,} matches at least n times.</td>
</tr>
</tbody>
</table>
Description

<table>
<thead>
<tr>
<th>Metacharacter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>\x</td>
<td>Extended metacharacter \x (where \x represents any letter or digit).</td>
</tr>
</tbody>
</table>

**Example**

This example creates a FindQuery (type 1) subset definition that searches for all products that begin with the name Star.

```vbscript
Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objFind As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objFind = objPPRep.ReportQueries.Add(1)
    With objFind
        .Name = "Find Star"
        .Dimension = "Products"
        .SearchShortName = False
        .SearchText = "Star"
        .Pattern = 2
    End With
    Set objFind = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "FindQuery Object" (p. 36)

---

**Precedence Property**

**Description**

Sets or returns the precedence used in complex calculations.

**Syntax**

`object.Precedence`

**Applies To**

- Column Object
- Layer Object
**Row Object**

**Discussion**

For complex calculations (those containing several operations), the operations are performed in a certain order. The precedence rules for IBM® Cognos® PowerPlay® are:

1. accumulation and % accumulate
2. a percent, average, minimum, or maximum operation take precedence over division or multiplication
3. division or multiplication take precedence over addition or subtraction
4. addition or subtraction take precedence over non-calculations (such as, categories)
5. where a calculation in a row intersects with a calculation in a column, the row takes precedence
6. layers are calculated after rows and columns

Precedence allows you to set the precedence of calculations. Your choices are "Normal" or "Override." (They are not case-sensitive.)

When precedence is explicitly assigned to a category (Override is set), the cell value no longer changes when the user swaps rows and columns. If used without the switch parameter, it returns the current setting. If Precedence is used with a non-calculation, an error occurs.

You cannot set precedence for business calculations (for accumulation, % accumulate only).

**Type**

String

**Access**

Read/Write

**Example**

This example creates a small report that includes several calculations. The precedence on the "Total" column is set to override any rows that have calculations.

```
Sub Main()
    Dim objPPRep As Object
    Dim objCategoryList As Object
    Dim objIncreaseRow As Object
    Dim objPercentRow As Object
    Dim objSummaryColumn As Object
    Dim intColumns As Integer
    Const CubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = GetObject(CubePath)
    Set objCategoryList = objPPRep.CategoryList()
    objCategoryList.Add 1, "Years"
    objPPRep.Rows.Add objCategoryList
    objPPRep.Rows.Add objCategoryList
    objCategoryList.Add 1, "Products"
    objPPRep.Rows.Add objCategoryList
    objCategoryList.Add 1, "Products"
End Sub
```
objPPRep.Columns.Add objCategoryList
objPPRep.ExplorerMode = False
objPPRep.Rows.Item("Years").Activate
Set objIncreaseRow = objPPRep.Rows.Item_ 
objIncreaseRow.Name = "Increase"
objIncreaseRow.Activate
Set objPercentRow = objIncreaseRow.Percent_ 
(objPPRep.Rows.Item("1996"))
objPercentRow.Name = "Percent Increase"
objPPRep.Columns.Item("Products").Remove
intColumns = objPPRep.Columns.Count
objPPRep.Columns.Item(intColumns).Activate
Set objSummaryColumn = __
   objPPRep.Columns.SubSet(1, 3).Addition()
intColumns = objPPRep.Columns.Count
objPPRep.Columns.Item(intColumns).Name "Total"
objPPRep.Columns.Item(intColumns).Precedence = __
   "Override"
objPPRep.SaveAs "C:\Cubes and Reports\Precedence.ppx"
Set objSummaryColumn = Nothing
Set objPercentRow = Nothing
Set objIncreaseRow = Nothing
Set objCategoryList = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "Accumulation Method" (p. 94)
- "Addition Method (Collections) " (p. 112)
- "Division Method " (p. 155)
- "Subtraction Method (Collections) " (p. 267)

PrintAllCharts Property

Description
Sets or returns whether all displays print on the same page.

Syntax
Print.PrintAllCharts
Applies To
Print Object

Discussion
If True, all displays visible in page layout or page width view print on the same page. If False, the selected or currently active Graph object prints on as many pages as required.

This property must be set to False when used with the following properties:

- AxisOnAllPages
- ChartTitleOnAllPages
- IncludeLegend
- SetChartToPrint
- SummariesOnAllPages

Default: True.

Type
Boolean

Access
Read/Write

Example
This example opens a report and prints one copy of all the data for the second graphical display only. This example includes the display title, summary category, and axis on all pages; turns on the collating option; and excludes the legend.

Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample2.ppx"
    Set objRepPrt = objPPRep.Print
    objRepPrt.PrintAllCharts = False
    objRepPrt.SetListOfRowsToPrint objPPrep.Rows
    objRepPrt.SetListOfLayersToPrint objPPRep.Layers
    objRepPrt.SetChartToPrint objPPRep.Graphs.Item(2)
    objRepPrt.IncludeLegend = True
    objRepPrt.ChartTitleOnAllPages = True
    objRepPrt.SummariesOnAllPages = True
    objRepPrt.AxisOnAllPages = True
    objRepPrt.Collate = True
    objRepPrt.Copies = 1
    objRepPrt.PrintOut
Set objRepPrt = Nothing
Set objPPRep = Nothing
End Sub

Related Topics

- "Methods" (p. 87)
- "Properties" (p. 283)
- "Print Object" (p. 47)

PrintColorsAsPatterns Property

Description
Sets or returns whether colors print as patterns or as colors.

Syntax

Print.PrintColorsAsPatterns

Applies To
Print Object

Discussion
If True, colors print as patterns. If False, colors print as they appear (if you have a color printer).

Default: False

Type

Boolean

Access

Read/Write

Example
This example opens a report and prints one copy of all displays in the report including all rows and layers. It also includes the legend, prints colors as patterns, and turns on the collating option.

Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample2.ppx"
    Set objRepPrt = objPPRep.Print
    objRepPrt.PrintAllCharts = False
    objRepPrt.SetListOfRowsToPrint objPPrep.Rows
    objRepPrt.SetListOfLayersToPrint objPPRep.Layers
objRepPrt.SetChartToPrint objPPRep.Graphs.Item(2)
objRepPrt.IncludeLegend = True
objRepPrt.PrintColorsAsPatterns = True
objRepPrt.ChartTitleOnAllPages = True
objRepPrt.SummariesOnAllPages = True
objRepPrt.AxisOnAllPages = True
objRepPrt.Collate = True
objRepPrt.Copies = 1
objRepPrt.PrintOut
Set objRepPrt = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
• "Print Object" (p. 47)

PrintEntireReport Property

Description
Sets or returns whether to print the entire report, including all displays, layers, and rows.

Syntax
Print.PrintEntireReport

Applies To
Print Object

Discussion
Print options are initialized to the options saved with the report. Unless a print macro overrides a property, its state will correspond to the way in which the author saved the report.

Only one of the print properties PrintEntireReport, PrintPageLayout, and PrintSelectedDisplays can be true at one time.

If true, the entire report, including all displays, layers, and rows, will print.

Type
Boolean

Access
Read/Write

Example
This example opens and prints an entire report. It also includes the summary row and column categories on all pages.
Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    Set objRepPrt = objPPRep.Print
    objRepPrt.PrintEntireReport = True
    objRepPrt.SummaryRowOnAllPages = True
    objRepPrt.SummaryColumnOnAllPages = True
    objRepPrt.PrintOut
    Set objRepPrt = Nothing
    Set objPPrep = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)
- "Print Object" (p. 47)

PrintPageLayout Property

Description
Sets or returns whether to print all displays visible in the page layout view or page width view on the same page.

Syntax
Print.PrintPageLayout

Applies To
Print Object

Discussion
Print options are initialized to the options saved with the report. Unless a print macro overrides a property, its state will correspond to the way in which the author saved the report.

Only one of the print properties PrintEntireReport, PrintPageLayout, and PrintSelectedDisplays can be true at one time.

If true, all displays visible in the page layout or page width view will print on the same page.

Type
Boolean
Chapter 5: Properties

**Access**
Read/Write

**Example**
This example opens and prints all displays visible in the page layout view or page width view on the same page, using the default print settings.

```vbp
Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    Set objRepPrt = objPPRep.Print
    objRepPrt.ResetPrintOptionsToDefault
    objRepPrt.PrintPageLayout = True
    objRepPrt.PrintOut
    Set objRepPrt = Nothing
Set objPPrep = Nothing
End Sub
```

**Related Topics**
- "Methods" (p. 87)
- "Properties" (p. 283)
- "Print Object" (p. 47)

**PrintSelectedDisplay Property**

**Description**
Sets or returns whether to print the selected or currently active Graph object.

**Syntax**

`Print.PrintSelectedDisplay`

**Applies To**

Print Object

**Discussion**

Print options are initialized to the options saved with the report. Unless a print macro overrides a property, its state will correspond to the way in which the author saved the report.

Only one of the print properties PrintEntireReport, PrintPageLayout, and PrintSelectedDisplays can be true at one time.

If true, the selected or currently active Graph object will print.
Type
Boolean

Access
Read/Write

Example
This example opens a report and prints the selected or currently active Graph object.

Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    Set objRepPrt = objPPRep.Print
    objRepPrt.PrintSelectedDisplay = True
    objRepPrt.SetChartToPrint objPPRep.Graphs.Item(1)
    objRepPrt.PrintOut
    Set objRepPrt = Nothing
    Set objPPrep = Nothing
End Sub

Related Topics
- "Methods" (p. 87)
- "Properties" (p. 283)
- "Print Object" (p. 47)

PromptForCurrency Property

Description
Sets or returns whether the report consumer can change the currency in a report published to Upfront

Syntax
DeploymentOptions.PromptForCurrency

Discussion
Use this property when the cube on which the report is based supports multiple currencies. By default the report uses the currency or currencies specified by the report author. If the cube supports multiple currencies, but the report does not contain currency measures, the author can still set this property to True.

The consumer cannot set different currencies for different measures.

If this property is set to True, the report consumer can set some formatting features for the currency in Upfront.
Chapter 5: Properties

An error will occur if the cube doesn’t support currencies or if the report contains a mix of currencies.

Default: False

Type
Boolean

Access
Read/Write

Example
This example specifies the prompts that the report consumer sees when the report is opened in Upfront.

Sub Main()
    Dim objPPRep as Object
    Dim objDeploymentOptions as Object
    Set objPPRep = GetObject(,”CognosPowerPlay.Report”)
    Set objDeploymentOptions = objPPRep.DeploymentOptions
    objDeploymentOptions.PromptForCurrency = True
    objDeploymentOptions.PromptForLongShortNames = True
    objDeploymentOptions.PromptForZeroSuppression = True
    objDeploymentOptions.PromptForSwapRowsAndColumns = True
    objPPRep.Save
    Set objDeploymentOptions = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "PromptForDimension Property" (p. 400)
- "PromptForLongShortNames Property" (p. 402)
- "PromptForZeroSuppression Property" (p. 404)

PromptForDimension Property

Description
Sets or returns whether a report consumer can filter the specified Dimension object when a report is opened in Upfront.

Syntax
DeploymentOptions.PromptForDimension(Index)
Discussion

Use this property to specify on which dimensions a report consumer can filter when a report is opened in Upfront. You can select or clear each dimension, one at a time. To select all dimensions, use the SelectAllDimensions method. To clear all dimensions, use the UnselectAllDimensions method.

By default, the property is set to false for each dimension to prevent a user from filtering on that dimension.

Default: False

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>Required. Specifies the name of the Dimension object or its position in the DimensionLine object. The position in the DimensionLine object starts at 1 and increments by 1. Type: String or Integer</td>
</tr>
</tbody>
</table>

Type

Boolean

Access

Read/Write

Example

This example specifies the dimensions on which the report consumer can filter when the report is opened in Upfront.

Sub Main()
    Dim objPPRep as Object
    Dim objDeploymentOptions as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objDeploymentOptions = objPPRep.DeploymentOptions
    objDeploymentOptions.PromptForCurrency = True
    objDeploymentOptions.PromptForLongShortNames = True
    objDeploymentOptions.PromptForZeroSuppression = True
    objDeploymentOptions.PromptForSwapRowsAndColumns = True
    objDeploymentOptions.PromptForDimension(1) = True
    objDeploymentOptions.PromptForDimension(2) = True
    objDeploymentOptions.PromptForDimension("Locations") = True
    objPPRep.Save
    Set objDeploymentOptions = Nothing
    Set objPPRep = Nothing
End Sub
PromptForLongShortNames Property

Description
Sets or returns whether the report consumer can change between long and short category names in a report published to Upfront.

Syntax

\[ \text{DeploymentOptions.PromptForLongShortNames} \]

Discussion
Use this property when the cube on which the report is based supports long and short category names. By default, the report uses the category name specified by the report author.

This property applies to all dimensions. The consumer cannot use long names for one dimension and short names for another, but the report author can.

You can use this property when the cube supports short names only or long names only.

By default, the report consumer will not be prompted to change between long and short category names.

An error will occur if the report contains some dimensions with long names and some dimensions with short names.

Default: False

Type
Boolean

Access
Read/Write

Example
This example specifies the prompts that the report consumer sees when the report is opened in Upfront.

Sub Main()
  Dim objPPRep as Object
  Dim objDeploymentOptions as Object
  Set objPPRep = GetObject(,"CognosPowerPlay.Report")
  Set objDeploymentOptions = objPPRep.DeploymentOptions
  objDeploymentOptions.PromptForCurrency = True
objDeploymentOptions.PromptForLongShortNames = True
objDeploymentOptions.PromptForZeroSuppression = True
objDeploymentOptions.PromptForSwapRowsAndColumns = True
objPPRep.Save
Set objDeploymentOptions = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "PromptForCurrency Property" (p. 399)
- "PromptForDimension Property" (p. 400)
- "PromptForZeroSuppression Property" (p. 404)

PromptForSwapRowsAndColumns Property

Description
Sets or returns whether the report consumer can swap rows and columns in a report published to Upfront.

Syntax
DeploymentOptions.PromptForSwapRowsAndColumns

Discussion
Use this property when distinct report consumer groups require the same information, but presented in different ways. If you set this property to True, users can analyze information or follow trends by using a different report axis as reference. Report consumers can use this property so that all the data in a report will fit the current page size.

By default, the report uses the rows and columns as the author created.

Default: False

Type
Boolean

Access
Read/Write

Example
This example specifies the prompts that the report consumer sees when the report is opened in Upfront.
Sub Main()
Dim objPPRep as Object
Dim objDeploymentOptions as Object

Set objPPRep = GetObject("CognosPowerPlay.Report")
Set objDeploymentOptions = objPPRep.DeploymentOptions
objDeploymentOptions.PromptForCurrency = True
objDeploymentOptions.PromptForLongShortNames = True
objDeploymentOptions.PromptForZeroSuppression = True
objDeploymentOptions.PromptForSwapRowsAndColumns = True
    objPPRep.Save
Set objDeploymentOptions = Nothing
Set objPPRep = Nothing
End Sub

Related Topics

- "PromptForCurrency Property" (p. 399)
- "PromptForDimension Property" (p. 400)
- "PromptForLongShortNames Property" (p. 402)
- "PromptForZeroSuppression Property" (p. 404)

PromptForZeroSuppression Property

Description
Sets or returns whether the report consumer can apply or turn off zero suppression in a report published to Upfront.

Syntax

DeploymentOptions.PromptForZeroSuppression

Discussion
Use this property when a row or column in a report contains all zeros, or all zeros and a rank category, and this information is not necessary. This reduces the size and improves the readability of the report. The report consumer can customize the report in Upfront by selecting whether to suppress zeros on rows, columns, or on both rows and columns.

By default, the report uses the suppression mode specified by the report author when it was created.

Default: False

Type

Boolean

Access

Read/Write
Example
This example specifies the prompts that the report consumer sees when the report is opened in Upfront.

Sub Main()
    Dim objPPRep as Object
    Dim objDeploymentOptions as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objDeploymentOptions = objPPRep.DeploymentOptions
    objDeploymentOptions.PromptForCurrency = True
    objDeploymentOptions.PromptForLongShortNames = True
    objDeploymentOptions.PromptForZeroSuppression = True
    objDeploymentOptions.PromptForSwapRowsAndColumns = True
    objPPRep.Save
    Set objDeploymentOptions = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "PromptForCurrency Property" (p. 399)
- "PromptForDimension Property" (p. 400)
- "PromptForLongShortNames Property" (p. 402)

RefreshSubCube Property

Description
Sets or returns whether the sub-cube is refreshed automatically.

Syntax
Application.RefreshSubCube

Applies To
Application Object

Discussion
Use this property to set the Refresh sub-cube preference setting to determine if sub-cube synchronization is performed during automation. A sub-cube is only a portion of a cube. This property sets the Refresh sub-cube preference setting if a Boolean value follows the property name. For example

    ppObjApp.RefreshSubCube True

If a Boolean value does not follow the property, it returns the current setting for the application.
True indicates that IBM® Cognos® PowerPlay® will automatically refresh the specified sub-cube. False indicates that the cube will be opened without refreshing the sub-cube with the cube.

Set this property before opening a sub-cube. If this property is set to True and you did not want a sub-cube refresh to take place, the report may not be as expected.

Default: True

Type
Boolean

Access
Read/Write

Example
This example returns the current preference setting for sub-cube synchronization.

Sub Main()
    Dim objPPApp As Object
    Dim strSetting As String
    Set objPPApp = CreateObject("CognosPowerPlay.Application")
    If objPPApp.RefreshSubCube = True Then
        strSetting = "True"
    Else
        strSetting = "False"
    End If
    MsgBox "The Refresh sub-cubes setting is " &strSetting
Set objPPApp = Nothing
End Sub

Related Topics
  ●  "Methods" (p. 87)
  ●  "Properties" (p. 283)

SaveAllCharts Property

Description
Sets or returns whether all Graph objects are saved in a PDF.

Syntax
SaveAsPDF.SaveAllCharts

Applies To
SaveAsPDF Object
Discussion
Use this method to determine whether to save the currently active Graph objects, or all Graph objects in the report. If True, all the displays visible in page layout or page width view save to the same page in the PDF. If set to False, only the selected Graph objects, or currently active graph object saves in the PDF over as many pages as required. If set to false, use the SetChartToSave method to select a chart to be saved.

When saving a report as a PDF, this property must be set to False to use the following properties:

- AxisOnAllPages
- ChartTitleOnAllPages
- IncludeLegend
- SetChartToSave
- SummariesOnAllPages

Default: False

Type
Boolean

Access
Read/Write

Example
This example opens a report, sets options for saving the report, and then saves as a PDF.

Sub Main()
    Dim objPDF as Object
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open( "c:\Cognos\sample.ppx" )
    objPPRep.visible( TRUE )
    Set objPDF = objPPRep.PDFFile( "c:\Cognos\PDFSample", True )
    With objPDF
        .SaveEntireReport = False
        .SaveAllCharts = True
        .AxisOnAllPages = True
        .ChartTitleOnAllPages = False
        .IncludeLegend = True
        .SetListOfLayersToSave objPPRep.Layers
        .SetListOfRowsToSave objPPRep.Rows
    End With
    objPDF.Save
    Set objPPRep = Nothing
    Set objPDF = Nothing
End Sub
Related Topics
- "Save Method" (p. 238)
- "SaveEntireReport Property" (p. 409)

Saved Property

Description
Returns whether the Report object has been saved.

Syntax
Report.Saved

Applies To
Report Object

Discussion
If True, the report has been saved. If False, the report has not been saved.

Type
Boolean

Access
Read

Example
This example determines whether an open report has been saved. If it hasn't, the macro saves it.

Sub Main()
    Dim objRep As Object
    MsgBox "The name of the current report is " &objRep.Name
    If objRep.Saved = False Then
        objRep.Save
        MsgBox "Changes to the report have been saved."
    Else
        MsgBox "No changes have been made to the report."
    End If
    Set objRep = Nothing
End Sub
SaveEntireReport Property

Description
Sets or returns whether to save the entire report as a PDF.

Syntax
SaveAsPDF.SaveEntireReport

Applies To
SaveAsPDF Object

Discussion
Use this property to save the entire report no matter which other properties are set for saving reports as a PDF. If True, the entire report saves as a PDF file; this property overrides all other property settings associated with saving a report in portable document format. If False, you can set other properties to determine what you want to appear in the saved PDF.

Default: True

Type
Boolean

Access
Read/Write

Example
This example opens a report, sets options for saving the report, and then saves the report as a PDF.

Sub Main()
    Dim objPDF as Object
    Dim objPPRep as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open( "c:\Cognos\sample.ppx" )
    objPPRep.visible( TRUE )
    Set objPDF = objPPRep.PDFFile( "c:\Cognos\PDFSample" , True )
    With objPDF
        .SaveEntireReport = False
        .SaveAllCharts = True
        .AxisOnAllPages = True
        .ChartTitleOnAllPages = False
        .IncludeLegend = True
    End With
End Sub
End Sub

Related Topics

- "AxisOnAllPages Property" (p. 297)
- "ChartTitleOnAllPages Property" (p. 311)
- "IncludeLegend Property" (p. 343)
- "SaveAllCharts Property" (p. 406)
- "SetListOfLayersToSave Method" (p. 253)
- "SetListOfRowsToSave Method" (p. 256)
- "SummariesOnAllPages Property" (p. 432)

SearchDescription Property

Description
Sets or returns whether the FindQuery object searches the category descriptions in a cube.

Syntax
FindQuery.SearchDescription

Applies To
FindQuery Object

Discussion
Use a FindQuery object to locate categories within a cube that match the search string specified by the SearchDescription property.

To search the long or short names, set the SearchDescription property to False. To search the description, set this property to True. The FindQuery object returns a list of category labels that match the search text.

The order of the components in the subset definition is important. First, set the Dimension property, followed by the SearchShortName, or SearchDescription, SearchText, and Pattern properties, and then the Execute and AddToReport methods. Set the Name property anywhere within the subset definition.

Default: False
Type
Boolean

Access
Read/Write

Example
This example creates a FindQuery (type 1) subset definition that searches for all products that begin with the name Star.

Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objFind As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objFind = objPPRep.ReportQueries.Add(1)
    With objFind
        .Name = "Find Star"
        .Dimension = "Products"
        .SearchShortName = False
        .SearchDescription = True
        .SearchText = "Star"
        .Pattern = 2
    End With
    Set objFind = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
• "SearchText Property" (p. 413)

SearchShortName Property

Description
Sets or returns whether the FindQuery object searches short or long category names.

Syntax
FindQuery.SearchShortName
Applies To
FindQuery Object

Discussion
Use a FindQuery object to locate categories within a cube that match the search string specified by
the SearchText property. Normally, the operation searches the category label text used in the short
names for cube data. Set this property to False to search for long names.

The result is dependent on how the user views data. If the user specifies long names, searching
returns a list of matching category labels with the long name format; similarly, using short names
returns the short name format.

To search for a description, set this property to false and the SearchDescription property to True.
The order of the components in the subset definition is important. First, set the Dimension property,
followed by the SearchShortName, SearchDescription, SearchText, and Pattern properties, and then
the Execute and AddToReport methods. Set the Name property anywhere within the subset defini-
tion.

Default: False

Type
Boolean

Access
Read/Write

Example
This example creates a FindQuery (type 1) subset definition that searches for all products that begin
with the name Star.

Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objFind As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New strCubePath, 1
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objFind = objPPRep.ReportQueries.Add(1)
    With objFind
        .Name = "Find Star"
        .Dimension = "Products"
        .SearchShortName = False
        .SearchText = "Star"
        .Pattern = 2
    End With
End Sub
Related Topics

- "SearchText Property" (p. 413)

SearchText Property

Description
Sets or returns the search string used in the subset definition of a FindQuery query.

Syntax

FindQuery.SearchText

Applies To

FindQuery Object

Discussion

Use this property to specify the name of the category that the query searches for. Set this property to a text before executing a Find query (a search of a cube). Unless specified by the Pattern property, the search is not case sensitive. The search string must contain characters to create a subset. The search only applies to category labels, not to the data. If there are no categories that match the specified search criteria at the time that the subset is created, then an empty subset is returned.

The order of the components in the subset definition is important. First, set the Dimension property, followed by the SearchShortName, SearchDescription, SearchText and Pattern properties, and then the Execute and AddToReport methods. Set the Name property anywhere within the subset definition.

Type

String

Access

Read/Write

Example

This example creates a FindQuery (type 1) subset definition that searches for all products that begin with the name Star.

Sub Main()
    Dim strCubePath As String
    Dim objPPRep As Object
    Dim objFind As Object
    strCubePath = "C:\Cubes and Reports\Great Outdoors.mdc"
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
Chapter 5: Properties

```vbscript
objPPRep.New strCubePath, 1
objPPRep.ExplorerMode = False
objPPRep.Visible = True
Set objFind = objPPRep.ReportQueries.Add(1)
With objFind
    .Name = "Find Star"
    .Dimension = "Products"
    .SearchShortName = False
    .SearchText = "Star"
    .Pattern = 2
End With
Set objFind = Nothing
Set objPPRep = Nothing
End Sub
```

Related Topics
• "SearchShortName Property" (p. 411)

ShareDimensionLine Property

Description
Sets or returns whether open reports share a dimension line.

Syntax

```
object.ShareDimensionLine
```

Applies To
Application Object
Report Object

Discussion
If set to True, changes to the dimension line in the first report are automatically reflected in any reports that
• are open or subsequently opened,
• share the same multidimensional cube, and
• have the Shared Dimensions command turned on.

If set to False, changes to the dimension line of this report are not reflected in other reports. Changes to other reports that have this property set to True are also not reflected in this report.

If this property is set to True for the Report object, the existing setting of this property in the Application object is ignored. Conversely, when this property is set to True for the Application object, only reports created after this property is set are affected.
Default: True

Type
Boolean

Access
Read/Write

Example
This example sets the ShareDimensionLine property to True for all reports in the IBM® Cognos® PowerPlay® application.

Sub Main()
    Dim objPPApp As Object
    Set objPPApp = CreateObject ("CognosPowerPlay.Application")
    objPPApp.Visible = True
    objPPApp.Activate
    objPPApp.ShareDimensionLine = True
    MsgBox objPPApp.ShareDimensionLine
Set objPPApp = Nothing
End Sub

Related Topics
- "Application Object" (p. 23)
- "Report Object" (p. 51)

ShareOf Property

Description
Sets or returns whether to show the values in selected categories as a percentage of their higher-level category.

Syntax
CategoryList.ShareOf

Applies To
CategoryList Object

Discussion
If True, this property shows the values in the selected categories as a percentage of their higher-level category.

Default: False
Chapter 5: Properties

**Type**
Boolean

**Access**
Read/Write

**Example**
This example sets the categories in the report as a share of a higher-level category.

```vba
Sub Main
    Dim objPPRep as Object
    Dim objCatList as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New "C:\Cubes and Reports\Great Outdoors.mdc"
    objPPRep.ExplorerMode = False
    objPPRep.Visible = True
    Set objCatList = objPPRep.CategoryList
    objCatList.Add 1, "Products", "Outdoor Products"
    objCatList.Each = False
    objCatList.ShareOf = True
    objPPRep.Columns.Add objCatList
    objCatList.Remove
    objCatList.Add 0, "Measures", "Revenue"
    objCatList.Each = True
    objCatList.ShareOf = False
    objPPRep.Rows.Add objCatList
    Set objCatList = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "CategoryList Object" (p. 25)

**ShowSummaryBreakdown Property (Explorer)**

**Description**
Sets or returns whether to show the breakdown of summary rows and columns in a crosstab.

**Syntax**

```
object.ShowSummaryBreakdown
```

**Applies To**
- Graph Object
- Graphs
**Discussion**

Use this property to show subtotals for each outer level summary. When this property is set to True, the report inserts automatic subtotals derived from details in the crosstab rows and columns. In a crosstab with a long list of data, you can use the summary data to outline the information in the report. Set this property to true for nested crosstabs so that the nested level summary is visible.

The ShowSummaryRow or the ShowSummaryColumn and the ShowSummaryBreakdown properties must both be set to True to see the details for each outer level summary row or column. If the ShowSummaryRow or ShowSummaryColumn property is set to True, but the ShowSummaryBreakdown is set to False, only a single row or column appears for each summary. If the ShowSummaryRow or ShowSummaryColumn property is set to False, but the ShowSummaryBreakdown is set to True, no summary rows or columns appear.

**Default:** True

**Type**

Boolean

**Access**

Read/Write (Graph)

Write (Graphs)

**Example**

This example sets the ShowSummaryBreakdown property to false so that the crosstab hides the subtotal summary for the nested categories.

```vba
Sub Main()
    Dim objCubeCategories As Object
    Dim objPPRep As Object
    Dim objGraph As Object
    Const level_0 = 0
    Const level_1 = 1
    Const add_to_current = 0
    Const add_to_all = 1
    Const as_parent = 0
    Const as_child = 1
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New "D:\Cubes and Reports\Great Outdoors.mdc", -1
    objPPRep.ExplorerMode = True
    objPPRep.Visible = True
    Set objCubeCategories = objPPRep.CategoryList()
    objCubeCategories.Add level_1, "Locations"
    objPPRep.Rows.AddLevel objCubeCategories, level_0,
    add_to_all, as_child
    Set objGraph = objPPRep.Graphs.Item(1)
```
objGraph.SetType 0
objPPRep.Graphs.ShowSummaryRow = True
objPPRep.Graphs(1).ShowSummaryBreakdown = False
Set objCubeCategories = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
● "ShowSummaryColumn Property (Explorer)" (p. 418)
● "ShowSummaryRow Property (Explorer)" (p. 419)

ShowSummaryColumn Property (Explorer)

Description
Sets or returns whether to show the summary column.

Syntax
object.ShowSummaryColumn

Applies To
Graph Object
Graphs

Discussion
If True, this property shows the summary column. If False, the summary column is hidden.
This property is not available for pie graphs and only applies to Explorer reports.
Default: True

Type
Boolean

Access
Read/Write (Graph)
Write (Graphs)

Example
This example adds two graphs to the currently open report and shows the summary column for only the third graph of the report.
Sub Main()
    Dim objPPRep As Object
    Set objPPRep = GetObject (, "CognosPowerPlay.Report")
    objPPRep.Graphs.Add 1
   
418 IBM Cognos PowerPlay Client
objPPRep.Graphs.Add 2
objPPRep.Graphs.ShowSummaryColumn = False
objPPRep.Graphs(3).ShowSummaryColumn = True
Set objPPRep = Nothing
End Sub

Related Topics
- "Graph Object" (p. 38)
- "Graphs" (p. 72)

ShowSummaryRow Property (Explorer)

Description
Sets or returns whether to show the summary row.

Syntax
object.ShowSummaryRow

Applies To
Graph Object
Graphs

Discussion
If True, this property shows the summary row. If False, the summary row is hidden.
This property is not available for pie, single bar, simple bar, and correlation graphs, and only applies to Explorer reports.
Default: True

Type
Boolean

Access
Read/Write (Graph)
Write (Graphs)

Example
This example adds two graphs to the currently open report and shows the summary column for only the third graph of the report.
Sub Main()
  Dim objPPRep As Object
  Set objPPRep = GetObject (, "CognosPowerPlay.Report")
  objPPRep.Graphs.Add 1
objPPRep.Graphs.Add 2
objPPRep.Graphs.ShowSummaryRow = False
objPPRep.Graphs(3).ShowSummaryRow = True
Set objPPRep = Nothing
End Sub

Related Topics
- "Graph Object" (p. 38)
- "Graphs" (p. 72)

ShowTies Property

Description
Sets or returns whether to show label ties.

Syntax
object.ShowTies

Applies To
Graph Object
Graphs

Discussion
For some graphs, labels along an axis can be connected or tied together. Set this property to True to display these ties.
ShowTies does not apply to pie graphs, scatter graphs, crosstabs, or a three-dimensional-bar graph.
Default: False

Type
Boolean

Access
Read/Write (Graph)
Write (Graphs)

Example
This example sets the ShowTies property for each applicable graph object in the active report.
Sub Main()
    Dim objPPRep As Object
    Dim objGraph As Object
    Dim intx As Integer
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
intx=0
Do
    intx=intx+1
    Set objGraph = objPPRep.Graphs.Item(intx)
    Select Case objGraph.Type
        Case 0,1,2,9
            MsgBox "ShowTies property does not apply to " & _
            "these graph types. "
        Case Else
            If objGraph.ShowTies = 0 Then
                objGraph.ShowTies = True
            Else
                objGraph.ShowTies = False
            End If
    End Select
Loop Until intx = objPPRep.Graphs.Count
Set objGraph = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
● "StatsLineOn Property" (p. 425)

ShowValuesAs Property (Explorer)

Description
Sets or returns how to show values in a report.

Syntax
Report.ShowValuesAs

Applies To
Report Object

Discussion
These are the possible values that ShowAs can be:
1=Shows values as number
2=Shows values as a percentage of the row total
3=Shows values as a percentage of the column total
4=Shows values as a percentage of the layer total
5=Shows values as a percentage of the grand total
This property is only available if the Report object is in Explorer Mode. (ExplorerMode property set to True.)

**Type**
Long

**Access**
Read/Write

**Example**
This example returns an open report, and shows values as a percentage of the grand total.

```vba
Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = GetObject (, "CognosPowerPlay.Report")
    Set objRepPrt = objPPRep.Print
    objPPRep.ExplorerMode = True
    objPPRep.ShowValuesAs(5)
    objRepPrt.PrintOut
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "SaveEntireReport Property" (p. 409)
- "Report Object" (p. 51)

**StatsLineCaption Property**

**Description**
Sets or returns the caption for a given statistical line on a graph.

**Syntax**

```vba
object.StatsLineCaption(LineNumber)
```

** Applies To**
Graph Object

**Discussion**
Many graphs can be enhanced by the addition of statistical lines, such as a mean or average line superimposed on a bar graph of sales figures. Up to three lines can be added, as determined by the StatsLineOn property. Each statistical line is explained in an automatically generated legend. StatsLineCaption sets the line’s label in the legend.
If not set, the caption defaults to the line type, such as "Maximum."

The applicable graph types are simple bar, clustered bar, correlation, simple line, multiple line, and scatter.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LineNumber</td>
<td>Required. Specifies which statistical line to reference:</td>
</tr>
<tr>
<td></td>
<td>1 = the minimum line (default caption: Minimum) 2 = the maximum line (default</td>
</tr>
<tr>
<td></td>
<td>caption: Maximum) 3 = the mean or average line (default caption: Mean) 4 = the</td>
</tr>
<tr>
<td></td>
<td>standard deviation line (default caption: Standard Deviation) 5 = the</td>
</tr>
<tr>
<td></td>
<td>regression line (default caption: Regression) 6 = the first user-created line</td>
</tr>
</tbody>
</table>
StatsLineColor Property

Description
Sets or returns the color for a given statistical line on a graph.

Syntax
object.StatsLineColor(LineNumber)

Applies To
Graph Object
Graphs

Discussion
Many graphs can be enhanced by the addition of statistical lines. Use StatsLineColor to change the color of a statistical line. If the property is used without the Color parameter, the current color is returned.

Up to three lines can be added, as determined by the StatsLineOn property.

The applicable graph types are simple bar, clustered bar, correlation, simple line, multiple line, and scatter.

Default: 0

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
</table>
| LineNumber | Required. Specifies which statistical line to reference:
  1 = the minimum line
  2 = the maximum line
  3 = the mean or average line
  4 = the standard deviation line
  5 = the regression line
  6 = the first user-created line
  7 = the second user-created line
  Type: Integer |

Type
Integer
Access
Read/Write

Example
This example sets the first Graph object to the clustered bar type and displays a custom statistical line. The custom line is referred to as the Limit, and it is set to 100,000.

Sub Main()
    Dim objPPRep As Object
    Dim objPPGraph As Object
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
    Set objPPGraph = objPPRep.Graphs.Item(1)
    With objPPGraph
        .SetType 4,1,1
        .StatsLineOn 6,True 'custom line
        .StatsLineColor 6,2 'green
        .StatsLineStyle 6,1 'dashed style
        .StatsLineUserValue 6,100000
        .StatsLineCaption 6,"Limit"
    End With
    Set objPPGraph = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "StatsLineCaption Property" (p. 422)
- "StatsLineOn Property" (p. 425)
- "StatsLineStyle Property" (p. 427)
- "StatsLineUserValue Property" (p. 429)

StatsLineOn Property

Description
Sets or returns a statistical line on a graph.

Syntax
object.StatsLineOn(LineNumber)

Applies To
Graph Object
Graphs
Discussion

Many graphs can be enhanced by the addition of statistical lines. Use StatsLineOn to pick the types of statistical lines to turn on or off. If the Switch property is used without the parameters, the current Boolean value is returned.

Up to three lines can be added, as determined by the StatsLineOn property.

The applicable graph types are simple bar, clustered bar, correlation, simple line, multiple line, and scatter.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LineNumber</td>
<td>Required. Specifies which statistical line to reference:</td>
</tr>
<tr>
<td></td>
<td>1 = minimum: a line that spans across the minimum value</td>
</tr>
<tr>
<td></td>
<td>2 = maximum: a line that spans across the maximum value</td>
</tr>
<tr>
<td></td>
<td>3 = mean: a line that spans across the average value</td>
</tr>
<tr>
<td></td>
<td>4 = standard deviation: two lines spanning pre-defined deviants from the mean</td>
</tr>
<tr>
<td></td>
<td>5 = regression: a logarithmic regression line</td>
</tr>
<tr>
<td></td>
<td>6 = the first user-created line</td>
</tr>
<tr>
<td></td>
<td>7 = the second user-created line</td>
</tr>
<tr>
<td>Type: Short</td>
<td></td>
</tr>
<tr>
<td>Return Type</td>
<td>Long</td>
</tr>
<tr>
<td>Access</td>
<td>Read/Write</td>
</tr>
<tr>
<td>Example</td>
<td>This example sets the first Graph object to the clustered bar type and displays a custom statistical line. The custom line is referred to as the Limit, and it is set to 100,000.</td>
</tr>
</tbody>
</table>

Sub Main()

Dim objPPRep As Object
Dim objPPGraph As Object
Set objPPRep = GetObject(, "CognosPowerPlay.Report")
Set objPPGraph = objPPRep.Graphs.Item(1)
With objPPGraph
    .SetType 4,1,1
    .StatsLineOn 6,True         'custom line
    .StatsLineColor 6,2         'green
    .StatsLineStyle 6,1         'dashed style
    .StatsLineUserValue 6,100000
    .StatsLineCaption 6,"Limit"
End With
Set objPPGraph = Nothing
Set objPPRep = Nothing
End Sub

Related Topics

- "StatsLineCaption Property" (p. 422)
- "StatsLineColor Property" (p. 424)
- "StatsLineStyle Property" (p. 427)
- "StatsLineUserValue Property" (p. 429)

StatsLineStyle Property

Description
Sets or returns the line style of a given statistical line on a graph.

Syntax
object.StatsLineStyle(LineNumber)

Applies To
Graph Object
Graphs

Discussion
Many graphs can be enhanced by the addition of statistical lines. Use StatsLineStyle to change the style of a statistical line. If the property is used without the Style parameter, the current style is returned.

Up to three lines can be added, as determined by the StatsLineOn property.

The applicable graph types are simple bar, clustered bar, correlation, simple line, multiple line, and scatter.

Default: 0
### Parameters

<table>
<thead>
<tr>
<th><strong>Parameters</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>LineNumber</td>
<td>Required. Specifies statistical line to reference:</td>
</tr>
<tr>
<td></td>
<td>1 = minimum line</td>
</tr>
<tr>
<td></td>
<td>2 = maximum line</td>
</tr>
<tr>
<td></td>
<td>3 = mean or average line</td>
</tr>
<tr>
<td></td>
<td>4 = standard deviation line</td>
</tr>
<tr>
<td></td>
<td>5 = logarithmic regression line</td>
</tr>
<tr>
<td></td>
<td>6 = first line created by the user</td>
</tr>
<tr>
<td></td>
<td>7 = second user-created line</td>
</tr>
<tr>
<td></td>
<td>8 = linear regression line</td>
</tr>
<tr>
<td></td>
<td><strong>Type:</strong> Short</td>
</tr>
</tbody>
</table>

### Type

Integer

### Access

Read/Write

### Example

This example sets the first Graph object to the clustered bar type and displays a custom statistical line. The custom line is referred to as the Limit, and it is set to 100,000.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objPPGraph As Object
    Set objPPRep = GetObject(, "CognosPowerPlay.Report")
    Set objPPGraph = objPPRep.Graphs.Item(1)
    With objPPGraph
        .SetType 4,1,1
        .StatsLineOn 6,True 'custom line
        .StatsLineColor 6,2 'green
        .StatsLineStyle 6,1 'dashed style
        .StatsLineUserValue 6,100000
        .StatsLineCaption 6,"Limit"
    End With
    Set objPPGraph = Nothing
    Set objPPRep = Nothing
End Sub
```

### Related Topics

- "StatsLineCaption Property" (p. 422)
StatsLineUserValue Property

Description
Sets a custom value for a statistical line on a graph.

Syntax
object.StatsLineUserValue(LineNumber)

Applies To
Graph Object
Graphs

Discussion
You can enhance graphs by the addition of statistical lines. Use StatsLineUserValue to place a statistical line at a value of your choosing, such as a quota line superimposed on a bar graph of sales figures. Up to three lines can be added, as determined by the StatsLineOn property. If the property is used without the value parameter, the current value is returned.

The applicable graph types are simple bar, clustered bar, correlation, simple line, multiple line, and scatter.

Default: 0

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LineNumber</td>
<td>Required. Specifies which user-created statistical line to reference:</td>
</tr>
<tr>
<td></td>
<td>6 = the first user-created line 7 = the second user-created line</td>
</tr>
<tr>
<td></td>
<td>Type: Short</td>
</tr>
</tbody>
</table>

Type
Double

Access
Write
Example

This example sets the first Graph object to the clustered bar type and displays a custom statistical line. The custom line is referred to as the Limit, and it is set to 100,000.

Sub Main()
Dim objPPRep As Object
Dim objPPGraph As Object
Set objPPRep = GetObject(, "CognosPowerPlay.Report")
Set objPPGraph = objPPRep.Graphs.Item(1)
With objPPGraph
  .SetType 4,1,1
  .StatsLineOn 6,True 'custom line
  .StatsLineColor 6,2 'green
  .StatsLineStyle 6,1 'dashed style
  .StatsLineUserValue 6,100000
  .StatsLineCaption 6,"Limit"
End With
Set objPPGraph = Nothing
Set objPPRep = Nothing
End Sub

Related Topics

- "StatsLineCaption Property" (p. 422)
- "StatsLineColor Property" (p. 424)
- "StatsLineOn Property" (p. 425)
- "StatsLineStyle Property" (p. 427)

Style Property

Description

Sets or returns the style used for a category, an exception range or set of categories.

Syntax

\texttt{object.Style}

Applies To

- Column Object
- Columns
- Layer Object
- Layers
- Row Object
Rows

Discussion
Only existing styles can be applied. If the style does not exist, an error occurs.

Type
String

Access
Read/Write (Row, Column, Layer)
Write (Rows, Columns, Layers)

Example
This example applies a specific style to all the rows in the report.

Sub Main()
    Dim objPPRep as Object
    Set objPPRep = CreateObject ("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample.ppx.ppx"
    objPPRep.Rows.Style = "Good News"
    objPPRep.Save
    Set objPPRep = Nothing
End Sub

Related Topics
- "Column Object" (p. 28)
- "Layer Object" (p. 41)
- "Row Object" (p. 55)

Sum Property

Description
Sets or returns whether to calculate the sum of selected categories.

Syntax
CategoryList.Sum

Applies To
CategoryList Object

Discussion
If True, a new category is created to show the sum of the selected categories. If False, the sum is not calculated.
**Default**: False

**Type**
Boolean

**Access**
Read/Write

**Example**
This example adds categories to the columns and rows and then calculates the sum of the categories in a report.

```vba
Sub Main()
    Dim objPPRep as Object
    Dim objCatList as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.New "C:\Cubes and Reports\Great " & "Outdoors.mdc", False
    Set objCatList = objPPRep.CategoryList
    objPPRep.Visible = True
    objCatList.Add 1, "Products", "Outdoor Products"
    objPPRep.Columns.Add objCatList
    objCatList.Add 1, "Locations", "Far East"
    objPPRep.Rows.Add objCatList
    MsgBox "The sum of the categories is " & objCatList.Sum
    Set objCatList = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "CategoryList Object" (p. 25)

---

**SummariesOnAllPages Property**

**Description**
Sets or returns whether existing summaries appear on every page of a printed report.

**Syntax**
`Print.SummariesOnAllPages`

**Applies To**
Print Object
**Discussion**

Use this property to determine how much detail appears in a printed report. If True, the summary categories (if any) appear on every printed page of the report. If False, the summary categories appear only once on the last page of the printed report.

Use this property only if the `PrintAllCharts` property is set to False.

**Default:** False

**Type**

Boolean

**Access**

Read/Write

**Example**

This example opens a report and prints one copy of all the data for the second graphical display only. This example includes the display title, summary category, and axis on all pages; turns on the collating option; and excludes the legend in the printed report.

```vba
Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample2.ppx"
    Set objRepPrt = objPPRep.Print
    objRepPrt.PrintAllCharts = False
    objRepPrt.SetListOfRowsToPrint objPPrep.Rows
    objRepPrt.SetListOfLayersToPrint objPPRep.Layers
    objRepPrt.SetChartToPrint objPPRep.Graphs.Item(2)
    objRepPrt.IncludeLegend = True
    objRepPrt.ChartTitleOnAllPages = True
    objRepPrt.SummariesOnAllPages = True
    objRepPrt.AxisOnAllPages = True
    objRepPrt.Collate = True
    objRepPrt.Copies = 1
    objRepPrt.PrintOut
    Set objRepPrt = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**

- "Print Method" (p. 219)
SummaryColumnOnAllPages Property

Description
Sets or returns whether to show the summary column category on every page of a PDF.

Syntax
object.SummaryColumnOnAllPages

Applies To
SaveAsPDF Object

Discussion
Use this property to determine how much detail appears in a PDF. When you save a report as a PDF, the Print object properties are replaced with the PDF options.

If True, the summary column category appears on every page of the report. If False, the summary column category appears only on the last page of the report.

When saving a report as a PDF file, use this property only if the SaveAllCharts property is set to False.

This property is valid for Explorer reports only.

Default: False

Type
Boolean

Access
Read/Write

Example
This example sets the summary column to show on every page of a report published to Upfront.

Sub Main()
    Dim objPPRep as Object
    Dim objDeploymentOptions as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objDeploymentOptions = objPPRep.DeploymentOptions
    objDeploymentOptions.PromptForCurrency = True
    objDeploymentOptions.PromptForLongShortNames = True
    objDeploymentOptions.PromptForZeroSuppression = True
    objDeploymentOptions.PromptForSwapRowsAndColumns = True
    objDeploymentOptions.PromptForDimension(1) = True
    objDeploymentOptions.PromptForDimension(2) = True
    objDeploymentOptions.PromptForDimension("Years") = True
objDeploymentOptions.SummaryColumnOnAllPages = True
objPPRep.Save
Set objDeploymentOptions = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "Print Method" (p. 219)
- "PrintAllCharts Property" (p. 393)
- "SaveAllCharts Property" (p. 406)
- "SaveEntireReport Property" (p. 409)

SummaryRowOnAllPages Property

Description
Sets or returns whether to show the summary row category on every page of a PDF.

Syntax
object.SummaryRowOnAllPages

Applies To
SaveAsPDF Object

Discussion
Use this property to determine how much detail appears in a PDF. When you save a report as a PDF, the Print object properties are replaced with the PDF options.

If True, the summary row category appears on every page of the report. If False, the summary row category appears once on the last page of the report.

When saving a report as a PDF file, use this method only if the SaveAllCharts property is set to False.

This property is valid for Explorer reports only.

Default: False

Type
Boolean

Access
Read/Write

Example
This example sets the summary row to show on every page of a report published to Upfront.
Sub Main()
    Dim objPPRep as Object
    Dim objDeploymentOptions as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objDeploymentOptions = objPPRep.DeploymentOptions
    objDeploymentOptions.PromptForCurrency = True
    objDeploymentOptions.PromptForLongShortNames = True
    objDeploymentOptions.PromptForZeroSuppression = True
    objDeploymentOptions.PromptForSwapRowsAndColumns = True
    objDeploymentOptions.PromptForDimension(1) = True
    objDeploymentOptions.PromptForDimension(2) = True
    objDeploymentOptions.PromptForDimension("Years") = True
    objDeploymentOptions.SummaryRowOnAllPages = True
    objPPRep.Save
    Set objDeploymentOptions = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics

- "Print Method" (p. 219)
- "PrintAllCharts Property" (p. 393)
- "SaveAllCharts Property" (p. 406)
- "SaveEntireReport Property" (p. 409)

### Suppress8020 Property (Explorer)

**Description**
Sets or returns the 80/20 suppress mode for report dimensions.

**Syntax**

```
Report.Suppress8020
```

**Applies To**
Report Object

**Discussion**
Use this property to refine the focus of a report by identifying categories that are significant contributors to a business measure and by applying rollup to the unimportant ones. You can set this property so that it groups rows and columns that are not meaningful into a single category called Other. 80/20 suppression means that 20 percent of the sample contributes 80 percent of the information. Therefore your view of report data depends on the category population and distribution.
You can suppress less critical items in rows or columns or in both rows and columns. Whatever dimension choice you make, the 80/20 suppression rule applies to all layers in a report. There are four settings for this property:

- 0 (off)
- 1 (on rows only)
- 2 (on columns only)
- 3 (on rows and columns)

It is possible that all categories are significant and there will not be an Other category.

You cannot drill, rank, insert, or delete the Other category. You cannot apply 80/20 suppression when a report dimension includes multiple measures.

You can apply Exception highlighting and select the Other category.

All Other categories along rows, columns, or layers will share the same characteristics, including formatting, name, and hidden state. You cannot apply separate formatting for each Other category in a nested, filtered, or drilled report.

**Default:** 0

**Type**
Integer

**Access**
Read/Write

**Example**
This example opens a IBM® Cognos® PowerPlay® report and applies the Suppress8020 property to rows and columns.

```vba
Sub Main()
    Dim objPPRep As Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open("C:\Cubes and Reports\Sample1.ppx")
    objPPRep.ExplorerMode = True
    objPPRep.Visible = True
    objPPRep.ShowValuesAs = 2
    objPPRep.ShareDimensionLine = 1
    objPPRep.Suppress8020 = 3
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "SuppressZeros Property" (p. 438)
SuppressZeros Property

**Description**
Sets or returns the suppress mode for the Report object.

**Syntax**

```
Report.SuppressZeros
```

**Applies To**

Report Object

**Discussion**

This property is used to set the suppression mode and also perform suppress or unsuppress operations based on the mode.

Return values for this property are:
- 1 (not suppressed)
- 2 (suppress rows and columns)
- 3 (suppress rows only)
- 4 (suppress columns only)

**Type**

Long

**Access**

Read/Write

**Example**

This example opens an IBM® Cognos® PowerPlay® report and sets the SuppressZeros property to True for rows only.

```vba
Sub Main()
    Dim objPPRep As Object
    Set objPPRep = CreateObject("CognosPowerPlay_Report")
    objPPRep.Open("C:\Cubes and Reports\Sample1.ppx")
    objPPRep.Visible (1)
    objPPRep.ShowValuesAs (2)
    objPPRep.ShareDimensionLine (1)
    objPPRep.SuppressZeros (3)
    objPPRep.Save
    Set objPPRep = Nothing
End Sub
```
Threshold Property

Description
Sets or returns the maximum printing page limit for the Print object.

Syntax

\[ \text{Print.Threshold} \]

Applies To
Print Object

Discussion
Use this property to limit the number of pages to print in an automation script. Printing from the user interface is not affected by this property. The value for the number of copies does not affect the maximum print range limit.

Default: 999

Type
Integer

Access
Read/Write

Example
This example sets the printing threshold to 10 pages for the Print object.

```
Sub Main()
    Dim objPPRep as Object
    Dim objRepPrt as Object
    Set objPPRep = CreateObject("CognosPowerPlay.Report")
    objPPRep.Open "C:\Cubes and Reports\Sample1.ppx"
    Set objRepPrt = objPPRep.Print
    objRepPrt.Threshold = 10
    objRepPrt.PrintAllCharts = False
    objRepPrt.SetListOfRowsToPrint objPPrep.Rows
    objRepPrt.SetListOfLayersToPrint objPPRep.Layers
    objRepPrt.SetChartToPrint objPPRep.Graphs.Item(1)
    objRepPrt.IncludeLegend = False
    objRepPrt.ChartTitleOnAllPages = True
    objRepPrt.SummariesOnAllPages = True
    objRepPrt.AxisOnAllPages = True
```

TitleText Property

Description
Sets or returns the text in the title of a report.

Syntax
Report.TitleText(Format)

Applies To
Report Object

Discussion
Use this property to set or return the complete text in the title of a report. Because you can add as many lines to the title as required, the title may contain information that is not visible when you view or print the report. You can use automation to view information that the report author included in the title but did not want the users to see. You can set or return the title of a report in text or HTML format.

If you set the footer as text, then the title is left justified and uses the default font size, font color, and font type. To specify multiple lines in a title, use the ASCII value of a new line character, chr$(10), between the lines of the title.

If you set the title of a report using HTML, you can specify complex formats. You can specify the font size, font color, font type and alignment of the title text. For example, the following code aligns the title text to the right and specifies the font size and color.

strTitle = "<P ALIGN=""Right"">"+"<FONT SIZE=6 COLOR="#0000FF">"+"MyNewTitle center<BR>On a New Line"

When you assign HTML tags to a string, use two sets of quotation marks to distinguish characters within the HTML tag from end of string quotation marks. For example, to assign <P ALIGN="Right"> to a string, use the following syntax:

objPPRep.TitleText(2) = "<P ALIGN=""Right"">"

If you use an external editor to specify HTML, you may have to modify the HTML to get the format you require for the report title.

A report title can include IBM® Cognos® PowerPlay® variables or variables expanded to the values that they represent. To specify a variable use the following syntax:

[PPVAR]Variable[PPVAR]
For example,

```
objPPRep.TitleText(1) = "[PPVAR]Page #[PPVAR]"
```

You can return the value of the variable or the expanded variable. To return the variable expanded to the value it represents, use the parameter value 11 for text or 12 for HTML.

For example,

```
objPPRep.TitleText(1) = "Report Printed [PPVAR]Date(ddd, dd MMM, yyy)[PPVAR]"
MsgBox objPPRep.TitleText(1)
```

returns

Report Printed [PPVAR]Date(ddd, dd MMM, yyy)[PPVAR]

```
MsgBox objPPRep.TitleText(11)
```

returns

Report Printed Thursday, 13 January, 2000

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format</td>
<td>Optional. Specifies the format of the text in the title of a report. If not specified, the text and variable are returned. Valid set and return values are 1 = Text 2 = HTML Valid return values are 11 = Text with variables expanded 12 = HTML with variables expanded Default: 1 Type: Integer</td>
</tr>
</tbody>
</table>

**Type**

String

**Access**

Read/Write

**Example**

This example specifies three lines of text for the title of the open report, and returns the full title and the date.

```
Sub Main()
    Dim objRep As Object
    Dim strTitleTextLine1 as String
    Dim strTitleTextLine2 as String
    Dim strTitleTextLine3 as String
```
Dim strNewLine as String
strTitleTextLine1 = "Annual Sales Report"
strTitleTextLine2 = "Northwest Region"
strTitleTextLine3 = "[PPVAR]Date(dddd, MMMM dd, yyyy)[PPVAR]"
strNewLine = chr$(10)
objRep.TitleText(1) = strTitleTextLine1 + chr$(10)
+ strTitleTextLine2 + chr$(10) + strTitleTextLine3
MsgBox "The report title text is: " _
&objRep.TitleText(11)
objRep.Save
Set objRep = Nothing
End Sub

Related Topics
● "FooterText Property" (p. 335)
● "HeaderText Property" (p. 340)
● "Report Object" (p. 51)
● "Reports" (p. 81)

TopLevelCategory Property (Explorer)

Description
Returns the name of the dimension for the collection.

Syntax
<collection>.TopLevelCategory

Applies To
Columns
Layers
Rows

Discussion
Use this property to determine the name of the dimension that the selected categories belong to in
a report. By returning the dimension name, you can identify data on a specific portion of a business,
such as products, dates, or markets.

This property applies to Explorer reports only.

Type
String
**Access**
Read

**Example**
This example issues a message box telling the user which dimensions the rows and columns of the open Explorer report are from.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objRows As Object
    Dim objCols As Object
    Set objPPRep = GetObject ("CognosPowerPlay.Report")
    Set objRows = objPPRep.Rows
    Set objCols = objPPRep.Columns
    MsgBox "Rows are from dimension: " & objRows.TopLevelCategory
    MsgBox "Columns are from dimension: " & objCols.TopLevelCategory
    Set objRows = Nothing
    Set objCols = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "Columns" (p. 68)
- "Layers" (p. 75)
- "Rows" (p. 83)

**TopLevelParentCategory Property**

**Description**
Returns the name of the dimension for the object.

**Syntax**

`object.TopLevelParentCategory`

**Applies To**
- Column Object
- Layer Object
- Row Object

**Discussion**
This property is used to get the name of the dimension that a category belongs to.
This property will return an empty string if the category is the top level or if it is a calculation.

**Type**
String

**Access**
Read

**Example**
This example issues a message box telling the user which dimensions the second row and second column of the open report are from.

```vba
Sub Main()
    Dim objPPRep As Object
    Dim objRow As Object
    Dim objCol As Object
    Set objPPRep = GetObject ("CognosPowerPlay.Report")
    Set objRow = objPPRep.Rows(2)
    Set objCol = objPPRep.Columns(2)
    MsgBox objRow.Name & " is from dimension: " & objRow.TopLevelParentCategory
    MsgBox objCol.Name & " is from dimension: " & objCol.TopLevelParentCategory
    Set objRow = Nothing
    Set objCol = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "Column Object" (p. 28)
- "Layer Object" (p. 41)
- "Row Object" (p. 55)

### Type Property

**Description**
Returns the Graph object type or Query object type.

**Syntax**

```vba
object.Type
```

**Applies To**
AdvancedQuery Object
FindQuery Object

Graph Object

ParentageQuery Object

Discussion

For a Graph object, use the following list to identify the display type:

- 0 (Crosstab)
- 1 (Pie)
- 2 (3-D)
- 3 (Bar)
- 4 (Cluster)
- 5 (Stack)
- 6 (Line)
- 7 (Multi-Line)
- 8 (Correlated)
- 9 (Scatter)

For a Set object, use the following list to identify the Query type:

- 1 = FindQuery
- 2 = ParentageQuery
- 3 = AdvancedQuery
- 4 = ValueRestriction

A Graph object is the same as a display in the user interface.

Return Type

Long

Example

This example changes the display type for the first Graph object to a three-dimensional cluster bar, and displays the settings for the Graph object for an open report.

Sub Main()
    Dim objPPRep as Object
    Dim objPPGph as Object
    Set objPPRep = GetObject( , "CognosPowerPlay.Report")
    Set objPPGph = objPPRep.Graphs.Item(1)
    objPPGph.SetType 4, 1, 1
    MsgBox "The Graph object type is " & objPPGph.Type & "."
If objPPGph.Depth = -1 Then
    MsgBox "The graph is not 3D."
Else
    MsgBox "The graph is 3D."
End If
Set objPPGph = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "Graphs Method" (p. 177)

**UpperBoundary Property**

**Description**
Sets or returns the value defined for the upper boundary of a Range object.

**Syntax**
Range.UpperBoundary

**Applies To**
Range Object

**Discussion**
Use this method to determine the upper boundary to apply formatting when the information in the report meets the conditions set by the exception range. The upper boundary sets the maximum value for the range. For example, you may want to highlight sales when they don't exceed $50,000. Use the LowerBoundary property to determine the lower boundary of the range.

**Type**
Variant

**Access**
Read/Write

**Example**
This example displays the upper boundary for the range in an Exception object.
Sub Main
    Dim objPPRep As Object
    Dim objPPRange As Object
    Set objPPRep = GetObject("C:\Cubes and Reports\Exception.ppx")
    objPPRep.Visible = 1
    Set objPPRange = objPPRep.Exceptions.item(1).Ranges.Item(1)
    MsgBox "Upper boundary is " & objPPRange.UpperBoundary
Set objPPRange = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
● "Range Object" (p. 50)

UseFontSubstitution Property

Description
Sets or returns whether to save full font information in a report published to Upfront.

Syntax
DeploymentOptions.UseFontSubstitution

Discussion
Use this property to substitute fonts on your system for those that are not available. If True, when you publish a report to Upfront, the DeploymentOptions object contains substituted system fonts that best match the size and appearance of the missing font. If False, font substitution is not used and the report appears exactly as the original, even if it is opened on a computer that does not have these fonts installed.

Default: False

Type
Boolean

Access
Read/Write

Example
This example sets the deployment options, including the use of system fonts, for a report published to Upfront.

Sub Main()
    Dim objPPRep as Object
    Dim objDeploymentOptions as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objDeploymentOptions = objPPRep.DeploymentOptions
    objDeploymentOptions.PromptForCurrency = True
    objDeploymentOptions.PromptForLongShortNames = True
    objDeploymentOptions.PromptForZeroSuppression = True
    objDeploymentOptions.PromptForSwapRowsAndColumns = True
    objDeploymentOptions.SelectAllDimensions
    objDeploymentOptions.UseFontSubstitution = True
Chapter 5: Properties

```vbnet
objPPRep.Save
Set objDeploymentOptions = Nothing
Set objPPRep = Nothing
End Sub

Related Topics

- "SetChartToPrint Method" (p. 245)
- "SetListOfLayersToPrint Method" (p. 252)
- "SetListOfRowsToPrint Method" (p. 254)

UserControl Property

Description
Sets or returns whether the Application object is under user control.

Syntax

```vbnet
Application.UserControl
```

Applies To

Application Object

Discussion
If True, this property prevents the Application object from closing when the last report is closed. If False, then the Application object is hidden when the last report is closed.

Default: True

Type

Boolean

Access

Read/Write

Example

This example gives control of an open report to the user.

```vbnet
Sub Main()
    Dim objPPApp As Object
    Dim objTest As Object
    Set objPPApp = CreateObject("CognosPowerPlay.Application")
    objPPApp.Visible = True
    Set objTest = objPPApp.Reports.Add("C:\Cubes and Reports\Great Outdoors.mdc")
    Set objTest = objPPApp.Reports.Open 448
```

448 IBM Cognos PowerPlay Client
Msgbox "The number of reports in the collection is"
   & objPPApp.Reports.Count
Msgbox "The name of the first report in the collection is"
   & objPPApp.Reports(1).Name
objPPApp.Reports(1).Visible = True
MsgBox objPPApp.UserControl
Set objTest = Nothing
Set objTest = Nothing
Set objPPApp = Nothing
End Sub

Related Topics
• "Application Object" (p. 23)

UserColumnSummaryLabel Property

Description
Sets or returns the user-defined label for the innermost summary column in a nested crosstab.

Syntax
object.UserColumnSummaryLabel

Applies To
Graph Object
Graphs

Discussion
Use this property to define a summary column label. Set the EnableUserColumnSummaryLabel property to True to use this property instead of using the default category label for the column. The column label is only visible in a crosstab report when the ShowSummaryColumn property is set to True.

Type
String

Access
Read/Write (Graph)
Write (Graphs)
Example
This example resets the graph object to use user-defined summary labels for rows and columns.

Sub Main
    Dim objPPRep as Object
    Dim objPPGraph as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objPPGraph = objPPRep.Graphs.Item(1)
    objPPGraph.EnableUserColumnSummaryLabel = True
    objPPGraph.UserColumnSummaryLabel = "Summary Total"
    objPPGraph.EnableUserRowSummaryLabel = True
    objPPGraph.UserRowSummaryLabel = "Summary Total"
    Set objPPGraph = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "EnableUserColumnSummaryLabel Property" (p. 329)
- "EnableUserRowSummaryLabel Property" (p. 330)

UserRowSummaryLabel Property

Description
Sets or returns the user-defined label for the innermost summary row in a nested crosstab.

Syntax

object.UserRowSummaryLabel

Applies To
Graph Object
Graphs

Discussion
Use this property to define a summary row label. Set the EnableUserColumnSummaryLabel property to True to use this property instead of using the default category label for the row.

The row label is only visible in a crosstab report when the ShowSummaryRow property is set to True.

Type
String

Access
Read/Write (Graph)
Write (Graphs)

Example
This example resets the graph object to use user-defined summary labels for rows and columns.

Sub Main
    Dim objPPRep as Object
    Dim objPPGraph as Object
    Set objPPRep = GetObject(,”CognosPowerPlay.Report”)  
    Set objPPGraph = objPPRep.Graphs.Item(1)
    objPPGraph.EnableUserColumnSummaryLabel = True
    objPPGraph.UserColumnSummaryLabel = ”Summary Total”
    objPPGraph.EnableUserRowSummaryLabel = True
    objPPGraph.UserRowSummaryLabel = ”Summary Total”
    Set objPPGraph = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- ”EnableUserColumnSummaryLabel Property” (p. 329)
- ”EnableUserRowSummaryLabel Property” (p. 330)

UseScrolling Property

Description
Sets or returns whether scrolling is enabled.

Syntax
object.UseScrolling

Applies To
Graph Object
Graphs

Discussion
Use this property to turn the scrolling feature on or off. If the value is True (-1), scrolling is enabled when the total number of bars exceed the maximum number of visible bars. If the value is False (0), scrolling is disabled.

If this property is False, IBM® Cognos® PowerPlay® will attempt to graph all data up to a maximum of 5000 bars. If this limit is exceeded, a warning message appears.

Scrolling is not available for crosstab, 3-D bar, scatter, and pie displays.

Default: True
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Type
Boolean

Access
Read/Write (Graph)
Write (Graphs)

Example
This example changes the scroll bar settings of an active report. The scrolling feature is set to True, maximum visible bars is set to six, maximum printed bars is set to ten, and the summary category is kept hidden until the end of the report.

Sub Main()
    Dim objPPRep As Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    objPPRep.Graphs.Item(1).UseScrolling = True
    objPPRep.Graphs.Item(1).MaxVisibleBars = 6
    objPPRep.Graphs.Item(1).MaxPrintedBars = 10
    objPPRep.Graphs.Item(1).KeepSummaryVisible = False
    Set objPPRep = Nothing
End Sub

Related Topics
● "Graph Object" (p. 38)
● "Graphs" (p. 72)

ValuesAutoFit Property

Description
Sets or returns whether value labels fit within graph bars and pie segments.

Syntax
object.ValuesAutoFit

Applies To
Graph Object
Graphs

Discussion
When creating graphs, you can optionally display the associated numerical values inside the bars or pie sections. Set the ValuesShown property to True to display such values. Set this property to True to automatically adjust the value labels to fit the available bar or pie width. ValuesAutoFit uses the specified font but adjusts the size as required to make values fit. (The largest size it uses is
the specified font size.) If set to False, the default font size may cause the value to overwrite bars and other labels.

**Default:** True

**Type**
Boolean

**Access**
Read/Write (Graph)
Write (Graphs)

**Example**
This example sets the first graph object of the active report to a horizontal simple bar chart and sets the properties for the values shown on the bars.

```vbs
Sub Main
    Dim objPPRep as Object
    Dim objPPGraph as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objPPGraph = objPPRep.Graphs.Item(1)
    With objPPGraph
        .SetType 3,0,0
        .ValuesShown = True
        .ValuesPosition = 0
        .ValuesAutoFit = True
        .ValuesFontColor = 10
        .ValuesFontSize = 10
        .ValuesFontName = "Times New Roman"
    End With
    Set objPPGraph = Nothing
    Set objPPRep = Nothing
End Sub
```

**Related Topics**
- "ValuesFontColor Property" (p. 454)
- "ValuesFontName Property" (p. 455)
- "ValuesFontSize Property" (p. 457)
- "ValuesPosition Property" (p. 459)
- "ValuesShown Property" (p. 461)
ValuesFontColor Property

Description
Sets or returns the font color used for graph value labels.

Syntax
object.ValuesFontColor

Applies To
Graph Object
Graphs

Discussion
Use this property change or display the numerical values for the color associated with the bar, pie section, or line graph. Set the ValuesShown property to True to display these values.

The font color types are
0 = Black
1 = Maroon
2 = Green
3 = Olive
4 = Navy
5 = Purple
6 = Teal
7 = Gray
8 = Silver
9 = Red
10 = Lime
11 = Yellow
12 = Blue
13 = Fuschia
14 = Aqua
15 = White
Default: 0 (black)

Type
Long
Access
Read/Write (Graph)
Write (Graphs)

Example
This example sets the first graph object of the active report to a horizontal simple bar chart and sets the properties for the values shown on the bars.

Sub Main
    Dim objPPRep as Object
    Dim objPPGraph as Object
    Set objPPRep = GetObject("CognosPowerPlay.Report")
    Set objPPGraph = objPPRep.Graphs.Item(1)
    With objPPGraph
        .SetType 3,0,0
        .ValuesShown = True
        .ValuesPosition = 0
        .ValuesAutoFit = False
        .ValuesFontColor = 10
        .ValuesFontSize = 10
        .ValuesFontName = "Times New Roman"
    End With
    Set objPPGraph = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "ValuesAutoFit Property" (p. 452)
- "ValuesFontName Property" (p. 455)
- "ValuesFontSize Property" (p. 457)
- "ValuesPosition Property" (p. 459)
- "ValuesShown Property" (p. 461)

ValuesFontName Property

Description
Sets or returns the font name used for graph value labels.

Syntax

object.ValuesFontName
Applies To
Graph Object
Graphs

Discussion
When you create graphs, you can optionally display the associated numerical values that go with the bars, pie sections, or lines. Set the ValuesShown property to True to display such values. Use the ValuesFontName property to change the current font type. Use ValuesFontSize to change the size.

Default: Arial

Type
String

Access
Read/Write (Graph)
Write (Graphs)

Example
This example sets the first graph object of the active report to a horizontal simple bar chart and sets the properties for the values shown on the bars.

Sub Main
    Dim objPPRep as Object
    Dim objPPGraph as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objPPGraph = objPPRep.Graphs.Item(1)
    With objPPGraph
        .SetType 3,0,0
        .ValuesShown = True
        .ValuesPosition = 0
        .ValuesAutoFit = False
        .ValuesFontColor = 10
        .ValuesFontSize = 10
        .ValuesFontName = "Times New Roman"
    End With
    Set objPPGRaph = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "ValuesAutoFit Property" (p. 452)
- "ValuesFontColor Property" (p. 454)
ValuesFontSize Property

Description
Sets or returns the font size used for graph value labels.

Syntax
object.ValuesFontSize

Applies To
Graph Object
Graphs

Discussion
When you create graphs, you can optionally display the associated numerical values that go with bars, pie sections, or lines. Set the ValuesShown property to True to display such values. Use the ValuesFontSize property to change the size of the current font. Use ValuesFontName to change the font.

Default: 10 point

Type
Long

Access
Read/Write (Graph)
Write (Graphs)

Example
This example sets the first graph object of the active report to a horizontal simple bar chart and sets the properties for the values shown on the bars.

Sub Main
    Dim objPPRep as Object
    Dim objPPGraph as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objPPGraph = objPPRep.Graphs.Item(1)
    With objPPGraph
        .SetType 3,0,0
        .ValuesShown = True
        .ValuesPosition = 0
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```
.ValuesAutoFit = False
.ValuesFontColor = 10
.ValuesFontSize = 10
.ValuesFontName = "Times New Roman"
End With
Set objPFGraph = Nothing
Set objPPRep = Nothing
End Sub

Related Topics
- "ValuesAutoFit Property" (p. 452)
- "ValuesFontColor Property" (p. 454)
- "ValuesFontName Property" (p. 455)
- "ValuesPosition Property" (p. 459)
- "ValuesShown Property" (p. 461)

ValuesFontStyle Property

Description
Sets or returns the font style used for graph value labels.

Syntax
```
object.ValuesFontStyle
```

Applies To
- Graph Object
- Graphs

Discussion
Use this property change or display the font style associated with the Simple Bar, Clustered Bar, Single Line, and Correlation graphs.

The available font styles are:
0 - Regular 1 - Italic 2 - Bold 3 - BoldItalic

Default: 0

Type
- Long

Access
- Read/Write (Graph)
Write (Graphs)

Example
This example sets the first graph object of the active report to a horizontal simple bar chart and sets the properties for the values shown on the bars.

Sub Main
    Dim objPPRep as Object
    Dim objPPGraph as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objPPGraph = objPPRep.Graphs.Item(1)
    With objPPGraph
        .SetType 3,0,0
        .ValuesShown = True
        .ValuesPosition = 0
        .ValuesAutoFit = False
        .ValuesFontColor = 10
        .ValuesFontName = "Times New Roman"
        .ValuesFontStyle = 3
    End With
    Set objPPGraph = Nothing
    Set objPPRep = Nothing
End Sub

Related Topics
- "ValuesAutoFit Property" (p. 452)
- "ValuesFontColor Property" (p. 454)
- "ValuesFontName Property" (p. 455)
- "ValuesPosition Property" (p. 459)
- "ValuesShown Property" (p. 461)

ValuesPosition Property

Description
Sets or returns the position of value labels on some graph types.

Syntax
object.ValuesPosition

Applies To
Graph Object
Graphs
Discussion
When you create graphs, you can optionally display the associated numerical values with some bar graphs. The positioning of values is only valid for simple bar or cluster bar graphs.
Set the ValuesShown property to True to display these values.

Default: 0 (False)

Type
Short

Access
Read/Write (Graph)
Write (Graphs)

Example
This example sets the first graph object of the active report to a horizontal simple bar chart and sets the properties for the values shown on the bars.

```vba
Sub Main
    Dim objPPRep as Object
    Dim objPPGraph as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objPPGraph = objPPRep.Graphs.Item(1)
    With objPPGraph
        .SetType 3,0,0
        .ValuesShown = True
        .ValuesPosition = 0
        .ValuesAutoFit = False
        .ValuesFontColor = 10
        .ValuesFontSize = 10
        .ValuesFontName = "Times New Roman"
    End With
End Sub
```

Related Topics
- "ValuesAutoFit Property" (p. 452)
- "ValuesFontColor Property" (p. 454)
- "ValuesFontName Property" (p. 455)
- "ValuesFontSize Property" (p. 457)
- "ValuesShown Property" (p. 461)
ValuesShown Property

Description
Sets or returns whether value labels appear next to pie chart slices.

Syntax
object.ValuesShown

Applies To
Graph Object
Graphs

Discussion
This property applies to single pie charts only. An error occurs if you set this property to True for nested charts.

Set ValuesShown to True to label slices by using a category value instead of a category name. The legend includes category names only.

Setting the NamesShown property to True automatically sets the ValuesShown property to False. If both properties are set to False, then no labels appear beside pie chart slices.

Default: True

Type
Boolean

Access
Read/Write (Graph)
Write (Graphs)

Example
This example sets the first graph object of the active report to a horizontal simple bar chart and sets the properties for the values shown on the bars.

Sub Main
    Dim objPPRep as Object
    Dim objPPGraph as Object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    Set objPPGraph = objPPRep.Graphs.Item(1)
    With objPPGraph
        .SetType 3,0,0
        .ValuesShown = True
        .ValuesPosition = 0
        .ValuesAutoFit = False
        .ValuesFontColor = 10
        .ValuesFontSize = 10
Version Property

Description
Returns the version number of IBM® Cognos® PowerPlay®.

Syntax
Application.Version

Applies To
Application Object

Discussion
Use this property to determine the version of PowerPlay you are using.

Type
String

Access
Read

Example
This example creates an instance of the PowerPlay Application object and shows the name, location, and version.

Sub Main()
    Dim objPPlayApp as Object
    Set objPPlayApp = CreateObject("CognosPowerPlay.Application")
    objPPlayApp.Visible = 1
    MsgBox "The name of the Application is " & objPPlayApp.Name
    MsgBox "The location of the Application is " & objPPlayApp.Path
    MsgBox "The Application version is " & objPPlayApp.Version
    Set objPPlayApp = Nothing
End Sub
Visible Property

Description
Sets or returns whether the object is visible to the user.

Syntax
object.Visible

Applies To
Application Object
Dimension Object
DimensionLine Object
Report Object

Discussion
By default, IBM® Cognos® PowerPlay® runs invisibly when invoked from within a macro. To see what a macro is doing, set the Visible property to True. By displaying PowerPlay, you can debug the macros more effectively. In addition, if errors occur when PowerPlay is running invisibly or when the macro has not specified a Quit method, PowerPlay remains in memory. If you continue to leave PowerPlay in memory every time you run the macro or it fails, you will eventually run out of memory.

This property is not valid while under user control. For example, when the Applications objects is visible, the UserControl property is set to True.

Default: False

Type
Boolean

Access
Read/Write

Example
This example creates a PowerPlay Application object and sets the application to visible.

Sub Main()
    Dim objPPlayApp as Object
    Set objPPlayApp = CreateObject("CognosPowerPlay.Application")
    objPPlayApp.Visible = 1
    MsgBox "The title of the application is " & objPPlayApp.Caption
    MsgBox "The name of the Application is " & objPPlayApp.Name

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MsgBox "The location of the Application is " & objPPlayApp.Path
MsgBox "The Application version is " & objPPlayApp.Version
Set objPPlayApp = Nothing
End Sub

Related Topics

- "Application Object" (p. 23)
- "Dimension Object" (p. 31)
- "DimensionLine Object" (p. 34)
- "Report Object" (p. 51)
IBM® Cognos® PowerPlay® uses administrative macros to perform tasks for specific administrative events. An administrative macro contains a customized set of instructions to perform one or more actions:

- when the PowerPlay application opens and closes
- when a report or cube opens and closes
- after PowerPlay opens a report or cube, for example, to change the appearance, perform calculations, or drill down to the lowest level categories
- when exceptions are triggered in a report

**Create Administrative Macros**

You create an administrative macro just as you do a report-level macro, however you must assign the specific name of the macro you want IBM® Cognos® PowerPlay® to run automatically. For example, if you want PowerPlay to recognize the AppOpen macro, the file AppOpen.mac must exist in the Macros directory.

The table below describes the PowerPlay administrative macros, the names to assign the files for PowerPlay to automatically run them, and identifies the order in which PowerPlay executes them.

<table>
<thead>
<tr>
<th>Administrative macro</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AppOpen Macro</strong></td>
<td>Performs startup operations when PowerPlay starts and before it opens a cube or report.</td>
</tr>
<tr>
<td><strong>DocOpen Macro</strong></td>
<td>Runs administrative tasks when PowerPlay opens a report or cube. Any instructions in the macro are executed before the report or cube opens.</td>
</tr>
<tr>
<td><strong>After Doc Open Macro</strong></td>
<td>Used for local document processing, such as performing calculations. This macro must have the same file name (with the .mac extension) and be stored in the same folder location as the report.</td>
</tr>
<tr>
<td><strong>Highlight Exceptions Macro</strong></td>
<td>Highlights exceptions. After you specify the use of this function in the Custom Exceptions dialog box, PowerPlay runs this function once for every cell in a report.</td>
</tr>
</tbody>
</table>
### Administrative macros

<table>
<thead>
<tr>
<th>Administrative macro</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DocClose Macro</td>
<td>Performs cleanup operations required after running the DocOpen macro. This macro starts when you close the report.</td>
</tr>
<tr>
<td>AppClose Macro</td>
<td>Performs cleanup operations required after running the AppOpen macro. This macro starts when you close PowerPlay.</td>
</tr>
</tbody>
</table>

### Examples

The following examples demonstrate some specific uses for administrative macros:

- To ensure that users have the latest cube, use the DocOpen macro to verify the version when PowerPlay is opened.
- To delete any empty or unused files, use the DocClose macro when you close PowerPlay.
- To automatically drill down to the lowest level of a category, use the After Doc Open macro.
- To open PowerPlay and set preferences, use the AppOpen macro.
- To reset any preferences after a user quits the application, use the AppClose macro.
- To highlight any exceptions in a report, use the Exception macro.
- To preset security passwords for a cube or report, use the AppOpen macro.

### After Doc Open Macro

**Description**

A macro used for local document processing, such as changing the display or performing calculations.

**Discussion**

Use this administrative macro to automate many of the routine tasks to perform after IBM® Cognos® PowerPlay® opens a report, such as drilling down to the lowest level categories or displaying a view other than the crosstab. If this macro exists in the Macros directory, PowerPlay runs it immediately after the DocOpen macro completes, and the report has opened. For example, to open a popular sales report, Sales.rpt, and add your own exception highlighting and display selections, you include the scripting for these preferences in the After Doc Open macro file, Sales.Mac.

**Requirements**

- An After Doc Open macro must have the same file name (with the .mac extension) and be stored in the same folder location as the report. Only one After Doc Open macro file can be associated with a single report.
- The only function that must be included in the macro is the Main subroutine.
An administrator should maintain this macro centrally in the Macros directory specified in the PowerPlay Preferences dialog box.

**Example**

This example automatically adds the lowest-level categories for the first row and then deletes the first row using the report (Reporter mode) that is open.

```vba
Sub Main()
    On Error Resume Next
    Dim objPPRep as Object
    Dim objRow as Object

    'Get the report object
    Set objPPRep = GetObject(,"CognosPowerPlay.Report")
    if Err <> 0 Then
        MsgBox "Error getting PowerPlay report. " + Error$
    Else
        'Make sure that there is at least one row in the report
        If (objPPRep.Rows.Count > 0) then
            'Get the first row category object
            Set objRow = objPPRep.Rows(1)
            'Add lowest-level categories for this row
            objRow.AddLowestLevelCategories
            'Remove first row category
            objRow.Remove
        End If
    End If
    Set objRow = Nothing
    Set objPPRep = Nothing
End sub
```

**Related Topics**

- "AppClose Macro" (p. 467)
- "AppOpen Macro" (p. 468)
- "DocClose Macro" (p. 470)
- "DocOpen Macro" (p. 471)
- "Highlight Exceptions Macro" (p. 473)

**AppClose Macro**

**Description**

A macro that performs cleanup operations required after running the AppOpen macro and before exiting IBM® Cognos® PowerPlay®.
Discussion
Use this administrative macro to

- close any documents the macro opened but the user no longer needs
- save, or prompt the user to save, a file that should be saved
- restore the settings of any options that the macro may have changed
- delete any temporary files

If this macro exists in the Macros directory, PowerPlay runs it when exiting PowerPlay. For example, to reset any preferences after a user exits the application, include scripting in AppClose.mac.

Requirements

- The only function that must be included in the macro is the Main subroutine.
- The Macros and Custom Menu File box in the Preferences dialog box must name the folder that contains the AppClose macro.
- An administrator should maintain this macro centrally in the Macros directory specified in the PowerPlay Preferences dialog box.

Example
This example uses a message box to display the words "AppClose Macro" to indicate the macro ended successfully.

Sub Main
    msgbox "AppClose Macro"
End sub

Related Topics

- "After Doc Open Macro" (p. 466)
- "AppOpen Macro" (p. 468)
- "DocClose Macro" (p. 470)
- "DocOpen Macro" (p. 471)
- "Administrative Macros" (p. 465)

AppOpen Macro

Description
A macro that performs startup operations when IBM® Cognos® PowerPlay® launches and before it opens a report or cube.

Syntax

Function AppOpenMacro(StartMode As Long) As LongEnd Function
Discussion
Use this macro to automate redundant or repetitive operations typically completed after PowerPlay starts, such as

- setting user preferences
- automatically opening a particular report
- presetting security passwords for a cube or report for specific user access to avoid entering a password on the user’s personal computer

If this macro exists in the Macros directory, it runs when PowerPlay launches and returns True or False to indicate the status of the macro execution. If the macro returns False, the application is not opened. For example, to set any preferences immediately after launching PowerPlay and before opening a cube or report, include scripting in the AppOpen.mac administrative macro file.

Requirements

- The macro must contain a function called AppOpenMacro, which returns True or False (-1 or 0 respectively). If the macro does not exist, the function name in the macro is incorrect, or the number of parameters are mismatched, the macro does not run and the application opens normally.
- An administrator should maintain this macro centrally in the Macros directory specified in the PowerPlay Preferences dialog box.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>StartMode</td>
<td>Required. Specifies how the application starts.</td>
</tr>
<tr>
<td></td>
<td>1 = Normal startup 2 = OLE</td>
</tr>
<tr>
<td></td>
<td>Type: Long</td>
</tr>
</tbody>
</table>

Return Type
Long

Example
This example automatically opens the report "C:\Cognos\Sample.ppx" when PowerPlay starts.

```
Function AppOpenMacro(lStartMode as Long) as Long
    On Error Resume Next
    Dim objPPRep as Object
    Dim ObjPPApp as object
    'Get the application object
    Set objPPApp = GetObject(, "CognosPowerPlay.Application")
    'Open the specified report
    Set objPPRep = objPPApp.reports.open("C:\cognos\sample.ppx")
    if Err <> 0 then
        MsgBox "Unable to open PowerPlay report."
    End If
End Function
```
AppOpenMacro = False
Else
    'Make the report visible
    objPPRep.visible = True
    'Set return code to indicate successful completion
    AppOpenMacro = True
End if
Set objPPRep = Nothing
Set objPPApp = Nothing
End Function

Related Topics
- "After Doc Open Macro" (p. 466)
- "AppClose Macro" (p. 467)
- "DocClose Macro" (p. 470)
- "DocOpen Macro" (p. 471)
- "Highlight Exceptions Macro" (p. 473)
- "Administrative Macros" (p. 465)

DocClose Macro

Description
A macro that performs cleanup operations required after running the DocOpen macro.

Discussion
Use this macro when you want IBM® Cognos® PowerPlay® to perform closing activities, such as
- deleting any unused or empty files
- notifying the user when the macro has completed
- saving, or prompting the user to save, a file that should be saved

If this macro exists in the Macros directory, it runs only when you exit the report. For example, to
delete any temporary files when PowerPlay closes a report, include scripting in the DocClose.mac
administrative macro file.

Requirements
The only function that must be included in the macro is the Main subroutine.
A central administrator should maintain this macro in the Macros directory specified in the Power-
Play Preferences dialog box.
Example
This example displays a message box with the words "DocClose Macro" to indicate the macro has run.

Sub Main
    messagebox "DocClose Macro"
End sub

Related Topics
- "After Doc Open Macro" (p. 466)
- "AppClose Macro" (p. 467)
- "AppOpen Macro" (p. 468)
- "DocOpen Macro" (p. 471)
- "Highlight Exceptions Macro" (p. 473)
- "Administrative Macros" (p. 465)

DocOpen Macro

Description
A macro that runs administrative tasks when IBM® Cognos® PowerPlay® opens a report or cube.

Syntax
Function DocOpenMacro(StartMode As Long, ReportName As String, CubeName As String, CubePassword As String) As Long
End Function

Discussion
Use this macro to add administrative functions, such as document security or statistical logging. If this macro exists in the Macros directory. It runs when the report or cube opens. If the macro returns False, the document is not opened. For example, to record the types of reports that your organization creates in a database, include scripting in the DocOpen.mac file.

Requirements
- The macro, DocOpen.mac, must contain a function called DocOpenMacro, which returns a True or False (-1 or 0 respectively) value. If the macro does not exist, the function name in the macro is incorrect, or the number of parameters are mismatched, the macro does not run and the report or cube opens normally.

An administrator should maintain this macro centrally in the Macros directory specified in the PowerPlay Preferences dialog box.
<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>StartMode</td>
<td>Required. Specifies how to open the report. 1 = Normal startup 2 = OLE</td>
</tr>
<tr>
<td></td>
<td>Type: Long</td>
</tr>
<tr>
<td>ReportName</td>
<td>Required. Specifies the report file name being opened.</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
</tr>
<tr>
<td>CubeName</td>
<td>Required. Specifies the .mdc file name that the report uses.</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
</tr>
<tr>
<td>CubePassword</td>
<td>Optional. Specifies logon information for protected cubes.</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
</tr>
</tbody>
</table>

**Return Type**

Long

**Example**

This example logs all reports and cubes that were opened to a text file.

```vba
Function DocOpenMacro( StartMode As Long, ReportName As String, CubeName As String, Unused1 As String, CubePassword As String, Unused2 As String, Unused3 As String, Unused4 As String) As Long

    Dim strLogFile As String
    strLogFile = "c:\log.txt"
    Open strLogFile For Append As #1
    Print #1, "Report: " & ReportName & " Cube: " & CubeName
    Close #1
    DocOpenMacro = 1

End Function
```

**Related Topics**

- "After Doc Open Macro" (p. 466)
- "AppClose Macro" (p. 467)
- "AppOpen Macro" (p. 468)
- "Highlight Exceptions Macro" (p. 473)
- "Administrative Macros" (p. 465)
Highlight Exceptions Macro

Description
A macro that highlights exceptions in a report.

Syntax

Function ExceptionMacro(DimensionLineSetting as String, RowLabel as String, ColumnLabel as String, LayerLabel as String, ExceptionName as String, ValueOfCell as Double) As Long ComparisonCode

Discussion
Use this macro to add extra administrative functions, such as document security or statistical logging. After you specify the use of this macro in the Custom Exceptions dialog box, IBM® Cognos® PowerPlay® runs this macro function once for every cell in a report. For example, to highlight values in cells (with a particular exception style) that match a specified criteria, include the scripting in the ExceptionMacroName.mac file.

Requirements
- The macro must include a function called ExceptionMacro.
- The macro must be located in the Macro directory specified in the Preferences dialog box.
- You can use this macro for one or more valid report file names.
- PowerPlay runs this function once for every cell in the report, so do not include any code for the ComparisonCode parameter that shows message boxes because each message box will appear at least once for each cell. For example, an exception macro uses a message box to indicate that a cell is an exception. If the report has 2,400 cells whereby 1,834 cells meet the exception criteria, 1,834 messages will appear as each cell is tested.
- Each time there is a change to a category, such as drilling down, adding a row, or performing calculations, PowerPlay runs the function again for every cell in the report.
- An administrator should maintain this macro centrally in the Macros directory specified in the PowerPlay Preferences dialog box.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DimensionLineSetting</td>
<td>Required. Specifies the Dimension line settings that PowerPlay passes to the exception macro. Type: String</td>
</tr>
<tr>
<td>RowLabel</td>
<td>Required. Specifies the Row label that PowerPlay passes to the exception macro. Type: String</td>
</tr>
</tbody>
</table>
### Parameters

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>ColumnLabel</td>
<td>Required. Specifies the Column label that PowerPlay passes to the exception macro.</td>
<td>String</td>
</tr>
<tr>
<td>LayerLabel</td>
<td>Required. Specifies the Layer label that PowerPlay passes to the exception macro.</td>
<td>String</td>
</tr>
<tr>
<td>ExceptionName</td>
<td>Required. Specifies the name of the exception that PowerPlay passes to the exception macro.</td>
<td>String</td>
</tr>
<tr>
<td>ValueOfCell</td>
<td>Required. Specifies the value of the cell that PowerPlay passes to the macro.</td>
<td>Double</td>
</tr>
<tr>
<td>ComparisonCode</td>
<td>Required. Identifies whether the style associated with the exception is applied to a cell. The ExceptionFunction macro determines the value returned. 0 = do not apply the style 1 = apply the style</td>
<td>Integer</td>
</tr>
</tbody>
</table>

### Return Type

Long

### Example

This example applies the exception style to each cell where the value in the cell is less than zero. When the macro returns a value of 1, it applies the style associated with the specified exception to the cell. When the macro returns 0, it does not apply the exception style to the cell.

```vba
Function ExceptionMacro (PPDimLine as String, PPRow as String, PPCol as String, PPLayer as String, PPExName as String, PPCellV as Double) As Long
    if PPCellV < 0 then
        ExceptionMacro = 1
    else
        ExceptionMacro = 0
    end if
End Function
```

### Related Topics

- "After Doc Open Macro" (p. 466)
Chapter 6: Administrative Macros

- "AppClose Macro" (p. 467)
- "AppOpen Macro" (p. 468)
- "DocClose Macro" (p. 470)
- "DocOpen Macro" (p. 471)
- "Administrative Macros" (p. 465)
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