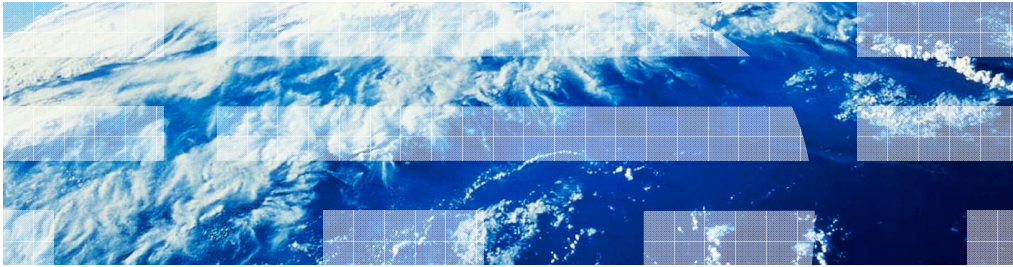


IBM Tivoli Netcool Performance Manager 1.3 Wireline Component

Creating a data source for Cognos reporting



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In this training module, you learn how to create an XML data source for Cognos integration with IBM Tivoli Netcool Performance Manager 1.3 Wireline Component.

Steps to create a Cognos report

You must perform these tasks to build a Cognos report for Tivoli Network Performance Manager 1.3 Wireline Component

1. Create an XML data source using Cognos administration tools
2. Create a data model using Framework Manager, and publish a package
3. Create a report based on the data model package

A data source is a connection between the Cognos server and an external store of report data. In the integration with Tivoli Netcool Performance Manager 1.3 Wireline Component, the DataView web server acts as a gateway between Cognos and the database.

To create a data source, you use the web-based Cognos administration tool. Then, you can use the data sources to create data models in Framework Manager. The models are published to the Cognos content store, and stored as a package. You use Report Studio to create a report page, based on the metadata and the metric data that is in the data model package.

In this module, you learn how to complete the first step, creating an XML data source.

Create a data source URL

```
http://student78:16315/ibm/tnpm/dal/cognos
#'?camid='+CAMPassport()##'
&call=pm.metric.getResourceTimeSeries("??group??",[??resources??],
+urlencode(["AP~Generic~Interface~Delivered Packets",
"AP~Generic~Universal~Throughput~Outbound Volume (PDUs)",
"AP~Generic~Universal~Throughput~Inbound Volume (octets)",
"AP~Generic~Universal~Throughput~Outbound Volume (octets)"])
+',??startTime??,??endTime??')#
```

Data sources use a URL connection string to retrieve information from DataView. The connection string is entered on a single line.

The hash characters (#) indicate that a Cognos function is used. The text between the hash characters is run by Cognos.

The double question mark (??) characters indicate that a Cognos prompt is used. Prompts force the report user to provide values for certain attributes. When a data model is created that includes this prompt, a report built on the model searches the data set for a value. If no value exists, the report user is prompted to provide one.

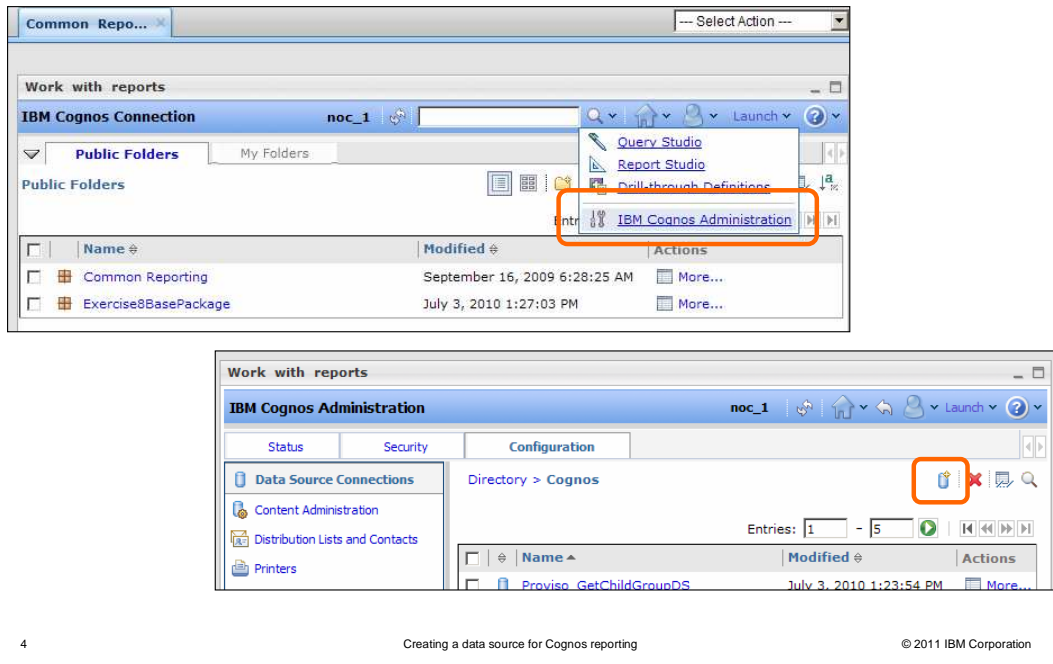
This example begins with **http://hostname:16315/ibm/tnpm/dal/cognos** to specify the location of the Cognos server.

The next part of the URL is the string **#'?camid='+CAMPassport()#**. This security function verifies that the user can access DataView report information.

The last part of the string contains a call to the **getResourceTimeSeries** data source. The two prompts after that obtain values for the group and resources that are used in a report, based on this data source. The **urlencode** keyword is encoding the special characters in the metric path that follows, such as **AP~Generic~Interface~Delivered Packets**. This data source retrieves four metrics from DataView. Two more prompts obtain values for the start and end time of a report, based on this data source.

Most of this URL is generic. For most custom data sources, you change the full path to the metrics that are used in the data model.

Start the New Data Source wizard



To create a data source, log in to the Tivoli Integrated Portal. Click **Reporting > Common Reporting**. Click **Launch > IBM Cognos Administration**.

Click the **Configuration** tab. Click the **New Data Source** button. The New Data Source wizard opens.

Name the data source

Specify a name and description - New Data Source wizard

Specify a name and location for this entry. You can also specify a description tip.

Name:

Description:

Screen tip:

Location:
Directory > Cognos

< Back Finish

Enter a name for the data source. A description and a screen tip for the data source are optional. Click **Next**.

Connection type

Specify the connection - New Data Source wizard

Specify the parameters for the connection of this new data source. The name source is used to set the name of the connection.

Type:
XML

Isolation level:
 Use the default object gateway
 Specify a value:
Cursor stability

Cancel < Back Next > Finish

Cognos communicates with the DataView module using an XML connection string. Choose **XML** as the type. Click **Next**.

XML connection string

Enter the XML connection string - New Data Source wizard

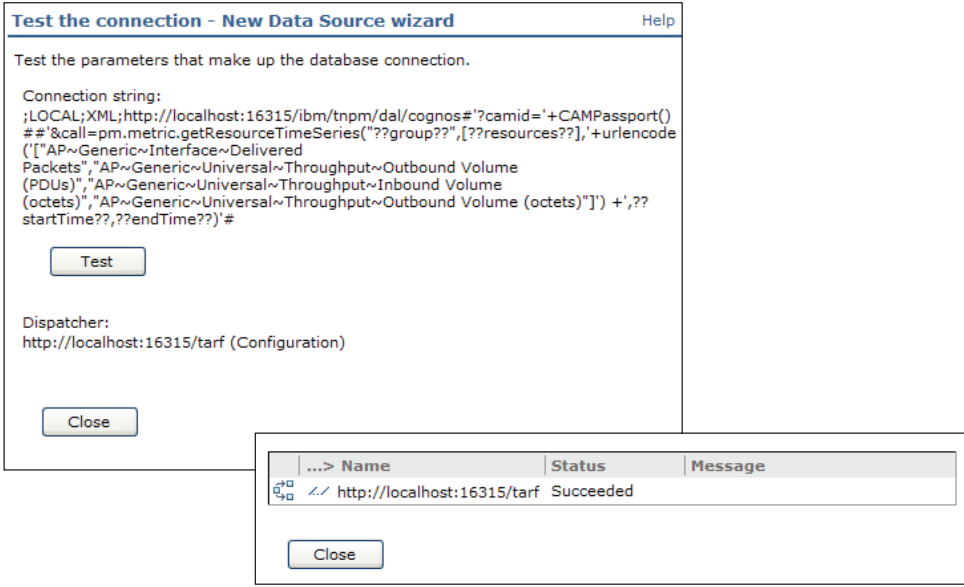
Edit the parameters to build connection string.

Connection string:

Testing
[Test the connection...](#)

Enter the URL string that you designed to retrieve report metrics in the **Connection String** field. Click **Test the connection**.

Test the connection string



Test the connection - New Data Source wizard Help

Test the parameters that make up the database connection.

Connection string:
;LOCAL;XML;http://localhost:16315/ibm/tnpm/dal/cognos#'?camid='+CAMPassport()
'&call=pm.metric.getResourceTimeSeries('??group??','??resources??','+urlencode
(['AP~Generic~Interface~Delivered
Packets','AP~Generic~Universal~Throughput~Outbound Volume
(PDUs)','AP~Generic~Universal~Throughput~Inbound Volume
(octets)','AP~Generic~Universal~Throughput~Outbound Volume (octets)']) +','??
startTime??,??endTime??) #

Test

Dispatcher:
http://localhost:16315/tarf (Configuration)

Close

...	Name	Status	Message
...	http://localhost:16315/tarf	Succeeded	

Close

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Click the **Test** button to test the connection string. After the test is completed successfully, click **Close**.

Complete the New Data Source wizard

Test the connection - Packet Metrics
Help

Test the parameters that make up the database connection.

Connection string:
;LOCAL;XML;http://localhost:16315/ibm/tnpm/dal/cognos#'?camid='+CAMPassport()
##%call=pm.metric.getResourceTimeSeries("??group??",[??resources??],'+urlencode
(["AP~Generic~Interface~Delivered
Packets";"AP~Generic~Universal~Throughput~Outbound Volume
(PDUs)";"AP~Generic~Universal~Throughput~Inbound Volume
(octets)";"AP~Generic~Universal~Throughput~Outbound Volume (octets)"]) '+';??
startTime??,??endTime??)'#

Dispatcher:
http://localhost:16315/tarf (Configuration)

Enter the XML connection string - New Data Source wizard

Edit the parameters to build connection string.

Connection string:

Testing _____

[Test the connection...](#)

Next >

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Click **Close** again, and click **Finish**.

After you create the data source

After you create an XML data source using Cognos administration tools, you are ready to perform these tasks:

- Create a data model using Framework Manager and publish a package
- Create a report based on the data model package

You created an XML data source using Cognos administration tools. Data model packages are used by Cognos to retrieve metadata and performance data from DataView. You can use Framework Manager to create or modify a data model to include the new data source. You can also add a new data source to an existing data model. After you publish the data model, it is available to report authors, who create reports that are based on network resources and metrics.

Report Studio is a web-based application that is used to create Cognos reports.

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This module is also available in PDF format at: [../cognos_data_source.pdf](..../cognos_data_source.pdf)

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