



WebSphere Product Center:

## Release Notes for Version 5.0.1

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**Note!** Before using this information and the product it supports, read the information in "Notices" at the end of this document.

24 September 2004

This edition of this document applies to WebSphere Product Center, version 5.0.1 (5724-I68), and to all subsequent releases and modifications until otherwise indicated in new editions.

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# Table of Contents

1.0 New in this release	1
2.0 Introduction	1
2.1 Limitations of this release	1
2.2 Platform, language, support, and migration	2
3.0 Enhancements	4
3.1 Enhanced search engine	5
3.2 Item-location attribute data modeling	13
3.3 Workflow saves and step transitions	19
3.4 Attributes and attribute views in a workflow step	19
3.5 Script operations changes	24
3.5 Change requests	48
4.0 Known Issues and limitations	51
5.0 Installation Notes	65
5.1 Change in configuration files	65
Notices	

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# 1.0 New in this release

- Support for item-store attribute data modeling and user interfaces.
- Enhanced search engine to designate runtime and non-runtime searches, thus allowing improved UI performance
- Updates made to improve workflow saves and step transactions
- Support for more efficient management of attributes and support for attributes in a workflow step
- Additional support for Linux platform (RedHat Linux/WebLogic/Oracle). Support for additional platforms are to be provided in subsequent releases
- Product documentation will no longer be published in the product CD. Documentation can be obtained from IBMs internet site at <http://www-306.ibm.com/software/integration/wpc/library/>
- Installer executable to install WebSphere Product Center 5.0.1. The installer can be run using a graphical interface or in silent mode. Refer to the "WebSphere Product Center: Installation Guide" for more information

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## 2.0 Introduction

This release provides a series of core architectural improvements to support item-store attribute data model and user interfaces, which are steps towards the item-location-vendor attribute data model that benefits retail customers. Due to the architectural changes to support item-store attribute data model, the Inheritance feature was removed for this release and is planned to be restored in a subsequent release.

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### 2.1 Limitations of This Release

- This release will disable the following functionality that was available in the previous release:
  - Ancestral inheritance – please see section in this document for an explanation of the new process of item-location inheritance for hierarchies
  - Category-to-category inheritance

**Note:** Customers who depend on these features should not migrate to this new release until it is restored in a subsequent release.

- For this release, a migration toolkit will not be provided

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## 2.2 Platform, Language support, & migration

### 2.2.1 Supported platforms

The following table represents the platforms supported by WebSphere Product Center 5.0.1. Support for additional platforms are available in 5.1.

**Note:** The information in this section is subject to change. Prior to implementation, please consult your WebSphere Product Center representative.

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#### AIX

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#### WebSphere Application Server Network Deployment 5.0.2.5/DB2 II 8.1 (Primary Stack)

The software in this primary stack lists the software products that are part of the IBM WebSphere Product Center offering.

	Software	Hardware
<b>Application Server</b>	<ul style="list-style-type: none"><li>• WebSphere Application Server Network Deployment 5.0.2.4</li><li>• AIX 5L 5.1 (32 &amp; 64 bit)</li><li>• IBM HTTP Server 2.0</li></ul> Required software based on needed function	<ul style="list-style-type: none"><li>• Server Type – IBM p630 Model 6C4</li><li>• Processor – 4 x 64-bit POWER4+ 1.45 GHz</li><li>• Memory – 8 GB</li><li>• Disk Sub-System – 144 GB SCSI</li></ul>

	<ul style="list-style-type: none"> <li>• IBM JDK bundled with WebSphere Application Server Network Deployment 5.0.2.4</li> <li>• WebSphere MQ Series V5.3 (1)</li> <li>• WebSphere Business Integration Adapter for WebSphere MQ V2.5.0 (1, 2)</li> <li>• WebSphere Business Integration Adapter Framework V2.4.0 (1, 2)</li> </ul>	
<b>Database Server</b>	<ul style="list-style-type: none"> <li>• DB2 II 8.1 Advanced Edition Fixpack 5</li> <li>• AIX 5L 5.1</li> </ul>	<ul style="list-style-type: none"> <li>• Server Type – IBM p630 Model 6C4, PE2650</li> <li>• Processor – 4 x 64-bit POWER4+ 1.45 GHz</li> <li>• Memory – 8 GB</li> <li>• Disk Sub-System – 420 GB SCSI</li> </ul>
<b>Additional Software</b>	<p>This primary stack is also bundled with the following:</p> <ul style="list-style-type: none"> <li>• WebSphere MQ Series V5.3 (1)</li> <li>• WebSphere Business Integration Adapter for WebSphere MQ V2.5.0 (1, 2)</li> <li>• WebSphere Business Integration Adapter Framework V2.4.0 (1, 2)</li> </ul> <p>(1) A limited use license is included with WebSphere Product Center</p>	

(2) Required when integrating with a process hub
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## Linux

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### BEA WebLogic/Oracle

	Software	Hardware
<b>Application Server</b>	<ul style="list-style-type: none"> <li>• WebLogic Server 7.0</li> <li>• Apache HTTP Server 2.0</li> <li>• Red Hat Enterprise Linux ES 2.1</li> <li>• JDK 1.3.1</li> </ul>	<ul style="list-style-type: none"> <li>• Server Type – Intel compatible</li> <li>• Processor – Dual Intel, XEON 2.8 GHz</li> <li>• Memory – 6 GB</li> <li>• Disk Sub-System – 5*73 GB 10K RPM SCSI Driver</li> </ul>
<b>Database Server</b>	<ul style="list-style-type: none"> <li>• Oracle 9.2.0.5 Enterprise Edition</li> <li>• Red Hat Enterprise Linux ES 2.1</li> </ul>	<ul style="list-style-type: none"> <li>• Server Type – Intel compatible</li> <li>• Processor – Dual Intel, XEON 2.8 GHz</li> <li>• Memory – 6 GB</li> <li>• Disk Sub-System – 5*73 GB 10K RPM SCSI Driver</li> </ul>

### 2.2.2 User Interface Internationalization & localization

This release does not support any user interface internationalization or localization.

### 2.2.3 Migration

As this release involves significant core architectural changes, this release will require that a re-implementation of much of the functionality from a previous release in order to leverage the functionality in this release. This changes in this release has radically changed inheritance fundamentals.

For this release, no migration toolkit is available.

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## 3.0 Enhancements

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### 3.1 Enhanced search engine

The search engine has been updated to allow more robust search capabilities. The engine employs a new rich and powerful query language. Searches have been improved in both the Rich Search screen and with the use of scripting.

Search now uses two methods of searching: runtime and non-runtime. The method for the non-runtime searches is that when a user performs a search and the expected result set is large, the search can be scheduled and the result set report will be delivered to the user.

The new Rich Search screen can be used to build quick rich search templates. Users also have the ability to construct the custom search queries by using AND, OR, <>, <=, and >= like conditional statements.

Search can also be performed on Multi-Occurrence item, item-location data attributes. In the case of the Multi-Occurrence Attribute search, the search string is searched in each of the occurrences of the Multi-Occurrence attribute and is displayed as part of the search result if the search string exists in that attribute.

#### 3.1.1 Overview of new Search Engine

When modeling item data, attributes are to be grouped into two categories.

- Global attributes - Attributes that apply to an item regardless of location. These are defined as the core attributes of an item and can contain hundreds of attributes per item. The limitation for this release is that a search can be be

- performed on Multi-occurring items of global attributes.
- Location attributes - Attributes that apply to an item based on location. These are defined as location specific attributes of an item and can be defined for multiple locations with many attributes per item.

### **3.1.2 Search method**

The item table of the database will only save runtime searchable attributes, which are marked at the spec level when defining a spec attribute.

Two search methods can be employed:

- Runtime: SQL is used to query the item table. Search is performed on the application server
- Non-runtime: searches are performed in JAVA. Search runs in the background and is performed on the Scheduler

The order in which searches are performed are global attributes first, then location attributes. Therefore the Runtime search method is first used to minimize and restrict a result set, then if additional search is required on a larger result set, the non-runtime search is performed.

Restrict the itemset results by setting the Rich Search common.properities configuration. If the itemset is larger than the number set in common.properties, it will perform a background (non-runtime) search search. An notification email reporting the completed search is sent to the user who performed the search.

### **3.1.3 Set maximum number of items allowed to be searched in realtime**

`max_number_items_for_realtime_search`

Description: Set for rich search: maximum number of items allowed to be searched on in real time. If the number of items returned by the initial query estimate is greater than this number, the search will be scheduled as a background search.

For example:

```
max_number_items_for_realtime_search=1000
```



**Note:** This setting only applies to synchronous searches (runtime). Asynchronous searcher (non-runtime) ignores this setting.

### **3.1.4 Separation of schema**

To better handle searches with large result sets, two schemas have been created as part of the design of creating a more robust search engine.

- Data schema: The serialization of items that reduce the number of rows that is required to save an item
- Search schema: The search schema includes global attributes and category mappings

Searches are performed in a two phase execution:

1. Database driven: search for global attributes and category mappings
2. Java driven: search for location attributes and location mappings

### **3.1.5 Search Script Operations**

Two new script operations were introduced with the introduction of the newly designed search engine:

#### **runSearch()**

- Prototype: `ItemSet runSearch( Catalog catalog,String searchQuery)`
- Description: Run search on catalog.

#### **runBackgroundSearch()**

- Prototype: `void runBackgroundSearch( Catalog catalog,String searchQuery,String selectionName)`
- Description: Run a catalog search job in background. The search results are saved as a selection with given name.

### **3.1.6 Query Predicate Types**

Available predicate types:

- Global attributes
- Location attributes
- Category mappings (global category and location mappings)

For runtime searchable attributes, the query is made up of the Global attribute predicate and the category mappings predicate.

For non-runtime searches, the query is made up of Global attribute predicates and Local predicates.

**Global attributes:** Attributes can either be runtime or non-runtime searchable

{attribute\_path} operator expr

Example: {Ctg Spec/integer} < 302

### **Location attributes**

{attribute\_path@location\_hierarchy} operator expr

Example: {Loc Spec/string@Loc Ctr} startswith "hello"

### **Category Mappings**

- Global category mappings

```
filter_cat ( {catalog_hierarchy}, subtree|nosubtree [+ level(all|#)],
{category_path} [+ {category_path}] )
```

Example:

```
filter_cat({Ctg ctr}, subtree, {first cat})
```

- Location mappings

```
filter_loc ( {location_hierarchy}, subtree|nosubtree [+ level(all|#)],
{location_path} [+ {location_path}] )
```

Example:

```
filter_loc({Loc Ctr}, subtree, {first loc})
```

### 3.1.7 Query Language Specification

A query is made up of a list of predicates that define the scope of a search criterion.

query = list of predicates

predicate = -- MULTIPLE PREDICATES --  
 predicate and\_or\_op predicate

-- PARENTHESIS TO DEFINE SCOPE --  
 ( predicate )

-- ATTRIBUTE PREDICATES --  
 attr\_path binary\_op expr  
 attr\_path binary\_op expr override  
 attr\_path unary\_op

-- MAPPING PREDICATES --  
 filter\_cat | filter\_loc ( { ctr\_name } ,filter\_options ,path\_list )

### 3.1.8 Operators

Construct custom search queries by using AND, OR, <>, <=, and >= like conditional statements.

and\_or\_op = -- QUERY OPERATORS --  
 &&, ||

Operator	String	Numeric	Boolean
==	x	x	x
<	x	x	
>	x	x	
<=	x	x	
>=	x	x	
contains	x		
startswith	x		
endswith	x		

isempty	x	x	x
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### 3.1.9 Expressions

expr = LITERAL\_BOOLEAN | LITERAL\_NUMBER | LITERAL\_STRING |  
LITERAL\_DATE

LITERAL\_BOOLEAN = true | false

LITERAL\_NUMBER = [0-9]+(\.[0-9]+)?

LITERAL\_STRING = <any java like string>

LITERAL\_DATE = date("value", "format")

### 3.1.10 Paths

path\_list = attr\_path + path\_list | attr\_path

attr\_path = { path\_element\_list [@ctg\_loc\_ctr] }

path\_element\_list = path\_element\_list / path\_element | path\_element

path\_element = LITERAL\_STRING | LITERAL\_STRING [ OCCURENCE\_NUMBER ]

OCCURENCE\_NUMBER = #LITERAL\_NUMBER | #\*

### 3.1.11 Notes

- override : Only applies to location attribute predicates. Only return locations where value is overridden.
- date : Use Java format as described in java.text.SimpleDateFormat.
- negation : All attribute predicate operators can be negated using '!' before the operator.

### 3.1.12 Limitations

Determining runtime search occurrence number : Only '\*' is allowed with global runtime searchable attributes. The default occurrence number, if missing occurrence

number, defaults to '\*'.

### 3.1.13 Rich Search screen

The rich search screen allows the search of Global and location attributes. Users can create a search template that is used to define a set of global and/or location attributes.

Through the GUI, if the resulting itemset is larger than the number set in common.properties, the search will be performed in the background. The user will be notified by a dialog box that the completed search result notification is to be sent via email.

The screenshot shows the 'Rich Search' window with tabs for 'Single Edit' and 'Multi Edit'. Below the tabs are 'Search' and 'Clear' buttons, and a checkbox for 'Background'. A list of saved search templates is shown, with the first one being 'Search for 044 items'. Below this is a section for 'Select Category Restrictions' with a tree view showing 'Main Primary Hierarchy' selected.

The screenshot shows the 'Global Attributes' section for 'Electronic Primary Spec'. It lists various attributes with checkboxes for selection and options for search criteria. The 'Manufacturer' attribute is checked and set to 'Rytek'.

Attribute	Selected	Criteria	Value
SKU	<input checked="" type="checkbox"/>	NOT Ends With	3
Model	<input type="checkbox"/>	NOT Equal To	
Type			
Type_SP	<input type="checkbox"/>	NOT Equal To	
Type_US	<input type="checkbox"/>	NOT Equal To	
Manufacturer	<input checked="" type="checkbox"/>	NOT Equal To	Rytek
Long Name	<input type="checkbox"/>	NOT Equal To	
Description	<input type="checkbox"/>	NOT Equal To	

The screenshot shows the 'Location Attributes' section with a toolbar containing buttons for 'Exit', 'Checkout', 'Macro', 'Action', 'Logs', and 'Location Data'. Below the toolbar is a tree view showing 'Main Primary Hierarchy' selected.

#### Creating a saved Search Template

1. From the Rich Search Screen (1. Saved Search Template), click New.
2. A dialog box appears. Enter a name for the search template, a description

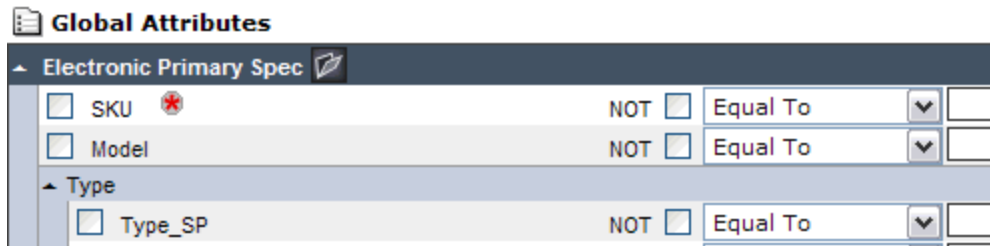
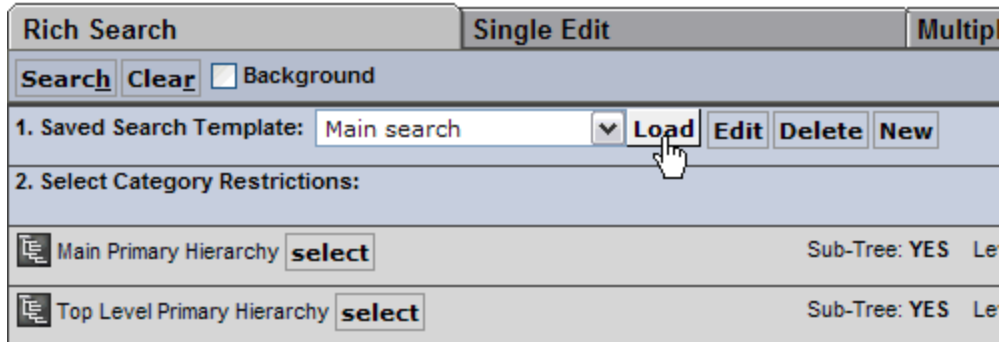
(optional), and select Specs or individual nodes for the search criterion and click **SAVE**.

The screenshot shows the 'WebSphere Product Center v5.0.0 -- Web Page Dialog' window. At the top, there are 'SAVE' and 'CANCEL' buttons. Below is the 'Search Template' section with a 'Name' field containing 'Main search' and a 'Description (max 2000)' text area. The 'Selected Specs/Nodes' section contains a list with 'Electronic Primary Spec (D)' and a 'Remove selected specs' button. The 'Attributes in Collection for Spec' section also contains 'Electronic Primary Spec (D)' and a 'Remove selected attributes' button.

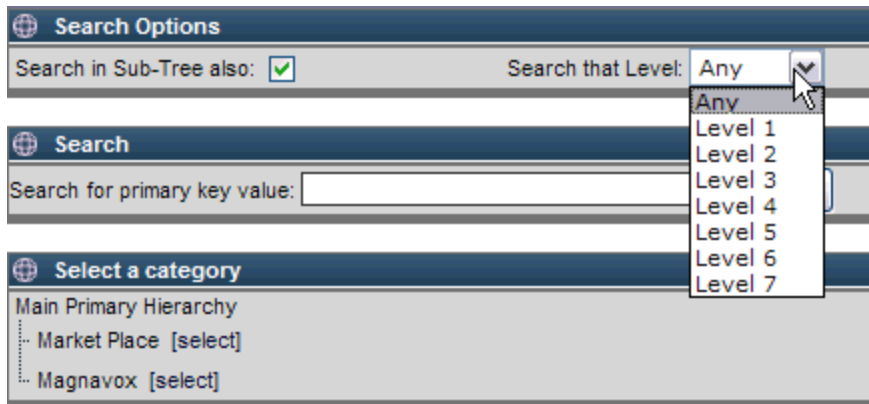
Below the search template is the 'Attribute Picker :: Search for Specs and/or Attributes' section. It includes 'Spec Name: \*' and 'Attribute Path:' fields. The 'Search Type' section has radio buttons for 'Specs Only' and 'Specs & Attributes' (selected), and checkboxes for 'Search by Spec Type' and 'Search by Locale(s)'. The 'Search by Spec Type' dropdown shows 'Primary Spec' and 'Secondary Spec'. The 'Search by Locale(s)' dropdown shows 'English (United States)' and 'Spanish (Spain)'. A 'Results - Select from the Specs and/or Attributes below to add to your Collection.' section shows '1-14 of 14' results, with the first result being 'Asia Pacific Spec 1' with sub-items 'Local Description' and 'Voltage'.

### Run Search based on saved search template

1. At the Rich Search screen, select the saved template and click LOAD. The search attributes appear.



2. Select category restrictions if desired. This can be done by selecting an associated hierarchy under (2. Select Category Restrictions:). A window displays and allows the ability to select any number of hierarchies or sub-tree thereof to restrict from the search. Click **Done** to return to the Rich Search screen.



3. Check the box next to the attribute to search and enter the desired search criteria. When all search data is complete, click **Search**. The results are displayed in the Multiple Edit screen.

4. To create another search with a different criterion, click the Rich Search tab. On the Rich Search screen, click **Clear** and begin to define the desired search criterion.

**Note:** It is required to click **Clear** before creating a new search criteria. If **Clear** is not clicked, the search results will be inaccurate.

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## 3.2 Item-location attribute data modeling

### 3.2.1 Item-Location Inheritance for Hierarchies

Item-location inheritance for one or more hierarchies in the system is supported in this release. When the item-location attribute inheritance is in place, an item can only inherit location attribute values from one parent and not multiple parents. Clustering is not supported in this release.

Example of how item-location inheritance is used:

Assume that there are two location hierarchies in the system – Hierarchy 1 and Hierarchy 2. Hierarchy 1 contains Attributes A and B. Hierarchy 2 contains Attributes C and D. Item 12345 is mapped to both Hierarchy 1 and Hierarchy 2. Item 12345 can inherit values for Attributes A and B from a higher level in Hierarchy 1, and can inherit values for Attributes C and D from a higher level in Hierarchy 2.

If the hierarchies in the above example were two separate locations, the following use case would follow.

When a user moves a store (Store 1) from one market (Market A) to another market (Market B), the system behavior should be the following:

- If an item-store attribute value was inherited from Market A without override, the item-store attribute value should be inherited from Market B without override.
  - Example - Assume that the Price for Item 12345 for the stores in Market A was \$10 and the Price for the stores in Market B is \$20. If a user moves Store 1 from Market A to Market B, the price without override for Item 12345 would change automatically from \$10 to \$20.



- If an item-store attribute value was inherited from Market A with override, the system should preserve the override upon the move of the store to Market B.
  - Example – The Price for Item 12345 for the stores in Market A was \$10. A user overrode the Price for Item 12345 for Store 1 within Market A to \$12. If a user moves Store 1 from Market A to Market B, the Price for Item 12345 should remain \$12.

After a user moves a store from one market (Market A) to another market (Market B), there may be items that were sold in Market A that are not sold in Market B. A user will need to manually remove the items from Market B.

### **3.2.2 Behavior on Multi-occurrence**

If users have occurrences inherited from the parent, users cannot override one occurrence and at the same time retain the rest of the inherited occurrences. If the user chooses to override one occurrence, users will lose all inherited occurrences; therefore, the user will need to start creating a new occurrence from 0 instance again.

### **3.2.3 Behavior on Rich Search**

When users run rich search on an item, the item-location result set created from search results is displayed on the Location Data screen. For example: item01 has an item location data at level BYO1. When users run rich search on item where item id equal to item01 and Location Hierarchy level equal to BYO1, the search will return item01 with BYO1 as its item-location result set. Users can identify the item-location result set, in this case BYO1, by clicking the Location Data button on the item and click on 'Show Context Locations' and select 'Search' as Context; only then, users will see BYO1 as a shortcut link to the location data.

### **3.2.4 Item-Location Attribute Handling**

- A single attribute can be marked with a null value. A child of a parent having a null value would inherit a null value from the parent.
- All attributes for an item-location can be marked with a null value. This

applies to all current and future attributes for an item-location. Marking with a null value does not suggest that the item is not available for a location. To make the item unavailable, it is necessary to make the location unavailable.

- All attributes in a multi-occurrence group can be marked with a null value.

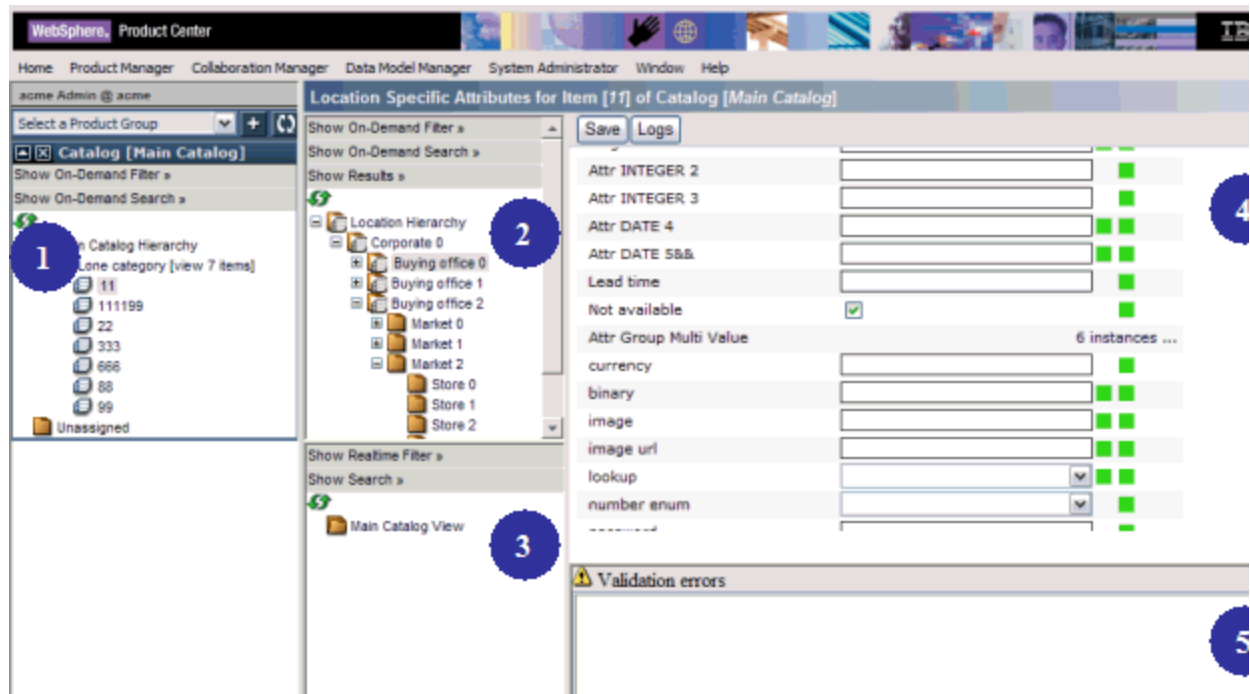
### 3.2.5 User Interface

#### Invoke the Location Data Screen from the Single-Edit screen

- Clicking the 'Location Data' button on the Single Edit screen displays the Location Data window in the additional frames to the right of the Left Pane
- The Location data screen cannot be displayed unless the item is valid and saved

### 3.2.6 Location Data Screen

The Location Data screen is displayed in a separate window in a similar format as the main screen.



#1 Left Pane of the main screen

#2 Location hierarchy

Location hierarchy is defined like any other hierarchy. The Location hierarchy associated to the catalog in #1 is displayed in this frame. Use the Show On-Demand Filter to select any of the location hierarchies associated with a catalog. An icon with a picture of a plain folder indicates that for the selected location, there is no location specific data. An icon with a paper in front of the folder indicates that the selected location has an override data. Even though a location has inherited data, the location icon is displayed with a plain folder.

Locations can be made available or unavailable by right clicking on the location hierarchy to display the short menu. The following selections are available.

- Make Available - Makes the selection location available for the selected item
- Make Available Recursive - Makes the currently selected location and all its children available for the selected item
- Make Unavailable - Makes the selected location unavailable for the selected item
- Make Unavailable Recursive - Makes the selected location and all of its children unavailable for the selected item

### **#3 Attribute list frame**

All location specific attributes defined in the location data view are listed in this frame. This frame provides a way to quickly view all the available location attributes.

### **#4 Location attribute data edit frame**

Unlike the Single Edit screen, the data displayed in this frame is displayed flatly and not in a nested fashion. Required attributes are displayed with a '\*' to the left of the data entry field.

### **#5 Error validation frame**

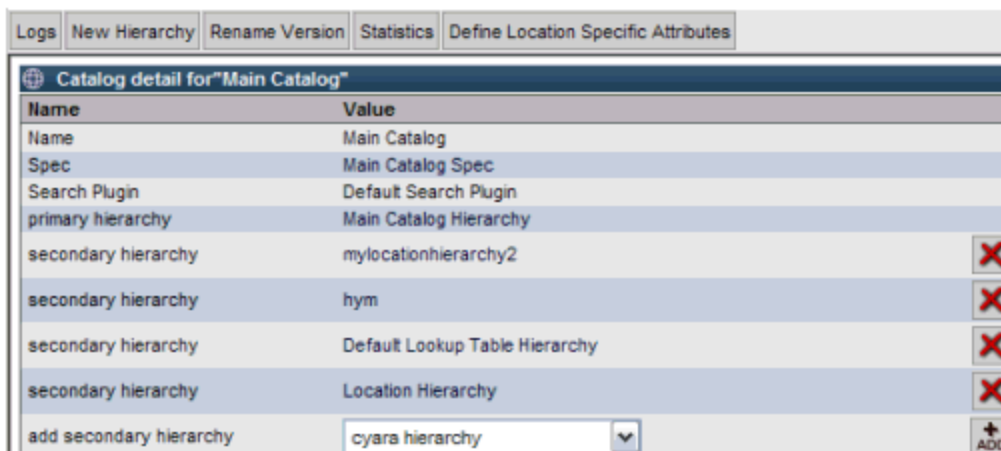
All validation errors are displayed in this frame. All attributes that fail the type validation are shown in red color. Examples of such errors include Min/Max enforcement and Required attributes not being provided. The validation error frame displays the location of validation errors by hyperlinks. Double-clicking on the error messages will focus the cursor on the attribute with the selected error. The location data cannot be saved unless all validation errors are cleared.

### 3.2.5 Modeling location specific data

Currently, a secondary spec is used to model the item location hierarchy spec. The item location hierarchy spec is limited to the purpose for item-location data and is not available for any other purpose. A location hierarchy can only have one item location spec attached to it, therefore all locations in a location hierarchy shares identical item-location attributes and requires item location attributes are not different for each location.

#### Associating a location hierarchy with a catalog

Similar to product hierarchies, location hierarchies can be associated with a catalog. Multiple location hierarchies can be mapped as secondary hierarchies of a catalog and only category hierarchies are used for location attributes, not organization hierarchies.

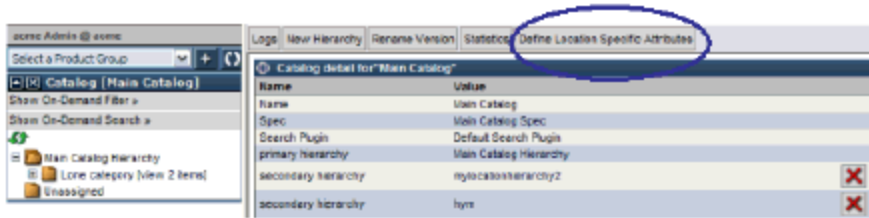


The screenshot shows a web interface for managing a catalog. At the top, there are tabs: 'Logs', 'New Hierarchy', 'Rename Version', 'Statistics', and 'Define Location Specific Attributes'. The main content area is titled 'Catalog detail for "Main Catalog"'. It contains a table with the following data:

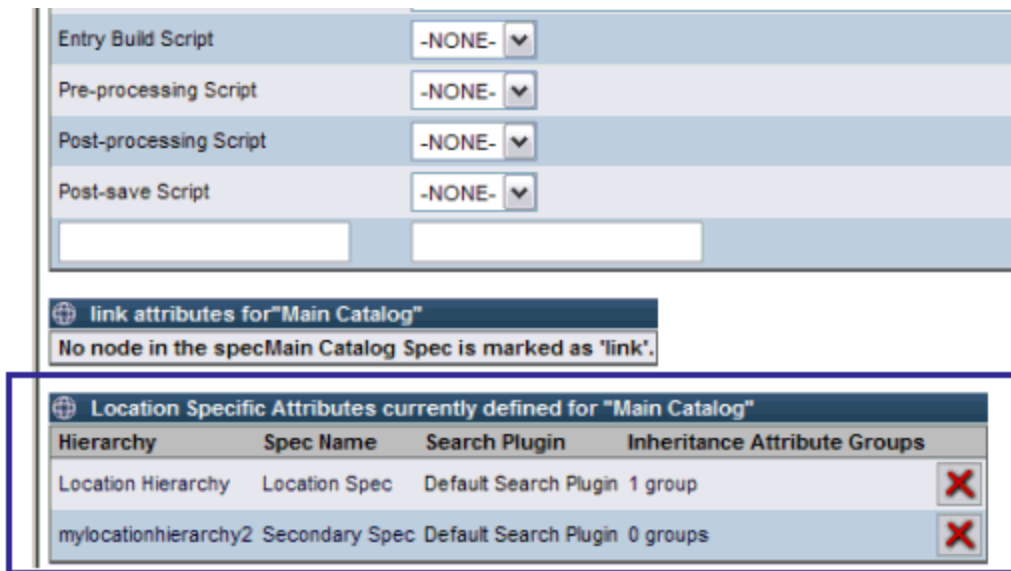
Name	Value	
Name	Main Catalog	
Spec	Main Catalog Spec	
Search Plugin	Default Search Plugin	
primary hierarchy	Main Catalog Hierarchy	
secondary hierarchy	mylocationhierarchy2	✖
secondary hierarchy	hym	✖
secondary hierarchy	Default Lookup Table Hierarchy	✖
secondary hierarchy	Location Hierarchy	✖
add secondary hierarchy	cyara hierarchy	+ ADD

#### Assigning a Location Hierarchy to a Catalog

To associate a location hierarchy to a catalog, click Define Location Specific Attributes from the Catalog Attributes screen. Using the Wizard, select the hierarchy that is going to be used as a location hierarchy and choose the appropriate values for the other wizard selections. Only Category Hierarchies that are associated with the catalog are displayed in the drop-down. Multiple hierarchies can be selected as location hierarchies for a given catalog.



Back at the Catalog Attributes screen, the Location Specific Attributes table now includes the newly associated location hierarchy.



Known limitation: It is not possible to modify an existing location hierarchy with a new spec. It is required to delete it and then add it with the new location spec.

### 3.2.7 Saving Item Location data

When users click the Save button of the Location Data screen, not only the item-location data is saved, but also the entire item. This applies when users click the save button on the main screen, all the item-location data of the item is also saved.

### 3.2.8 Inheritance

The following inheritance behavior applies to location hierarchies:

- Only attribute collections selected within a location hierarchy for attribute inheritance will inherit the data from their parent.
- Capabilities are provided to Override the inherited data or cancel the

inheritance by marking a field as NULL field. Note: Null is treated as a valid value for an attribute field in this release.

### 3.2.9 Script limitations

Catalog item, catalog item-location, collaboration area item, collaboration area item-location run on the same catalog scripts.

Currently the scripts can be differentiated whether it is running in a collaboration area or main catalog by using IF statement, such as if (colArea != null). Also, users can differentiate whether the script is running on main screen or location by using if (location != null) for location screen and if (location == null) for main screen. These implicit objects such as colArea, workflow, wfl Step, location are available on both catalog script and macro/action script.

**Note:** Refer to section 3.5 for updated and new script operations related to item-location hierarchies.

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## 3.3 Workflow Saves and Step Transitions

Several workflow updates were made to improve workflow save and step transitions.

- Entities from one workflow step to another step are prevented if the validations at the step are not met
- When a user leverages the user interface functionality to move entities from one workflow step to another step, the move from one step to the next automatically triggers a save. Previously, users had to use the user interface buttons to move from one workflow step to another.
- When a script moves entities from one workflow step to another step, the move from one step to the next does not automatically trigger a save
- When a user leverages the user interface functionality to move entities from one workflow step to another step, the move from one workflow step to another step triggers a validation per any related post-processing script
- When a user presses the Save button in a workflow step, the system saves any work in progress and shows any validation errors

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## 3.4 Attributes and Attribute Views in a Workflow Step

Several updates were made to the management of attribute and attribute views in a workflow step.

- Support to enable designating a view in a workflow step via the user interface for use for the single edit, multiple edit, rich search, and location screens tied to the workflow step. This is only for supporting one view in a workflow step, not for supporting multiple views in a workflow step
- UI support for search on location attributes within a workflow step
- Support using a workflow step setup UI to set the required attributes at a workflow step level. This applies to location and global attributes
- Support to enable setting the header attributes for a view, inclusive of all mapped attributes
- Ability to set all attributes in multiple edit to view only, thereby forcing all modifications in the single edit screen
- Support to enable interim publishing of a value from a workflow to the main catalog while the value is checked out in the workflow
- Ability for location data to export differences and to support audit logging

### 3.4.1 Workflow for location specific data

The workflow step definition screen has been modified to accommodate the following requirements:

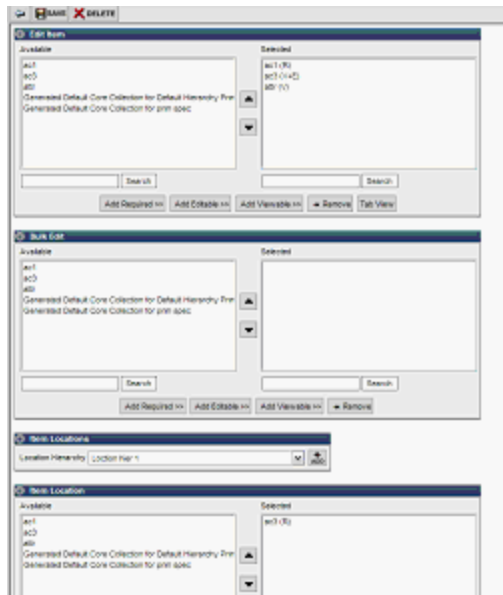
- Define required, editable, and viewable attributes at a workflow step level
- Define Required, editable, and viewable attributes collections in the single edit view
- Define Required, editable, and viewable attributes collections in the multi edit view

Clicking the Add button in the Edit Workflow Step displays the Workflow Step View definition screen with the following tables:

<p>Edit Item</p>	<p>Modify to allow for the selection of attribute groups that are to be either required or viewable only or viewable and editable</p>	<ul style="list-style-type: none"> <li>Attributes groups that are selected as ADDVIEW will be displayed in the single-edit screen, but they can't be edited.</li> <li>Attribute collections that are selected with 'Add REQUIRED', will add attributes to the view as required attributes.</li> <li>Attribute collections that are selected with ADDEDIT will be displayed in the single-edit screen and the attributes can be edited.</li> </ul>
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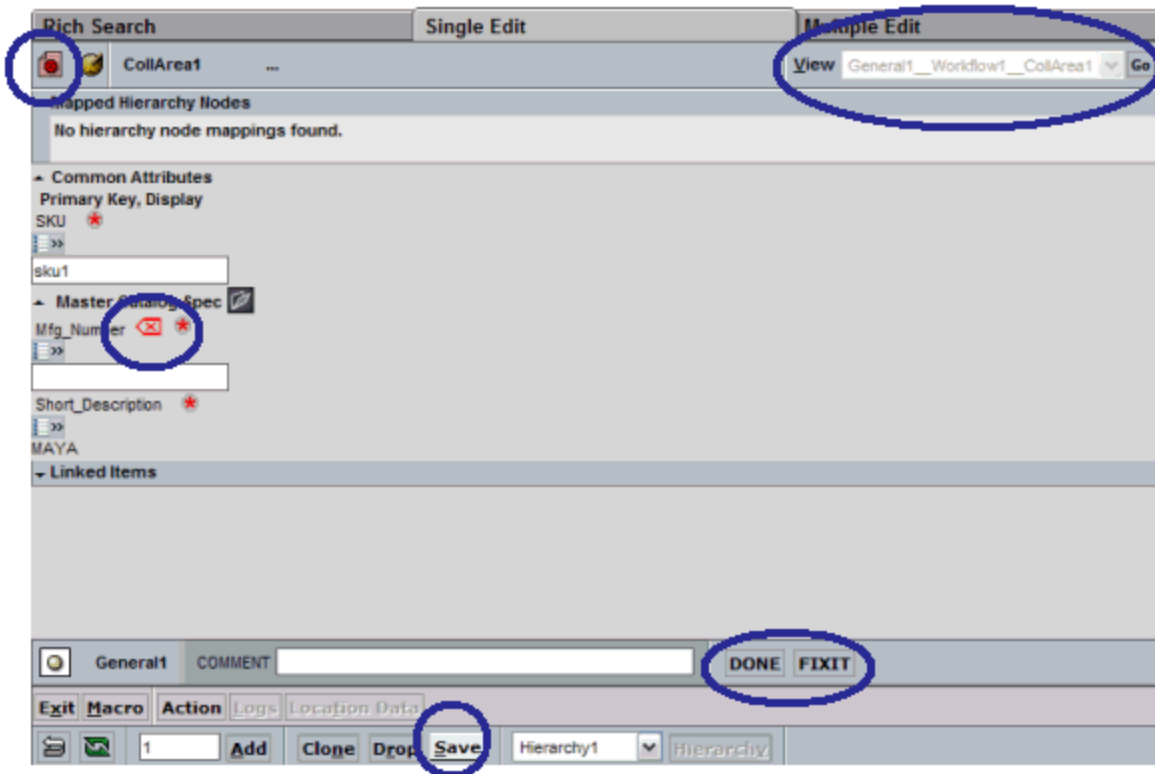
Bulk Edit	modified to allow for the selection of attribute groups that are to be either viewable only or viewable and editable	<ul style="list-style-type: none"> <li>• Attributes collections that are selected as ADDVIEW will be displayed in the multi-edit screen, but they can't be edited.</li> <li>• Attribute collections that are selected as ADDREQUIRED will be required to be completed in the multi-edit view.</li> <li>• Attribute collections that are selected as ADDEDIT will be displayed in the single-edit screen and the attributes can be edited.</li> </ul>
Location attribute collections	select a location hierarchy and then define the Required, Edit, and View-Only attributes for the location hierarchy. Like in the case of the product attributes, location attribute collections can either be selected as required or viewable only or editable.	<ul style="list-style-type: none"> <li>• Attributes collections that are selected as ADDVIEW will be displayed in the single-edit screen, but they can't be edited.</li> <li>• Attribute collections that are selected as ADDREQUIRED will be displayed in the single-edit screen as required attributes.</li> <li>• Attribute collections that are selected as ADDEDIT will be displayed in the single-edit screen and the attributes can be edited.</li> </ul>
<p><b>Note:</b> All the required attributes have to be editable in a workflow step view.</p>		



## Checking out an item

- Item checkout process works the same as in version 5.0 of WebSphere Product Center software.
- When an item is checked out, along with item attributes, all the associated store location data is checked out as well.

### 3.4.2 Workflow Single Edit View



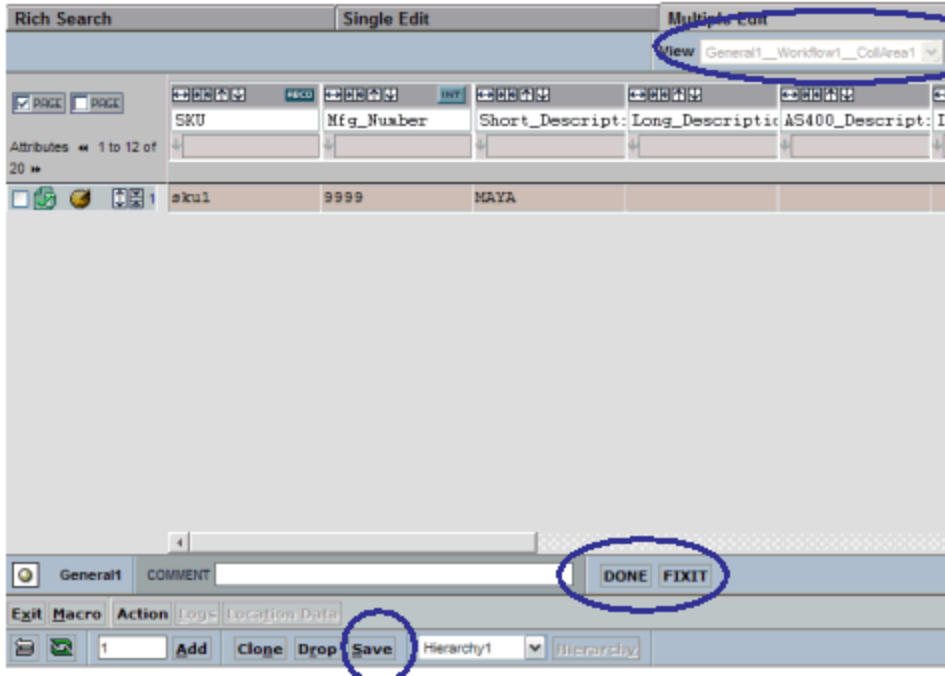
### Attribute Display in Single-Edit Screen

- The workflow single edit screen will only display the attributes that have been selected for the viewing or editing in the view that is selected for a given workflow step.
- Attributes that are neither selected for editing or viewing will not be displayed at all in the workflow single-edit screen.

### Actions that can be performed in the single edit screen

- Edit attribute values
- Save
- Done
- Undo button
- Clone
- Fixit
- Reserve of location attributes
- Changing a View in a workflow step

### 3.4.3 Workflow Mult-Edit view



All of the buttons within the Multi-Edit screen work like the buttons on the Single-Edit Screen.

## 3.5 Script Operations changes

### 3.5.1 Updated script operations

This document provides a list of script operations that have been modified in WebSphere Product Center 5.0.1 from version 5.0.

**Note:** The script operations listed in this document are for reference only and are subject to change. Refer to the Script Sandbox in the WebSphere Product Center product for more accurate information.

#### Updated and new script operations to support item location hierarchies

##### getItemPrimaryKeysForCategory

Description	Returns an array of Strings containing the primary keys of the items in this category. The option Boolean 'ordered' being set to true makes the operation return the ordered children of this
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	category if the catalog is set up to use ordering
Prototype	String[] Category::getItemPrimaryKeysForCategory(Catalog ctg [, Boolean ordered])

### **getEntryNodeInheritedValue**

Description	If this EntryNode inherits its value, return the value. Otherwise, return null.
Prototype	Object EntryNode::getEntryNodeInheritedValue()

### **deleteEntryNode**

Description	Remove this entrynode from the Entry. This operation will only work on Mutli-Occurance attributes, an error will be thrown if used on a non-multit-occurance entryNode.
Prototype	void EntryNode::deleteEntryNode()

### **setEntryNode**

Description	Return the entryNode with path sPath relative to EntryNode. If the path is not already built a NULL will be returned. Use the Entry::setEntryAttrib script operation to create a path that might not exist.
Prototype	EntryNode EntryNode::setEntryNode(String sPath)

### **setEntryNodeValue**

Description	Set the value of this EntryNode and return 1 if the value was set, 0 if nothing changed, and -1 if there was a type conversion error.
Prototype	Integer EntryNode::setEntryNodeValue(Object value)

### **hasInheritedValue**

Description	Returns TRUE if this EntryNode inherits its value.
Prototype	Boolean EntryNode::hasInheritedValue()

### **getLocationPathForInheritedValue**

Description	Returns the path for the location from which this EntryNode inherits, or null if it does not inherit its value. The given delimiter is used.
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Prototype	String EntryNode::getLocationPathForInheritedValue(String delimiter)
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### **setInheriting**

Description	Sets an item to inherit at a location for sAttribPath.
Prototype	void Item::getItemLocationAttrib(Category location, String sAttribPath)

### **setInheriting**

Description	Sets an item to inherit at a location for sAttribPath.
Prototype	void Item::getItemLocationAttrib(Category location, String sAttribPath)

### **isInheriting**

Description	Return true if the item inherit at a location for sAttribPath.
Prototype	Boolean Item::isInheriting(Category location, String sAttribPath)

### **defineLocationSpecificData**

Description	Sets up location specific data for a catalog. CTR is the category tree that contains the locations. "spc" is the spec of the locations. "inhattrgrps" is an array of attribute groups containing the inheritable attributes.
Prototype	void Catalog::defineLocationSpecificData(CategoryTree ctr, Spec spc, AttrGroup[] inhAttrGrps)

### **removeLocationSpecificData**

Description	Sets up location specific data for a catalog. CTR is the category tree that contains the locations.
Prototype	void Catalog::removeLocationSpecificData(CategoryTree ctr)

### **setCtgView**

Description	Sets the container view object with the given name/catalog and returns it. The viewType can be 'ITEM_LIST', 'ITEM_POPUP',
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	'ITEM_LOCATION', 'BULK_EDIT' or 'ITEM_EDIT'. By default ITEM_EDIT is used. Permissions are [V E]
Prototype	CtgView CtgView::setCtgView(String viewType, String[] attrGroupNames, String[] permissions)

### **getCtgViewType**

Description	Returns the type of the view in question as a string. The values can be 'ITEM_LIST', 'ITEM_POPUP', 'ITEM_LOCATION', 'BULK_EDIT', 'ITEM_EDIT', 'CATEGORY_EDIT', 'CATEGORY_BULK_EDIT', 'CATEGORY_RICH_SEARCH', 'ITEM_RICH_SEARCH'
Prototype	String CtgView::getCtgViewType()

### **getCtgViewByName**

Description	Returns the view with the corresponding name. If no name is specified, returns the default view. Use '[System Default]' to refer to the default view. The viewType can be 'ITEM_LIST', 'ITEM_POPUP', 'ITEM_LOCATION', 'BULK_EDIT', 'ITEM_EDIT', 'CATEGORY_EDIT' or 'CATEGORY_BULK_EDIT'. By default ITEM_EDIT/CATEGORY_EDIT is used. If the view is not found, it returns null.
Prototype	CtgView Container::getCtgViewByName([String viewName, String viewType])

### **getChangedAttributes**

Description	Returns an array of changed attribute paths. If a location is specified, only the attributes for the location are examined. If a location is specified, and the location does not apply to both entries, null is returned.
Prototype	String[] Entry::getChangedAttributes(Entry secondEntry. [Category location])

### **getLocationPathForInheritedValue**

Description	Returns the path for the location from which this EntryNode inherits, or null if it does not inherit its value. The given
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	delimiter is used.
Prototype	String EntryNode::getLocationPathForInheritedValue(String delimiter)

### **getItemLocationAttrib**

Description	Gets a location attribute for an item.
Prototype	Object Item::getItemLocationAttrib(Category location, String sAttribPath)

### **setInheriting**

Description	Sets an item to inherit at a location for sAttribPath.
Prototype	void Item::getItemLocationAttrib(Category location, String sAttribPath)

### **isInheriting**

Description	Return true if the item inherit at a location for sAttribPath.
Prototype	Boolean Item::isInheriting(Category location, String sAttribPath)

### **getLocation**

Description	Return the location (category) for the entry node or null if a global entry node.
Prototype	Category EntryNode::getLocation()

### **getEntryChangedData**

Description	Return an EntryChangedData object encapsulating the changes in data and locations between two entries.
Prototype	EntryChangedData ::getEntryChangedData(Entry oldEntry, Entry newEntry)

### **getLocationsAddedAvailability**

Description	Returns all locations in LOCATIONHIERARCHY that are available in the new entry but not the old entry from which this EntryChangedData object was created.
Prototype	CategorySet EntryChangedData::getLocationsAddedAvailability(CategoryTree



locationHierarchy)
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### **getLocationsRemovedAvailability**

Description	Returns all locations in LOCATIONHIERARCHY that are available in the old entry but not the new entry from which this EntryChangedData object was created.
Prototype	CategorySet EntryChangedData::getLocationsRemovedAvailability(CategoryTree locationHierarchy)

### **getLocationsChangedToHaveData**

Description	Returns all locations in LOCATIONHIERARCHY that (1) are available in both the old entry and the new entry from which this EntryChangedData object was created, and (2) contain no data in the old entry but do contain data in the new entry.
Prototype	CategorySet EntryChangedData::getLocationsChangedToHaveData(CategoryTree locationHierarchy)

### **getLocationsChangedToHaveNoData**

Description	Returns all locations in LOCATIONHIERARCHY that (1) are available in both the old entry and the new entry from which this EntryChangedData object was created, and (2) contain no data in the new entry but do contain data in the old entry.
Prototype	CategorySet EntryChangedData::getLocationsChangedToHaveNoData(CategoryTree locationHierarchy)

### **getLocationsHavingChangedData**

Description	Returns all locations in LOCATIONHIERARCHY that (1) are available in both the old entry and the new entry from which this EntryChangedData object was created, and (2) have at least one attribute path for which the old and new entries contain different values.
Prototype	CategorySet EntryChangedData::getLocationsHavingChangedData(CategoryTree locationHierarchy)

### **getModifiedAttributePathsNewEntry**

Description	Returns the paths of all attributes in LOCATION that (1) are present in both the old entry and the new entry from which this EntryChangedData object was created, and (2) contain different data in the old and new entries. It is possible for an attribute to have different attribute paths across the old entry and the new entry, for example because a multioccurrence sibling has been deleted. In this case, we return the attribute path for the new entry. If LOCATION is not specified or is null, then the comparison is done for global attributes.
Prototype	String[] EntryChangedData::getModifiedAttributePathsNewEntry([Category location])

### **getModifiedAttributePathsOldEntry**

Description	Returns the paths of all attributes in LOCATION that (1) are present in both the old entry and the new entry from which this EntryChangedData object was created, and (2) contain different data in the old and new entries. It is possible for the same attribute to have different attribute paths across the old entry and the new entry, for example because a multioccurrence sibling has been deleted. In this case, we return the attribute path for the old entry. If LOCATION is not specified or is null, then the comparison is done for global attributes.
Prototype	String[] EntryChangedData::getModifiedAttributePathsOldEntry([Category location])

### **getAddedAttributePathsNewEntry**

Description	Returns the paths of all attributes in LOCATION that (1) are not present in the old entry and (2) are present in the new entry from which this EntryChangedData object was created. If LOCATION is not specified or is null, then the comparison is done for global attributes.
Prototype	String[] EntryChangedData::getAddedAttributePathsNewEntry([Category location])

### **getDeletedAttributePathsOldEntry**

Description	Returns the paths of all attributes in LOCATION that (1) are not present in the new entry and (2) are present in the old entry from which this EntryChangedData object was created. If LOCATION is not specified or is null, then the comparison is done for global attributes.
Prototype	String[] EntryChangedData::getDeletedAttributePathsOldEntry([Category location])

### **getLocationErrors**

Description	Returns the locations errors for locations having validation errors.  Will return an empty array if no such errors exists.
Prototype	LocationErrors[] EntryValidationErrors::getLocationErrors ()

### **getLocationForErrors**

Description	Returns the category associated with the current location errors.
Prototype	ICategory LocationErrors::getLocationForErrors ()

### **getErrorsForLocation**

Description	[Returns the validation errors for the current location errors. There will be at least one validation error.
Prototype	[ValidationError[] LocationErrors::getErrorsForLocation ()

### **setItemLocationAttrib**

Description	Sets the attribute sAttribPath (spec_name/attribute_name) of this item for the given location to sValue.
Prototype	void Item::setItemLocationAttrib(Category location, String sAttribPath, Object sValue)

### **getItemRootEntryNodeForLocation**

Description	Returns the root EntryNode for this item at the given location.
Prototype	EntryNode Item::getItemRootEntryNodeForLocation(Category location)

### **getItemRootEntryNodesHavingLocationData**

Description	Returns a list of EntryNodes, each is a root entryNode per location that has data defined.
Prototype	EntryNode[] Item::getItemRootEntryNodesHavingLocationData()

### **makeItemAvailableInLocation**

Description	Makes this item available in a given location. Available means that an item can have location data for the given location. If bRecursive is true than make item available in all descendent locations.
Prototype	void Item::makeItemAvailableInLocation(Category location, [Boolean bRecursive])

### **makeItemUnavailableInLocation**

Description	Makes this item unavailable in a given location. If bRecursive is true than make item unavailable in all descendent locations.
Prototype	void Item::makeItemUnavailableInLocation(Category location, [Boolean bRecursive])

### **makeItemAvailableInLocations**

Description	Makes this item available in the given locations. Available means that an item can have location data for the given location. If bRecursive is true than make item available in all descendent locations.
Prototype	void Item::makeItemAvailableInLocation(Category[] locations, [Boolean bRecursive])

### **makeItemUnavailableInLocations**

Description	Makes this item unavailable in the given locations. If bRecursive is true then make item unavailable in all descendent locations.
Prototype	void Item::makeItemUnavailableInLocations(Category[] locations, [Boolean bRecursive])

### **isItemAvailableInLocation**

Description	Returns true if item is mapped to the given location in the specified category tree.
Prototype	Boolean Item::isItemAvailableInLocation(Category location)

### **getLocationsHavingData**

Description	Returns the category set of locations for which this entry has location specific attributes defined under the specified location or category tree.
Prototype	CategorySet Item::getLocationsHavingData(Object locationOrCategoryTree)

### **locationHasData**

Description	Returns true if the location has data.
Prototype	Boolean Item::locationHasData(Category location)

### **getAvailableLocations**

Description	Returns CategorySet of available locations.
Prototype	CategorySet Item::getAvailableLocations(Object locationOrCategoryTree)

### **getSearchResultCtrs**

Description	Returns the location category trees for which search returned matching locations for this item. Returns null if there are no locations trees found with any matching locations.
Prototype	ICategoryTree[] Item::getSearchResultCtrs()

### **getSearchResultForCtr**

Description	Returns all the matching locations path i.e. full category paths for the given location tree for this item's search result. Returns null if there are no matching locations found the given location tree.
Prototype	String[] Item::getSearchResultForCtr(CategoryTree locationTree)

### **setRequiredAttributeGroups**

Description	Sets the required attrinute groups for the workflow step for a given subViewType. The parameter subViewType can be 'ITEM_LOCATION', 'BULK_EDIT', 'ITEM_EDIT', 'CATEGORY_EDIT', or 'CATEGORY_BULK_EDIT'. The optional parameter locationHierarchyName is required when the subViewType is 'ITEM_LOCATION'. WorflowStep cannot be of type "SUCCESS", as it is hardwired that an Entry must validate against its Container Spec in order to leave the Success step.
Prototype	<code>void WorkflowStep::setRequiredAttributeGroups(String subViewType, String[]/AttrGroup[] attrGroups, [String locationHierarchyName])</code>

### **setEditableAttributeGroups**

Description	Sets the editable attrinute groups for the workflow step for a given subViewType. The parameter subViewType can be 'ITEM_LOCATION', 'BULK_EDIT', 'ITEM_EDIT', 'CATEGORY_EDIT', or 'CATEGORY_BULK_EDIT'. The optional parameter locationHierarchyName is required when the subViewType is 'ITEM_LOCATION'. WorflowStep cannot be of type "SUCCESS", as it is hardwired that an Entry must validate against its Container Spec in order to leave the Success step.
Prototype	<code>void WorkflowStep::setEditableAttributeGroups(String subViewType, String[]/AttrGroup[] attrGroups, [String locationHierarchyName])</code>

### **setViewableAttributeGroups**

Description	Sets the viewable attrinute groups for the workflow step for a given subViewType. The parameter subViewType can be 'ITEM_LOCATION', 'BULK_EDIT', 'ITEM_EDIT', 'CATEGORY_EDIT', or 'CATEGORY_BULK_EDIT'. The optional parameter locationHierarchyName is required when the subViewType is 'ITEM_LOCATION'. WorflowStep cannot be of type "SUCCESS", as it is hardwired that an Entry must validate against its Container Spec in order to leave the Success step.
Prototype	<code>void WorkflowStep::setViewableAttributeGroups(String subViewType, String[]/AttrGroup[] attrGroups, [String</code>

	locationHierarchyName])
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### **getWflStepView**

Description	Returns a ctg view with a give subViewType for the workflow step. The parameter subViewType can be 'ITEM_LOCATION', 'BULK_EDIT', 'ITEM_EDIT', 'CATEGORY_EDIT', or 'CATEGORY_BULK_EDIT'. The optional parameter locationHierarchyName is required when the subViewType is 'ITEM_LOCATION'.
Prototype	CtgView WorkflowStep::getWflStepView(String subViewType, [String locationHierarchyName])

### **getLocationHierarchyNames**

Description	Returns the list of location hierarchy names defined in the given workflow step. The optional parameter canModifyAvailability filters the list of location hierarchy names based on the 'modify location hierarchy availability' flag. If not specified, no filtering takes place.
Prototype	String[] WorkflowStep::getLocationHierarchyNames([Boolean canModifyAvailability])

### **getModifyLocationHierarchyAvailability**

Description	Returns the 'modify location hierarchy availability' flag for a given location hierarchy in the given workflow step. The optional parameter locationHierarchyName is required when the subViewType is 'ITEM_LOCATION'.
Prototype	Boolean WorkflowStep::getModifyLocationHierarchyAvailability(String locationHierarchyName)

### **setModifyLocationHierarchyAvailability**

Description	Sets the 'modify location hierarchy availability' flag for a given location hierarchy in the given workflow step.
Prototype	void WorkflowStep::setModifyLocationHierarchyAvailability(String locationHierarchyName, Boolean canModifyAvailability)

### **getRequiredAttributeGroups**

Description	Gets the required attribute groups of a workflow step. The result is an array attribute collection names. The optional parameter subViewType can be 'ITEM_LOCATION', 'BULK_EDIT', 'ITEM_EDIT', 'CATEGORY_EDIT', or 'CATEGORY_BULK_EDIT'. The optional parameter locationHierarchyName is required when the subViewType is 'ITEM_LOCATION'.
Prototype	String[] WorkflowStep::getRequiredAttributeGroups([String subViewType], [String locationHierarchyName])

### **getEditableAttributeGroups**

Description	Gets the editable attribute groups of a workflow step. The result is an array attribute collection names. The optional parameter subViewType can be 'ITEM_LOCATION', 'BULK_EDIT', 'ITEM_EDIT', 'CATEGORY_EDIT', or 'CATEGORY_BULK_EDIT'. The optional parameter locationHierarchyName is required when the subViewType is 'ITEM_LOCATION'.
Prototype	String[] WorkflowStep::getEditableAttributeGroups([String subViewType], [String locationHierarchyName])

### **getViewableAttributeGroups**

Description	Gets the viewable attribute groups of a workflow step. The result is an array attribute collection names. The optional parameter subViewType can be 'ITEM_LOCATION', 'BULK_EDIT', 'ITEM_EDIT', 'CATEGORY_EDIT', or 'CATEGORY_BULK_EDIT'. The optional parameter locationHierarchyName is required when the subViewType is 'ITEM_LOCATION'.
Prototype	String[] WorkflowStep::getViewableAttributeGroups([String subViewType], [String locationHierarchyName])

### **Additional changes to script operations**

Each modified script operation listed in the following sections is preceded with one of the acronyms listed in the table below, which represent the type of change that was made.

N	New
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D	Deprecated
PU	Prototype updated
DU	Description updated

## Basic: Date

### DU setDateField

- Prototype: Date Date::setDateField(String field, Integer value)
- Description: Return a Date equal to the input Date, except that the specified field is set to the given value. Allowed field values are : YEAR MONTH DATE HOUR\_OF\_DAY MINUTE SECOND

## Container: Catalog

### D massUpdate

- Prototype: Boolean Catalog::massUpdate (Selection sel, String scriptPath, String parametersPath)
- Description: Do a mass update on the selection, using the script and parameters defined by the given paths (from the docstore)

### DU disableContainerProcessingOptions

- Prototype: void Container::disableContainerProcessingOptions(String[] options)
- Description: Disable the specified processing options - possible values: PRE\_SCRIPT, POST\_SCRIPT, VALUE\_RULES, VALIDATION\_RULES, DEFAULT\_VALUES, DEFAULT\_VALUE\_RULES, SEQUENCES, TYPE\_VALIDATION, MERGE\_WITH\_OLD\_VERSION, MIN\_MAX\_OCCURANCE, MIN\_MAX\_LENGTH, POSSIBLE\_VALUES, PATTERN\_VALIDATION, COL\_AREA\_LOCKS\_VALIDATION, LOCK\_CATEGORIES\_FOR\_ITEM\_SAVE, LOCKING, ALL

### DU setContainerProperties

- Prototype: void Container::setContainerProperties(HashMap properties)
- Description: The properties specified in the PROPERTIES hashmap are set for

the container in question. The hashmap keys can be one of SCRIPT\_NAME PRE\_SCRIPT\_NAME PREVIEW\_SCRIPT\_NAME ENTRY\_BUILD\_SCRIPT SCRIPT\_RESTRICT\_LOCALES. The values are required to be string names. The value for SCRIPT\_RESTRICT\_LOCALES must be true or false.

#### N defineLocationSpecificData

- Prototype: void Catalog::defineLocationSpecificData(CategoryTree ctr,Spec spc, AttrGroup[] inhAttrGrps)
- Description: Sets up location specific data for a catalog.

#### Container: Item

##### PU new\$CtgItem

- Prototype: new CtgItem([String sCtgName/Catalog ctg, Boolean bRunEntryBuildScript, Boolean bBuildNonPersisted, Boolean bBuildEmptyEntryPicture])
- Description: Returns a new item object. The argument can be a catalog name or a catalog object. The argument being a catalog object allows the propagation of attribute collections to process settings etc. to new items being built with this operation. If no catalog name/object is provided, then the default catalog from the current script context is used. bRunEntryBuildScript or bBuildNonPersisted should be set to false to disable the default behavior of this script operation to run the entry build script or build the non-persisted attributes respectively for this new item.

#### Container: ItemSet

##### D setItemSetFetchCategorySpecificAttributes

- Prototype: ItemSet::setItemSetFetchCategorySpecificAttributes

#### Container: LookupTable

##### PU put

- Prototype: void put(String sLkpTableName, String sStartKey, String sValue), void put(String sLkpTableName, String sStartKey, String[] asValues)
- Description: Put a new row in the lookup table sLkpTableName

## Container: Views

### N deleteCtgView

- Prototype: deleteCtgView(CtgView ctgView)
- Description: Delete the catalog view ctgView.

### DU setCtgView

- Prototype: CtgView CtgView::setCtgView(String viewType, String[] attrGroupNames, String[] permissions)
- Description: Sets the container view object with the given name/catalog and returns it. The viewType can be 'ITEM\_LIST', 'ITEM\_POPUP', 'ITEM\_LOCATION', 'BULK\_EDIT' or 'ITEM\_EDIT'. By default ITEM\_EDIT is used. Permissions are [V|E]

### DU getCtgViewByName

- Prototype: CtgView Container::getCtgViewByName([String viewName, String viewType])
- Description: Returns the view with the corresponding name. If no name is specified, returns the default view. Use '[System Default]' to refer to the default view. The viewType can be 'ITEM\_LIST', 'ITEM\_POPUP', 'ITEM\_LOCATION', 'BULK\_EDIT', 'ITEM\_EDIT', 'CATEGORY\_EDIT' or 'CATEGORY\_BULK\_EDIT'. By default ITEM\_EDIT/CATEGORY\_EDIT is used. If the view is not found, it returns null.

## Entry: Entry

### PU getFlatEntryNodes

- Prototype: EntryNode[] Entry::getFlatEntryNodes([Boolean skipEmptyGrouping])
- Description: Returns an array of flat EntryNodes of this entry

### PU getFlatPrimaryEntryNodes

- Prototype: EntryNode[] Entry::getFlatPrimaryEntryNodes([Boolean skipEmptyGrouping])
- Description: Returns an array of flat primary EntryNodes of this entry

## PU getFlatSecondaryEntryNodes

- Prototype: `EntryNode[] Entry::getFlatSecondaryEntryNodes([Boolean skipEmptyGrouping])`
- Description: Returns an array of flat secondary `EntryNodes` of this entry

## N getFlatEntryNodesOf

- Prototype: `EntryNode[] getFlatEntryNodesOf(EntryNode en)`
- Description: Returns an array of all the `entrynodes` under this `entrynode` in depth first order

## PU setEntryAttrib

- Prototype: `void Entry::setEntryAttrib(String sAttribPath, Object sValue)`
- Description: Sets the attribute `sAttribPath` (`spec_name/attribute_name`) of this entry to `sValue`. Perform optional checks before update if `bDoChecks` is true.

## N getEntryNodeForLocation

- Prototype: `EntryNode Entry::getEntryNodeForLocation(Category location, String sAttribPath)`
- Description: Returns the `EntryNode` for `sAttribPath` (`spec_name/attribute_name`) of this entry for the given location

## N setEntryLocationAttrib (Previously setEntryRelationshipAttrib)

- Prototype: `void Entry::setEntryLocationAttrib(Category location, String sAttribPath, Object sValue)`
- Description: Sets the attribute `sAttribPath` (`spec_name/attribute_name`) of this entry for the given location to `sValue`.

## N getChangedAttributes

- Prototype: `String[] Entry::getChangedAttributes(Entry secondEntry, [Category location])`
- Description: Returns an array of changed attribute paths. If a location is specified, only the attributes for the location are examined. If a location is specified, and the location does not apply to both entries, null is returned.

## PU/DU getChangedLocations

- Prototype: `HashMap Entry::getChangedLocations(Entry oldEntry)`
- Description: Returns a `HashMap` that contains 4 `Category[]` mapped to keys `DELETED`, `ADDED`, `MODIFIED`. A location (given by its category) appears in the `Category[]` for `DELETED` if it is in `oldEntry` but not in this entry. It appears in `ADDED`, if it is not in `oldEntry` but is in this entry. And it appears in `MODIFIED` if it is both in `oldEntry` and this entry and some of the attributes changed (and to get the details of those changes, one should call `getChangedEntryNodes` and get `getChangedAttributesForMultiOccurrence` for this location).

## PU/DU getChangedAttributesForMultiOccurrence

- Prototype: `HashMap Entry::getChangedAttributesForMultiOccurrence(Entry oldEntry, [Category location])`
- Description: Returns a `HashMap` that contains 4 `String[]` mapped to keys `DELETED_OLD`, `ADDED_NEW`, `MODIFIED_OLD`, `MODIFIED_NEW`. Used the `XXX_OLD` on `oldEntry` and the `XXX_NEW` on this entry (the new entry). This method determines the differences between the attributes of another `ENTRY` for multi-occurrence (grouping and non-grouping) `ENTRIES`. `ADDED_NEW` and `DELETED_OLD` will only include multi-occurrence attributes (groupings and non-groupings). Note on multi-occurrence non-groupings: The `MODIFIED_NEW` and `_MODIFIED_OLD_lists` will never include any multi-occurrence non-groupings, as multi-occurrence for non-groupings will only show up as Deleted or Added. If a location is specified, only the attributes for the location are examined. If a location is specified, and the location does not apply to both entries, null is returned. Please consult documentation for more details.

## DU getDisplayValue

- Prototype: `String Entry::getDisplayValue(Locale locale)`
- Description: Returns the primary key value of this entry.

## N getEntryLocationsHavingData

- Prototype: `CategorySet Entry::getEntryLocationsHavingData(CategoryTree ctr)`
- Description: Returns the set of locations for which this entry has location

specific attributes defined in the specified hierarchy.

#### N getRootEntryNodeForLocation

- Prototype: `EntryNode Entry::getRootEntryNodeForLocation(Category location, [Boolean bCreate])`
- Description: Returns the root `EntryNode` for this entry at the given location. `bCreate` returns a root entry node even if there was no data defined already for this location

#### N getRootEntryNodesHavingLocationData

- Prototype: `EntryNode[] Entry::getRootEntryNodesHavingLocationData()`
- Description: Returns a list of `EntryNodes`, each is a root entryNode per location that has data defined.

### Entry: UserDefinedLog

#### PU/DU forEachUserDefinedLogEntry

- Prototype: `forEachUserDefinedLogEntry(UserDefinedLog UDL, [Entry e,] String[] logEntries [, Boolean bReturnMultipleLogEntries = true]) { statements }`
- Description: Executes the statements for each group of log entries in the given `UserDefinedLog` or, if `Entry e` is defined, each log entry for that specific `Entry`. If `bReturnMultipleLogEntries` is false, the array of log entries will contain only the first (oldest) log in chronological order. This is only a valid option if `Entry e` is not defined. If `bReturnMultipleLogEntries` is true, all logs are populated in the array in ascending chronological order for a given `Entry` (oldest first). By default, `bReturnMultipleLogEntries` is true.

#### PU/DU userDefinedLogAddEntry

- Prototype: `void UserDefinedLog::userDefinedLogAddEntry(Entry entry, [String log_message], [Entry category])`
- Description: Add an entry to the user defined log. If a message is specified, set that for the `UserDefinedLogEntry`. If the category is provided then the logs are only restricted for that category.

#### PU userDefinedLogDeleteEntriesFor

- Prototype: void UserDefinedLog::userDefinedLogDeleteEntriesFor(Entry entry [, Entry category])
- Description: Delete all log entries for an entry from the user defined log.

#### N userDefinedLogGetEntriesFor

- Prototype: UserDefinedLogEntry[] UserDefinedLog::userDefinedLogGetEntriesFor(Entry entry[, Entry category])
- Description: Get all log entries for an entry from the user defined log. The category can be provided in order to get the logs associated for that category only.

#### PU/DU newUserDefinedLogEntry

- Prototype: newUserDefinedLogEntry(Date date, Container container, Entry entry, String log [, Entry category])
- Description: Returns a new user defined log entry object with for the specified entry which is either an item or category (with date/timestamp and log). If the category is also provided the logs will only be associated to that category.

### InputOutput: Feed

#### N startExportByName

- Prototype: Boolean startExportByName(String sName)
- Description: Run the export called sName. Returns TRUE if success.

#### DU createExport

- Prototype: String createExport(String marketSpecName, String catalogName, String specMapName, String exportScriptName, String syndicationName, [HashMap optionalArgs])
- Description: Creates the Export with given params. An optional parameter charsetName, which may be set in the optionalArgs parameter, describes the file encoding of the export. Otherwise, the Cp1252 is chosen as the default file encoding. Returns Done if successful, Error if not. Here is a complete list of the optional arguments which may be set in the optionalArgs parameter: String approverUserName, String charsetName, String distributionName, String distributionGroupName, String selectionName, String synType, String

diffType,String sParamsDocPath. The distributionName and distributionGroupName can be a list of distribution names delimited by the string returned by  
getStringValueForClassMember(com.ibm.ccd.common.util.Const, CATEGORY\_PATH\_DELIMITER)

## InputOutput: Reader

### PU getFullHTTPResponse

- Prototype: <HashMap getFullHTTPResponse(String url, HashMap hmRequestProperties, HashMap hmParameters, String sRequestMethod , [String sEncoding, Doc doc, String sContentType, boolean bGetResponseReader, boolean bPostUserInfo, String sDocStorePath]
- Description:Returns a HashMap (with RESPONSE\_READER and RESPONSE\_HEADER\_FIELDS) for the response for posting hmParameters or a doc of sContentType against the server at url, Use hmRequestProperties to send specific header information. An optional parameter bGetReader could be used to specify if the function needs to also return the response reader (default is true). An optional parameter bPostUserInfo could be used to specify if the function would need to post the invoking user information (default is false). The response is optionally stored into a document at sDocStorePath in the docstore.

## Security: User

### PU Clone User

- Prototype: User::cloneUser(String original\_username, String username, String firstname, String lastname, String email, Boolean enabled, String password[, Category organization[, HashMap roles]]) ]]> </prototype>
- Description: Clones existing user info into a new user. Password field is required. The optional roles and organization fields, when specified, override the roles and/or organization of the existing user.

### N getAllUsers

- Prototype: User[] getAllUsers()
- Description: Returns all users



## Spec: Spec

### N setNodeRuntimeSearchable

- Prototype: void Node::setNodeRuntimeSearchable(Boolean)
- Description: Sets the node to be runtime searchable or not

## System Admin: Logger

### N getLogger

- Prototype: Logger getLogger(String s)
- Description: Returns a logger (loggers are in the system log directory with the given name)

### N loggerDebug

- Prototype: void Logger::loggerDebug(String s)
- Description: Write s to this logger

### N loggerInfo

- Prototype: void Logger::loggerInfo(String s)
- Description: Write s to this logger

### N loggerWarn

- Prototype: void Logger::loggerWarn(String s)
- Description: Write s to this logger

### N loggerFatal

- Prototype: void Logger::loggerFatal(String s)
- Description: Write s to this logger

### N getScriptExecutionMode

- Prototype: String getScriptExecutionMode()
- Description: Return the current script execution mode

## PU LoggerError

- Prototype: void Logger::loggerError(String s)
- Description: Write s to this logger

## Workflow: Collaboration area

### N getStepsForEntry

- Prototype: String[] CollaborationArea::getStepsForEntry(Entry entry)
- Description: Returns all the steps that the entry is currently in for the given collaboration area. The return values is a string array containing the stepPaths.

## 3.6 Change requests

The following change requests (CR) have been implemented in this release.

<b>CR</b>	<b>Synopsis</b>
P10891	Single item save imports are running POST processing scripts even after doing disableContainerProcessingOptions
P11057	disableContainerProcessingOptions() not functioning properly
P11093	Edit Inheritance Creation/Going back for inheritance is general instead of object specific
P11094	Edit Item - Item inherits a value from a source that does not contain the sub spec node
P11155	Edit Item Inheritance - Inheritance rule will not get values from a 3rd level source if another Attribute Collection is defined, which is not in 2nd level
P11374	'Audit' under 'System Administration' does not return any results
P11392	Problems with "Bulk Edit" in Multi-Edit screen
P11560	Refreshing collaboration area does not update User Defined Core attributes immediately for step types that do not allow edit
P11588	System default view of fixit step does not automatically incorporate attributes editable in rest of workflow
P11590	Audit log search feature is inoperative
P11650	If number of bytes for a number attribute exceed 16 bytes , then it does not allow to save the attributes
P11660	Import: new statistic needed to capture total time preparing

P11682	Custom Import/Export Tool Importenv is not opening its corresponding page
P11705	Trying to add appserver status without an empty name gives "page cannot be displayed" error
P11708	Adding a subspec node or assigning a subspec to a primary spec, having same attribute names as that of a subspec does not add the common attribute names from sub spec
P11720	Short cut keys are not working for a few options on the Single Edit page
P11762	Rich Search screen - Inherited Values are not identified
P11779	Search results are displayed for a root hierarchy where the level is 0 and SKU has a value of 1
P11781	Maintain view selections on left hand men
P11826	exception.log files not being populated
P11854	The user should be able to save the basic search results for a lookup table in Search Catalog console when a lookup table is selected in the dropdown list in the Select Catalog dropdown list
P11872	Custom Import/Export Tool - Spec Node of type Lookup Table is not imported correctly
P11881	Tool Tip listing for checked out attributes flashes on and off if the list is very long
P11886	Edit Item/Hierarchy - Display sequence attribute will not be saved if item/hierarchy is already created and the display attribute was not displayed
P11926	Basic Selections with same name are getting overwritten
P11958	Value Rule Editor Screen title is incorrect
P11960	Left Hand Pane Catalog / Category pairing in left pane are not updated
P11980	UI Look & Feel of the Application should be more consistent throughout
P12002	Display Inheritance paths - If there are 2 or more different hierarchies, then only 1 will have '(H)' displayed next to name
P12005	Numbered links to specific items not fully visible with item is reserved in multi edit screen
P12010	It is possible to have catalog/hierarchy mismatch when setting up collaboration area
P12070	Update dbms_utility package

P12076	Edit Spec – It is possible to associate regular spec nodes to inheritance ones
P12079	Attribute values not retrieved for hierarchy nodes in a collaboration area history unless they are in the view
P12092	Localized root nodes designated as required on Spec Mapping page
P12093	Can see root node of localized attributes in item list
P12097	Security - Giving Access privileges to attribute collections for one user allows that user to view other attribute collections also.
P12101	Not able to delete an Attribute collection of type Inheritance even if all rules, hierarchies are deleted
P12112	Rich Search Tab search displays tabs for Single Edit instead of Rich Search
P12124	Incorrect error when you attempt to reserve an item that had incorrectly been released
P12128	Get invalid error if item in workflow step if Reserve is done twice and then saved
P12144	Collaboration Area Console - Hide When Empty will always give server error page
P12156	Multiple Edit - If there are 2 specs that reuse the same sub spec specified in the attribute collection, then the catalog view will not display these sub spec attributes
P12157	Import Script giving null pointer exception
P12159	The "restrict display locales" setting in
P12171	Can delete a parent node if its child is in a workflow
P12195	Get Items Linked To This Item Query
P12212	Mapped Hierarchy Section of Item Edit Screen
P12220	Category being removed from the collaboration area
P12227	Mass update does not set time part of a date field
P12230	New index IDOC_DOA_2
P12267	Empty date attributes say "null" in workflow history
P12271	Lookup table OR Catalog: Search having Exact Match predicate is not working
P12281	Date type attribute doesn't display default values set in the spec's default field
P12282	Item status icon is changed by Macro
P12283	Using Date type attribute as a primary key causes Validation

	error and cannot save an item
P12288	Provide contextual information for posts
P12312	Period type attribute defaults to hyphen ("") for Hour and Minutes part of START_DATE
P12360	Can't search for German character ß
P12365	Strange column name is displayed when prompted to persist lookup table sorts
P12368	In lookup table popup, searching for string enumeration does not work
P12369	In Category, setting string enumeration rule to NONE with external value rule makes dropdown disappear in UI
P12380	Hide empty collaboration areas sometimes hides nonempty areas sporadically
P12397	Performance of Roles edit page is slow
P12400	Mass Update for a Single item is failing
P12411	Validation rule still executed even after
P12414	\$STOP/bin/exportCompanyAsZip.sh is missing
P12419	Attribute inside grouping disappears if item is saved in a view that does not show attribute
P12420	It is not possible in to setup an user who has ADD ITEM rights but not ADD CATEGORY rights for a Category Tree/Catalog combination in the left pane
P12426	jsp.footer error when modifying role/locale setting
P12439	Restrictions on script locales should be configurable through austin.properties as well as through setContainerProperties()
P12442	Deleting occurrences on a multi occurrence group is erroneous
P12446	Change saveCtgItem to behave as "Save As Draft" in a workflow step.

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## 4.0 Known Issues and limitations

The following table lists the open change requests that remain known issues in WebSphere Product Center 5.0.1. These issues are being considered for releases subsequent to WebSphere Product Center 5.0.1.

P10455	It is possible to reserve the same set of attributes twice
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	after a split in a workflow
P10689	Search Attribute - ENTER key not working from search popup screen
P10891	Single item save imports are running POST processing scripts even after doing disableContainerProcessingOptions
P10995	arrayreturntyped operations should return an empty array/set instead of null/exception
P11057	disableContainerProcessingOptions() not functioning properly
P11093	Edit Inheritance Creation/Going back for inheritance is general instead of object specific
P11094	Edit Item - Item inherits a value from a source that does not contain the sub spec node
P11155	Edit Item Inheritance - Inheritance rule will not get values from a 3rd level source if another Attribute Collection is defined, which is not in 2nd level
P11170	delete all collections removes generated from display
P11228	can't create collection and save workflow in same script
P11273	jmsGetMsgProperties() always returns an empty array
P11551	Inconsistency in the use of a few script operation names
P11560	Refreshing collaboration area does not update User Defined Core attributes immediately for step types that do not allow edit
P11575	Creating a user which already exists does not have correct flow after error message
P11576	After creating new User, the User Console should be displayed
P11588	System default view of fixit step does not automatically incorporate attributes editable in rest of workflow
P11613	The user can add Items having a primary key with more than one character though the maximum length of primary key is set to "1"
P11630	Deleting all items in a Selection causes no nodes to be displayed
P11642	Mandatory fields need to be disabled for table display properties in the Job Console
P11650	If number of bytes for a number attribute exceed 16

	bytes , then it does not allow to save the attributes
P11673	dropEntries() should be renamed as removeEntries()
P11703	Error Message not displayed while deleting the last node in any spec except primary spec. An exception is thrown in the log files
P11705	Trying to add appserver status without an empty name gives "page cannot be displayed" error
P11707	User can make a Primary key non-persistent, this should not be allowed
P11708	Adding a subspec node or assigning a subspec to a primary spec, having same attribute names as that of a subspec does not add the common attribute names from sub spec
P11719	The search criteria is lost when a sort is done on a lookup table column in the lookup popup window
P11720	Short cut keys are not working for a few options on the Single Edit page
P11723	Needs updating - migration script for tqe_mqu_queue
P11726	Left Pane - Font Size settings are not reflected in the left pane
P11732	Selection:New:Selection Name text box becomes blank on Expanding Hierarchy tree
P11735	Rolling back an organization hierarchy containing duplicate users duplicates the users in the default organization
P11736	Rolling back an organization hierarchy displays a pop-up message saying the item is already added
P11738	Rolling back a hierarchy displays the data once in user console and three times in the default organization
P11739	Re-expanding an expanded default organization re-changes the view users data
P11740	Click on the duplicated user names in the left pane and it shows the message "Default Organization Hierarchy>Default Organization" multiple times
P11761	Value entered for Password (editable) field appears in the decrypted form on Multi Edit screen and encrypted form on Single Edit screen

P11762	Rich Search screen - Inherited Values are not identified
P11767	Create a Catalog View with the name same as the already existing one. System displays "Error Creating Catalog view message". Better message would be "View with the given name already exists"
P11775	Click on the "Exit" button on any mapping details page, the page does not close
P11779	Search results are displayed for a root hierarchy where the level is 0 and SKU has a value of 1
P11801	Schedule Status Information (Return values) for Catalog to Catalog Export is incorrect
P11802	Left Pane - An error message should appear when copying/cutting hierarchy node where it would duplicate path
P11820	Unable to set False values on flag attributes of new items in multi edit screen
P11822	exportEnv() cannot export "ITEM_CATEGORY_MAPS"
P11832	Save button is gone after clicking Save on the Report page
P11837	Long workflow names cut off in collaboration console
P11854	The user should be able to save the basic search results for a lookuptable in Search Catalog console when a lookup table is selected in the dropdown list in the Select Catalog dropdown list
P11857	Returning to Import Console from "View and Change Table Display properties" Causes an error
P11858	Returning to Import Console from "View and Change Table Display properties? Causes "1 export could not be deleted message"
P11859	Fetches files are NOT deleted from doc store when a Job is deleted
P11862	Catalog script successfully uploaded to doc store, causing error when clicked
P11872	Custom Import/Export Tool - Spec Node of type Lookup Table is not imported corre
P11881	Tool Tip listing for checked out attributes flashes on and off if the list is very long



P11885	Need white space between comments given by multiple "And Approvers" in workflow
P11886	Edit Item/Hierarchy - Display sequence attribute will not be saved if item/hierarchy is already created and the display attribute was not displayed
P11896	Checked out attributes listing is out of order in Tool Tip for workflow history
P11906	Click on ">>" to expand the "User Search" results for an Organization Hierarchy should not throw any error message
P11925	Object to ACG role Map does not save the ACG
P11947	multiple catalog import
P11958	Value Rule Editor Screen title is incorrect
P11959	async wfl ops should take in a boolean optional arg for waiting or not
P11961	austin.properties has redundant mq/jms parameters
P11963	RE::match() should return empty array instead of null in case of not matching
P11968	Edit Item/Hierarchy "Occurrences to Display" option displays last occurrences when it should display first
P11971	Needs operation for setUserOrganizations()
P11980	UI Look & Feel of the Application should be more consistent throughout
P11982	Spelling correction in the error message of import "occured" >>"occurred"
P11989	getRolesForCompany() should return empty array in case of bad name
P11990	getRoles() and getRolesForCompany() can be combined into one script operation
P12002	Display Inheritance paths - If there are 2 or more different hierarchies, then only 1 will have '(H)' displayed next to name
P12005	Numbered links to specific items not fully visible with item is reserved in multi edit screen
P12010	It is possible to have catalog/hierarchy mismatch when setting up collaboration area
P12017	loading specs from XML misses local var check
P12076	Edit Spec – It is possible to associate regular spec nodes

	to inheritance ones
P12079	Attribute values not retrieved for hierarchy nodes in a collaboration area history unless they are in the view
P12081	"Lookup Table Import Spec" spec is not returned by Spec Explorer Search in the Left Pane
P12085	Edit Hierarchy Mapping - Multiple mappings will be displayed on remapping when specifying different mapping and saving in the same data entry session
P12087	Recategorization not working if forbidden in whole catalog but allowed in SelectionMember ACG
P12090	Edit Hierarchy - Removing standalone spec is not reflected in the data entry screen
P12091	Can add hierarchy nodes to collab area if sku is not editable anywhere in the workflow
P12092	Localized root nodes designated as required on Spec Mapping page
P12093	Can see root node of localized attributes in item list
P12097	Security - Giving Access privileges to attribute collections for one user allows that user to view other attribute collections also.
P12101	Not able to delete an Attribute collection of type Inheritance even if all rules, hierarchies are deleted
P12104	Widget exception thrown on deleting any node on a spec that is used as a path attribute
P12108	MemberSelection ACG's ignored in left pane right click menu
P12112	Rich Search Tab search displays tabs for Single Edit instead of Rich Search
P12117	Left pane hangs on Cut, Modify Selection filter and Paste operation
P12124	Incorrect error when you attempt to reserve an item that had incorrectly been released
P12128	Get invalid error if item in workflow step if Reserve is done twice and then saved
P12131	Edit Item/Hierarchy [SystemDefault] view does not display required attributes for Secondary specs
P12133	New op LookupTable::getLkpId() is redundant
P12141	replaceString() should support regex

P12142	replace() and replaceString() have the interchanged documentation in the Script Sandbox
P12154	WSDL implementation script should be validated before saved
P12156	Multiple Edit - If there are 2 specs that reuse the same sub spec specified in the attribute collection, then the catalog view will not display these sub spec attributes
P12160	Server error occurs on creating a Preview script for a catalog.
P12163	beta zip stream writer
P12166	left pane too slow on login
P12168	Need to reboot application to implement changes in MemberSelect ACG permissions
P12171	Can delete a parent node if its child is in a workflow
P12179	Item ReCategorization using Data Entry screen is very slow
P12214	"Catalog Spec" should be replaced with "Primary Spec" in the drop down list of Specs Map console.
P12214	"Catalog Spec" should be replaced with "Primary Spec" in the drop down list of Specs Map console.
P12215	Server error displayed when trying to map a hierarchy node that has been deleted from left pane.
P12227	Mass update does not set time part of a date field
P12228	Catalog to Catalog Export is not setting the value for the time part of the date field
P12231	Can't change ACG for organization hierarchy
P12267	Empty date attributes say "null" in workflow history
P12271	Lookup table OR Catalog: Search having Exact Match predicate is not working
P12275	Splashscreen can be dragged & dropped
P12281	Date type attribute doesn't display default values set in the spec's default field
P12283	Using Date type attribute as a primary key causes Validation error and cannott save an item
P12312	Period type attribute defaults to hyphen ("") for Hour and Minutes part of START_DATE
P12314	Removing attribute collection from the view will still keep it for the Tabs

P12317	New button is missing from the Catalog Import Script console when filtered by an Alphabet
P12319	reportAllTableIndexes() causes out of memory
P12323	buildCategory() fails if no displayed value (UI and script for Oracle DB)
P12325	Importing XSD Spec reports parsing error
P12363	Beta Workflow events are not processed synchronously when nested scripts ar
P12365	Strange column name is displayed when prompted to persist lookup table sorts
P12367	Missing word when file is fetched from docstore or ftp
P12368	In lookup table popup, searching for string enumeration doesn't work
P12375	Import/Export Tool - Import of pending objects is not executed
P12378	WSDL web service name should be checked before saved
P12380	Hide empty collaboration areas sometimes hides nonempty areas sporadically
P12395	Audit Search results are not as per "Date From" , "Date To" criterion
P12397	Performance of Roles edit page is slow
P12400	Mass Update for a Single item is failing
P12403	Catalog Item locking issues were sporadically observed during a time when large catalog rollbacks were occurring on unrelated catalogs and even unrelated companies
P12430	Cleanup -- more detailed doc for new Spec
P12435	Cleanup --- in ScriptSandbox, printXML() prints out only values, not tags and a
P12440	Cannot save a binary-typed file name with underscores/spaces
P12462	the "Show Populated Categories" checkbox filter doesn't work for Lis
P12494	install_war.sh script does not configure
P12499	beta add catalog search page to getPageURL
P12551	no way to get locale specific display name
P12553	auto-refresh of item & item-location screen on macro & action script
P12608	Cloned items move to Unassigned category
P13050	post-beta request.log and soap.log are always empty

P13487	Catalog View Tab names can be non-unique
P13565	Binary Spec type overwrites previous Binary with same name
P13568	Mozilla wrongly reported as IE5
P13572	Characters !@\$%^&()-_="+ "<>/'\ ?T cause graphical errors during binary
P13575	Item locking problem when being imported into catalog
P13601	No error when entry is reserved twice or released by 2nd user
P13662	Refresh and Undo buttons not disabled in Rich Search screen
P13663	Workflow no longer editable if Initial, Success, Failure or Fixit steps a
P13682	Support address correct?
P13688	Clone of item with invalid entries does not have invalid entries
P13703	Invalid buttons available in workflow steps in which all attributes are Viewable
P13712	Catalog Attributes Menu and page titles differ
P13724	Searching for specs/attributes to add to an attribute collec
P13726	Post-beta Imports fail when generated file spec is used
P13750	Replace type feed fails
P13753	Alerts for workflow approval is not working
P13756	Hitting back button after retrieving file on Import Console goes to first page
P13760	installer wrong error message if invalide directory is selected
P13762	No back button when person views User Info from Jobs console
P13777	System default view does not show expected fields in multi-e
P13783	Invalid value for Lookup Table attribute does not cause error
P13807	Invalid characters on import name not in error message.
P13816	Item checked-out icon does not display correct attribute inf
P13821	getMoniker method not implemented
P13822	Import console - Import items not deleted error dialog.
P13830	Invalid filename still allows save on binary spec node type
P13885	No import option for group specific access
P13886	PASSWORD attribute error on save with specific sequence
P13893	user settings text columns and multiline limit affect WPC GUI
P13898	Hierarchy mapping button not disabled in hierarchy workflow
P13927	Copying multiple catgeories into one simulataneo
P13932	Location Data panel on Item doesn't have a close button
P13935	Attempt to add "-2" hierarchies does not result in error
P13939	Location views setup avail flag

P13942	Cloning unsaved entry with type validation errors clones invalid data
P13944	Can't remove unsaved modified entry from Fixit step
P13950	Location Data button in grey until saved
P13981	MySettings Sort Item List by PrimaryKey redundant?
P13985	Adding an item to a category while sub
P13992	Currency attributes in multi-edit do not have two zeros afte
P13999	SECURITY Can see passwords in multi-edit
P14005	Adding invalid URL with " character leads to junk text
P14009	MySettings Display Locked icon on Catalog,Hierarchy consoles
P14024	createWebService() should work without implementation script
P14069	A new NUMBER occ with a value rule is blank until saved
P14073	Relationship to Item named !@\$%^&()-_="+ "<>'/\ ?T failing
P14074	Workflow modify/general step - imageURL field issue
P14081	Workflow modify/general step - URL field issue
P14086	A NUMBER attribute with an invalid entry does not clone
P14104	No error when invalid number of items are added
P14137	RelationContainer giving error for Multi Level Spec
P14144	Single Edit - Tab Errors icon is generated with no information when errors happen
P14145	Location Attribute - Relationship Value doesn't appear after Specify
P14149	path removed from text boxed after it is found invalid (image upload popup windoow
P14150	upload image popwindow doesn't refresh properly with invalid data
P14222	BINARY field url or files with underscores do not validate
P14224	Freshly cloned NUMBER field with default is not read-only
P14233	Edit Hierarchy - Can map to the root hierarchy node
P14237	Multi Edit - Curenry field need to give an error if more than 2 digits
P14239	Checking out 150 items not working
P14241	Cloned entry in workflow has history icon before it is saved
P14294	Runtime Searchable not auto selected
P14296	Multiple edit tab is available in collaboration areas when s
P14304	n/a is displayed for grouped or multi-occur fields in Item List view
P14343	Gap between item number column and first attribute in multiedit data entry
P14345	Multi Edit Hierarchy - Cloning/Adding hierarchy puts string value 'null' for primary key attribute
P14387	Table Properties allows hiding of all columns

P14388	Sort by description does not work
P14390	Localized attributes appear in dropdown for catalog display
P14402	Hierarchy display attribute is not displayed in multi-edit
P14420	Duplicate exports error comes too late
P14422	Multi Edit - Location Attributes are displayed for items when you check in My Settings: 'In Multi Edit, show all category ...'
P14430	Tab view options do not appear in workflow view validation setup until entire workflow is saved
P14432	Entire path not visible in multiedit hierarchy tree workflow
P14436	Rich Search - 'Clear' does not clear up the selected Category Restrictions
P14438	Edit Hierarchy - 'User Defined Core...' does not display any attrib
P14461	getCurrentCtgViewName returns null in Data Entry scripts
P14466	Cannot create a rich-search template with same n
P14469	Reduce column width button does not work in multi-edit
P14472	Rich Search - After saving a new template, the appropriate attributes do not loa
P14482	Changing the specs for the location hierarchy gives errors
P14494	In location module of Location Attributes, a search with underscore character sometimes doesn't work
P14535	Attribute columns display too narrow if there are additional exit step buttons i
P14546	isDefinedLocationSpecificData() script operaion needed
P14551	Edit Spec - User can set 'runtime searchable' on local child node itself
P14591	Fixit step ignores if required attributes are missing
P14604	Attribute Collections selection disappears when saved
P14670	No validation error for non-existent binary or image in category
P14672	Workflow multi-edit for a large number of hierarchy
P14676	Delete shortcut ctrl-alt-D works but no ctrl-alt-d
P14678	Minor problem searching when adding standalone spec to category
P14694	Standalone spec attributes do not appear when Spec is added
P14727	Entry is always cloned on save
P14730	ITA has multiple indexes that should be merged
P14732	Locking code needs to be improved
P14748	Display attribute is not displayed in category multi-edit wi
P14755	Attempt to create simple spec with no name in Specs-Copy does not cause
P14756	After looking at Spec pop-up organization becomes unsaved

P14767	Workflow Password field in inherited location attribute a
P14848	AbstractEntry.getChangedEntryNodes very slow
P14946	Changing view modifies item
P14949	Rich Search - If same spec is used as location for both hierarchies,
P14950	Rich Search - Can not search on unassigned
P14953	Can't edit time
P14956	Rich Search - 'Dynamic' spec in the template doesn't add new attribute
P14958	Single Edit - Specifying value for the attribute in one tab will not be persisted
P14960	Says "disabled attr groups" instead of "collections" when editing nested workflow
P14965	New item going through interrim checkin has no history
P14966	New hierarchy node says "null" for primary key if added in multi-edit
P14969	Reserve/Release/ and Exit value buttons not disabled in Rich Search
P14970	No tab view for single edit global attributes in workflow step set up, until you
P14975	Items being imported one by one; too slow
P14984	Only one collaboration area appears in checkout tooltip
P15007	Location Attributes - There is no view button to view the image/image url/url
P15038	Clicking on nonempty step in Gui Editor doesn't take user to items in that step
P15039	Reservation enabled automatically in Dispatch/Approve steps created through UI
P15040	Edit Hierarchy - Localized display attribute does not work
P15049	Multi Edit - Java script error appears when clicking on 'auto size' when no attributes are displayed
P15051	Left Pane - in the List View, right click REFRESH is not working for a sub category
P15054	Left Pane - clicking on paths in List View sometimes doesn't show category links
P15055	Left Pane - list view does not filter by selection
P15056	Left Pane - List view does not filter out empty category nodes
P15122	getCategorySetByAttributeValue() on Date-typed node returns empty set
P15123	Checked out value rule attempts update in source on save, gives erro
P15125	Bug From Fix - Location Attributes - If error happenes in another lo
P15127	Add Log for Item - Adding a log to the hierarchy log from the item will



	not gene
P15140	ItemSaveEntryProcessor.buildItemDifferencesXML slow
P15145	ModelBasedSerialized tree is running sync even when
P15195	Running an import causes all items in all compa
P15202	Left Pane - Unexpected Error when expanding category
P15207	Alert for login produces 2 alerts each time
P15210	() missing beginswith/contains searches on lookup table global
P15217	Scripting - 'getItemPrimaryKeysForCategory' should return items in order of left
P15218	Password data becomes invisible when item is read only in single edit
P15221	Saving invalid location data in workflow gives error asking if you w
P15223	Getting history of entry after modification in workflow gives server
P15226	Cannot delete an item from Item List screen after a catalog rollback
P15232	Selection name wiped when Hierarchy tree expanded
P15236	Import existing categories into Hierarchy Collaboration Are
P15239	Intermittent re-create the company does not completely wipe out the old data
P15242	Hierarchy nodes not checking in if imported to collab area -
P15247	Get Pk locked message intermittently when saving an item
P15248	Refresh/Undo button not enabled in Dispatch/Approve/Performerless steps
P15250	Alert emails come from support@trigo.com
P15264	Performance profiles, getting screen error
P15272	userDefinedLogEntryGetTarget() fails on a category
P15273	Null pointer exception error is displayed when occurrence is deleted in location attribute screen.
P15275	Population of offline search results container exposed via scripting
P15277	Logic to evaluate success/failure of a request to make requests available
P15278	Collaboration area history logging of attribute value changes
P15279	Attribute type clarification (1) allow date only (2) allow date/time
P15286	Export XML uses TrigoXML in tag name
P15300	Edit Item/Hierarchy - Macro input parameter spec appears without order first
P15305	getFlatEntryNodes() returns duplicate locale root nodes
P15307	Viewing Location Attributes Relationship item
P15309	items stuck in merge step in workflow
P15312	"Trigo" referred to on Home->MyTask List screen

P15313	Categories without display names in LHP list view are blank
P15314	Custom tools do not appear in lhp module until relogin
P15316	User Setting "In Multi Edit, show all category specific attributes..
P15317	Left Pane - list view does not show categories if display attribute not set
P15318	Left Pane - if category display attribute is not set, search results in left pane
P15337	hasNonInheritedValue() throws exception on root entryNode
P15339	New mappings not listed in Schedule status page after icm feed completion
P15340	Errors in pre-proc script do NOT prevent checkin and do NOT add to fixit step
P15342	arraylist concurrent modify error when closing location data popup (doing a save)
P15351	getCatalogAttributes() does not return all the values set by setContainerPropert
P15353	Update document for setContainerProperties()
P15354	Item in source is not checked out if checked in from first collaboration area to which it has been checked out
P15357	Hierarchy Collaboration Area 4 categories result in 6 approvals
P15359	multi-occurrence attribute display issues in multi-edit screen when attribute is editable
P15360	Single Edit - Can add a new occurrence for the uneditable field
P15361	Category specific attributes not populating during import
P15362	On sorting the dates attributes of the Items A server Error occur
P15363	Location Attributes - Sometimes I get java script errors when making
P15364	Exit button disappears when there is unsaved entry
P15365	Rich search added to bookmarks automatically
P15367	getOriginalItem returns the modified item in workflow step
P15371	Left Pane - search for users in organization module results in link nodes with blank names
P8078	Containers not ordered when workflow selected in Collaboration edit page
P9576	disableContainerProcessingOptions() is not working properly
P9861	Hierarchy Attribute page should contain a way to setup a link to the catalog items *missing feature*
P9865	Organization in the Left Pane should allow the deletion of a user *missing feature*

P9999	Hierarchy Attributes page should have a 'Save' button and nothing should be committed on an individual field basis
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## 5.0 Installation Notes

### 5.1 Change in configuration files

A change has been made to the **common.properties** configuration file in this release.

#### Removed configuration properties

- create\_unique\_key\_for\_multioccurrence\_groups
- create\_unique\_key\_for\_multioccurrence\_localized

#### New configuration properties

max\_number\_items\_for\_realtime\_search

Description: Set for rich search: maximum number of items allowed to be searched on in real time. If the number of items returned by the initial query estimate is greater than this number, the search will be scheduled as a background search.

For example:

```
max_number_items_for_realtime_search=1000
```

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