IBM

WebSphere Product Center Release Notes for
Fix Pack 5.2.1.5

Note!

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

12 February 2007

This edition of this document applies to WebSphere Product Version, version 5.2.1 5, and to all subsequent releases and modifications until otherwise indicated in new editions.

Table of Contents

1   Overview

This document addresses enhancements, product fixes, installation instructions, and other updated information for WebSphere Product Center Fix Pack 5.2.1.5.

The following features were the main drivers for the delivery of this fix pack:

- Portal Integration related performance changes

- IBM Tivoli License Management (ITLM) compatibility signature file for Version 5.2

- Daylight Savings Time (DST) Compliance

- Product fixes

1.1   Fix Pack requirements

WebSphere Product Center 5.2.1 must be installed prior to the application of Fix Pack 5.2.1.5. If you are migrating from a maintenance release between version 5.2.1 and 5.2.15, ensure that you have applied all configuration changes (i.e. common.properties updates and schema changes) as stated in the readme file provided with each maintenance release.

2   Enhancements

- Portal Integration related performance changes

  - WSDL retrieval optimization (WSDL Caching)

  - SOAP Envelope validation switch

  - Script Caching

  - Web service Splitting

  - Session Management in the web service layer

- IBM Tivoli License Management (ITLM) compatibility signature file for Version 5.2

- Daylight Savings Time (DST) fix

2.1   Validation switch for SOAP requests and response

2.1.1   Validation switch for SOAP requests

In script based doc literal type webservices, the inbound SOAP requests are validated against the XML schema defined in the WSDL for that webservice. Only after the validation succeeds, further processing is done on the request XML. This validation can be bypassed if the client has a fixed way of generating the request XMLs. In portal integration we have exactly the same situation where the only client is the Portal application and it has defined way in which it generates the request XMLs. The doc literal webservice in WPC can be assured that the request XMLs would be according to the schema defined in the WSDL and hence the validation can be bypassed.

To achieve this bypassing, there will be a new checkbox provided on the webservice creation/edition page. The names of these two new checkboxes would be "**Skip validation of SOAP requests**". This checkbox if checked would mean that there would not be any validation done for the inbound SOAP requests. If not checked, the validations would be done by default for the inbound requests.

For debugging purpose this checkbox should not be checked for the webservice.This will ensure that the validations are done and that the SOAP requests are adhering to the WSDL schema. Once the protocol is set between the client and the service, the checkbox should be checked to skip the validations.

2.1.2   Validation switch for SOAP responses

Just like SOAP requests, the SOAP responses also are validated against the schema defined in WSDL of script based doc literal webservice. This again can be bypassed for the same reasons as discussed in the above section. To achieve this, a new checkbox would be provided on the webservice creation page. The name of this checkbox would be "**Skip validations of SOAP responses".** This checkbox if checked would mean that there would not be any validation done for the outbound SOAP responses. If not checked, the validations would be done by default for the outbound responses.

For debugging purpose this checkbox should not be checked for the webservice.This will ensure that the validations are done and that the SOAP responses are adhering to the WSDL schema. Once the protocol is set between the client and the service, the checkbox should be checked to skip the validations.

2.2   Session Management – Portal Integration

2.2.1   Web Service Session Management

Web services invoked from Portal are stateless. Session Management is implemented in Portal by passing the Session ID in a SOAP Header. WPC generates a new session ID for each Portal user session. The Portal user has to get and retain the session ID and send it to WPC after each subsequent call.

In the Portal, the Session ID is encapsulated in the user object. These user objects are contained in the WPSContext object. In order for the session management to work correctly, the WPSContext object has to be cached either by the caching framework/portlet context, per user login.

2.2.2   WPC Request with SOAP Header

```
    <soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
// without SOAP Header since it is the new user
```

2.2.3   WPC Response with SOAP Header

```
    <soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
```

```
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
      <soapenv:Header>
<ns1:sessionIDsoapenv:mustUnderstand="0"xmlns:ns1="http://xml.apache
.org/axis/session"/>4932478437954237555 </soapenv:Header>
```

2.2.4   Subsequent Call

WPC Request with SOAP Header

```
    <soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
      <soapenv:Header>
<ns1:sessionIDsoapenv:mustUnderstand="0"mlns:ns1="http://xml.apache.
org/axis/session"/>4932478437954237555 </soapenv:Header>
```

WPC Response with SOAP Header

```
    <soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
      <soapenv:Header> <ns1:sessionID soapenv:mustUnderstand="0"
xmlns:ns1="http://xml.apache.org/axis/session"/>4932478437954237555
</soapenv:Header>
```

2.3   Code changes made to sample portlets

File : IWPCUser.java
Content:

```
public static final String WPC_AXIS_SESSIONID =
"WPC_AXIS_SESSIONID";
```

Description: Key variable name for the property in WPCUser to store the WPC generated SessionID.

File: SoapReponse.java
Content:

```
private String wpcAxisSessionID;
```

Description: Variable to store the WPC generated SessionID from the SOAP Response. This is used to check the request and response SessionID is the same OR different in the case where a session timed out

File: WSHelper.java
Method:

```
public Element getCatalogs(WPCUser user) throws
WPCMediatorException {
```

```
SoapResponse soapResponse = invokeSOAP(getSoapURL(
                     ISoapMessageKeys.REQ_GET_CATALOGS), requestXML,

(String)user.getProperty(WPCUser.WPC_AXIS_SESSIONID));
setWPCSessionID(soapResponse,user);
```

Description: Invoke webservice with the sessionID, which is stored in the User. Set the newly generated sessionID in the user property only if it is new or it has timed out.

File: SoapInvoker

Method:

```
private static SoapResponse invokeWithMOM(Call call, String
requestMsg,Attachment attachment,String wpcSessionID) throws
AxisFault {
        //when the ResponseMessage contains SOAP session Header
store it in soapResponse
        SOAPHeaderElement resSessionID =
call.getResponseMessage().getSOAPEnvelope().

   getHeaderByName(SimpleSessionHandler.SESSION_NS,SimpleSessionHand
ler.SESSION_LOCALPART);
        Long sid = null;
        if(resSessionID != null) {
              try {
                    sid = (Long)
resSessionID.getValueAsType(Constants.XSD_LONG);
              } catch (Exception e1) {
                    e1.printStackTrace();
              }
        }
return new SoapResponse(buff.toString(),
attachmentList,sid.toString());
```

Get the generated SessionID from WPC Response and set the value in the SoapResponse Object.

Code to add the sessionID in SOAP Header if session exists

```
// when wpcSessionID is present create a SOAPHeader with Session ID
if(!UIUtils.isEmpty(wpcSessionID)) {
try {
//create a session element with session id
Document document = factory.newDocumentBuilder().newDocument();
Element sessionElement =
document.createElementNS(SimpleSessionHandler.SESSION_NS,
                          SimpleSessionHandler.SESSION_LOCALPART);

sessionElement.appendChild(document.createTextNode(wpcSessionID+""))
;

SOAPHeaderElement sessionHeader= new
SOAPHeaderElement(sessionElement);
```

```
        sessionHeader.setActor(null);

        //add Session ID to SOAP Header
        call.addHeader(sessionHeader);
```

2.3.1 WPC Migration of WSDL definition changes

The WSDL definition for WPC needs to be changed to include SimpleSessionHandler in the request and the response flow of web service processing.

To update the web service definitions, the following java class needs to be executed, which will update the server-config.wsdd file according to the common.properties values defined:

$JAVA_RT com.ibm.ccd.soap.common.WebServiceMigrationForSessionHandling

2.4   Work with multiple Items

The Multi-Item Edit Portlet provides the ability to update Item details for a selected set of Items. The user can select the items from a search result, and proceed to perform a mass-update of the items' details.

The items details update is an asynchronous process, where the details are submitted to WPC, and the user can proceed with working with other portlets. The status of this asynchronous transaction is tracked in the Transactions portlet.

2.4.1 Multi-edit rendering

- Provides support to render data types specific html controls in mass-edit portlet. This reduces the possibility of entering wrong data. Support for Relationship, Lookup, Time Zone, Number Enumeration, and String Enumeration added

- The items that require changes can be selected by clicking the checkbox

- Apply changes to all selected items for a particular attribute by clicking the header attribute name that triggers a popup window. This popup contains the corresponding input control for the chosen attribute type

- Individual attribute value can also be modified the same way by clicking the text box, which triggers the popup window

- Click "Update" button in popup window to apply changes otherwise "Cancel"

- Supports data type validation and displays error messages for attributes prior sending it to WPC

2.5   Data Type Validation

Validation framework is only for validating data types, and does not include WPC Validation rules or any other checks. Apart from these data type validations, it also checks for the mandatory and minimum occurrence criteria for all the attributes.

The WPC data types that are supported as part of this framework are Number, Integer, Currency, Date, Period, URL, Image URL, Thumbnail Image URL, Image and Thumbnail Image.

This framework is aimed at improving the usability of Work with Item portlet and Mass Edit portlet by validating the data entered by the user at the portal server itself and displaying the validation errors in more intuitive way. These also avoid making WPC web service calls with invalid data.

- There is no change in the way a user use the Work with Item portlet and Mass Edit portlet.

- When the data entered by the user is submitted, the validation framework validate the data against the corresponding data type and if there are any errors, they will be reported back to user at the top of the portlet window. A maximum of two errors will be displayed in the portlet window. To view all the validation errors, user can click on a hyperlink provided just below the two error messages. These links pops-up a new window with all the errors and their description.

- The error message will provide enough information for the user to act upon such as the attribute display name (along with the occurrence index for multi-occurrence attributes), the invalid value entered by the user and the attribute data-type.

- Some data-types such as Date and Period require check for the format in which the date values are entered in addition to the date validation check. Validation framework will check for the correct format and in case of wrong format an appropriate error message will be displayed with the expected date format.

- An error sign will also be displayed against each attribute for which an invalid value has been entered. This error sign will have a tool-tip that will display the error message specific to that attribute only. This makes it easier for the user to identify the invalid values and correct them.

- Validation framework also performs mandatory checks for all the attributes. If any of the attributes is mandatory and if the user enters no value, an error message will be displayed.

- Validation framework also performs the minimum occurrence checks for multi-occurrence attributes. If an attribute requires a minimum number of occurrences and if values have not been provided for those occurrences, an error message will be displayed.

2.6 Portal source code delivery mechanism changes

Previously, the Portal source files were zipped into a file called sources.zip and was delivered separately from the core WPC code. To ensure a consistent delivery of all required updates to the WPC solution, including the portions needed for Portal integration, the Portal source files are contained in the main WPC patch delivery *.tgz file.

The following two zip files are bundled in reference to the WPC Portal Enablement integration:

- Binary WPC Portal build (wpsinteg_wps.zip) – A demo implementation for the Portal solution and requires customization to the default implementation

- Portal Source zip (portal_source.zip) - essentially includes the source code of WPC Portal Enablement

These files are located in the WPC directory: $TOP/integration/WebSpherePortalServer/WPS/.

2.7   IBM Tivoli License Management (ITLM) compatibility signature file for Version 5.2

ITLM enablement allows the software components and software offerings to be included in the IBM software catalog. The IBM software catalog is the basis of the information used by Tivoli License Manager to monitor software use and to recognize installed software.

For this release, ITLM enablement of WebSphere Product Center 5.3.2 is only for the WAS application server stacks and not for BEA WebLogic stacks. The enablement is for inventory monitoring only and is tracked by an inventory signature file in the following installed directory.

The path of the ITLM signature file is $TOP/*.sys2 not $TOP/etc/default/websphere/*.sys2.

2.8   Daylight Savings Time (DST) Compliance

An update was made for the compliance of WebSphere® Product Center with the new US Energy Policy Act of 2005 which changes the effective dates of US Daylight Saving Time (DST) in 2007.

As previously announced, IBM WebSphere Product Center releases are not affected by this DST change as long as the WPC server and users are in timezones that adhere to the same DST rules. The enhancement provided in WPC 5.2.1-FP005 is to additionally support the cases where the WPC server and users are in timezones where the DST rules do not match. As of 5.2.1-FP005, there is no situation in which a WPC customer may encounter behavioral differences due to the upcoming DST changes. The customer requires no further action.

The passage of the Energy Policy Act of 2005 alters the Daylight Saving Time (DST) start and stop dates by four weeks. Extended Daylight Saving Time will begin in March of 2007. As a result of this change, APARs, maintenance, or actions will be required for the WebSphere Application Server and operating systems. Information about the Energy Policy Act can be found on the US Department of Energy Web site.

The Energy Policy Act changes the effective dates of DST. Beginning in 2007, DST start and end dates will be:
* Start date: Second Sunday of March
* End date: First Sunday of November

3   Product Fix History

3.1   5.2.1.5

Tracking Number	Description
JR24308	*Issue*: In a post save script, the customer is trying to update another archive catalog based on the save result. If the value returned is ADDED or MODIFIED, the script is able to update the archive catalog. For DELETED the

	script does not update the archive catalog. *Solution*: A new item can be created in another catalog from the post save script even if a deletion is performed on the main catalog item.
JR24690	*Issue*: Slow performance of rich search: When single or multiple attributes are searched using Rich Search, the results retrieval was slow. Cause: When single or multiple attributes were searched using Rich Search, results retrieval was very slow. *Solution*: A fix was implemented to take care of the single attribute case by removing redundant joins in the query. The case of multiple attribute searches has not been addressed by this fix since this has been already fixed in higher code version via the new search implementation. *Impact*: Single attribute searches will be faster, while multiple attribute searches will remain slow.
JR24827	*Issue*: The item search link for a relationship type attribute was not working. Clicking on the search result link in the popup was not populating the attribute field. *Solution*: This issue was resolved by the escaping of single/double quotes in the code.
JR25164	*Issue*: When the customer FTP server is hosted on a third party server, it was found the sendFTP and getFTP operations do not work in a WPC 5.2.1 installation. *Solution*: Replaced FTPProtocol_2.01p.jar with FTPProtocol_2.01q.jar
JR25190	*Issue*: The use of the WebSphere Portal Server Mass Edit Portlet in order to remove values from attributes does not work. *Solution*: The setting of empty values for date and text attributes using the WPS mass edit portlet is enabled.
JR25113	*Issue*: Workflow performance: implement workflow code changes to gain increase in workflow performance. *Cause*: Getting the workflow step name from the step id is done repeatedly by accessing the database. *Solution*: Workflow step IDs to step names are cached the first time the steps are accessed, therefore reducing the need to access the database.
JR25114	*Issue*: Alter session changes are applied for an Oracle session every time a connection is received from DbConnectionBroker. *Solution*: To improve workflow performance, the alter session changes were removed from the WPC code into the Oracle configuration file ora.ini. This was also a required change to comply with National Language Support.
JR25206	*Issue*: Pop-up screen for "macro" won't close automatically after upgrading to WPC v5.2.1.3. This issue could not be reproduced

	Solution: This issue was not reproducible.
JR25226	*Issue*: Disable "Store Requests / Store Replies" for Web services by default.
	Cause: When "Store Requests" and "Store Replies" for a web service are enabled, WPC creates many DB loads by writing to the DAD table.
	Solution: By default the Store Requests & Store Responses options are enabled in the web service that comes with portal tool kit. The end user need to turn this off, if it is not required.
JR24742	*Issue*: Problem in Commerce Integration kit with Merchandising Associations has been fixed.
	Solution: This issue was not reproducible in this Fix Pack.
JR25360	*Issue*: The saveUser script operation still truncates the user name after 20 characters.
	Cause: The size used in saveUser script-operation was limited to 20.
	Solution: The size in the saveUser script operation has been increased to 400.
JR25449	*Issue*: Bad exception handling is causing empty Soap envelopes.
	Solution: Handled exception so that AxisFault is returned instead of an empty SOAP response.
JR25580	*Issue*: Finalizer methods in EntryNode and AttrValue are causing Out of Memory errors.
	Cause: Finalized methods make the garbage collector postpone the cleanup of the unused objects and hence the memory accumulation on a multiple processor machine which runs out of memory.
	Solution: The finalize methods in the classes EntryNode and AttrValue were removed.
65368	*Issue*: Static AustinContext was being used for webservice call.
	Solution: Code is modified to use AustinContext per session. This change resolved the issue.
JR25700	*Issue*: A change in lookup table image display mode affects usability.
	Solution: The image display behavior was reverted to what was used in version 5.2.1.3.
JR25779	*Issue*: Out of the workflow step, an XML Message is generated and put on a queue using JMS. This is no longer working and is causing a classpath not found exception.
	Solution: The fix was to roll back the version 6.0 of com.im.mq.jar and com.ibm.mqjms.jar to the supported version 5.3.
31459	*Issue*: Script operation issue in assigning secondary spec to category node
	Solution: A change of behavior has been defined for both script parsing and

caching layer.

1) Any syntax error in any kind of scripts (validation error defined in spec nodes, trigger scripts etc), will result in exceptions.

2) Any call to getScriptByPath("<PATH>") referring non-existence script will result in exceptions.

    For Example:

    var scriptLib = getScriptByPath("wrongpath");

Executing the above script snippet in the script sandbox will result in an exception as output, even though the script object was not referred to in the script.

3.2   5.2.1.4

Tracking Number	Description
JR23487	Cannot read boolean cells from Excel sheets. WPC was throwing exception while retrieving value of particular cell having boolean (TRUE/FALSE) value. Now one can use getStringCellValue() script operation to read boolean value as well.
JR23561	Widget error occurs when clicking Edit-All in the search results when using exact_date as the search criteria for a date type attribute.
JR23563	WC.utility.Lib.wpcs cannot handle 10+ occurrences. This script works on the multi-occurrence attributes in the WPC-WCS Commerce Integration Script. There was hard coding that forced the kit to break if there were more than 10 occurrences of a defining / descriptive attribute. Removing the hard code and computing the occurrence ID based on the last occurrence of # resolved the issue. The Commerce Integration kit is now capable of handling as many multi-occurrences there are in WPC.
JR23968	Entering date and Saving it manually in date field when accessed from the reports console gives a javascript error
JR23988	In the Rich Search Page, clicking the Edit icon of lookup table type "attribute" with an image value will show the entire attribute image. This causes usability issues if there are a large number of lookup table entries. It has been fixed by displaying a thumbnail image instead and clicking on the thumbnail will show the actual image.
JR24060	Passing an empty String as search query to an AdvancedSelection causes DB Exception
JR24075	deleteEntryNode() generates error results on import
JR24134	WebSphere Commerce Delta Export produces unnecessary data. In the Commerce Integration, the category tree information for the master catalog gets emitted for each of the updated item. So even for a delta export that consists

	of few updated items the category information gets emitted multiple times and hence the size of the generated XML increases. This issue has been addressed by having the category information emitted only once per delta feed, thereby minimizing the size of the XML file.
JR24247	Customized fields are not translated properly in the generate XML. During Commerce Integration, the export script does not emit some of the customizable fields. To address this issue, a fix involved adding the customizable fields to the specs and emitting them in the XML.
JR24257	WPC-WCS eCommerce integration kit fails to import, throwing an exception
JR24345	In Commerce Integration, there is an incompatibility between WCS target field type ("available" of type integer) and source field type ("availabilitydate" of type date, WCCatentryPSpec). The fix involved Adding availabilitydate in the UI and emitting its value. Emitted static value "1" as value for attribute available.
JR24455	If the user deletes a "listprice" or "offerprice" occurrence from a CatEntry in WPC, this change is not propagated to Commerce. I.e. no "delete XML" is generated for this change.
JR24507	Mass edit not working for text attributes having a comma. This is a portal integration issue with no impact on core WPC function.
JR24596	Quotation mark in WPS wrong escaped in WPC
JR24623	When using a read-only view, a browse icon for the related item is not shown
JR24624	Lookup Cache is not correctly used, causing an unneeded load on the database
JR24625	ThinPoolDBManager class has an extra wait() outside the sync block, that can lead to 'IllegalMonitorException' when connections in the pool are exhausted. This fix is transparent to the users. If the issue is present, the system may fail to obtain database connections for 'BLOCKING' type of threads and may throw 'IllegalMonitorException' under high user load conditions.
JR24700	It is not possible to add localized attributes to a specification mapping of the type "Catalog to Destination Spec" and save the changes. A localized attribute can temporarily add to the mapping but after a click on the save button the mapping is empty and the changes are not saved.
JR24756	Oracle version of WPC Patch for GDS does not support case insensitive search
JR24778	Could not copy/paste on Preview window
JR24786	When using the Macro for a item within a category in a catalog, the popup remains open even after clicking on "Run"
JR24853	WPC-WPS integration kit requires automatic cleanup of docstore files and better location within the docstore
JR25110	Performance degradation after migration from Trigo 4.2 to WPC 5.2.1 IF004. New Index creation needed.

3.2.1 Docstore Cleanup Enhancement

This section covers the docstore cleanup functionality added in 5.2.1 4 release.

Change in docstore path of webservice's messages/attachments

The messages and attachments related to webservices were getting stored in the subdirectories under "/scripts/soap" in the docstore. This was not appropriate as the messages and attachments related to webservices are not related to scripting. Hence from 5.2.1 4+, the messages and attachments for webservices are stored under the subdirectories below "/soap" parent directory.

The following were the paths where the messages and attachments were previously stored:
- /scripts/soap/messages/incoming-attachments
- /scripts/soap/messages/incoming
- /scripts/soap/messages/outgoing
- /scripts/soap/messages/response

Following are the new paths for messages and attachments:
- /soap/messages/incoming-attachments
- /soap/messages/incoming
- /soap/messages/outgoing
- /soap/messages/response

Docstore cleanup report

The webservices related to Portal integration are invoked several times daily, which leads to a large accumulation of transaction messages and attachments in the docstore over a period of time. Hence there was need to provide a mechanism by which the older messages and attachments, that were no longer required, could be purged from docstore. To address this issue, a new report is provided in 5.2.1.4 as part of the WPC Portal Integration Kit. The name of this report is called "Docstore cleanup" and it can take the two parameters listed below:

- "Duration in days for which the docs would be retained"
- "Comma separated directory paths for purging"

The first parameter i.e. "Duration in days for which the docs would be retained" is a mandatory parameter. As the name suggests it requires an integer to set the number of days for which the documents would be retained. All the documents created before the number of days specified by this parameter would be deleted.

If a value of 0 (zero) were set for this parameter then all the documents, current as well as past, would be deleted from the docstore. If a negative value is set for this parameter then the report will terminate with a message asking the user to input a positive value.

The second parameter i.e. "Comma separated directory paths for purging" is not a mandatory parameter. This parameter expects a comma-separated list of docstore directory paths for which the files need to be

cleaned up. If no value were set for this parameter then a default set of directories would be considered for processing. Following is the list of docstore directory paths, which will be processed by default:

- /soap/messages/incoming-attachments
- /soap/messages/incoming
- /soap/messages/outgoing
- /soap/messages/response
- /scripts/soap/messages/incoming-attachments
- /scripts/soap/messages/incoming
- /scripts/soap/messages/outgoing
- /scripts/soap/messages/response

The report job can be scheduled to run on a daily basis or weekly basis depending upon the number of webservice calls being made. It is recommended that the value of "Duration in days for which the docs would be retained" parameter is set to a higher number for initial runs of the report so that the load on the scheduler is not too high.

3.2.2 Enable Case Insensitive Search Enhancement

A fix has been provided to enable case insensitive search in WPC and GDS. To enable case insensitive search in WPC and GDS, it is required to add a new property in the common.properties file of your WPC instance that will bring case sensitive/insensitive searches based on the switch value. Use the following format:

exactmatch_ignorecase_search={No|Yes}

- 'Yes' by default
- If this option is not specified, it will be 'No'
- If this option is specified but does not equal to 'Yes' (case insensitive), then it will be 'No'
- 'No' will mean a case sensitive search while 'Yes' will mean a case insensitive search
- 'No' and 'Yes' as the option value are case-insensitive
- If this option is specified but does not equal to 'Yes' (case insensitive), then it will be treated as 'No'
- This option is a runtime-only option

For example, the following use cases are treated as search case-sensitive:

- Enabling this switch will only enable case in-sensitive search on exact match criterion in rich search, search from catalog console, value rules in selections and Lookup table searches.
- All other searches (like 'starts with', 'ends with') will remain intact as before
- Searches on DB2 will NOT be affected by the value of this switch and this is targeted only for app running on Oracle.

By enabling Case Insensitive Search, the following use cases are supported:
   1.) For Rich search in WPC, exact match predicate will support case insensitive search.
   2.) Advance Search in WPC will support case insensitive search
   3.) For Lookup table search in WPC, exact match predicate will support case insensitive search.
   4.) Predicates like Begins with, Ends with and Contains functionality have not been modified and will perform a case sensitive search in WPC

5.) GDS Item search and Trading Partner search will support case insensitive search.

3.3   5.2.1.3

Tracking Number	Description
JR23493	NullPointerEx in for getItemSetForSelection
JR23311	5210 System Status Page does not work properly
JR22967	Single and double quote in PK failed in RT search
JR23164	Calendar picker errors in entry macro
JR23259	WPC JDBC Connection transaction error
JR22929	View error using adv selection in left nav pane
JR22523	Date range filter for user audit log does not work even when a date range has been specified
JR23591	Merge step does not proceed
JR23633	521x - WPC Problem (reserveEntryInStep())
JR23637	5211 Attribute Collection cannot be reordered.
JR23698	Items in wfl move to Error state on engine shutdown
JR21786 / JR22433	5210 Uniqueness failed in Multioccurences
JR23840	getLoginString() not working
JR23869	Empty PK in entry content screen
JR23415	Locale values of localized attributes get lost when an attribute is checked out to a collaboration area.
23632	Requesting the email field in WPC be increased in length to 100 characters
28898	Relationship attribute values for Categories cannot be exported
24474	Caching item specification
24476	Hyperlink items in Browse Catalog Portlet,Multi-Item Edit Portlet,Advanced Search Portlet
24475	Use of Attribute Collections
JR23861	Escaping quotation mark

3.4   5.2.1.2

Tracking Number	Description
JR22764/22900	Report cannot be launched in WPC
JR22580/22901	Characters incorrectly exported
JR22543/20789	Cannot download files when binary attribute is no
JR22502/22960	Import export utility not working
JR22979/22648	Ampersand in workflow step name prevents save
JR22575/22639	New lookup entries throw validation error
JR23163/22098	"Scripts, enabling script_check_vars fails create_company script"
JR22946/22973	"UI, MultiEdit copy down button inaccessible"
JR22963/22647	"UI, right pane scrollbar obscuring operations row"
JR23201/22411	Reserving an item twice causes errors
JR23213/22114	Adding new item will loose unsaved item info
JR23212/22192	Unique validation on MOA
JR23283/22962	Clicking external page will loose unsaved data

JR23373/21116	moveEntriesToColArea() not working
JR23306/22331	Oracle error during kit import
JR23330 /22472	NullPointerEx in ActivityLogger.wpcs
JR23352/22429	Loader commands to return completion status
JR23332/22362	WPC WCS kit performance
22904	throwError script opertation does not throw message
JR23554	Character validation in numeric attribute
JR23512	Multi-Edit item retrieval must use "EQUALS" instead of "CONTAINS" search criteria- Changes are possible
JR23648	Trying to modify attributes of type integer within the massupdate portlet with a nullvalue (entering no value), will cause WPS sending a default value of "-2147483648" to WPC.
JR23649	By using the WPS mass edit portlet, when saving alphabetical value in a mono occurrence numerical fields with WPC 5.2.1.1 F004, there is no error message and WPC save a value coming from nowhere :"-2147483648"

3.5   5.2.1 IF004

Tracking Number	Description
JR23191/22047	Lookup table value lost on opening from multi edit
JR23099/21665	WPC lkp table value can't be seen if read only
JR23089/21593	Exit value not recognized in OUT script
JR23086/21935	Excel parser does not correctly parse numbers entered as text
JR23045/21594	Modifying and saving an entry before checkout in a script gives entry lock error on checkout
JR2304421477	When running the migration shell script, errors occur. Customer cannot login to WPC after script finishes with errors.
JR23017/21393	Performance of Hierarchy mapping popup window is slow for large hierarchies
JR22939/22046	Attribute search is case sensitive in item edit
JR22938/22044	Multi edit errors with tab views
JR22935/21478	The "realtime search" box on organizations doesn't work
JR22792/20959	Workflow engine is holding up sessions and using up memory
JR22496/20086	Add to Dictionary adding whole sentence
22078	Wrong austin context in member variables when event created
21905	Setting a workflow step exit value in an IN script for an automated step is not recognized.
21826	Performance improvement in Multi Item edits Portlet
20751	Can not view the files named with localized language letters

3.6 5.2.1.1

Tracking Number	Description
JR22520	Organization Deletion Causes Organization Hierarchy Data Corruption
19738	Issue when changing WSDL in portal - Unacceptable Character ">" throws Exception.
JR21767	Scripts - getCategorySet() returns set with wrong size
JR21520	Uniqueness validation fails for multi-occurring attributes
JR22566	WPC produces incorrect XML for Commerce integration
JR22571	Custom Tool Does Not Render As Home Page
JR21932	WebServices: request fails validation when using xsd namespace
JR22020	Fetching an external url when invoking a web service not work
JR22209	Hierarchy pre processing script and the post processing script
JR21740	running delta syndications causes 'Unexpected Version" in syn
JR21996	Realtime search fails when the search count is more than 100 (To be done by 5.2.0-IF006 integration)
JR21985	isStringSingleByte() script operation returns true for a string
JR22517	Can not view the files named with localized language letters
JR21996	Realtime search fails when the search count is more than 100

4   Issues and limitations

This maintenance release contains the following known issues (which will be addressed in a future maintenance release):

Tracking Number	Description
21243	*Issue*: The Edit page did not appear after clicking on "Reserve & Edit" button in workflow. *Workaround*: Whenever new collaboration area is created, a process has to be followed to access workflow items ina single item. A copy of associated Catalog jsp should be created and renamed with the name of the collaboration. For example, collaboration name : PORTAL CTG jsp name:PORTAL_CTG_Create.jsp
21267	*Issue*: Rendering of lookup table window fails if the selected option from the select contains the special character "#". There can be other situations where the rendering of the lookup table picker window may fail. However, this occurs only under rare circumstances. *Workaround*: It is advisable to avoid using # in the lookup table key string.
21139	*Issue:* DB2 query size problem. If running large queries that return no records, it is necessary to adjust the STMTHEAP size for DB2.

	Workaround: The following DB2 commands need to be run on the DB2 server as the DB2 instance owner to adjust the STMTHEAP size to an appropriate values to handle larger queries: db2 connect to <dbname> db2 update db cfg for <dbname> using STMTHEAP 10000

5 Installation

This section provides general guidelines to apply a maintenance release to WebSphere Product Center. Some information may differ depending on the methods used for previous installations. Contact your support representative for WebSphere Product Center with any installation issues.

5.1 Pre-requisite for 5.2.1.5

WebSphere Product Center 5.2.1 must be installed prior to the application of Fix Pack 5.2.1.5. If you are migrating from a maintenance release between version 5.2.1 and 5.2.15, ensure that you have applied all configuration changes (i.e. common.properties updates and schema changes) as stated in the readme file provided with each maintenance release.

5.2 Bundled files for WPC Portal Enablement integration

The manual process of Portal build creation has been changed so that common WebSphere Product Center installation will take care of Portal build.

Two zip files are bundled in reference to WPC Portal Enablement integration.

- Binary WPC Portal build (wpsinteg_wps.zip)

- Portal Source zip (portal_source.zip)

These zip files are located in

   $TOP/integration/WebSpherePortalServer/WPS/

portal_source.zip essentially includes the source code of WPC Portal Enablement.

5.3 Migration

5.3.1 Database schema change requirement

If upgrading from 5.2.1-FP004 or 5.2.1-TF010 to 5.2.1-FP005, two database schema modifications are required.

1) There is one table introduced: **tutl_map_shared_map** which is used by Script caching. To upgrade the schema run the SQL commands present in following SQL file.

   For Oracle

$TOP/src/db/schema/dbscripts/oracle/map_migration_oracle.sql

For DB2:

$TOP/src/db/schema/dbscripts/db2/map_migration_db2.sql

2) There are also a couple of columns added in the **twbs_wbs_webservice** table. To upgrade the schema run the SQL commands present in following SQL file:

For Oracle

$TOP/src/db/schema/dbscripts/oracle/alter_wbs_table.sql

For DB2:

$TOP/src/db/schema/dbscripts/db2/alter_wbs_table.sql

To apply the database schema modifications, run any included SQL instructions for your database. Make sure to create a backup of your database before running the SQL update in order to have a version of the database to revert to in case of any problems.

5.3.2 Supplemental patch installer required

ID JR25779: If upgrading from version 5.2.1-FP004 (5.2.1.4), a supplemental patch installer is required to be installed. This supplemental patch installer updates the required MQ jar files required with the use of version 5.2.1.5. The name of the supplemental patch installer is MQJars_WPC-5.2.1-FP005.tgz. Use the following instructions to install:

- Download and unpack the regular platform-specific 5.2.1-FP005 patch installer

- If upgrading from an existing 5.2.1-FP004 version, then download and unpack the supplemental patch installer in the $TOP directory.

Note: If upgrading from any other version of 5.2.1.x, this step is not required

5.3.3 Changes to common.properties File

Please include the following parameters to the common.properties file required for some of the features provided in this maintenance release.

```
 # This is the maximum number of WSDL objects, which will cache.
max_wsdls_in_cache=50
  # Script Cache TimeOut is the time for which the system will not
look
 # for updates for a Script in the Cache from other JVMs
 # Value is entered in MINUTES!
 max_script_timeout=1
  # Configure the size of the script cache
 # Ideally, this value includes both docstore scripts and spec
scripts
 max_scripts_in_cache=1000
```

```
 # This property decides whether the webservices would be session
enabled or not. A true
 # value will enable sessions for webservices.A webservice needs to
be saved after changing
 # the value of this property.
 enable_webservice_session=true

# This property decides the session timeout period for the
webservices session. The value is in seconds.
 #
webservice_session_timeout=300
```

5.4   Preparation

Before attempting to apply the latest Maintenance Release to WebSphere Product Center, the following preparation is recommended:

5.4.1   Stopping the whole application on the local machine

Complete the following steps to stop the WebSphere Product Center instance:

1. Check the scheduler to make sure there are no critical jobs that need to be completed. If the queue is clear, kill the scheduler manually by running the following script:

    $TOP/bin/go/stop/stop_scheduler.sh

2. Abort the entire application by running the following script:

    $TOP/bin/go/abort_local.sh

    All services running on the local machine is aborted. The RMI registry is aborted.

Note: Check to make sure all processes have stopped using the 'ps' command.

Kill off any rogue "java" or "rmiregistry" processes that remain after shutting down the instance. Occasionally, it may take several attempts to kill off all java processes. Continue killing all java processes until they are all dead.

5.4.2   Backup

- **Create a full backup of the current WebSphere Product Center directories before applying the Fix Pack. The Fix Pack will overwrite files that have changed. If any issues occur, the backup will allow a rollback to a previous version**

- **It is recommended to apply the Fix Pack to a test system to identify any issues before applying the Fix Pack to a production system**

- **Perform a full backup of the database before applying the Fix Pack to a production system**

    Note: Do not delete the old WebSphere Product Center version until performing thorough testing with the new installation.

5.4.3   Delete Tomcat working directory

For configurations using Tomcat, delete the Tomcat working directory using the following command:

```
rm -rf $TOP/etc/default/tomcat33/webapps/ccd
```

Once the working directory has been deleted, restart the application server and apply the Fix Pack.

5.5   Apply Fix Pack

To apply the Fix Pack to WebSphere Product Center, complete the following tasks:

- ❑ Unpack tar file
- ❑ Run WebSphere Application Server script
- ❑ Update configuration files
- ❑ Test installation

5.5.1 Unpack tar file

Purpose: To extract and update any new installation files into the current working directory

Note: GNU tar is needed to untar the WebSphere Product Center files.

1. Copy the WebSphere Product Center tar file to the user or temporary directory.

Example:

```
{HOME_OF_WPC}/tarballs
```

2. CD to $TOP, the current working directory, and unpack the tar file:

Example:

Using GNU tar, the following command extracts and unzips the tar file using an absolute path:

```
tar zxvf
/home/WPC/tarballs/wpc_5001_03_fixpak_from_5000_15_was5_db2.tgz
```

5.5.2 Run WebSphere Application Server script

After unpacking the tar file in the previous section, ensure that the default server (server1) is running and run the following WebSphere Application script:

> $TOP/bin/websphere/install_war.sh

Note: Ensure that the default server (server1) is running, as it is required for the WebSphere Application Server script to work. If needed, start the WAS default server by issuing the following command as root:

${WAS_HOME}/bin/startServer.sh server1

5.5.3   Verify configuration files

Verify all configuration files required by the new installation and make any updates as needed. Refer to the backup copy of the configuration files for the previous installation if needed.

- ❑   common.properties
- ❑   admin_properties.xml
- ❑   init_ccd_vars.sh
- ❑   WebSphere Product Center license file

❖ **common.properties**

On startup, the system will use this file to read in all system level parameters. This file includes settings for the database layer (connection parameters), directory settings, default character sets, thread-pooling parameters, and other settings, which are documented in the file.

File location: $TOP/etc/default

❖ **admin_properties.xml**

This file is used by the administrative utilities to configure clusters of the application.

File location: $TOP/etc/default

❖ **init_ccd_vars.sh**

The initialization file is the shell script that initializes the shell variables used by the system.

File location: $TOP/setup

❖ **WebSphere Product Center License File**

The license file contains the license keys needed to use the WebSphere Product Center application.

File location: $TOP/etc/default

5.5.4   Run analyze_schema.sh

Recommended: It is recommended to run the analyze_schema.sh script once a week or when there is a twenty percent or more increase/change of data in the database.

Location: $TOP/src/db/schema/util/analyze_schema.sh

The optimizer uses the catalog tables from a database to obtain information about the database, the amount of data in it, and other characteristics. It then uses this information to choose the best way to access the data. If current statistics are not available, the optimizer may choose an inefficient access plan based on inaccurate default statistics.

Therefore, it is highly recommended that you use the analyze_schema.sh script to collect current statistics on tables and indexes, especially if significant update activity has occurred since the last time the analyze_schema.sh was executed. This provides the optimizer with the most accurate information with which to determine the best access plan. On WPC databases it is recommended to run the analyze schema at least once a week.

To run analyze schema in DB2, refer to the WPC technote: Analyzing schema and collecting statistics in DB2 - http://www-1.ibm.com/support/docview.wss?uid=swg21205939

To run analyze schema in Oracle, refer to the WPC technote: Analyzing WebSphere Product Center schema and collecting statistics in Oracle - http://www-1.ibm.com/support/docview.wss?uid=swg21206376

5.6   Test Installation

5.6.1   Start WebSphere Product Center

To start the WebSphere Product Center, execute the following script:

```
$TOP/bin/go/start_local.sh
```

The script starts all the services needed to run WebSphere Product Center.

Note: This process should take approximately 30-40 seconds, depending on the speed of the processor.

5.6.2   Check status

Run the **$TOP/bin/go/rmi_status.sh** script that was provided by WebSphere Product Center and verify the following services have started correctly.

- admin_<machine name>
- appsvr_<machine name>
- eventprocessor
- queuemanager
- scheduler
- workflow

YOU HAVE SUCCESSFULLY APPLIED THE LATEST MAINTENANCE RELEASE FOR WEBSPHERE PRODUCT CENTER!

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