# **HP Service Manager**

For the supported Windows and Unix systems

Software Version: 9.31

### Patch 2 Release Notes

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# **Documentation Updates**

The title page of this document contains the following identifying information:

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This document is an overview of the changes made to HP Service Manager 9.31 for patch 2. It contains important information that is not included in other documentation.

### What's New in This Release

This section describes important changes in this release.

### **Updating the Java Plug-in When Using Firefox 17**

As of this release, the SM9.31 Web client supports Firefox 17; however, if you have certain Java plugin, JRE versions installed on your web client, you will need to click the Manage plug-in link to update the Java Platform Plugin to a newer version.

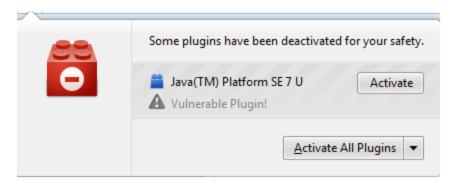
If you do not do so, problems might occur. For example, workflow graphics cannot display correctly.

#### Activate your JRE7 plugin if blocked by Firefox

Due to a security enhancement in JRE7, Firefox may deactivate your JRE7 plugin for your safety. When this happens, a red plugin icon appears in the address bar, next to your web client URL string. For example, when you open the web client with ?telephonyuser=1 appended to its URL, Firefox deactivates the JRE7 plugin; as a result, Service Manager cannot function properly (for example, cannot execute a telephony call). In this case, you need to activate your JRE7 plugin for your Service Manager web site as described here:

1. Click the red plugin icon in the address bar.

A message window opens, as shown below.



- 2. Click Activate All Plugins.
- Select Always activate plugins for this site.

The red plugin icon now disappears from the address bar.

### JDK 7 Support for the KM Solr Search Engine

As JDK 6 has already reached its end of life and the KM Solr Search Engine heavily relies on JDK, JDK 7 Update 17 has been certified on the Knowledge Management Solr Search Engine in this release.

Updating to JDK 7 is optional but recommended. For more information, see "Knowledge Management Update Installation" on page 80.

# Embedded JRE Upgraded (Server and Windows Client)

This patch release has upgraded the SM server and Windows client embedded JRE to JRE1.7.

#### Server

The server embedded JRE for x86 systems has been upgraded to version 1.7.0\_15.

Since the Service Manager server does not come with an embedded JRE for non-x86 systems (Solaris, HP-UX, and AIX), users using these platforms need to install one of the following JRE1.7 versions and make sure server/RUN/jre is a symbolic link pointing to the JRE1.7.

Platform	JRE Version
Solaris	JRE1.7 (update 15 or greater)
HP-UX	JRE1.7 (JRE_7.0.04 or greater)
AIX	JRE1.7 (SR4 or greater)

**Note:** After applying the server patch, if you need to roll back, be sure to restore your old JRE. See "Backout Instructions" on page 65.

**Caution:** Since JRE1.7 is not supported on Solaris 9, HP recommends upgrading your server operating system to Solaris 10. If you still want to stay with Solaris 9, a workaround is available. See known issue "QCCR1E99940" on page 63.

#### Windows Client

The Windows client embedded JRE has been upgraded to version 1.7.0\_17.

### Server Embedded Tomcat Upgraded

In this release, the SM server embedded Tomcat has been upgraded from 6.0.35 to 6.0.36 to take advantage of the security fixes in version 6.0.36.

This upgrade requires additional steps when installing the server patch. For details, see "Server Update Installation" on page 72.

**Note:** After applying the server patch, if you need to roll back, be sure to restore your old embedded Tomcat. See "Backout Instructions" on page 65.

### Multi-Thread Email Sending Solution Updated

The multi-thread email sending solution has been introduced since SM9.30p5, by adding a new argument mailThreadCount to the emailout parameter. With this solution, the main email thread reads email records from the database and places them in a queue, and a number of mail-sender threads (N=mailThreadCount) send the emails from the queue. In addition, there are N+1 "EMAILOUT" thread entries displayed in System Status, and the corresponding logged-in users are counted as N+1.

This solution has been updated in the SM9.31p2 release so that only the main email thread displays in System Status and the logged-in users are counted as 1. The reason for this update is that the mail-sender threads are internal and therefore should not be displayed or counted.

### Ability to Change the Order of Rule Sets

This patch release updates the Workflow Editor in Process Designer to enable you to change the order of rule sets that are applied to a workflow phase or transition.

To change the order of rule sets:

- 1. Navigate to **Tailoring > Process Designer > Workflows**.
- 2. Open an existing workflow.
- 3. Select a phase or a transition in the workflow.
- 4. Go to the **Rule Sets** or **Actions** tab (for a phase) or the Rule Sets section (for a transition), and if needed add rule sets to the list.
- 5. Select a rule set from the list, and click the Up or Down arrow button to move it up or down.

### **New Text Strings to Be Localized**

The SM9.32p2 release has introduced a number of new text strings, which customers can easily localize using the native2ascii tool.

### **Naming Convention of Localized Files**

Localized versions of resource files use the following naming convention: <basename>\_<language\_
code>.properties or code>.country\_code>.properties.

Note: The file names are case-sensitive.

The following are two examples.

Example File	Description
cpe_rcp_en.properties	"cpe_rcp" is the base name, and "en" is the language code.
cwc_labels_zh_ CN.properties	"cwc_labels" is the base name, "zh" is the language code, and "CN" is the country code.

For a list of language codes (and country codes if any) used in the file names of localized resource files, see the following table.

Language Code	Country Code	Description
		Default
en		English
ar		Arabic
cs		Czech
de		German (Standard)
es		Spanish (Spain)
fr		French (Standard)
hu		Hungarian
it		Italian (Standard)
ja		Japanese
ko		Korean
zh	CN	Chinese (PRC)
nl		Dutch (Standard)
pt	BR	Portuguese (Brazil)
ru		Russia

Service Manger uses UTF-8 as the default encoding when interpreting the resources. It requires all resources files in native UTF-8 encoding be converted to files containing Latin-1 and/or Unicode-encoded characters, using the native2ascii tool.

### New Text Strings to Be Localized

The following table lists the removed or added text strings in the Web tier and Windows client of this release, as well as their corresponding properties files.

Removed or Added Text Strings	Description	
<webtier-9.31.war>/WEB-INF/classes/workflowBundle.properties</webtier-9.31.war>		
Added:	New strings were added for the Workflow Editor in Process Designer.	
• UP=Up		
UP_ITEM=Up Item		
DOWN=Down		
DOWN_ITEM=Down Item		
PHASE_ORDER=Phase Order		
<webtier-9.31.war>/WEB-INF/classes/conditionEdit</webtier-9.31.war>	orBundle.properties	
Added:	New strings were added for the	
• NULL=Blank/NULL	Condition Editor in Process Designer.	
NULL_VALUE=NULL		
• STARTS_WITH=Starts With		
• IS_IN=Is In		
• SELECT_A_BOOLEAN=Select TRUE/FALSE		
<webtier-9.31.war>/WEB-INF/classes/chMBundle.p</webtier-9.31.war>	roperties	
Removed:	New strings were added for the Task Planner (labeled as Task Editor before	
• TITLE=Task Editor	SM9.31p2) for the Change Management module.	
Added:	s.ragoo.r. modulo.	
• TITLE=Task Planner		
• MANDATORY=Mark as required\/Set properties as read-only in change		
• TASK_CONDITION=Task Condition		
• END_PHASE_INVALID=The End Phase must occur after the Start Phase		

Removed or Added Text Strings	Description
Removed:	New strings were added for 508
• idsMenuImage=Expand and Collapse Menu	compliance.
Added:	
• idsMenuImage=Menu	
• idsMenuImageExpand=Expand Menu	
• idsMenuImageCollapse=Collapse Menu	
<webtier-9.31.war>/WEB-INF/lib/cwc-9.31.2004.jar/c labels.properties</webtier-9.31.war>	om/hp/ov/cwc/web/cwc_
Removed:	New strings were added for 508 compliance.
<ul> <li>Framework.CollapseNav=Collapse/Expand Navigator</li> </ul>	сопрнансе.
Added:	
• Framework.CollapseNav=Collapse Navigator	
• Framework.ExpandNav=Expand Navigator	
• Framework.CommandLineField=Command Line	
• Framework.CommandLineBtn=Execute	
• cwc.skipLink=Skip to main content	
<pre><service_manager_root 9.31.2004="" client="" com.hp.ov.="" plugins="" rcp.jar="">/com/hp/ov/sm/client/eclipse/rcp/</service_manager_root></pre>	· · · · -
Added:	New strings were added for the message window that opens when
• HelpError=Help Error	users click the <b>Help Contents</b> optior in the Windows client.
<ul> <li>HelpDocumentationNotInstalled=Documentation is not installed.</li> </ul>	<b>Note</b> : These new strings are required due to an RCP change made in this release.

Removed or Added Text Strings	Description
Added:  • Props.LockRenderingStyle=Lock rendering style	New string added for the Lock rendering style property of the Notebook control in Forms Designer.

### **How to Localize New Text Strings**

#### Step 1. Set up the Java development environment on Windows.

- 1. Download and install Java Standard Edition 6 or later.
- 2. Set the JAVA\_HOME variable and add < JAVA\_HOME > / bin to the system path.
- 3. Open the system command prompt, and run the following command to check if Java has been correctly configured:

java -version

**Note:** If your Java development environment is ready, this command will print your Java version information.

#### Step 2. Convert the text in a specific language to Unicode.

As an example, the following provides the localization steps for Japanese. The steps for other languages are similar.

- Merge your translated recourse text for all properties files into one file, so that you can convert all of the text in one go. For instance, for Japanese, put the translated text in sm931p2\_RES\_ ja.txt.

**Note:** Make sure its file encoding is UTF-8 (You can copy an existing file in Service Manger and then edit it).

The following is an example of translated text, which is provided for demonstration purposes only.

# From chMBundle.properties

TITLE=タスクプランナー

MANDATORY=必要に応じてマーク\ /読み取り専用の変更のようにプロパティを設定します。

TASK CONDITION=タスクの状態

```
END_PHASE_INVALID=エンドフェイズでは、スタートフェーズの後に発生する必要があります
#From cwc_labels.properties
Framework.CollapseNav=崩壊・ナビゲータ
Framework.ExpandNav=ナビゲータを展開
Framework.CommandLineField=コマンドライン
Framework.CommandLineBtn=実行する
cwc.skipLink=スキップしてメインページに進む
```

- 3. Copy sm931p2\_RES\_ja.txt to a local folder. For example: C:\sm931p2.
- 4. Open the system command prompt, and change current directory to the local folder you selected in the previous step (for example: C:\sm931p2).
- 5. Run the following native2ascii command to convert the text.

```
native2ascii -encoding utf-8 sm931p2_RES_ja.txt sm931p2_RES_ja.properties
```

The converted text should look like the following (the following text is provided for demonstration purposes only).

```
#From cwc_labels.properties
Framework.CollapseNav=\u5d29\u58ca\u00b7\u30ca\u30d3\u30b2\u30fc\u30bf
Framework.ExpandNav=\u30ca\u30d3\u30b2\u30fc\u30bf\u3092\u5c55\u958b
Framework.CommandLineField=\u30b3\u30de\u30f3\u30c9\u30e9\u30a4\u30f3
Framework.CommandLineBtn=\u5b9f\u884c\u3059\u308b
cwc.skipLink=\u30b9\u30ad\u30c3\u30d7\u3057\u3066\u30e1\u30a4\u30f3\u30da\u30fc\u30fc\u30b8\u306b\u9032\u3080
```

**Tip:** For more information on the usage of the native2ascii tool, see <a href="http://docs.oracle.com/javase/1.4.2/docs/tooldocs/windows/native2ascii.html">http://docs.oracle.com/javase/1.4.2/docs/tooldocs/windows/native2ascii.html</a>.

#### Step 3. Append the localized new strings to the localized version of the resource files.

- 1. In the sm931p2\_RES\_ja.properties file, copy the lines from cwc\_labels.properties to <webtier-9.31>/WEB-INF/classes/com/hp/ov/cwc/web/cwc\_labels\_ja.properties.
- 2. In the sm931p2\_RES\_ja.properties file, copy the lines from each of the remaining properties files and append them to the Japanese version of the files.

Now, the localization process for Japanese is complete.

3. Restart your web application server and Windows client.

### **New Parameters and RAD Functions**

This release introduces the following new parameters and RAD function.

- "Startup parameter: KMSearchEngineTimeout" below
- "Startup parameter: onewayssl4ws" below
- "Parameter: acceptsharedcert" on the next page
- "Startup parameter: maxloginspercluster" on page 19
- "RAD function: datecmp" on page 20

### Startup parameter: KMSearchEngineTimeout

#### **Parameter**

KMSearchEngineTimeout

#### Description

This parameter defines a timeout value in seconds for all Knowledge Management search server hosts (including indexing hosts, search hosts, and load balancer hosts). The default is 20 seconds, and the minimum is 10 seconds.

**Note:** This parameter is used to prevent overloaded KM search servers from causing Service Manager to hang.

See also "QCCR1E80231" on page 30.

#### Valid if set from

Server's OS command prompt Initialization file (sm.ini)

#### Requires restart of Service Manager server?

Yes

#### **Default value**

20 (seconds)

#### Possible values

No less than 10 seconds (if you specify a value less than 10, 10 is used.)

#### Example usage

Command line: sm -httpPort:13080 -KMSearchEngineTimeout:25 Initialization file: KMSearchEngineTimeout:25

### Startup parameter: onewayssl4ws

#### **Parameter**

onewayssl4ws

#### Description

This parameter provides the option to use either one-way/anonymous SSL or the more stringent two-way/mutual SSL for web services clients in a trusted sign-on (TSO) configuration. When enabled, this parameter allows web services clients to access SM SOAP interfaces without a certificate.

This parameter is only used for web service integrations, and therefore does not affect the TSO behavior of the SM Windows and web clients. If you can vouchsafe your internal security policies that govern your Web Services clients integrated with the SM server, this parameter enables you to deploy SSO/TSO without the need to specify the stringent ssl\_reqClientAuth: 2. You can start specific servlets with parameters onewayssl4ws, ssl\_requireClientAuth: 0 and debugnode for a web services integration.

By default, this parameter is disabled.

#### Valid if set from

Server's OS command prompt Initialization file (sm.ini)

#### Requires restart of Service Manager server?

. Yes

#### **Default value**

0

#### Possible values

0: Use two-way/mutual SSL for web services clients

1: Use one-way/anonymous SSL for web services clients

### Parameter: acceptsharedcert

Startup parameters change the behavior of the Service Manager server. You can always set a startup parameter from the server's OS command prompt.

#### **Parameter**

acceptsharedcert

#### Description

**Note:** This parameter has been introduced since SM9.30p4, as a hidden parameter; however, starting with SM9.31p2, it is no longer hidden.

This parameter defines how the Service Manager server handles signed SSL certificates from incoming client requests in a Trusted Sign-On configuration.

#### When set to 0 (default)

When set to 0 (default), the Service Manager server validates the signed SSL client certificates using standard best practices. The validation procedure is described in the "Secure Sockets Layer (SSL) encryption and server certificates" topic in the online help.

Tip: Using the default value of 0 is the recommended and most secure mode of operation.

HP recommends you run the Service Manager server with the default value of this parameter (acceptsharedcert:0).

Before attempting to modify the default behavior, consider the following alternative workarounds:

- Do not use the Service Manager Windows client. Instead, use only the Service Manager
  Web Tier as it does not incur the additional maintenance overhead or complexity associated
  with managing numerous signed client SSL certificates.
- If the Service Manager Windows client must be used in your environment, consider limiting
  the distribution of this client to a small number of users. This minimizes the additional
  overhead costs associated with managing numerous Service Manager Windows clients and
  their unique signed client SSL certificates.
- Use as many Service Manager Windows clients as needed but disable Trusted Sign-On functionality for these users. This eliminates the requirement to generate unique signed client SSL certificates.

#### When set to 1

When the parameter is enabled (acceptsharedcert:1), the Service Manager server allows Trusted Sign-On connections using a so-called "shared certificate." The Service Manager server validates the shared certificate using only the following two checks:

- Whether the certificate is issued by a trusted certificate authority.
- Whether the Common Name attribute of the certificate is in the Service Manager Server's trusted clients keystore.

HP provides this parameter primarily for use in customer environments where the following are true:

- There is a requirement to allow access to Service Manager through Trusted Sign-On for a large number of Service Manager Windows clients.
- Creating and maintaining the required signed SSL client certificates adds too much maintenance overhead and complexity to IT operations.

By using acceptsharedcert:1, only one client SSL certificate (the "shared certificate") needs to be created and maintained. This significantly minimizes the maintenance overhead costs and complexity associated with managing signed SSL client certificates. Keep the following in mind:

- The shared certificate still needs to be copied and distributed to individual Service Manager Windows clients before Trusted Sign-On access can be successfully used.
- By using acceptsharedcert:1, you will have minimized your maintenance overhead and complexity of your IT operations at the cost of reduced security in Service Manager. This is due to the two simple "shared certificate" validation checks performed by the Service Manager server (which were previously described) when running with acceptsharedcert:1.

Running the Service Manager server with the recommended default value for acceptsharedcert provides the most secure method for enabling Trusted Sign-On features because the Service Manager server performs additional validation checks against the client SSL certificate. It is also possible, though unlikely, that if a malicious user obtains the "shared certificate" the user may be able to gain unauthorized access to Service Manager (if the user can then also defeat the NTLM-based implementation of Trusted Sign-On on the Service Manager Windows client).

#### Valid if set from

Server's OS command prompt Initialization file (sm.ini)

#### Requires restart of Service Manager server?

Yes

#### **Default value**

0

#### Possible values

0 (Disabled) 1 (Enabled)

#### Example usage

Command line: sm -httpPort:13080 -acceptsharedcert:1 Initialization file: acceptsharedcert:1

### Startup parameter: maxloginspercluster

Startup parameters change the behavior of the Service Manager server. You can always set a startup parameter from the server's OS command prompt.

#### **Parameter**

maxloginspercluster

#### Description

In a horizontal scaling implementation, Max Logins for operators is enforced at the cluster level. This parameter allows administrators to turn off this feature. By default, this parameter is set to 1, which means Max Logins for operators is enforced by counting each operator's logins on all cluster hosts; when this parameter is set to 0, only logins on the local host are counted.

#### Valid if set from

Server's OS command prompt Initialization file (sm.ini)

#### Requires restart of Service Manager server?

. Yes

#### **Default value**

1

#### Possible values

0 ((Disable Max Logins at the cluster level)
1 (Enable Max Logins at the cluster level)

#### Example usage

Command line: sm -httpPort:13080 -maxloginspercluster:0

Initialization file: maxloginspercluster:0

### **RAD function: datecmp**

A RAD function that translates date/time fields to the correct SQL statement dialect. You can use this function in expert search of incidents, as well as in JavaScript programming.

See also "QCCR1E52991" on page 25.

#### **Function**

datecmp

#### **Format**

datecmp("DateTimeField1","LogicOperator","DateTimeField2","+/-", "TimeInterval")

#### **Parameters**

This function uses the following arguments.

Argument	Description Example Value (s)	
DateTimeField 1	A date time field in a Service Manager table.	close.time
LogicOperator	A logic operator.	>, >=, =, <=, <
DateTimeField 2	Another date time field in the same Service Manager table.	open.time
+/-	Arithmetic operator: +or	+, -
TimeInterval	A string that represents the time interval to be added to or subtracted from the second date time field.  The format of time interval can be: d, d hh:mm:ss, d h:m:s, hh:mm:ss, h:m:s, or hh:m:ss (1 digit mixed with 2 digits). Days can be omitted, or at most 9 digits. Hours, minutes, and seconds can be 1 or 2 digits (from 0 to 99), and hour:minute:second as a whole can be omitted if you enter only days.	10 02:03:04 (This string represents 10 days, 2 hours, 3 minutes and 4 seconds.)

#### Notes:

- All arguments must be enclosed in a pair of double quotes; otherwise the query parsing will fail.
- This function supports "AND"/"OR"/"NOT" to concatenate multiple datecmp() calls in one query.

The following are two examples:

```
datecmp("close.time", "<", "open.time","+", "1") or datecmp("close.time",">=", "open.time","+", "5:0:0")

problem.status="Closed" and (not datecmp("close.time",">", "open.time", "+","31 04:02:30"))
```

- You can combine the result of this function with other query conditions to construct a complete query. For example, you can execute one of the following queries when performing an expert search of incidents:
  - problem.status="Closed" and datecmp("close.time","<","open.time","+","04:02:30") and datecmp("close.time",">=","open.time","+","02:02:30")
  - problem.status="Closed" and datecmp("open.time",">","close.time", "-", "04:02:30") and datecmp("close.time",">=","open.time","+","02:02:30")
  - problem.status="Closed" and datecmp("close.time",">", "open.time", "+","31 04:02:30")

**Note**: The first two queries should return the same results, which are incidents whose closed time is between 2 hours and 4 hours from their open time; the third query should return incidents that were closed more than 31 days after their open time.

#### **Example**

An example of a JavaScript program that uses this function is as follows:

```
var f = new SCFile('probsummary', SCFILE_READONLY);
var query = 'problem.status="Closed" and datecmp("close.time", "<", "open.time",
"+", "04:02:30") and datecmp("close.time",">=", "open.time","+", "02:02:30")';
if (RC_SUCCESS == f.doSelect(query))
{
    do
    {
        print(f);
    }
    while (RC_SUCCESS == f.getNext());
};
```

### **Certifications**

This release includes the following support matrix changes .

#### **Added Support**

- Firefox 17 (web client and SRC)
- JRE 7 Update 17 (web client and SRC)
- JDK 7 Update 17 (KM Solr Search Engine)
- Tomcat 6.0.36 (KM Solr Search Engine)
- VMWare vSphere 5.1
  - VMWare ESXi 5.1 (Note: VMHA is supported; however a client reconnection is required after fail-over.)

#### **Discontinued Support**

• Firefox 10, 15 (web client and SRC)

# **Enhancements**

This release includes the following enhancements.

CR	Module	Problem	Solution
QCCR1E83966	Web Tier	As JRE 6 is apporaching its end of life, support for JRE 7 on the web client is required for all supported versions of Service Manager.	JRE 7 on the Web client is now supported for Service Manager 9.31p2 or later.
QCCR1E88963	Web Tier	Firefox 17 is not supported for the web tier.	Firefox 17 is now supported for the web tier.
QCCR1E92001	Server	Service Manager does not support VMHA mode on VMware ESXi 5.1.	Service Manager now supports VMHA mode on VMware ESXi 5.1.

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# **Fixed Defects**

This release fixes the following defects.

### Server

CR	Problem	Solution
QCCR1E30967	Attachments that are added via Web services do not honor the Max Attachment Size settings in the Company or Operator records.	Attachments that are added via Web services now honor the Max Attachment Size settings in the Company or Operator records.
QCCR1E8986	Using a type of TIMESTAMP in a dbdict SQL mapping on an Oracle database causes soap faults and a signal 11 error when saving data into the column. Service Manager will not automatically choose this data type, but users are able to manually map a database field to a SQL type of TIMESTAMP.	SQL type of TIMESTAMP in dbdict on Oracle no longer causes a signal 11 when saving data into the column.

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CR	Problem	Solution
QCCR1E52991	In a default Service Manager version 7.11 system that uses an Oracle database, queries that include date and time calculations fail because of SQL syntax errors. This prevents the creation of a view that shows all the interactions that were closed within 24 hours of being opened.	This issue occurs because the date/time fields arithmetic calculation concerned query results are incorrect in SM. This is true regardless of the database type. This is due to the lack of a generic representation of time interval, and the different ways to calculate it in those DB server types.  Added a new RAD function datecmp ("DateTimeField1","LogicOperator","DateTimeField2","+/-", "TimeInterval") that translates date/time fields to the correct SQL statement dialect. The function can be used in expert incidents searching, as well as in JavaScript programming.  For more information, see "RAD function: datecmp" on page
		20.
QCCR1E57668	After reaching Maximum Sessions in a Horizontally Scaled system, the following message is printed in the sm.log every 30 seconds until someone logs off: JRTE I Not Accepting Connections: Node: HostName:xxxxx PID:xxxx HttpPort:xxxx ActiveSessions:4 BlockedOnLowMemory:false Quiesced:false ChannelAddress:xxxxx	Now, this message is printed only when the node is neither a debug service nor a loadbalancer node. Additionally, the time interval for reporting the message was increased.
QCCR1E59909	You cannot store fields out of sequence in a structured array if the structure-type element is new to the array. This issue occurs because of an incorrect JavaScript implementation that causes the sequence of filling fields into the structured array to fail, if a single field is not first in the structure.	The incorrect code that failed to handle a field name with array path has been fixed.

CR	Problem	Solution
QCCR1E64043	If a duplicated Interaction record has been modified, the "refresh" rtecall retrieves the wrong interaction instead of the new interaction when the workflow is executed after duplicating an interaction record.	The "refresh" rtecall now retrieves the new interaction correctly.
	Scenario:	
	The user opens Interaction # 1 and escalates it to Incident # 1.	
	After returning to a blank Interaction, the user clicks Last Interaction and then selects Duplicate Interaction.	
	3. The User opens Interaction # 2 and associates it to Incident # 1.	
	<ol> <li>The user attempts to save Interaction # 2 after it is updated in the background (Open - Linked) and the "refresh" rtecall retrieves Interaction # 1 (instead of the updated Interaction # 2).</li> </ol>	
QCCR1E64366	If a QBE includes Display List and Value List values that are Global Lists, you cannot use that field as a value to "Chart By" in the Web client.	The "aggregatable" attribute in the response of "getForm" XML specifies whether a field can be put in "chart by" menu or not. In this case, the RAD variables affected the value of the "aggregatable" attribute even after the attribute was set. This behavior has now been corrected.

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CR	Problem	Solution
QCCR1E64357	<ul> <li>Details of audit records for a configuration item (CI) do not display properly. Specifically, the following problems occur:</li> <li>The audit history in the device.audit.vj subform is not shown correctly.</li> <li>Fields such as operator or the child field of an array structure like old.scalar are treated in the same way as columns of a table in the form.</li> <li>An audit record may have only one operator, but may have several old.scalar values. However, the form would show only the first old.scalar which value is incorrect. After applying Patch 15, even the first old.scalar value is not shown.</li> </ul>	This subform can be revised to show only ordinary fields of an audit record and can have a link to jump to a detail form to show an array structure of that audit record. If users do need the audit history to show data in array structure in old.scalar, try to implement it by tailoring. To do this, follow these steps:  1. Modify the input of the columns of the device.audit.vj subform to set the input value to a variable instead of field names. For example, substitute \$L.old.scalar for column old.scalar.  2. Prepare the variables in a JavaScript by executing a DB query and then call this JS in the display screen or format control. The variables can be shown in the subform.  Note: Although the above-described workaround is available, be aware that Service Manager already supports such a use case. When creating a Subform control, you need to fill in the Input field, where you can specify the sm database field or variable to associate with this control; however, if the database field is a complex type, for example, Array type or Structure type, you must fill in the Input field using this format: ArrayName, FieldName. In this example, it is recorded.changes,old.scalar.
QCCR1E72398	The Service Manager server does not report memory leaks at thread termination when using utalloc memory manager.	By default, the SM server now reports memory leaks at thread termination when using utalloc memory manager.

CR	Problem	Solution
QCCR1E72809	After closing a ticket (such as an Interaction or Incident) and returning to the view, the queue is not synchronized correctly.	Now, when detecting a record deletion, SM updates the group information so that the queue synchronizes correctly.  Note: This works only when a user deletes records. If users update or insert records, the view display issue will still exist. As a workaround, users can click the "Refresh" button to solve the view display issue for the latter case.
QCCR1E72834	An administrator cannot terminate a session that is fetching millions of records. This may occur due to a poorly created customer view, which can cause servlets to consume too much CPU and memory, and then terminate servlets.	Now, administrators can terminate a session that is fetching millions of records.
QCCR1E74528	On ESS, buttons will overlap when display option labels are greater than 10-12 characters.	Now, ESS truncates long labels to ensure the buttons do not overlap.
QCCR1E75514	WCF client cannot add an MTOM/XOP attachment when calling the SM Web service to create an incident.	WCF client can add MTOM/XOP attachment when calling the SM Web service to create an incident.
QCCR1E76630	The Status field is shown as "Scheduled" even though the "Schedule this index?" checkbox is not checked.	If "Schedule this index?" checkbox is checked, the status will be show as "Scheduled"; if "Schedule this index?" checkbox is not checked, the status will be show as "Completed".
QCCR1E76724	After deleting the unique key of cm3r, a signal 11 happened while doing an IR regeneration.  This issue occurs because the SM server does not check to see if there are a unique key and IR key before it starts a key regeneration, and thus causes a signal 11.	The Service Manager server now checks if the number of the unique key or IR key is zero. If yes, the server then issues a warning message to the client that indicates the IR regen cannot be performed without a unique key.  To take advantage of the server fix, you must load QCCR1E76724_SM931P2_SM930.unl, available in the platform_unloads directory.

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CR	Problem	Solution
QCCR1E77743	A legacy integration crashes with a Signal 11 error when running a Crystal report from 3 join tables (erddef and joindefs).	The integration will not crash when running a Crystal report from 3 join tables (erddef and joindefs).
QCCR1E77935	After an SLO is created, it is not attached and displayed in the change record. The SLO displays correctly only after the user logs out and then logs in again.	After an SLO is created, it will be attached and displayed in the change record.
QCCR1E78016	Trying to start multiple SM processes with the same httpPort simultaneously results in a memory leak.	No memory leak will occur when trying to start multiple SM processes with the same httpPort simultaneously.
QCCR1E78996	The base64Decode JavaScript function does not work as expected.	The base64Decode JavaScript function now works as expected.
QCCR1E78991	A Signal 11 error occurs in the CJsSCXmlDateTime::CJsSCXmlDateTime(double) function.	Now, the CJsSCXmlDateTime object is initialized properly, which avoids the Signal 11 error.
QCCR1E79306	A signal 11 occurs when changing the SQL TYPE of a field.	No signal 11 occurs when changing the SQL TYPE of a field.
QCCR1E79354	SM 9.30 does not send the <xop:include> tag together with MTOM attachments.</xop:include>	SM 9.30 sends the <xop:include> tag together with MTOM attachments as expected.</xop:include>
QCCR1E79795	Unwanted records are returned when searching in "Order from Catalog" within a specified category.	Correct records are returned when searching in "Order from Catalog" within a specified category.
QCCR1E80092	A memory leak occurs when running command "ba" in the RAD debugger.	No memory leak occurs when running command "ba" in the RAD debugger.

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CR	Problem	Solution
QCCR1E80231	When a search server becomes overloaded, Service Manager will hang and prevent users from continuing to search. Additionally, the search servers do not respond to the shutdown command.  Root cause: When a search host is down or disconnected, the load balancer host can detect it and redirect search requests to the next search host. However, the load balancer host cannot detect if a search host hangs. As a result, the Service Manager client will try to connect and then hang too.	A new sm.ini parameter, KMSearchEngineTimeout, has been introduced that defines a timeout value for all Knowledge Management search servers (indexing, search, and load balancer hosts). When a timeout occurs to any host, Service Manager will return and report an error.  For more information about the new parameter, see "Startup parameter: KMSearchEngineTimeout" on page 16.
QCCR1E80363	JAVA MAIL frequently freezes, which causes the eventout table to fill with unsent email.	This issue occurs, because there is no timeout set for the mail sessions, which causes the RTE to wait indefinitely. Now, when a connection issue occurs, a timeout has been added so that mail can be resent when starting the sending process after the connection issue is resolved.
QCCR1E83880	When you navigate to the last page after changing the page size, it takes a long time to show the record list.	When you navigate to the last page after changing the page size, it no longer takes a long time to show the record list.
QCCR1E84104	The sysinfo.get("ClientNetAddress") function returns an empty string when executing an external Web Service request.	The sysinfo.get("ClientNetAddress") function now returns the correct IP address of the Web Service client when executing an external Web Service request.
QCCR1E84337	After upgrading to later releases of the Service Manager application and binary files, the functionality that tracked how many logins since the last reset is removed and this information is no longer traced in the operator record.	This functionality is now implemented on the RTE side.

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CR	Problem	Solution
QCCR1E84362	Accessing forms that have a virtual join that references a structured array may result in warning messages in the log that resemble the following:  RTE W could not find field "fielddname" in dbdict for file enclapplrev	Accessing forms that have a virtual join that references a structured array will not result in warning messages in the log.
OCCD4E94400		The DTE will detect when the ID file is comput, and will
QCCR1E84490	When the RTE detects that the IR file is corrupt, a Signal 11 error is received and the system crashes.	The RTE will detect when the IR file is corrupt, and will prevent the crash.
QCCR1E84567	When upgrading from ServiceCenter 6 to Service Manager 9, the upgrade fails with an ALTER statement error:  SQL code=1741 message=0RA-01741: illegal	The ALTER statement on cm3r and cm3t is successful and no SQL statement error occurs.
	<pre>zero-length identifier (apm.upgrade.dbdict,save.dbdict)</pre>	
QCCR1E84666	When upgrading sc6.2 to SM9.30, the inbox dbdict cannot be upgraded. Instead, the Service Manager server hangs, you cannot log in, and the following information is logged repeatedly:  RTE I Mapped field 'RECORD_KEY' to NULLTABLE in file 'inbox'	When upgrading sc6.2 to SM9.30, the inbox dbdict can be upgraded successfully.
QCCR1E84765	A signal 11 occurs when adding new SQL Table: n1 in dbdict.	No signal 11 occurs when adding new SQL Table: n1 in dbdict.
QCCR1E87640	SCAutoListener enters an infinite loop and leads to high CPU utilization. The Service Manager session encounters a signal 6 and produced a core file.	Added new logic to check whether there is any data read by the listener. If no data is read, quit from reading to avoid infinite loop.
QCCR1E87764	A memory leak occurs when an adhoc SQL syntax is wrong.	No memory leak occurs when an adhoc SQL syntax is wrong.

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CR	Problem	Solution
QCCR1E87784	When IR detects corruption, Service Manager issues the following, misleading messages:	Now, clear messages will be provided. If Error = 0, the first message will not be issued:
	7532( 7124) 10/25/2012 23:15:22 RTE E Error 0	"RTE E Error 0 in call irReadInP4 - The
	in call irReadInP4 - The operation completed successfully. 7532( 7124) 10/25/2012 23:15:22 RTE E irReadInP4: Failure reading 32768 bytes at offset scirexpert:ir.probsummary (52409176), errno=0 (No error)	operation completed successfully"
	The error messages state "The operation completed successfully" and "No error" which is not the case. This issue occurs when the IR files are internal (that is, mapped to the scirexpert table).	

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CR	Problem	Solution
QCCR1E88044	A TeMIP-SM integration fails with "Out-of-Memory" errors or otherwise becomes unstable. This issue occurs because Service Manager processes queries incorrectly and returns all records for the table when the database is frequently inaccessible.	The "Out-of-memory" error will no longer occur because Service Manager now returns the correct records or error message even if the database is frequently inaccessible. If the object.name is the same as the name in the "extaccess" table, the correct records will be returned. If not, the following xml response will be returned to the client side and the error information will be logged in sm.log:
		<soap-env:envelope xmlns:soap-env="&lt;/td"></soap-env:envelope>
		"http://schemas.xmlsoap.org/soap/envelope/">
		<soap-env:body></soap-env:body>
		<pre><createincidentresponse <="" message="Specified Name Not Found" pre=""></createincidentresponse></pre>
		<pre>returnCode="7" status="FAILURE" xmlns="http://sch   emas.hp.com/SM/7"/&gt;</pre>
QCCR1E88112	When delivery of an e-mail fails, there is no useful information in the log to find out the root cause.	Now the Java stack trace will be printed to the log file if an exception occurs when sending an e-mail.
QCCR1E88223	A signal 11 occurs when Service Manager calls the toString of an empty XML object.	No signal 11 occurs when Service Manager calls the toString of an empty XML object.
QCCR1E88266	If Service Manager generates two or more core dumps in one thread, the last core dump will overwrite the previous ones.	Service Manager now keeps the first two core dumps for one thread.

CR	Problem	Solution
QCCR1E88335	An attempt to add an attachment with a file name that ends with a dot, or an attempt to update an object that already has an attachment with a file name ending with a dot results in termination of the session with error "_ SCStringValue() pos > length".	This issue occurs because a "." at the end of a file is considered as the delimiter for the extension. Now, the sequence for the delimiter is "." + any character.
QCCR1E88306	A memory leak is found when you run the following JavaScript function:  var r= new Record();	The memory leak was eliminated.
QCCR1E88305	Service Manager crashes when you run the following JavaScript unit test case:  function ClassGlobalObjectTest_testCheckObject()  {     print(user); }	Service Manager should not have any exception when you run the the JavaScript unit test case.
QCCR1E88468	After you upgrade to SM 7.11 Patch 19, a Signal 11 error occurs and the servlets eventually hang.	Now, the issue has been resolved by rolling back a change introduced in previous release.
QCCR1E88509	A memory leak occurs when performing an IR Regen.	No memory leak occurs when performing an IR Regen.

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CR	Problem	Solution
QCCR1E88643	After you log in to Ess.do home page, you cannot switch to "View Closed Requests" after you click "View Open Requests."	This issue occurs because the RTE copies the start-up parameter's values to the global symbol table, so that the previous RAD's start-up parameters overwrite the start-up values of the current RAD. This issue has been fixed.
QCCR1E88706	The SMTPMail process (also known as JavaMail) fails to deliver messages due to a "Not connected" exception error.	The SMTPMail process (also known as JavaMail) will now reconnect to the session and deliver all messages successfully.
QCCR1E88851	When you confirm the multi-selection checkbox to perform a Mass Cancel, the number of records displayed in the confirmation message is incorrect.	The number of records now displays correctly.
QCCR1E89009	High CPU usage and memory leak are found when the user sets a nonexistent SQL Type during the creation of a new dbdict table in an AIX+DB2 environment. The memory leak is caused by a system hang that occurs when the user enters an unknown SQL data type.	When the user enters an unknown SQL data type, no system hang occurs and therefore no memory leak occurs; additionally, a message displays on the client side to prompt the user that the SQL data type is unknown.
QCCR1E89093	When attempting to log in, users receive the following error and then the servlet eventually hangs:	Now, SM uses a thread-safe version of the OpenIdap library to prevent the Signal 11 error.
	"Authentication failed. Contact your system administrator for assistance. SOAP Fault occurred: A signal 11 was raised in native code. Client terminated. Stack trace dumped to sm.log"  This behavior occurs when the user tries to connect to the LDAP server by using SSL.	<b>Note</b> : On all UNIX and LINUX platforms, after applying this patch and before starting SM, users need to run the setupLinks.sh script in the server's RUN directory.
QCCR1E89219	Users cannot log in to SRC on their first or second	Logging in to SRC is now successful after the 1st attempt.
	attempts, despite entering the correct login credentials. The 3rd login attempt is successful.	

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CR	Problem	Solution
QCCR1E89248	When you audit records, a unique constraint error occurs and the records are not added in Oracle.	The primary key is generated in any case.
QCCR1E89395	SRC server fails to start up due to the conflict between ESS and SRC startup.	SRC server can start up now.
QCCR1E89583	An SM outage occurs due to shunned messages in the Jgroups channel in Clustered mode.	There will be no shunned messages because the shunning mode has been disabled.
QCCR1E89717	The standard Web Service Update method responds with a "Record modified since last retrieved" message.	The standard Web Service Update method now works well and no longer responds with a "Record modified since last retrieved" message.
QCCR1E90073	When opening a large attachment of a record repeatedly, the session is accumulating a large amount of native memory.	The memory allocated for the attachment is released once it is of no use.
QCCR1E90121	In the multi-thread email sending solution (see fix QCCR1E74158 in SM9.30p5), there are N (N=mailThreadCount) email sender threads and one main email thread (reading emails from the DB); however, the mail-sender threads (EMAILOUT) remain idle in System Status.	Now, only the main email thread is displayed in System Status; the mail-sender threads (EMAILOUT) are no longer displayed.  Note: Before this fix, there are N+1 "EMAILOUT" threads in System Status and the logged-in users are counted as N+1; after this fix, there is only one "EMAILOUT" thread and the logged-in users are counted as 1.
QCCR1E90160	A Signal 6 error is received and the background schedulers stop unexpectedly.	Fixed the issue in which a Signal 6 error is received and the background schedulers stop unexpectedly.
QCCR1E90171	When you start an RTE931 instance together with an instance of an older RTE version that has the same value for the system parameter in sm.ini, the shared memory becomes corrupt. This behavior results in a Signal 11 error, and users cannot log on to the system.	Use the latest 921p7 and 931p2 servers. Then if the second server starts and finds its version is different from the first server, it stops itself without crashing the first server.

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CR	Problem	Solution
QCCR1E90530	Users are unable to effectively process Incident tickets due to a loop of the "Record has been modified since read" message.	The "Record has been modified since read" message no longer pops up.
QCCR1E90544	You encounter a performance issue in sorted fill operation when record list is enabled.	This defect is fixed. If the visual recordList is not related to the RELBLK, which needs to be sorted, the action to locate the current record is no longer performed.
QCCR1E90546	SM process on Linux failed with a signal 6.	SM RTE will not terminate the entire process if the client is not available to receive a message.
QCCR1E90766	An update to a large incident ticket is slow due to the performance of the "recordsize"/"recordsizeok" call.	The performance of updating a large incident ticket has been enhanced.
QCCR1E90767	An update to a large incident ticket is slow due to the performance of the "makenItt" function.	The performance of updating a large incident ticket has been enhanced.
QCCR1E90842	When SM is configured to use the HTTPS URL for UCMDB, if you click the "View in UCMDB" button or expand the "Actual State" section for a CI that exists in UCMDB and was pushed into SM, you receive the following error message:	Now, View in UCMDB and Actual State work properly without the error message.
	Error calling method: doSoapRequest in class: com/hp/ov/sm/server/utility/SoapClient Exception (com.sun.xml.messaging.saaj.SOAPExceptionImp l: java.security.PrivilegedActionException: com.sun.xml.messaging.saaj.SOAPExceptionImpl: Message send failed)  This issue does not occur if you use the HTTP URL for UCMDB.	
QCCR1E91734	In the server log (sm.log), "Unsupported Java version" is misspelled as "Unsupported Java verion".	The misspelling has been corrected.

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# **Application**

CR	Problem	Solution
QCCR1E76724	After deleting the unique key of cm3r, a signal 11 happened while doing an IR regeneration.  This issue occurs because the SM server does not check to see if there are a unique key and IR key before it starts a key regeneration, and thus causes a signal 11.	The Service Manager server now checks if the number of the unique key or IR key is zero. If yes, the server then issues a warning message to the client that indicates the IR regen cannot be performed without a unique key.  To take advantage of the server fix, you must load QCCR1E76724_SM931P2_SM930.unl, available in the platform_unloads directory.

# **Web Client**

CR	Problem	Solution
QCCR1E58337	Two timer widgets cannot be displayed on the same format at the same time in the Service Manager web client.	Multiple timer widgets can be displayed correctly on the same format in the web client.
QCCR1E60153	When you click on Change link on the CI Changes Tab on the CI Record, the Change is opened in a new browser tab with no buttons.	The Change is now opened in a new tab as expected.
QCCR1E68768	Some of our users report that the 'navigator' pane is empty on the left side of their screen. The application shows the area where the navigator pane must be, but it is empty.	The browser side timeout was increased to wait for the server response, and an unnecessary, costly request was removed. This should enable the navigator pane to display properly.

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CR	Problem	Solution
QCCR1E69469	You receive an "HTTP Status 404" error in the detail form when you perform a search in the web client in the following two scenarios:  1. Incident Management > Search Incidents > Search  2. Service Desk > Search Interaction Records > Search	The "HTTP Status 404" error no longer occurs in the detail form.
QCCR1E70786	Multiple line comments in the subview table only display the first line.	Multiple line comments in the subview table are now displayed correctly, with each line separated by " ".
QCCR1E71209	A "condition" option is requested that allows users to specify a condition under which tasks will be created when creating a Change Model that has tasks.	Added a condition editor control to edit the task condition for a Change Model.
QCCR1E73985	Current value of a selectonly combox will be cleaned up if the value is not contained in the value list, and no value can be selected from the value list when the property "Select Only" is activated.	The current value will be kept even if it is no longer in the value list.

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CR	Problem	Solution
QCCR1E74321	MySM generates a 404 error in the SM 9.30 Web tier when the following configuration is present inside the " <host>" tag of the server.xml file of the Tomcat server:  <context debug="0" docbase="webtier-9.30" path=""> </context>  Users can connect to the Web client, but inside each of the 4 sub-windows there is a 404 error. This issue is present in the 9.30.201 Web tier, but is not present in the 9.30.021 Web tier.</host>	Users can connect to the Web client can display the MySM graph when the Context path attribute of Tomcat is "".  Known issue of record list: Before the graph is drawn, 404 errors will appear in each of the 4 sub-windows, but these will disappear shortly thereafter.  To work around this known issue, follow these steps:  1. Create a new folder named composition_manager in the \client\web\text{lient\web\composition_manager} directory.  2. Copy composition the_manager\empty.html file into this folder.  3. Create a new folder named images at the \client\web\composition_manager\composition_manager\composition_manager\text{composition_manager}\text{composition_manager\text{lient\web\composition_manager\text{lient\nedges}\loading.gif into this folder.}  5. Verify that you have the following files in the directories as shown:  composition_manager\composition_manager\text{lient\nedges}\text{loading.gif}  manager\text{lient\nedges}\text{loading.gif}

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CR	Problem	Solution
QCCR1E74389	After you apply Process Designer Content Pack, inactive Task Categories are available in the Change Model's Task Editor.	After you apply Process Designer Content Pack, only active Task Categories are available in the Change Model's Task Editor right now.
QCCR1E74391	The Accessible Web client uses background images, which cannot be read by screen readers.	Now an aria-label is used for a button that uses a background image instead of text, and its value is set as the button's tool tip, which can be read out by a screen reader when the focus is set on the button.
QCCR1E74650	Blind and disabled users use the keyboard to navigate in Service Manager. Therefore, it should be possible to use only the keyboard to navigate in Service Manager. However, some elements, such as the register in the beginning of the content, table-rows and check-boxes (which are not done with HTML standard elements), can be focused with the keyboard, but cannot be activated by using the spacebar or the return key. It is therefore not possible to use these elements by using only the keyboard.	<ul> <li>When working with record lists, you can do the following:</li> <li>Use the arrow keys to go through the records.</li> <li>Use the spacebar to select or deselect a row.</li> <li>Use the return key to select the currently focused item and fill in the field.</li> </ul>

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CR	Problem	Solution
QCCR1E74732	Blind and disabled users must use the keyboard to navigate in Service Manager. Therefore, it should be possible to use only the keyboard to navigate in Service Manager.  Important elements, such as the main and submenus, the side-navigation in tables, or the tree structure in overviews cannot receive focus by using only the keyboard. These elements include the following:  • Grouped lists in the ToDo queue  • System Navigator  • Page navigation (paging bar) at the bottom of record lists	<ul> <li>Now the following items can get focus:</li> <li>Group lists in the ToDo queue</li> <li>System Navigator</li> <li>Paging bar of recordlist</li> <li>Known issue: Paging bar buttons can be focused, but do not have a proper label, and so JAWS cannot read out any proper button text.</li> </ul>
QCCR1E74831	Blind and disabled users must use the keyboard to navigate in Service Manager. Therefore, it should be possible to use only the keyboard to navigate in Service Manager. However, users cannot sort tables by activating a column header with a screen reader because the "Columns" sub-menu is opened instead of performing the sort.	When JAWS is running, users can now sort a table by focusing the table column header and then pressing the Enter key.

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CR	Problem	Solution
QCCR1E75815	Two vertical scroll bars are appearing for Workflow Viewer in Normal change ticket forms.	In Internet Explorer, there are no vertical scroll bars for workflow display, and there is no horizontal bar either. In Firefox, there is no horizontal/vertical bar.  Note: In both Internet Explorer and Firefox, the form does not display well when the workflow width or height is bigger than the group's.
QCCR1E76531	There is no mechanism to display counters in the Web client in the same manner that the Windows client does.  For example, the Windows client displays the "Display list count" for a view, but nothing is displayed in Web client.	The record count is displayed in the Web client.  Known issue: If user update the tickets that result in the change of record count, the count cannot be updated automatically, user need click refresh button above navigation tree to update it.
QCCR1E78030	A skip link is not accessible with the JAWS screen reader, and the reading focus does not move to the start of the main content area.	A skip link is added on top of the page, but is only visible when focused. Otherwise the skip link is not visible. On activation, the skip link goes to the beginning of the main content area, ahead of detail tab header.
QCCR1E78176	When you set the main menu to SC style after you log in, a JavaScript error is received. Additionally, groups cannot be expanded automatically.	There is no JavaScript error in the main menu page, and the first group is expanded by default.
QCCR1E78246	Dashboards in SM 9.30 are a lot smaller than SM 7.11.	This issue occurs because the chart size in SM 9.30 was calculated incorrectly. The issue is now resolved.
QCCR1E78594	You cannot remove the condition once it has been added using the Condition Editor.	Now you can remove the condition using the Condition Editor.
QCCR1E78687	When you tab to a selected Provider Group and then click on a collapsed item, the focus does not remain on the expanded item.	You can now expand and collapse groups without losing focus, and the state change is read by JAWS.

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CR	Problem	Solution
QCCR1E78734	Us.print does not function correctly when called from a display option in the Web client. Instead, a "Loading" message appears briefly and then nothing more occurs. When called from the Windows client, the print dialog is displayed as expected.	Now, the print window is displayed as expected when us.print is called.
QCCR1E79007	Only the first element of a comfill displays in a Virtual Join when the "Display Using Table" option is off.	All elements of a comfill display correctly in a Virtual Join when the "Display Using Table" option is off.
QCCR1E79114	A data changed event fires too late when the focus leaves a radio button in the Web client running in Internet Explorer.	The data changed event fires properly when the focus leaves a radio button in the Web client running in Internet Explorer.
QCCR1E79125	The navigator size is not remembered after the user logs out of the system.	The navigator size is now remembered when the user logs out.
QCCR1E79203	When you click the icons above the Navigator in 9.30.P4.HF3, the JAWS screen reader returns an "Unlabeled 0 button" message.	Add accessibility support for the Manage Favorites, Add Favorite, Refresh, Collapse/Expand Navigator, Spell Check, Print Page, Messages and Alerts icons and buttons.
QCCR1E79204	In 9.30.P4.HF3, the icons above Detail form bar cannot be read by JAWS13. Instead, JAWS identifies them as 'Unlabled 0 Buttons".	Add accessibility support for the Manage Favorites, Add Favorite, Refresh, Collapse/Expand Navigator, Spell Check, Print Page, Messages and Alerts icons and buttons.
QCCR1E79212	Messages are read only if a user triggers the Read All command (Ins+B) after the message is displayed.	"Role=alert" and "aria-live=assertive" are now used to indicate updated areas on the page, and the screen reader now reads the messages immediately.

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CR	Problem	Solution
QCCR1E79205	JAWS 13 cannot read the Collapse/Expand status of the tree node of Navigator or whether the items of the navigator tree can be expanded in 9.30.P4.HF3.	Accessibility support was added for the navigation tree so that JAWS can read the Collapse/Expand status of tree nodes, and use the arrow keys to navigate the tree.
QCCR1E79369	When tailoring RuleSet RAD Expressions by using Process Designer and using the ampersand (&) special character in the condition expression of RuleSet, the following error is received:  Error "Expression can't be edited because data is missing or corrupt"	Tailoring the RuleSet RAD Expressions now works as expected, even when you use the ampersand (&) special character in the condition expression of RuleSet.
QCCR1E79399	The expanded or collapsed state of the navigator cannot read by the JAWS screen reader.	The expanded or collapsed state of the navigator can read by the JAWS screen reader.
QCCR1E79484	In classic login mode, the screen reader does not tell the user whether the menu in details is expanded or collapsed.	<ul> <li>In index mode, the title and alt values of the image are updated according to the state of the current menu.</li> <li>If the current menu is expanded, the values are "Collapse Menu".</li> <li>If the current menu is collapsed, the values are "Expand Menu".</li> <li>In accessible mode, since the menu cannot be collapsed, the title and alt values of the image are set as "Menu".</li> </ul>
QCCR1E79534	The calendar widget icon is not rendered in an array table from the CM.change.login form.	The calendar widget icon is now rendered correctly in an array table.

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CR	Problem	Solution
QCCR1E80228	Users cannot see the graphical relations about CI's in the Service Manager Web client when	Users can now see the graphical relations about CI's in the Service Manager Web client.
	the web application server's context path is of a multi-level structure, such as "/sm/sm921".	Known issue:
	Instead, the graph is always empty.	If the web application server's context path is of a multi- level structure, such as "/sm/sm921", MySM pages cannot be displayed and an error occurs. To resolve this issue, perform the steps below to update the records in the "uimcompdefinitions" table.
		In Database Manager, type "uimcompdefinitions" in the Table field, and click Search.
		Click Search to retrieve a list of records in the "uimcompdefinitions" table.
		3. For all the records, add the additional context path as a prefix to the "View Url" and "Filter Url" fields. For example, if the custom context path is "/sm/sm921" and the value of the "View Url" field is something like "/uimComponent.jsp?ctx=chart&", change the value to "/sm921 /uimComponent.jsp?ctx=chart&".
		4. Save the records.
		Log off Service Manager and log back in for the changes to take effect.
QCCR1E84713	When you add different dates in the Parts and Labor section on the Web client, the date and time value of the first line changes after the date and time values of other lines are changed.	Dates are now updated in the correct rows.

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CR	Problem	Solution
QCCR1E88062	A subform that contains a table component shows only the first element in Admin mode.	All elements are now shown as expected.
QCCR1E88074	When there is a form with collapsible sections in a collapsible section on the Web client, the space between the section header and the next section is not suppressed after you expand and then collapse a section.	To resolve this issue, the height is reset to the new value on either expand or collapse.
QCCR1E88267	Change models should have a flag that allows users to specify whether a task is editable/removable in the task planner of a change record. The default value should be false.	Users can now specify whether a task is editable or removable. This was achieved by adding a mandatory checkbox in task planner in change models.
QCCR1E88461	In the ESS client, a 404 error occurs when the user attempts to open an attachment.	In the ESS client, now you can open an attachment successfully without any errors.
QCCR1E88872	In Service Manager 9.30, the charts are partially cut off from the bottom and the auto-resizing functionality does not appear to work correctly.  Note: This behavior does not occur in the SM7.1x code branch.	The chart sizing behavior is now the same as SM7.1x.
QCCR1E89021	The focus gets lost after the user presses the Enter key on Navigation toolbar buttons and Favorite toolbar buttons.	The focus now remains on the Navigation toolbar buttons and Favorite toolbar buttons.
QCCR1E89261	The Web client hangs when you return from the Change Detail page to the Interaction page.	The Web client no longer hangs when you return from the Change Detail page to the Interaction page.

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CR	Problem	Solution
QCCR1E89653	Superfluous error messages occur in the Web client when a referenced workflow name contains characters that are not in the English Latin character set.	No error message occurs in the Web client when a referenced workflow name contains characters that are not in the English Latin character set.
QCCR1E89789	The Notebook widget can be rendered as Group by selecting the "Group rendering enabled" property in Forms Designer. However, there is no mechanism to easily customize notebook rendering style for the entire system.	The Lock rendering style property has been added to the Notebook widget in Forms Designer, and the default value of this property is "True".  This property is designed to work with the following two options that will be added in the upcoming Process Designer Content Pack. If you have not installed the corresponding Process Designer Content Pack, ignore the "Lock rendering style" option. Otherwise, refer to Release Notes of that Process Designer Content Pack for details.  • Preferred Notebook Style option under System Administration > Base System Configuration > Miscellaneous > System Information Record  • Preferred Notebook Style option in Operator records. If this option is not empty, the Preferred Notebook Style setting in System Information Record is ignored.

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CR	Problem	Solution
QCCR1E89790	Group rendering in the Web client needs to be improved for the Notebook widget.	<ul> <li>The following improvements are introduced in the group rendering for the Notebook widget in the Web client:</li> <li>Added a line break between groups to separate different groups (To make the style consistent with the Group widget).</li> <li>Only the groups that have the "Default to Expanded" option checked are expanded by default.</li> <li>Limitation:</li> <li>Nested notebooks that are rendered as a group in the Notebook widget are not recommended. If you have to do that, adjust the "Height" property of the outside Notebook widget to make it high enough to enclose the</li> </ul>
QCCR1E89766	On the 9.31 Web client, when you select the "Show clocks" option from a record that has an active clock, there is JavaScript error and a blank screen is shown.	nested expanded groups.  The list of clocks now shows correctly when you use the "Show clocks" option in the Web client.
QCCR1E90051	The Condition Editor does not support a blank or null value for a Number/Date type field.	A Blank/Null option is now available from the drop-down list of the Condition Editor.
QCCR1E90275	When a list-only page (a ToDo list or Fill list) is initially opened or reloaded (resorted or refreshed), the first row or the last selected row is selected.	When a list-only page (a ToDo list or Fill list) is initially opened or reloaded (refreshed or resorted), the first row or the last selected row is only focused but not selected, regardless of the viewrecordlist setting.
QCCR1E90292	In Task Planner, tasks in waiting state and tasks in active state use the same style.	In Task Planner, tasks in waiting state use a new style, which is different than that of active tasks.

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CR	Problem	Solution
QCCR1E90581	If you use a proxy to connect to Service Manager, you do not receive the "record locking" message when you try to modify a locked IM record.	This defect is fixed. The "record locking" message is displayed correctly.
QCCR1E90655	Timer widget "Expiration Event" property is not triggered in the ESS web client.	Timer widget "Expiration Event" property works correctly in the ESS web client.
QCCR1E90797	The date/time picker for the Start Time field and the End Time fields is missing when the corresponding field has a value.	The date/time picker is visible when the corresponding field has a value.
QCCR1E90960	The phase names text does not align correctly in the phase rectangles in Workflow Viewer.	The phase names text now aligns correctly in the phase rectangles in Workflow Viewer.
QCCR1E91012	After a new change task is saved, the date/time picker for the start time and the end time in the work notes group disappears if values are provided for these two fields.	After a new change task is saved, the date/time picker for the start time and end time in the work notes group does not disappear if values are provided for these two fields.
QCCR1E91026	The check box in the header of a grid is not removed after a page is refreshed.	Now, the check box in the header of a grid is removed after page is refreshed.

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CR	Problem	Solution
QCCR1E91172	When you create or edit a rule set, it is a simple process to re-sequence individual rules. However, there is no way to re-sequence rule sets that have been applied to a phase. If you need to add another rule set that must be executed first in the rule set list for a phase, currently there is no way to add it or move it to the top of the list. Instead, you have to drop all rule sets and re-add them in the proper order.	<ol> <li>The Up and Down arrow buttons have been added to the web tier's Workflow Editor so that you can move a rule set up or down.</li> <li>To change the order of rule sets:</li> <li>Navigate to Tailoring &gt; Process Designer &gt; Workflows.</li> <li>Open an existing workflow.</li> <li>Select a phase or a transition in the workflow.</li> <li>Go to the Rule Sets or Actions tab (for a Phase) or the Rule Sets section (for a transition), add rule sets to the list if needed.</li> <li>Select a rule set from the list, and click the Up or Down arrow button to move it up or down.</li> </ol>
QCCR1E91169	When you change the description of an existing change task in the task planner, if you click at the middle of the text and start typing, the cursor unexpectedly moves to the end of the text after you type the first letter.	Now, the cursor no longer moves to the end of the text when you try to insert characters in the middle of the existing description.
QCCR1E91189	If you use the CTRL key to copy a task, after you modify the copied task, the original task is also changed.	This defect is fixed by disabling the clone feature.
QCCR1E91176	In the task planner, the task description that contains only numbers is displayed incorrectly in the graphic.	Now, the task description is displayed correctly in the graphic of the task planner even if the description only contains numbers.

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CR	Problem	Solution
QCCR1E91187	In the task editor, if you press the Enter key when editing Task-Properties, the page refreshes without saving the task so that the changes you made are lost.	This defect is fixed by disabling the Enter key in the task planner window.
QCCR1E91173	If a task condition is set with a less than ("<") symbol, the expression after the "<" symbol disappears when you save the condition.	Now, you can save a condition containing the less than ("<") symbol with the complete expression.
QCCR1E91228	When the focus is set on a subgroup record in a record list, if you resort the list multiple times and then click the Select All checkbox, no record is selected.	All records in the record list are selected.
QCCR1E91626	The image of the Mass Cancel button is missing in the Web client after you apply Process Designer Content Pack 3 (PDCP3).	The image of the Mass Cancel button displays correctly after you apply PDCP3.
QCCR1E91632	Users cannot drag or drop Task Planner in Internet Explorer.	Users can drag or drop Task Planner in Internet Explorer.
QCCR1E91647	When you open the Task Planner, all buttons on the detail form toolbar are disabled; if you click another record in the list page, all the buttons are still disabled.	If you click another record in the list page, all the buttons are enabled.
QCCR1E92065	On the Web client, the "select all" check box for list cannot be unchecked with mouse if it has been checked by the Space key.	The "select all" check box for list now can be checked or unchecked by using mouse or the Space key freely.
QCCR1E92078	The Service Manager client does not support Hebrew localization.	Hebrew localization text strings are now shown with the Hebrew locale.

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# **Windows Client**

CR	Problem	Solution
QCCR1E49805	In Forms Designer, the "Web Preview" widget does not display the information.	In Forms Designer, the "Web Preview" widget displays the correct information.
QCCR1E52188	The HTML Editor in the Knowledge Management KM Contribute Knowledge screens does not display when using a Shared Service Manager Client type.	This defect is fixed. The HTML Editor displays correctly when using a Shared Service Manager Client type.  Known limitations:  Some files are copied to the "C:\Documents and Settings\{your user name\}\ServiceManager\workspace\.metadata\.plugins\com.hp.ov.sm.client.eclips e.user\htmlEditor" folder.  Therefore, the first time when you open a window that contains HtmlEditor widget, it will be slower than before.  Additionally, since some files' path length may exceed 255, you cannot delete them directly. In this case, you can use DOS commands to delete these folders. Go to the "C:\Documents and Settings\{your user name\}\ServiceManager\workspace\.metadata\.plugins\com.hp.ov.sm.client.eclips e.user" folder, and then execute the "rmdir /s/q htmlEditor" command to delete the whole htmlEditor folder.

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CR	Problem	Solution
QCCR1E53130	After you change the font size or select the Restore Defaults from Window > Preferences > Appearance on the Windows client, the format no longer fits on the screen. This results in objects falling off the edge of the form and the vertical and horizontal scroll bars are not created. This behavior prevents users from navigating the form.	Now the scroll bars are shown as expected when a larger font is used.
QCCR1E64130	When you select a record from the Incident Queue in the Windows client, you experience poor performance and then you receive a SOAP error. This issue occurs when you have grouping enabled and a large number of records returned.	The Windows client responds much quicker when you select a record from the Incident Queue with grouping enabled and a large number of records are returned.  Known issue: This resolution targets group views only. You may still find performance issues on non-group views.

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CR	Problem	Solution
QCCR1E65333	If the Delete button is used to remove an attachment from a record, it also removes any text that was previously highlighted. Specifically, this issue occurs only in the Windows/Eclipse client, and requires the following, specific set of steps in the SM 7.11 user interface:	When you press the "delete" key on attachment, the selected text will no longer be cleared.
	Open any ticket with an attachment.	
	Note the field that is highlighted when the ticket is opened.	
	3. Select the attachment.	
	Press the delete key. The attachment is deleted and the field that was highlighted when the ticket was opened is cleared.	
	It appears that clicking on the file name does not un-select the highlighted field.	

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CR	Problem	Solution
QCCR1E73858	The SM9.30.201 build (Patch 3) Windows client cannot open attachments that have a long filename (more than 120 characters).	The Windows client can open attachments that have long filenames.  Note: Due to the limitation of file name length (255 characters) in Windows systems, follow these guidelines:  Use a short filename for attachments, and  Make the path length as short as possible if you want to change the default workspace for the Windows client.
QCCR1E76437	The Form Designer Web Preview does not work if the form contains collapsed content. You cannot expand the content in the collapsed section in preview window.	You can expand sections as expected in the Web Preview window.
QCCR1E79222	When a session is terminated, the user receives a "Session no longer valid" message on every open tab. This is annoying when multiple tabs are open.	When a session is terminated, the user receives only one "Session no longer valid" message.
QCCR1E83715	The us.launch.external RAD application does not open the browser if the ToDo tab is closed.	The us.launch.external RAD application opens the browser even if the ToDo tab is closed.
QCCR1E83940	When you double-click a record in the record list to select it, additional actions may occur on the detail format. This behavior occurs if, when you double-click the record, the mouse position is where an interactive element of the detail format (such as Link Label or button) will appear.	The issue has been fixed so that the detail format is opened without triggering additional actions.

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CR	Problem	Solution
QCCR1E88876	In Service Manager 9.30, data charts placed above a record list are partially cut off from the bottom and the autoresizing functionality does not appear to work correctly.  Note: This behavior does not occur in SM7.1x.	The graph sizing behavior is now the same as in SM7.1x.
QCCR1E89544	Printing a non-grouped record list does not work on the Windows client. For example, the Incident record list that displays when you select Incident in the To Do queue and select Autoformat Date View in View.	Printing a non-grouped record list now works well.
QCCR1E91040	Forms Designer crashes if you save a form that contains a notebook of which at least one tab is invisible.	Forms Designer no longer crashes if you save a form that contains a notebook of which at least one tab is invisible.  Known Issue: When you switch the form from Design mode to Preview mode in Forms Designer, the focus is no longer always set on the first visible tab of the Notebook.
QCCR1E91837	The image of the Mass Cancel button is missing in the Windows client after you apply Process Designer Content Pack 3 (PDCP3).	The image of the Mass Cancel button displays correctly after you apply PDCP3.
QCCR1E92046	In the Properties pane of Forms Designer, if you click a dropdown list (for example, the "Foreground Color Condition" dropdown list) multiple times, single mouse click no longer works. You have to use double-click instead of single-click.	This defect is fixed. Single-click works.

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# **KM Search Engine**

This release fixes the following defect in the KM Search Engine.

CR	Problem	Description
QCCR1E90386	Need to certify JDK7 on the KM Solr Search Engine, because JDK 6 reached its EOL in February 2013 and the KM Solr Search Engine heavily relies on JDK.	<ul> <li>JDK 7 Update 17 has been certified on the KM Solr Search Engine. Pay attention to the following:</li> <li>For Windows platforms, after updating to JDK 7, do the following:</li> <li>1. Replace startup.cmd and installservice.cmd in the kmsearchengine directory with the files in the KM patch.</li> <li>2. Restart the Solr search engine. KM search should work fine.</li> <li>For UNIX platforms, you do not need to change any files; simply restart the KM Solr search engine after your JDK is updated.</li> </ul>

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# **Known Problems, Limitations, and Workarounds**

This software release has the following known issues and limitations.

Global ID	Problem	Workaround
QCCR1E63663	The Service Manager (SM) client loses connectivity during JavaScript execution of the file.list RAD application.	No workaround available.  Created a knowledge article (KM1166532), which states that Service Manager does not currently support calls from JavaScript on RAD applications that use the rio/fdisp panels.

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Global ID	Problem	Workaround
QCCR1E57385	When Service Manager is running on Unix, the legacy listener may log intermittent signal 11 upon CIT initial connectivity test if exec-shield is not set properly.	Use one of the following solutions to solve this issue on Unix.  Solution 1:  Connect Connect-It to the Web Services connector instead of the Legacy Listener connector.  Solution 2:  Before connecting Connect-It to the Legacy Listener connector, do the following:  1. Add usethreading:0 in the sc.ini file, which is located in <service installation="" manager="" path="" server="">\LegacyIntegration\RUN.  Note: For 64-bit RedHat Linux servers only, you can alternatively run the following shell commands as root:  #sysctl-w kernel.exec-shield=0  #sysctl-w kernel.randomize_va_space=0  2. Start the legacy listener.</service>
QCCR1E69449	The user encountered a signal 11 while updating an incident: RTE E Caught XML API exception scxmlapi(40).  This is because another user was updating the probsummary dbdict record at the same time.	When modifying a dbdict record, ensure that there are no other users updating records or inserting records in the same file. For example, when updating the probsummary dbdict, make sure that there are no other users updating existing incidents or opening new incidents.

Global ID	Problem	Workaround
QCCR1E67491	When the collation of the db instance is Chinese_PRC_BIN, Web service clients fail to connect to Service Manager (SM). Only ASCII operator names are supported, so only ASCII operator names can be used.	Note: This issue only exists in Web service integrations. Therefore, the SM clients do not have this problem.  When SM is handling an incoming SOAP request, the authorization string is decoded by BASE64Decoder. SM uses the decoded string value to construct a UTF-8 string that is used in the RTE. However, the authorization string is in the header and SM does not know the charset or encoding of the underling string value, which is BASE64 encoded.  Therefore, if the underlying string value is not UTF-8 this problem will occur. In SM, when fetching an operator record from the database, no matter what collation the database uses, the operator record finally will get a UTF-8 operator value. However, even if users put the same value in the authorization header, the operator name may differ because of the charset/encoding issue. Because of this, the operator will fail to log on.  This is a limitation of SM. Do not use non-ASCII characters in operator names. Created a knowledge article (KM1442479) to document this limitation.
QCCR1E75182	HTML email truncates the body of the message and sends the HTML code without translating it.	When the content of an HTML email template exceeds 8192 bytes in size, the content will be truncated and displayed as HTML code.  Make sure your HTML email templates do not exceed this size limit.
QCCR1E89890	Grouped Views are not correctly updated after logging a new Incident.	When you log a new incident, to keep consistency with actual incidents, the group number is not updated.  You need to click the "Refresh" button to update grouped Views.
QCCR1E72835	Add the ability to limit the memory consumed by individual threads in SM as specified by an Administrator.	The requested change is not implemented to avoid performance degrade.  No workaround is currently available.

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Global ID	Problem	Workaround
QCCR1E77563	Signal 11 error is received when calling the toXMLString() routine of the Users object.	HP has reviewed this change request. After careful consideration regrettably HP has determined the requested change will not be addressed within the product.  No workaround is currently available.
QCCR1E77657	When using Mobility on a BlackBerry, users are taken to a back screen after entering comments for an Approval and then clicking the Back button. However, users should be returned to the Change queue.	HP has reviewed this change request. After careful consideration regrettably HP has determined the requested change will not be addressed within the product.
QCCR1E88222	An unload file that is exported from an Oracle to an SQL Server database fails to import when the unload file already contains a RECORD_KEY field and the length of first unique key exceeds the db limitation.	This request is caused by the product running in an unsupported configuration. Change to a documented and supported configuration. If the problem still exists in a supported environment, contact HP Support.  To work around this issue, do not use "RECORD_KEY" as a SQL Name for a field in dbdict. This field name is reserved by SM. To do this, follow these steps:  1. Enter dbdict in the SM command line box.  2. Enter "esdquestions" in to the search field, and then click the Search button.  3. Select the "record.key" field, and then change the SQL Name from "RECORD_KEY" to anything else.

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Global ID	Problem	Workaround
QCCR1E99940	Customers on Solaris 9 cannot upgrade to SM9.31p2 or a later patch because JRE7 does not support Solaris 9 and Service Manager starts with a JRE validation that does not allow a JRE version below JRE7 up15.	To continue to use JRE 1.6 on Solaris 9, modify the following three lines in the validjava.sh file located in the SM server's RUN/ folder.  From:  JAVA_UPDATE_VERSION_SUPPORTED=15  To:  JAVA_UPDATE_VERSION_SUPPORTED= 20  From:  if [ "\${JAVA_VERSION}" = "1.7" ]; then  To:  if [ "\${JAVA_VERSION}" = "1.6 " ]; then  From:  echo "Install or setup Java 7 correctly and then run ./setupLinks.sh to re-create the symbolic links."  To:  echo "Install or setup Java 6 correctly and then run ./setupLinks.sh to re-create the symbolic links."

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# **Documentation Errata**

The following documentation items are incorrect.

#### Location:

Online help: Help topic "Subform control"

#### Error::

This topic needs more information about using the Input property.

#### Correction:

The Input property description should be updated as shown in the following:

Property	Description
Input	Specify the database field or variable to associate with this control.
	<b>Tip:</b> If the database field is a complex type, for example, Array type or Structure type, you must specify the Input property using this format: ArrayName,FieldName. For example, recorded.changes,old.scalar.

#### Location:

Online help: Help topic "Startup parameter: emailout"

#### Error:

The following note in this help topic is no longer correct due to server fix "QCCR1E90121" on page 36:

"**Note**: The main email thread now reads email records from the database and places them in a queue, and some number of other threads (N=mailThreadCount) send the emails from the queue. Therefore, there are N+1 "eventout" entries in System Status instead of one entry, and the logged-in users are counted as N+1 instead of 1."

#### Correction:

The note should be changed to the following:

"Note: The main email thread now reads email records from the database and places them in a queue, and a number of mail-sender threads (N=mailThreadCount) send the emails from the queue; however, there is only one "EMAILOUT" thread entry displayed in System Status and the logged-in users are counted as 1, because the mail-sender threads are internal threads and are therefore not displayed."

### **Backout Instructions**

If you want to restore your Service Manager system to its original state after installing this patch, follow these guidelines.

### Server

To backout your server changes, make a backup before installing the patch and then roll back.

#### **Backup**

Before applying the server patch, make a backup of the server installation folder. For example, C:\Program Files\HP\Service Manager 9.30\Server.

#### **Backout**

After installing the patch, do the following to backout:

- 1. Remove the existing server installation folder.
- 2. Copy the backup folder back.

### **Web Tier**

#### **Backup**

Before deploying the new web tier, make a backup of the following items:

- · web.xml file
- application-context.xml
- · splash screen
- · style sheets
- any other customizations you made, including your webtier-9.31.war (webtier-ear-9.31.ear) file.

#### **Backout**

To roll back to the old web tier:

- 1. Delete or uninstall the existing web tier.
- 2. Clear the cache of your web application server (for example, Tomcat).
- 3. Redeploy the old web tier.
- 4. Restore your old customizations.

### **Windows Client**

To roll back to your old Windows client, you need to do backup before installing the new Windows client and then reinstall the previous Windows client.

#### **Backup**

- Make a backup of your Windows client home folder, for example,
   C:\Users\<username>\ServiceManager. Your connections and personalized settings are stored in this folder.
- Make a backup of your security configuration files if any (Window > Preferences > HP Service Manager > Security). For example, your CA certificates file and client keystore file.

#### **Backout**

- 1. Uninstall the new Windows client.
- 2. Reinstall the previous Windows client.
- 3. Restore your old Windows connections and configurations.

# **Applications**

#### **Backup**

**Tip:** If your application version is 7.11 ap3, 9.21 ap3, 9.30 ap3, 9.31 or later, you are recommended to use Unload Manager to make a backup of the files to be modified by an unload file, because Unload Manager can create a backup of your old data during the installation of the unload; if your application version is other than any of these, Unload Manager is not available and you can use Database Manager instead.

To use Unload Manager to make a backup:

- Go to System Administration > Ongoing Maintenance > Unload Manager.
- 2. Double-click **Apply Unload**. A wizard opens.
- Select the unload file you want to apply, also specify a backup file, and then click Next. Details of the unload file appear.
- 4. Double-click a conflicting object in the table to open the merge tool:
  - a. Merge the object, and then select the **Reconciled** check box.
  - b. Click Save to go back to the wizard.

- 5. Click **Next** after all the conflicting objects are reconciled.
- 6. Click **Yes** on the confirmation window to apply the unload.
- 7. Click Finish.

Now, the unload has been applied and at the same time your old data backed up.

To use Database Manager to make a backup:

- Go to Database Manager, select Import/Load from More or the More Actions menu, and browse to the unload file.
- Click List Contents on the menu bar, to view a list of files that have been updated in this unload.

See the following figure for an example.

```
Process
  {["svc.add.cart", {$L.calinextprocess=true}, {}, {{["se.get.record", {"name", "file", "text", "string1"}, {"incident.id in $L.file", "$L.svcCart", "\"sdiD\\"", "\"svcCart\""}, not null(incident.id in $
RAD - money.format (10)
  {["cs", "10", 20, "Neopravitelná chyba v aplikaci: %S na panelu %S", "error", {}, '02/28/12 15:33:24', 4, "ramuro"]}
  {["de", "10", 20, "Nicht behebbarer Fehler in der Anwendung: %S auf Feld %S", "error", {}, '02/28/12 15:33:32', 3, "ramuro"]}
  {["en", "10", 20, "Unrecoverable error in application: %5 on panel %5", "error", {}, '02/28/12 15:33:12', 66, "ramuro"]}
  {["es", "10", 20, "Error irrecuperable en la aplicación: %5 en panel %5", "error", {}, '02/28/12 15:33:36', 5, "ramuro"]}
  {["fr", "10", 20, "Erreur non récupérable dans l'application : %5 sur le panneau %5", "error", {}, '02/28/12 15:33:46', 3, "ramuro"]}
  {["hu", "10", 20, "Visszaállíthatatlan hiba lépett fel az %5 alkalmazásban a %5 panelen", "error", {}, '02/28/12 15:33:51', 3, "ramuro"]}
  {["it", "10", 20, "Errore irreversibile nell'applicazione: %S nel riquadro %S", "error", {}, '02/28/12 15:35:08', 3, "ramuro"]}
  {f"iten", "10", 20, "Unrecoverable error in application: %5 on panel %5", "error", {}, '02/28/12 15:35:23', 3, "ramuro"]}
   \{ ["ja", "10", 20, "sAsvs5sPğ[sVsEsű5ÅsÌJñčţčsČ\\sGsJğ[(sps[s2%S[2]]kä5ì%S[1])", "error", \{\}, '02/28/12 15:35:34', 3, "ramuro"] \} \} \} \} 
  {["ko", "10", 20, "머플리케이션에 복구할 수 없는 오류 %5미(기) 패널 %5에서 발생했습니다.", "error", {}, '02/28/12 15:35:44', 3, "ramuro"]}
   \{ ["nl", "10", 20, "Unrecoverable error in application: \% S on panel \% S", "error", \{ \}, '02/28/12 \ 15:35:51', 3, "ramuro"] \} \} 
  {["pl", "10", 20, "\"Nieodwracalny biţd w aplikacji: %5, panel %5.\"", "error", {}, '02/28/12 15:36:01', 3, "ramuro"]}
  {["pt", "10", 20, "Erro irrecuperável no aplicativo: %S no painel %5", "error", {}, '02/28/12 15:36:14', 3, "ramuro"]}
   \{ \text{["pt-Br", "10", 20, "Unrecoverable error in application: $\%5 on panel $\%5", "error", $\{\}, $12/28/12 15:36:24', 3, "ramuro"] \} \} 
  {["ru", "10", 20, "Unrecoverable error in application: %5 on panel %5", "error", {}, '02/28/12 15:36:35', 3, "ramuro"]}
  {["zh-Hans", "10", 20, "åąČçČŪçŪŽåqkäų|åĚqçů×äąšäųŮåkļŲæǧţåŁŮçšİéČňèŲŲ: %SIĖčälJŮäqůéŘ¢æŘí %SIĖŢ", "error", {}, '03/14/13 01:34:16', 5, "Imingyan"]}
ScriptLibrary
  {["svcCartHelper", "]** @fileoverview svcCartHelper - contains functions used by the Service Catalog module when dealing with svcCart and svcCartItems* @author Alex Corvino*//** This function i
datadict
  {["activity", {}, "miscellaneous", , , "FALCON", '01/21/96 17:00:00', "cblanck", '06/19/07 00:58:57', , , , , {"cust.visible", "datestamp", "description", "negdatestamp", "number", "operator", "syshom
scmessage
  {["en", "1000", 10, "Please specify Area name", "fc", {}, '12/01/10 09:33:44', 0, "rolfel"]}
```

This figure shows the contents of an unload file that contains changes to the following files:

File	Record
Process	svc.add.cart
application	money.format
	<b>Note</b> : The scmessage records listed under each RAD application are messages used in this RAD application; no backup is needed for them.

File	Record
ScriptLibrary	svcCartHelper
datadict	activity
dbdict	activity
	<b>Note:</b> The "activity" file with no records actually represents the dbdict record of the activity file.
scmessage	The record whose message class is "fc" and message number is 1000.

- Go to Database Manager, in the Table field enter a file name you got in step 2, and click the Search button.
- 4. If the format selection page shows, select the proper format by double-clicking it (for example, select the device format for the device file), and then search for the file record.
- Click More (or the More Actions menu) > Export/Unload after the file record displays.

**Note:** If **Export/Unload** is not available, check the **Administration Mode** check box in Database Manager and try again.

6. In the pop-up window, specify your backup upload file path/name, and click Unload Appl.

Caution: Make sure that Append to file is selected.

7. Repeat steps 3 through 6 to back up the rest of the files you got in step 2.

#### **Backout**

**Tip:** You can use Unload Manager (recommended) or Database Manager (if Unload Manager is not available in your application version) to roll back to your old data, as described in the following.

To roll back to your old data using Unload Manager:

- 1. Go to System Administration > Ongoing Maintenance > Unload Manager.
- Double-click Apply Unload. A wizard opens.
- 3. Select the unload file generated in the backup process, specify a backup file, and then click **Next**. Details of the unload file display.

- 4. Double-click a conflicting object in the table to open the merge tool:
  - a. Merge the object, and then select the **Reconciled** check box.
  - b. Click **Save** to return to the wizard.
- 5. Click **Next** after all the conflicting objects are reconciled.
- 6. Click **Yes** on the confirmation window to apply the backup unload.
- 7. Click Finish.

To roll back to your old data using Database Manager:

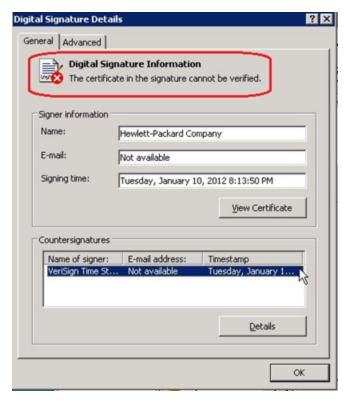
- 1. Go to Database Manager, click **More > Import/Load**.
- 2. Browse to the backup unload file you created.
- 3. Click Load FG.

### **Installation Notes**

This section provides instructions on installing each component in this patch release.

## **Digital Signature Notice**

HP signs Windows executable files with a digital signature. Since January 2012, this process has been updated to use a new VeriSign root certificate. On a Windows system that does not have the new VeriSign root or intermediate certificate installed, when the user right-clicks the file and then goes to **Properties > Digital Signatures > Details**, a verification error will display: "The certificate in this signature cannot be verified."



To resolve this issue, either enable Windows Update or download and install the G5 Root certificate as documented at: https://knowledge.verisign.com/support/ssl-certificates-support/index?page=content&actp=CROSSLINK&id=SO19140

### **Web Tier Installation**

The Web Tier update consists of a compressed file, sm9.31.2004-P2\_Web\_Tier.zip. The specific upgrade process depends on your particular Web application server, but follows the same steps as deploying a new installation. For more information, refer to the Service Manager Interactive Installation Guide.

The upgrade does not automatically save your Web Tier customizations. To keep your changes, you must save your customized files and replace the new version of these files with your customized version.

**Note on Tomcat 7.0**: If you plan to deploy the web tier on Tomcat 7.0 using the Tomcat Manager, be sure to set the max-file-size and max-request-size parameters (default: 52428800) in the <Tomcat 7.0\_Home>webapps\manager\WEB-INF\web.xml to an appropriate value greater than the web tier .war file size; otherwise the deployment request will be rejected because the web tier .war file exceeds the default maximum values. This restriction does not exist in Tomcat 6.0.

To install the new Web Tier:

- 1. Make necessary backups. For details, see "Backout Instructions" on page 65.
- 2. Delete or uninstall the existing webtier-9.31.war (or the .ear) file.
- 3. Clear the cache of your web application server (for example, Tomcat).
- Deploy the new webtier-9.31.war (or the .ear) file following the instructions in the Service Manager Installation Guide.

Note: It is best practice to deploy with a unique context root. For example: /webtier-9.31.2004

- 5. Use a diff utility to compare the new Web tier's web.xml file against your backed-up version to ensure that any new parameters are properly merged into the files used in your final deployment. Do this for application-context.xml as well as any other files you may have customized (such as style sheets and splash screens).
- 6. Make any new customizations necessary for your deployment.
- 7. Restart the web application server.

**Note:** Before accessing the new Web Tier, HP recommends that all users empty their browser cache.

### **Windows Client Installation**

The Windows client update consists of a compressed file, sm9.31.2004-P2\_Windows\_Client.zip, which contains the executable installation files.

To install the Windows client update:

- 1. Stop the Service Manager Windows client.
- 2. Make necessary backups. For details, see "Backout Instructions" on page 65.
- 3. Uninstall the Service Manager Windows client. (Your connection and personalized settings are retained.)

- 4. Run setup.exe and install the client by following the instructions in the Service Manager Installation Guide.
- 5. Check the version in Help > About Service Manager Client.

The client should be Release: 9.31.2004.

# **Server Update Installation**

The server update for your operating system (OS) consists of a compressed file, sm9.31.2004-P2\_ <OS>.zip (or .tar), which contains the Service Manager server files. These files add to or replace the files in the [SM Server Root]\ ([SM Server Root]/) RUN, irlang, legacyintegration, and platform\_unloads directories.

### **Upgrade Paths**

This server patch must be applied on top of one of the following versions/patch levels of the SM server:

- SM9.30 GA
- SM9.30 Patch/Hotfix
- SM9.31
- SM 9.31 Patch/Hotfix

The following server upgrade paths are recommended:

- New customers: Install the SM9.30 GA server, and then directly apply the latest 9.31 server patch;
- Existing SC6.2, SM7.11 and 9.21 customers: Uninstall the old server, install the SM9.30 GA server, and then apply the latest 9.31 server patch;
- Existing SM9.30 or 9.31 customers: Apply the latest 9.31 server patch.

For installation instructions of the SM9.30 GA server, see the Service Manager 9.30 Interactive Installation Guide, which is available from the HP Software Manuals Site: http://h20230.www2.hp.com/selfsolve/manuals

For installation instructions of the server patch, see "Server Patch Installation Steps" below.

### **Server Patch Installation Steps**

**Note:** If you have a load balanced system, you must upgrade all server instances.

#### Caution:

- This server update will upgrade the embedded Tomcat to version 6.0.36, and therefore requires additional steps.
- Starting with SM9.31p2, the SM server requires JRE 1.7. For Windows and Linux, the embedded JRE has already upgraded to version 1.7; for other Unix-based platforms, you need to manually perform this JRE upgrade.

The JRE upgrade will cause external web service calls over SSL to fail if the remote endpoint does not support Server Name Indication (SNI), which is by default activated in JRE 1.7. Once Service Manager is upgraded to use JRE 1.7, it starts to use SNI extensions during the SSL handshake. If the remote endpoint does not support SNI, the web service call will fail with an error message. To solve this issue, do either of the following:

- Activate SNI at the remote end point (recommended)
- If the remote endpoint does not support SNI extensions, and SNI cannot be activated, add the following JVMOption<n> parameter either to the sm.ini file, or to the start command of the servlet(s) in the sm.cfg file:

JVMOption2:-Djsse.enableSNIExtension=false

#### To install the Server update:

- Stop all Service Manager clients.
- 2. Stop the Service Manager server.
- 3. Make a backup of the Server installation directory. See also "Backout Instructions" on page 65.
- 4. Delete the **RUN/tomcat** directory. Tomcat in this directory will be upgraded to version 6.0.36 when you extract the server files later.
- Delete the RUN/lib directory.
- 6. For Windows and Linux platforms, delete the RUN/jre directory.

The purpose of this step is to avoid conflicts between the old 1.6-based JRE and new 1.7-based JRE.

- 7. Extract the compressed files for your operating system into the main Service Manager directory on the server. The default path is: C:\Program Files\HP\Service Manager 9.30\Server.
- 8. For UNIX servers, set the file permissions for all Service Manager files to 755.
- 9. For UNIX servers, manually upgrade to JRE1.7.

a. Install either JDK1.7 or JRE1.7 for your specific platform.

Solaris	JRE1.7 (update 15 or greater)	
HP-UX	JRE1.7 (JRE_7.0.04 or greater)	
AIX	JRE1.7 (SR4 or greater)	

- b. Set your JAVA\_HOME environment variable to point to JDK1.7 (if you have JDK1.7 installed) or JRE1.7 (if you have only JRE1.7 installed).
- c. Execute \RUN\removeLinks.sh to remove the old symbolic links and then execute \RUN\setupLinks.sh to create new symbolic links.
- d. Run the following command to check that the JRE version is 1.7:

RUN\jre\bin\java -version

- 10. If you have made any customizations/changes to the original **RUN/tomcat** folder, restore them in the new **RUN/tomcat** folder.
- 11. If you were running a server earlier than version 9.31, your old schemastub.xml file (in the <SM\_Server\_Home>\RUN\km\styles\ directory) has been updated to a new version. If you want to use the new KM Solr search engine features, follow the steps described in the Solr Search Engine Update Installation section; otherwise, copy your old schemastub.xml file back.

**Note:** The schemastub.xml file is same with the one shipped with SM9.31 or 9.31p1.

12. Make sure the server is stopped, and run the sm -unlockdatabase command.

**Note:** The purpose of this step is to prevent stale license information from being kept in the system. In a scaling implementation, you can run this command from any one of your servers.

**Caution:** This step is required the first time you upgrade to 9.30p4 or later; it is also required whenever you change the server's IP address after your upgrade to 9.30p4 or later.

- 13. Restart the Service Manager server.
- 14. Restart the Service Manager clients.
- 15. Check the version in **Help > About Service Manager Server**. The server should be Release: 9.31.2004.

# **Application Unload Installation**

If a platform fix (in most cases, a server fix) also requires an applications change to resolve the relevant issue, an unload file is provided. Unload files introduced in earlier patches are also included in this cumulative release. If you have not already applied them for a previous patch, you should also apply the unload files that are intended for your applications version. For more details about these applications updates, see the Release Notes for those patches.

This patch release includes the unload files that come with the server update. When you extract sm9.31.2004-P2\_<OS>.zip (or .tar), it will add the files to the following directory:

[SM Server Root]\platform\_unloads ([SM Server Root]/platform\_unloads)

**Note:** Unload files should be installed in their patch order. That is, those introduced in patch 1 should be applied first, then those introduced in patch 2, and so on. However, unload files introduced in the same patch can be installed in a random order, unless otherwise specified.

### **Unload File Naming Convention**

The unload files use the following naming convention: <CR ID> SMxxxPxx SMxxx.unl, where:

- <CR\_ID>: The identification number of the applications defect that the unload file fixes. For
  example, QCCR1E12345. Note that this is always the number of the parent CR of a CR family
  (if any).
- SMxxxPxx: The minimum Service Manager patch level that requires the unload file. For
  example, SM921P2, which means the unload file comes with the server updates in Service
  Manager 9.21 patch 2 and should be used for patch 2 or higher.

**Note**: Sometimes this portion contains an additional hot fix number, for example, SM711P16HF8. This example means the unload file is intended for Service Manager 7.11 patch 16 Hot Fix 8 or higher.

 SMxxx: The Service Manager applications version that requires the unload file. For example, SM711, which means the unload file is intended only for Service Manager applications version 7.11.

**Note**: If the applications version suffix is omitted, the unload file is then intended for all applications versions compatible with the server version, unless otherwise specified. For example, QCCR1Exxxx\_SM930P4.unl is normally intended for applications versions 7.11, 9.20, and 9.30 (which are compatible with Service Manager server 9.30), unless otherwise specified in the unload file description. For information on the applicable applications versions for each unload file included in the current patch, see "Unload Files Included in the Current Patch" below.

### **Unload Files Included in the Current Patch**

The following are unload files included in the current patch release.

Unload file	Introduc ed in 9.3x patch	Used for apps version (s)	Description
QCCR1E7672 4_SM931P2_ SM930.unl	9.31p2	9.30 and 9.31	Fixes the issue that after deleting the unique key of cm3r, a signal 11 happened while doing an IR regeneration.  Associated server fix: "QCCR1E76724" on page 28
QCCR1E7622 7_SM930P6_ SM930.unl	9.31	9.30	Contains the code changes to support localization of incident/change priority and urgency strings for the Mobility Client.
QCCR1E7879 4_SM930P6_ SM930.unl	9.31	9.30	Removes incident.assignee when a Web Service call specifies the assignee as 'NULL' via the Mobility Client.
QCCR1E7679 6_SM930P6_ SM930.unl	9.31	9.30	Provides the ability to turn on debugging dynamically for user sessions or schedulers.
			<b>Note:</b> This unload requires the SM9.31 server.
QCCR1E7109 9_SM930P5_ SM711.unl	9.30p5	7.11	Displays Value Lists instead of the data directly retrieved from the database in a QBE list when adding a field by using Modify Columns.
			Associated server fix: QCCR1E71099
QCCR1E7109 9_SM930P5_ SM920.unl	9.30p5	9.20	Displays Value Lists instead of the data directly retrieved from the database in a QBE list when adding a field by using Modify Columns.
			Associated server fix: QCCR1E71099
QCCR1E7109 9_SM930P5_ SM930.unl	9.30p5	9.30	Displays Value Lists instead of the data directly retrieved from the database in a QBE list when adding a field by using Modify Columns.
			Associated server fix: QCCR1E71099
QCCR1E7113 9_SM930P5_ SM930.unl	9.30p5	9.30	Works with server fix QCCR1E71139 to solve this issue: When Service Manager is configured to use LDAP as the authentication data source, the user is still forced to change the password if the user is expired in the local database.

Unload file	Introduc ed in 9.3x patch	Used for apps version (s)	Description
QCCR1E3194 1_SM930P4_ SM930.unl	9.30P4	9.30	Enables users to use a pre-configured decimal symbol when completing numeric fields.
SM930.uni			<b>Note:</b> This enhancement requires a 9.30p4 or later server; however if you are using RTE version 9.30 with applications version 7.11 or 9.20, do not load this unload file; you can safely upgrade your server to 9.30p4 or later without applying this applications change.
			Associated server fix: QCCR1E31941.
QCCR1E7345 2_SM930P4.unl	9.30P4	7.11 - 9.30	Enables Mandanten restricting queries to be updated correctly after a profile is edited.
			Associated server fix: QCCR1E71897
QCCR1E6707 2_SM930P4_ SM930.unl	9.30P3	7.11 and 9.20	Enables users to take advantage of the new KMStatusListener background process.
SM930.uni			<b>Note:</b> This unload file is not needed for applications version 9.30 or later, which supports only the Solr Search Engine.
			Associated server fix: QCCR1E67071
QCCR1E7016 3_SM930P4_	9.30P3	7.11	Fixes the issue that the KMUpdate process terminates abnormally.
SM711.unl			Associated server fix: QCCR1E69687
QCCR1E7016 3_SM930P4_	9.30P3	9.20	Fixes the issue that the KMUpdate process terminates abnormally.
SM920.unl			Associated server fix: QCCR1E69687
QCCR1E7016 3_SM930P4_ SM930.unl	9.30P3	9.30	Fixes the issue that the KMUpdate process terminates abnormally.
SIVIZOU.UI II			Associated server fix: QCCR1E69687

Unload file	Introduc ed in 9.3x patch	Used for apps version (s)	Description
QCCR1E6764 7_SM930P3.unl	9.30P3	7.11 - 9.30	Updates the exception message that occurs in the request response when closing an interaction by calling CloseInteraction from a web service without specifying the localSolution field in the request.  Associated server fix: QCCR1E54192
QCCR1E6761 0_SM930P2.unl	9.30P2	7.11 - 9.30	Enables you to block potentially dangerous attachments.  Associated server fix: QCCR1E64290

**Tip:** If your application version is 7.11 ap3, 9.21 ap3, 9.30 ap3, 9.31 or later, you are recommended to use Unload Manager to load an unload file, because Unload Manager can help you create a backup of your old data and reconcile conflicts during the installation of the unload; if your application version is other than any of these, Unload Manager is not available and you can use Database Manager instead.

#### To load an unload file using Unload Manager:

- 1. Go to System Administration > Ongoing Maintenance > Unload Manager.
- Double-click Apply Unload. A wizard opens.
- 3. Select the unload file you want to apply, also specify a backup file, and then click **Next**. Details of the unload file appear.
- 4. Double-click a conflicting object in the table to open the merge tool:
  - a. Merge the object, and then select the **Reconciled** check box.
  - b. Click Save to go back to the wizard.
- 5. Click **Next** after all the conflicting objects are reconciled.
- 6. Click **Yes** on the confirmation window to apply the unload.
- 7. Click Finish.

Now, the unload has been applied and at the same time your old data backed up.

#### To load an unload file using Database Manager:

- 1. Make sure the Windows client is configured for server-side load/unload.
  - a. From the Windows client, go to Window > Preferences > HP Service Manager.
  - b. Unselect Client Side Load/Unload if is flagged.
  - c. Restart the Windows client.
- 2. Open Tailoring > Database Manager.
- 3. Right-click the form or open the More Actions menu and select Import/Load.
- 4. Browse to the unload file, and view the contents of an unload file before importing it by clicking **List Contents**.
- 5. Make a backup copy of all files to be modified by this unload. For detailed steps, see "Backout Instructions" on page 65.
- 6. Fill in the following fields.

Field	Description
File Name	Type the name and path of the file to load.
Import Descriptor	Since unload files do not require an Import Descriptor record, leave this field blank.
File Type	Select the source operating system of the unload file.
Messages Option —	
All Messages	Select this option to see all messages that Service Manager generates loading the file.
Messages Option —	
Totals Only	Select this option to see only the total number of files Service Manager loads.
Messages Option — None	Select this option to hide all messages that Service Manager generates when loading the file.

5 Click Load FG.

### **Mobile Application Update Installation**

**Note:** This release does not contain the latest Mobile Application package that has been shipped with the SM9.31p1 release. You can download this package from <a href="http://support.openview.hp.com/selfsolve/document/KM00279017">http://support.openview.hp.com/selfsolve/document/KM00279017</a>.

For installation instructions, see the Service Manager 9.31p1 Release Notes.

# **ODBC Driver Update Installation**

**Note:** This release does not contain the ODBC .zip file that has been shipped with the SM9.30p4, SM9.30p5, and SM9.31 releases.

You can download the zip file from

http://support.openview.hp.com/selfsolve/document/KM00207925.

The ODBC Driver update contains the following updated files:

- Scodbc32.dll
- sci18n.dll
- sccl32.dll

To install the ODBC Driver update:

- 1. Extract the files to your ODBC Driver installation folder, for example: C:\Program Files\Peregrine Systems\ServiceCenter 6.2\ODBC Driver.
- 2. When prompted, replace the three old DLL files with the new ones.

# **Knowledge Management Update Installation**

The KM package (sm9.31.2004-P2\_KM.zip) in this release includes updated files for the Solr Search Engine and the KM Import Utility.

### **KM Search Engine Update Installation**

The KM Search Engine update contains the following files:

Folder	Files
kmsolr_unloads	• QCCR1E67750_SM930P4_SM930.unl
	• QCCR1E75104_SM930P5_SM930.unl
	• QCCR1E77409_SM930P5_SM930.unl
knowledgemanagement	• installasservice.cmd and startup.cmd (updated for JDK7 support added in 9.31p2)
	kmsearchengine subfolder (which contains several search engine fixes)

The Solr Search Engine update aims to enable the following features or fixes for Knowledge Management searches:

- Support of Knowledge Management search for Service Request Catalog (SRC) 1.4. For more information, see the SM9.31 Release Notes.
- Ability to specify search result sort preferences in Knowledge Management (by Modified Date, Status, or Relevancy). For more information, see the SM9.30p4 Release Notes.
- Ability to select whether or not to highlight attachment content in KM search results. A new option (Highlight content of attachment in search result?) is available in the KM environment record. By default, this option is not selected, and therefore attachment content in user's KM search results will not be highlighted. This can significantly improve search performance when there are a large number of large-size attachments like PDF manuals in the knowledgebases. For more information, see the Highlighting Attachment Content in Search Results Optional section in the 9.30p5 Release Notes.
- Fix QCCR75104 (Searches that use "NOT" or '-' to exclude terms produce unexpected results.
   For example, the search results when using the **None of these words** option in Advanced
   Search may include the search terms that should have been excluded. For more information,
   see the 9.30p5 Release Notes.
- JDK 7 support ("QCCR1E90386" on page 58): To use JDK7 on a Windows platform, you need
  to update your installasservice.cmd and startup.cmd files with those shipped with the
  9.31p2 KM patch; for UNIX platforms, no file changes are needed to use JDK7.

To install the KM Search Engine update:

**Note:** JDK 7 Update 17 and Tomcat 6.0.36 have been certified on this release of the KM Search Engine. Upgrading to JDK 7 or Tomcat 6.0.36 is optional but recommended.

- 1. Optionally, update your JDK to JDK7 Update 17 if you have not already done so.
- 2. (Windows platforms only) If you do not plan to update your JDK, make a backup of your installasservice.cmd and startup.cmd files in your KM search engine installation folder.
- 3. Optionally, update the KM embedded Tomcat to version 6.0.36.
  - a. Make a backup of your existing KM embedded Tomcat folder.
  - b. Download the Tomcat 6.0.36 zip file specific for your operating system.

**Caution:** The KM search engine requires a 32-bit Tomcat if running on a 32-bit operating system, and a 64-bit Tomcat on a 64-bit operating system.

c. Extract the zip file to overwrite your existing Tomcat folder.

**Caution:** Before this step, be sure not to remove the embedded Tomcat folder, which contains certain files that do not exist in the Tomcat 6.0.36 zip file that you downloaded. This way these files will remain after you overwrite the old Tomcat folder.

- d. Copy your old Tomcat configuration file (server.xml in the conf folder) back to the updated Tomcat folder.
- Follow the same steps as described in the KM Solr Search Engine Update Installation section in the SM9.31 Release Notes, except that you need to load QCCR1E67750\_SM930P4\_ SM930.unl instead of QCCR1E67750\_SM930P5\_SM930.unl.
- 5. If you do not plan to update your JDK, copy your old installasservice.cmd and startup.cmd files back.
- 6. Restart your KM search engine.

### **KM Import Utility Installation**

**Note:** The km-import-9.31.zip file included in this release in same with the one shipped with previous releases (SM9.30p4, SM9.30p5, SM9.31, and SM9.31p1).

Extract km-import-9.31.zip in the Knowledge Management package to a local drive. For detailed instructions on the use of the import utility, see the README file packaged in this .zip file.

# **Service Manager Verified Environments**

The Compatibility Matrix lists supported versions of operating systems, browsers, HP Software products, and other compatibility and support information.

**Note:** Most of the support areas require that you register as an HP Passport user and sign in. Many also require an active support contract. To find more information about support access levels, go to Access levels.

To register for an HP Passport ID, go to HP Passport Registration.

To access the Compatibility Matrix:

1. Use a browser to navigate to the Software Support Online (SSO) web page:

http://support.openview.hp.com/sc/support\_matrices.jsp

- 2. Log on with your Customer ID and password or your HP Passport sign-in.
- 3. Navigate to the applicable information.