HP Service Manager

for supported Windows® and UNIX® operating systems

Release Notes

Software version: 9.21.290 Patch 5 / May 2012 (Updated June 29, 2012)

This document provides an overview of the changes made to HP Service Manager for 9.21.290 Patch 5. It contains important information not included in the manuals or in online help.

Documentation Updates

The first page of this release notes document contains the following identifying information:

- Version number, which indicates the software version.
- Publish date, which changes each time the document is updated.

Important Note: The initial version of this document is included in the patch package that is shipped with the patch release. However, this document may undergo modifications after the patch is released. To check for recent updates or to verify that you are using the most recent edition, visit the following URL:
http://h20230.www2.hp.com/selfsolve/manuals

This site requires that you register for an HP Passport and sign in. To register for an HP Passport ID, go to:
http://h20229.www2.hp.com/passport-registration.html

Or click the **New users - please register** link on the HP Passport login page.

You will also receive updated or new editions if you subscribe to the appropriate product support service. Contact your HP sales representative for details.

Note: To view files in PDF format (`*.pdf`), Adobe Acrobat Reader must be installed on your system. To download Adobe Acrobat Reader, go to the following web site:
http://www.adobe.com/

Enhancements

The following information supports updates included in this patch.

- [Changes to the Web Tier Directory Structure](#)
- [The New Mask and Time Out parameters](#)
- [New Parameters](#)
- [Warnings for Duplicated Entries in smi.ini or in the Command Prompt](#)
- [Case Insensitive LDAP Login](#)
- [Login Times Reported in sm.log File](#)
- [How Relationship Models are used with Change and Request Types](#)

Changes to the Web Tier Directory Structure

QCCR1E69692 introduces significant changes to the directory structure of the Service Manager (SM) Web tier. Specifically, the directory structure of the Web tier has been modified to reflect the current build number of the Web tier. These changes were implemented because the SM Web tier is typically updated every few months. When these updates occur, it is sometimes necessary for users to clear their browser cache. For enterprise clients that have tens of thousands of users, getting all of those users to do this requirement is onerous. With this revised implementation, users will no longer need to clear their browser cache if they do not use the MySM module. Detailed information on the specifics of these directory changes can be found in the **"Updates to the Service Manager Web Tier Directory Structure"** white paper at the HP Software support Web site:

www.hp.com/go/hpsoftwaresupport

The New Mask and Timeout Parameters

There are occasions where browser performance when using the Service Manager Web client can appear sub-optimal. With the current Web-tier, there is a "mask" mechanism that masks the user's web page before a server side response is received. This behavior prevents the user from doing anything further which may issue a new request. This mask appears as a grayed out window overlaying the browser. However, this mechanism may make it appear as if the browser has hung or frozen, or otherwise performing poorly.

To help manage browser performance and apparent hang or freeze issues when using the Service Manager (SM) Web client, the autoCloseMaskDelay, unmaskDeferMillis, socketReadTimeout, lockWaitTimeout parameters were created to facilitate control over the mask behavior. Brief descriptions of these parameters can be found in the [New parameters](#) section.

Important: Incorrect configuration or use of these parameters can severely impact both real and apparent performance! Detailed information on the specifics of these parameters can be found in the web.xml configuration file and in the **"Using the Mask and Timeout Parameters in HP Service Manager"** white paper at the HP Software support Web site:

www.hp.com/go/hpsoftwaresupport

New Parameters

This patch introduces the following new parameters:

- autoCloseMaskDelay

- unmaskDeferMillis

- socketReadTimeout

- lockWaitTimeout

- loginWaitTime

- maxrecordsetspersession

- enableAnubisMonitor

- anubisPollInterval

autoCloseMaskDelay

Description

Specify the delay (in seconds) before which the mask is automatically closed. This parameter value must be >= 60 seconds. Uses default value 180 seconds if any invalid value is specified.

> **Location:**
> web.xml
> **Requires restart of Web application server?**
> Yes
> **Default value:**
> 180 seconds
> **Possible values:**
> 60-300 seconds
> **Example usage:**
> ```
>  <context-param>
>    <param-name>autoCloseMaskDelay</param-name>
>    <param-value>180</param-value>
>  </context-param>
> ```

unmaskDeferMillis

Description

Defer the unmasking of a browser window after an unmask request is issued. This parameter relates to how much time (in milliseconds) the client browser needs to finish rendering after a page is loaded. The client user may feel low application performance if set it to a value greater than 2000.

> **Location:**
> web.xml
> **Requires restart of Web application server?**
> Yes
> **Default value:**
> 750 milliseconds
> **Possible values:**
> 350-3000 milliseconds
> **Example usage:**
> ```
> <context-param>
> ```

```
    <param-name>unmaskDeferMillis</param-name>
    <param-value>750</param-value>
  </context-param>
```

showMaskCloseButtonDelay (deprecated)

The showMaskCloseButtonDelay was introduced in previous hotfixes only, but was deprecated before this patch release.

The following two parameters were created to assist in managing how long a client request should wait before timing out:

socketReadTimeout

Description

The **socketReadTimeout** parameter prevents a thread on the Web tier application server from waiting infinitely for a socket IO operation.   After the specified time (in seconds) is reached, the socket read operation will terminate.

> **Location:**
> web.xml
> **Requires restart of Web application server?**
> Yes
> **Default value:**
> 180 seconds
> **Possible values:**
> Any value is valid. A value of less than or equal to 0 will indicate no time out limit.
> **Example usage:**
> ```
>   <init-param>
>     <param-name>socketReadTimeout</param-name>
>     <param-value>180</param-value>
>   </init-param>
> ```

lockWaitTimeout

Description

The **lockWaitTimeout** parameter prevents a Web tier application server thread from waiting infinitely to acquire a lock. After the specified time (in seconds) is reached, a thread will cease trying to acquire a lock, and the user will see the following warning message appear:

"The session is busy, please try again later."

> **Location:**
> web.xml
> **Requires restart of Web application server**?
> Yes
> **Default value:**
> 15 seconds
> **Possible values:**
> 1-300 seconds (A value of less than or equal to 0 will indicate the maximum value 300 is used)

Example usage:

```
<init-param>
  <param-name>lockWaitTimeout</param-name>
  <param-value>15</param-value>
</init-param>
```

loginWaitTime

Description

Defines the maximum idle time (in seconds) allowed for the login page. If the user stays on the login page longer than the time specified, a logout page will be returned when the user clicks the login button.

Location:

sm.ini

Requires restart of Service Manager server?

Yes

Default value:

180 seconds

Possible values:

Positive integer; If an invalid value (negative, zero, or non-numeric value) is specified, the default will be used.

Example usage:

```
<context-param>
  <param-name>loginWaitTime</param-name>
  <param-value>180</param-value>
</context-param>
```

maxrecordsetspersession

This parameter specifies the maximum allowed number of recordsets that a client session can keep active. This limit helps prevent the server from running out of memory.

Note: A zero value (default) disables the feature, which means there is no limit on the number of recordsets that can be opened in a client session; the minimum is 400 recordsets.

Example usage

Command line: sm -httpPort:13080 -maxrecordsetspersession:800

Initialization file (sm.ini): maxrecordsetspersession:800

See [QCCRIE66688](#).

Location:

sm.ini

Server's OS command prompt

Requires restart of Service Manager server?

Yes

Default value:

0: Disables this feature (no limit).

Possible values:

0: No limit;

A value no less than 400 (recordsets)

Example usage

Command line: sm -httpPort:13080 -maxrecordsetspersession:800

Initialization file (sm.ini): maxrecordsetspersession:800

enableAnubisMonitor

Description

Start the Anubis monitor to check the status of the background scheduler thread. This parameter starts the Anubis monitor to check the status of the background scheduler thread.

Location:

sm.ini

Server's OS command prompt

Default value:

1 (Enabled)

Possible values:

0 (Disabled)

1 (Enabled)

Note: When enableAnubisMonitor is enabled, the original Anubis RAD applications (apm.anubis and apm.anubis.restart) should be disabled.

anubisPollInterval

Description

The time interval (in seconds) at which the Anubis thread checks to see if any registered scheduler is alive. Default is 15 (seconds).

Location:

sm.ini

Server's OS command prompt

Default value:

15 (seconds)

Possible values:

Any time interval (in seconds)

Warnings for Duplicated Entries in sm.ini or the Command Prompt

A warning message is logged in the sm.log file when one parameter is specified more than once in sm.ini or has multiple inputs in the server's operating system command prompt. See QCCRIE72988.

Case-Insensitive LDAP Login

When LDAP is used, user login is now case-insensitive. Upper-case (FALCON), lower-case (falcon), or camel case (fAlcOn) can all be used. See QCCRIE70459.

LDAP will now always be the primary data source of the operator table. The following describes the new case-insensitive login behavior with LDAP and a case-insensitive DB:

1   (User "admin" exists in the AD server.) Log in with either "admin" or "ADmin".

    Result: Login is successful, and user "admin" is automatically added to the operator table.

2   Add user "john.smith" in the AD server, with a Display Name (CN) of "john.smith". Log in as john.SMITH.

    Result: Login is successful, and user "john.smith" is automatically added to the operator table.

3   Disable LDAP in sm.ini first (or the LDAP user will be deleted too), and then do the following:

    a   Manually delete "john.smith" from the operator table.

    b   Manually add john.SMIth to the operator table.

    c   Enable LDAP in sm.ini.

    d   Log in as John.Smith.

        Result: Login is successful, and John.Smith is NOT automatically added to the operator table.

Login Times Reported in the sm.log File

A new message is now available from the sm.log file that indicates how much time (in seconds) a user login takes. See QCCRIE72686.

It mainly covers the time consumed by the login RAD application. If the RAD name is "login" and label is "cleanup", the log message will look like the following, where 3.921 (seconds) is the login time:

```
5812(  4496) 04/05/2012 14:23:16  RTE I Base login Response: 3.921 -- RAD: 0.311  JS: 0.577
Log:0.000 Database: 3.033  LDAP: 0.000 (CPU 1.217)  application:login,cleanup
```

How Relationship Models Are Used With Change and Request Types

The "Service Manager record relationship models" topic should be updated to the following:

Service Manager Service Desk relationship models are methods to control the relationships between records inside Service Manager. The Service Desk relationship models affect four record types: Service Desk interaction records, Incident Management incident tickets, Change Management change requests, and Request Management quote orders. A Service Desk Agent can:

• Open an incident, complaint, or request for information in Incident Management.

• Open a request for change in Change Management.

• Open a Request Management quote to order a product or service. For example, if a user complains that a printer has stopped working and the Service Desk Agent determines that an older printer is not compatible with a new laptop, the agent can open a Request Management quote to order a new printer for the user. Once the order is placed, the Service Desk Agent can close the interaction record and add the quote order number for the new printer to the resolution note of the interaction. The quote order is also associated to the interaction record, so that even though the interaction is at a closed status the agent can refer back to the closed interaction to check the status of the related quote order.

The following can be set in the Service Desk Environment Profile record and are models for managing Service Desk record relationships:

- Full Service Desk Model: In this model, the state of a Service Desk interaction record changes when each related record closes. The closed state of an interaction record depends on the notification value chosen for the "Notify By" field in the interaction record. For example, if the notification value is "Telephone," the interaction record has a required action before it is closed. This action describes why the customer must be contacted. It also prevents the interaction record from closing until all required actions are complete. In this case, the interaction record goes into the Open-Callback state before it is closed. For more information, see Full Service Desk model.

- All Records close Independently: In this model, all Service Desk interaction records close independently. The state of related records does not affect closing an interaction record, and closing the interaction record does not affect related records.

- Close Interactions when Related Record closes: In this model, when the last related record closes, the Service Desk interaction record closes.

- Cannot close Related Record until Interactions are closed: In this model, records related to a Service Desk interaction cannot close until the interaction record is closed.

- Cannot close Interactions until Related Records are closed: In this model, a Service Desk interaction record cannot close until all related Incident Management tickets, Change Management requests, and Request Management quotes are closed.

Note: The updated document will be available in the online help of the next release of Service Manager.

Additional Enhancements

The following enhancements are included in the current software release.

Global ID	Module	Problem	Solution
QCCR1E70811	Server	Need to enhance the login idle status control for the web client.	Introduced a new parameter "-loginWaitTime:n", which defines the maximum idle time (in seconds) allowed for the login page. If the user stays on the login page longer than the time specified, a logout page will be returned when the user clicks the login button.
			The default value of this parameter is 180 seconds (3 minutes). If an invalid value (negative, zero, or non-numeric value) is specified, the default will be used.
			To set a value other than the default, specify loginWaitTime:n in sm.ini or in the server's operating system command prompt, and then restart the server.
			Note: This parameter is functional in the SM 9.21.p5 (and later versions) server only when used together with an SM 7.11 client. Otherwise, it is ignored.

Fixes

Service Manager Version 9.21, build 290 patch 5 (SM 9.21p5) includes several customer requested software fixes. Refer to the sections below for information about the defects for each release included in this cumulative patch.

Service Manager 9.21 patch 5 updates the following areas:

- Application updates
- Documentation changes
- Server updates
- Web client updates
- Windows client updates

Applications Updates

The following items are fixed in the current software release.

Global ID	Problem	Solution
QCCR1E67647	There is a need for extra information in 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.	Updated the following scmessage record from "Doc Engine call failed with cc %d" to "Doc Engine call failed with cc %d msg: %s": - Message Number: 19 - Class: scxmlapi
QCCR1E70163	The KMUpdate process terminates abnormally even though it is not terminated manually. Additionally, the KMUpdate process may terminate even if no internal errors occur.	When the Search Engine server is shut down or an indexing document error occurs, the KMUpdate process will not terminate, and error messages will be written to sm.log to indicate the exception details.

Documentation Changes

The following items are fixed in the current software release.

Global ID	Problem	Solution
QCCR1E49518	No documentation is available about how relationship models are used with Change and Request types.	See the "How relationship models are used with Change and Request types" section following this table.

Global ID	Problem	Solution
QCCR1E66827	A NullPointerException is reported in the WebSphere 7.0 logs (System.out), when the local class loader is set to parent first and the class loader order is set to parent last.	HP recommends using the following deployment procedure: 1. Deploy the .ear file of the Service Manager web tier on WebSphere 7.0. Note: The .ear file contains the .war file. 2. Configure the Service Manager web application as follows: a. Go to Enterprise Applications > HP Service Manager *** Web > Class loader, and select the following settings: Class loader order: Classes loaded with local class loader first (parent last) WAR class loader policy: Single class loader for application b. Go to Enterprise Applications > HP Service Manager *** Web > Manage Modules > webtier-***.war, and select the following setting: Class loader order: Classes loaded with parent class loader first
QCCR1E67991	The Service Manager SM9.21_p2_Release_Notes.pdf does not mention what to do with the file QCCR1E31545_SM921P2_SM920.unl, which appears in the platform_unloads directory for the patch.	Updated the release notes and published on the SSO Manuals Site.
QCCR1E69449	The documentation needs to state that when modifying a dbdict record, users need to ensure there are no other users updating or inserting records in the same file. For example, when updating the probsummary dbdict record, users need to make sure there are no other users updating existing Incident records or opening new Incident records.	The "Database dictionary (DBDICT) utility" section of the Tailoring Best Practices Guide of the next release of Service Manager will be updated.
QCCR1E71067	The Service Manager 9.21 Patch 3 Release Notes document could mislead customers running on Service Manager applications version 9.20 to load QCCR1E56678_SM921P3_SM711, which is only needed for applications version 7.11.	Updated the Service Manager 9.21 Patch 3 Release Notes document, which now includes additional information on the unload file naming convention and clearly indicates the unload files specific for each applications version (7.11 or 9.20). The updated document is now available from the HP software manuals site:http://support.openview.hp.com/selfsolve/document/KM1306465.

Global ID	Problem	Solution
QCCR1E71557	Documentation is needed on how to use the new configure.jar file of the server.	The Service Manager server configure.jar file has been updated to enable encryption of the Service Manager database login credentials (username/password). To encrypt the database login credentials of an installed Service Manager system, follow these steps:

1. Extract the server package (.zip or .tar) in this patch, and copy the configure.jar file to your <SM server installation> directory. This will overwrite your old configure.jar file if you did not move it to somewhere else after your installation.
2. Run the configure.bat file in the installed system, without loading demo data.

After completing these steps, the database login credentials in the sm.ini file are encrypted strings instead of clear text.

Note: You can still manually specify clear-text database login credentials in the sm.ini file, however HP recommends that you encrypt the credentials as described above.

Server updates

The following items are fixed in the current software release.

Global ID	Problem	Solution
QCCR1E72686	There is no log message that indicates how much time the login process takes.	There is now the following log message when a successful login occurs: "User XXX login elapse time: YYY.ZZZ seconds"
QCCR1E72988	When a parameter is defined multiple times in the sm.ini file, there is no indication as to which parameter value is being honored.	A warning message is issued in the sm.log file when a parameter is specified multiple times in the sm.ini file. Additionally, SM will report and log more detailed information in cases where there is more than one command input.
QCCR1E31928	Web Service RetrieveIncidentListRequest has the potential to cause a Java Heap Space out-of-memory error when retrieving a list of records.	Updated the server code so that the following applies for the request response: - When there is neither a start attribute nor a count attribute, return all records/keys. - When there is a valid start value but no count attribute, return all records starting from the start attribute. - When there is a valid start attribute and valid count attribute, return the number of keys/records starting from the start attribute. - When there is a negative start attribute, return from the first record. - When there is a negative count attribute, return one record. - When the start attribute is bigger than the total number of records/keys, no record is returned.
QCCR1E49322	When using the dbdict utility to rename the SQL name of a field, it fails if the current SQL name is a reserved word in the database.	The column names in the generated statement are enclosed between double quotes, which allows the SQL name of a field to become a reserved word.
QCCR1E51838	With Mandanten security enabled, the group views in the ToDo list display no records.	The group views in the ToDo list display records correctly.

QCCR1E54192	When trying to close an interaction by calling CloseInteraction from a web service without specifying the localSolution field in the request, a CXmlApiException occurs with a DocEngine error.	A normal response will now be returned instead of the SOAP Fault. In addition, all or part of the following messages will occur in the request response depending on which field values are missing in the request: Doc Engine call failed with cc -1 Msg: ; You must enter a Solution to close this interaction. You must enter a Closure Code to close this Interaction. Note: To take advantage of this server-side change, users also need to apply an applications fix QCCRIE67647 (by loading the relevant unload file).
QCCR1E57188	Signal 11 and Signal 6 occur when starting the server on Linux with background processes enabled. Cause: Starting the sm process with system.start postfixed failed on Linux. There was signal 6 in the sm.log.	No more signal in the sm.log and the system starts successfully.
QCCR1E57292	Resource lock cannot be released or even cannot be killed using the 'k' command due to a plugin termination failure, even though the operator has logged out and the session does not exist.	Added an exception handler for the plugin termination procedure so that Service Manager can clean up successfully when the operator is logged out.
QCCR1E57907	The dbcount on joinsvcDisplay(JOIN) counts all records instead of those in qbe.	The dbcount on joinsvcDisplay(JOIN) now excludes records based on the query.
QCCR1E58862	The usergrid functionality does not work correctly when Service Manager is using an Oracle database. When the user attempts to open a saved column view by loading a named grid, the correct user grid may not be loaded.	The usergrid functionality now works correctly.
QCCR1E59119	Servlet container processes crash when parsing a large query with more than 2500 conditions.	Servlet container processes do not crash.

QCCR1E59527	In environments deploying a case-sensitive RDBMS in combination with a case-insensitive LDAP server for authentication, it might be impossible for users to successfully log in to Service Manager (SM). After login, the System Navigator displayed an empty tree and the main screen was partially rendered, which resulted in an inability to use SM.	If the LDAP is used for authentication, users can now successfully log in with a lowercase, uppercase, or mixed-case user name and use SM properly after login. Without LDAP authentication, the case-sensitivity of login depends on the case-sensitivity setting of the RDBMS.
QCCR1E59746	Knowledge Management: KMImport is not updated to reflect the km-import jar.	The scripts will no longer hard code the jar file name for the class path. Instead, the value of the class path will depend on all the jar file names in the lib directory.
QCCR1E59764	Try logging in to the web client index.do or Windows client as an Employee Self Service (ESS) user. User will be rejected, which is correct, but the session will not be terminated on the server side. The session should terminate if ESS user is rejected for logging in on non-ESS pages.	Now, the ESS user login is rejected and the session is released as expected.
QCCR1E60613	User cannot log in to the Service Manager server and instead receives the message "SOAP Fault occurred: "Server is running low on memory try again." The Service Manager server service has to be restarted to temporarily resolve the problem.	When JVM memory usage is higher than 90%, the system garbage collection is automatically called.
QCCR1E64064	Using the appthreadspersession:x parameter, only x-1 tabs can be opened, not x tabs.	The appthreadspersession parameter now works correctly.
QCCR1E65095	The "Does not Contain" comparison does not work for an ARRAY text field.	The "Does not Contain" comparison will work correctly for an ARRAY text field.
QCCR1E65453	When trying to change the database field encryption key using the "sm -changeencrkey" command, the command failed to complete and left the database corrupted.	Users can now successfully change the database field encryption key using the "sm -changeencrkey" command.
QCCR1E65597	System encounters errors after a change to the dbdict on one of the following tables: code, format, link, counters, ScriptLibrary, scmessage, dbdcit, or datadict	System performs normally after a change to the dbdict on any of these tables: code, format, link, counters, ScriptLibrary, scmessage, dbdcit, or datadict
QCCR1E66601	Formatting applied to Knowledge Documents was lost when the document was used as a solution for an interaction.	When invoking Use Solution on a Knowledge Document in an interaction record, formatting will be properly applied to all HTML tags.

QCCR1E66688	When performing a Case Exchange of Incident tickets from SM 7.11 to SM 9.20 via Connect-It (CIT), once CIT establishes a session, the thread associated with the session gradually uses more memory until all SM processes fail and a java.lang.OutOfMemoryError occurs: unable to create new native thread. This issue is caused by a Connect-It connector defect. The Connect-It connector sends an incorrect soap action for close filehandle operations. As a result of the incorrect soap action, the RTE does not properly close the filehandle that was opened and results in memory accumulation over time. This triggers the -Memory messages in the log, and would eventually cause the out-of-memory errors of the type "unable to create new native thread." When the user session logs off, all open filehandles are then closed and accumulated memory is released.	The maxrecordsetspersession parameter has been introduced to limit the number of recordsets that a client can keep active, to prevent the server from running out of memory. See the maxrecordsetspersession section of this document.
QCCR1E66812	In Service Manager (SM), when the SM administrator kills the scauto for OVO client (which is not the listener but the scauto for ovo user) in the System Status monitor, a message occurs indicating that the session is terminated, however it is not killed actually. The user session still exists on the server and the socket connection is still established.	The SM administrator can kill the SCAuto client user session successfully using the "k" command, which means the user thread will be terminated on the server and the socket connection will be forced to be disconnected by the server.
QCCR1E67233	If the backend RDBMS is not started or the wrong ODBC driver is used when executing the command sm -sqlverifyconnection, the console freezes and connection 'retry' information prints infinitely in the server log file (sm.log).	After trying the connection three times and failing to connect to the RDBMS, the failure information will print in the log and the connection command will terminate.
QCCR1E67275	Number prefixes are not generated as expected.	The number prefixes and suffixes are generated correctly even if there are no triggers on the number table.
QCCR1E67946	Slow system performance occurred and reviewing the system status revealed that several background processes were idle for over three hours.	Fixed the Service Manager load balancer so that load is now distributed evenly across all available servlet containers.
QCCR1E67910	The fourth parameter of RAD function generate.sql.query() will not take effect when a boolean value is passed, whether it is true or false.	The fourth parameter will be taken into account when a boolean value is passed.

QCCR1E68005	When a user connects through Trusted Sign-on (TSO) and exceeds the maximum number of concurrent logins, the server gives an error message.	When the Service Manager client log-in fails, the correct message(s) will be displayed.
QCCR1E68081	When trying to start Service Manager, users encounter a null pointer exception error: Exception in thread "main" java.lang.ExceptionInInitializerError Caused by: java.lang.NullPointerException at com.hp.ov.sm.common.auth.AutoPassClient.getFeatures(AutoPassClient.java:48) at com.hp.ov.sm.common.resource.LicenseData.verifyLicense(LicenseData.java:114) at com.hp.ov.sm.common.resource.LicenseData.initData(LicenseData.java:213) at com.hp.ov.sm.common.resource.LicenseData.initializeAutoPass(LicenseData.java:66) at com.hp.ov.sm.common.core.Init.initializeLicense(Init.java:347) at com.hp.ov.sm.common.core.Init.getInstance(Init.java:147) at com.hp.ov.sm.common.core.Init.getInstanc Error! initializing java in scjvm.cpp In addition, error messages similar to the following appear in the sm.log file: 26219(1) 08/11/2011 16:06:55 JRTE I Java version: 1.6.0_21 26219(19) 08/11/2011 16:06:55 JRTE I Starting Memory Monitoring thread to check for memory every 15 seconds. 26219(1) 08/11/2011 16:06:55 JRTE E Autopass Initialization Failed. Error Code: 2013 Message: 2013 26219(1) 08/11/2011 16:06:55 RTE E Unable to Find Class com/hp/ov/sm/common/core/Init by ThreadId 1 26219(1) 08/11/2011 16:06:55 RTE D die: entered 26219(1) 08/11/2011 16:06:55 RTE E HP Service Manager is unable to start.	When checking for existence of the license file, Service Manager no longer generates the null pointer exception and will report the correct error statements in the sm.log file.

QCCR1E68200	The displayed data List was incorrect after using Customize Current View when adding a field.	The displayed data List will be correct after the user adds a field to the list using the Customize Current View option.
	Here is an example scenario:	
	1. Log in to Service Manager as a system administrator. 2. Select Interaction as Queue on the To Do Queue page. 3. Select "All Open Interactions" as View. 4. Click "Count Records". The number of records (for example, 198) is displayed. This is correct. 5. From the More or More Actions menu, click "Customize Current View". 6. Click Fields and then add "Contact Full Name" to the List. 7. Click Finish. Only 4 records are displayed. After clicking field "Contact Full Name", only 2 records are displayed. This is incorrect.	
QCCR1E69154	Unable to see a localized values and display lists on dynamic forms.	Service Manager now uses the global lists variable 'display.variable' to set display list values and the proper language will be displayed.
QCCR1E69423	After the RTE binary patch P3HF4 and web client P3HF4 were applied, there were issues when users worked in the web client. The session often aborted unexpectedly with following error: "Logout successful".	The "Logout successful" error no longer occurs.
QCCR1E69448	Signal 11 encountered when a user is updating an incident record: RTE E Caught XML API exception scxmlapi(40).	When one user is inserting data or updating data in a file (for example, probsummary) while another user is updating the dbdict record at the same time, Service Manager no longer generates a signal 11.
QCCR1E69687	When the Search Engine server is not running or is disconnected from Service Manager, the KMUpdate process fails with a signal 6 in the sm.log and a core dump written to the disk.	Introduced a new exception handling strategy to handle any error or exception from the Search Engine server. No matter whether the Search Engine is down or not, the KMUpdate process keeps running, unless the process is terminated manually.

QCCR1E70053	When using an unsupported SQL data type in a SQL mapping in Service Manager during a record insert, a corrupt error message is displayed.	Now, when using an unsupported SQL data type in a SQL mapping in Service Manager during a record insert, the correct error message is displayed including the numeric representation of the unsupported data type.
QCCR1E70184	After applying Patch 14 to Service Manager 7.0.2, the number of database connections increases over time until no further connections remain.	The resource leak, which was introduced by HTTP GET requests, has been fixed.
QCCR1E70218	An unload file from a DB2 system cannot be loaded into an Oracle system.	The unload files can now be loaded from DB2 with no problem.
QCCR1E70349	Extra characters are inserted randomly in email messages sent by the scemail agent of Service Manager.	A new JavaMail solutioin is used so that email messages are rendered correctly.
QCCR1E70459	Service Manager (SM) versions 9.20 and later require that LDAP operators should match the case of the SM DB opeartors. However, this is not mandatory before SM9.20. After upgrading from SM version 7.10 to version 9.2x, some users may not be able to log in anymore with an error "Invalid username/password".	This issue has been resolved. Now, login is case-insensitive, so end users can log in using "FALCON", "falcon", or "faLCon." Additionally, user ids do not have to match between LDAP and RDBMS anymore.
QCCR1E70544	The Service Manager server experiences high CPU load and servlets stop responding to client requests. Over time, an administrator has to restart the service to recover from this condition.	This high CPU load issue has been resolved.
QCCR1E70915	When using the horizontal scaled parameters, an operator login name containing a comma is truncated in Service Manager System Status view.	Operator login names containing commas are not truncated.
QCCR1E70907	The _populateRecList() calls itself recursively until available memory is exhausted and a "Signal 11" error occurs.	The memory leak is eliminated.
QCCR1E70999	The field length automatically changes when adding new field into a Service Manager table with dbdict.	When adding a new field, users are recommended to fill in all the necessary values, not only the SQL type varchar(50), but also other columns like SQL Name and SQL Table. If the user specifies a value for a column, Service Manager will now use the specified value; otherwise it will use a default value.

QCCR1E71027	A certain message in the eventout queue may cause the client to crash and prevent emails from being sent.	Messages in the eventout queue should be processed correctly.
QCCR1E71047	When you attempt to consume a third-party WSDL web service from ServiceCenter 6.2.8.8 through an SSL channel, using Run WSDL to JS or a ScriptLibrary record, the connection aborts with the following error: 22464(5750788) 11/23/2011 17:18:15 RTE E soap_sendRequest failed in step 0 with rc 22 - errnum 0 22464(5750788) 11/23/2011 17:18:15 RAD E SOAP request failed - TCP error 22 - SSL authentication failed in tcp_connect(): check password, key file, and ca file. 22464(5750788) 11/23/2011 17:18:15 RAD E Script <unknown script> line 0: ERROR uncaught exception: SOAP request failed - TCP error 22 - SSL authentication failed in tcp_connect(): check password, key file, and ca file. at char 1	Service Center now can verify the certificate file and consume a WSDL web service.
QCCR1E71341	If the directory path of JAVA_HOME contains a white space, executing wsdl2java.bat and runDocumentImport.bat will cause errors.	When the directory path of JAVA_HOME contains white spaces, wsdl2java.bat and runDocumentImport.bat can run successfully.
QCCR1E71657	User sessions hang or cannot connect after many different ESS users have logged in because the coordinator process runs out of memory. This behavior may occur even after the other users have logged out.	The coordinator process will no longer run out of memory.

QCCR1E71698	When there are a large number of users logged on to a host, reportstatus -reporttolog locks the user chain and the following "Lock user chain" warning message is repeatedly logged in the sm.log file. This behavior may cause delays on connections or other operations. Example content of the log file: 12324(7660) 12/22/2011 09:55:39 RTE W WARNING: lock [6]User chain held for 344 milliseconds by routine ..\..\src\SCUserProcessChain.cpp line 412 12324(7660) 12/22/2011 09:58:40 RTE W WARNING: lock [6]User chain held for 360 milliseconds by routine ..\..\src\SCUserProcessChain.cpp line 412 12324(7660) 12/22/2011 09:59:40 RTE W WARNING: lock [6]User chain held for 282 milliseconds by routine ..\..\src\SCUserProcessChain.cpp line 412 12324(7660) 12/22/2011 10:00:40 RTE W WARNING: lock [6]User chain held for 343 milliseconds by routine ..\..\src\SCUserProcessChain.cpp line 412 12324(7660) 12/22/2011 10:01:41 RTE W WARNING: lock [6]User chain held for 282 milliseconds by routine ..\..\src\SCUserProcessChain.cpp line 412 12324(7660) 12/22/2011 10:03:41 RTE W WARNING: lock [6]User chain held for 265 milliseconds by routine ..\..\src\SCUserProcessChain.cpp line 412 12324(7660) 12/22/2011 10:05:42 RTE W WARNING: lock [6]User chain held for 265 milliseconds by routine ..\..\src\SCUserProcessChain.cpp line 412 12324(7660) 12/22/2011 10:06:42 RTE W WARNING: lock [6]User chain held for 360 milliseconds by routine ..\..\src\SCUserProcessChain.cpp line 412	This behavior is prevented by copying the report to memory first, unlocking the user chain, and then printing the report to the log file.
QCCR1E71786	Response times in the sm.log file (enabled by the "rtm:2" parameter) are incorrect for actions initiated from the navigator.	Response times in the sm.log file (enabled by the "rtm:2" parameter) are correct for actions initiated from the navigator.
QCCR1E71910	The ir.probsummary lock obtained by a user is never released. This causes many sessions to be waiting on this lock and may potentially lead to data integrity problem.	The ir.probsummary lock will be released correctly.

| QCCR1E72028 | The RAD routine scheduler selects a set of records from the schedule file, and then processes only a single record before selecting the entire set again. This behavior is extremely inefficient. | **Root cause**: The Anubis process is provided by RAD applications apm.anubis and apm.anubis.restart. It calls processes() to get all the running threads and processes, causing a high overhead. |

Resolution: The need for Anubis Process has been eliminated and the Service Manager background process has been modified such that it can manage and restart the registered schedulers in the case of exceptions:

When a background scheduler starts, it will be registered to GenericThreadManager, except "system.start" and "scheduler.start". GenericThreadManager will check periodically whether the schedulers are alive. If a scheduler is not alive, it will be restarted except that it is dead or killed normally.

The anubis working principle is copied from the anubis RAD applications: when the thread check time is reached, the anubis thread will check whether the scheduler is alive: if not alive, try to restart it. If the scheduler restart times reach 5 on the most recent day, the next restart time will be delayed to 1 day later; If the scheduler restart times reach 25 in the most recent week, the next restart time will be delayed to 2 days later.

To use the new feature, two new parameters have been introduced:

- enableAnubisMonitor: Start the Anubis monitor to check the status of the background scheduler thread.

- anubisPollInterval: The time interval (in seconds) at which the Anubis thread checks to see if any registered scheduler is alive. Default is 15 (seconds).

Note: When enableAnubisMonitor is enabled, the original anubis RAD applications should be disabled.

QCCR1E72046	Log files report servlet terminations and out-of-memory errors. A resource is locked and the system seems to hang.	This issue was caused by running 32-bit applications on a 64-bit HP-UX system. To resolve this issue, the applications were recompiled to maintain compatibility on 64-bit HP-UX systems.
QCCR1E72255	When you start scemail (JavaMail) in the Windows client, a "Signal 11" message is generated.	This issue was caused by a long message being passed incorrectly. A code fix has been implemented that prevents the "Signal 11" error from being generated.
QCCR1E73079	Using the RAD fduplicate function on a file mapped to attribute tables (MERGE file) generates a "Signal 11" if we fail to copy the record list.	The fduplicate function now handles the error condition before copying the record list.
QCCR1E73737	The LDAPNOSTRICTLOGIN:1 parameter does not have any effect in SM 9.21 when an LDAP connection fails.	Now, when an LDAP connection fails and LDAPNOSTRICTLOGIN is set to 1, the login will succeed if the login name exists in RDBMS.

Web client updates

The following items are fixed in the current software release.

Global ID	Problem	Solution
QCCR1E32210	Users are unable to view an attachment from the web client when getAbsolutePath() in Attachment.java returns greater than 255 characters. Note: This issue is most likely to occur on WebSphere systems, where the deployment path to the temp directory is prefixed by various WebSphere nodename and server names and an attachment file full path is dependent on the length of WAR file name and the installation path of the application server.	The web tier now supports long full paths (greater than 255 characters) for attachments when running on Linux, Unix, or Windows with an NTFS file system. Note: This issue still exists when, in rare cases, the web tier is running on Windows with a FAT file system. Note: If the user uses a very long file name or folder name, which causes the full path of the file to exceed 255 bytes, the user will not be able to delete the web application server's temporary file/folder generated on uploading the file (normally under the web application server installation directory). Deleting the temporary file/folder will fail with a system warning message that states the file name is too long. In this case, the user can do the following to delete the file: 1. Rename the temporary file to a short name, and then delete it. 2. If the delete still fails, open the system command prompt, type "dir /x" to display the file's short name and then run the "rmdir {short name} /S" to delete the folder. This patch introduces a known issue in which the user cannot open an attachment on Windows client if the file name is longer than 120 characters. See QCCR1E73858 in the [Known Issues] section of this document.
QCCR1E52805	In the Web client, when a data change option is specified on a date widget, the corresponding display option is not executed when the date is changed.	The display option is now executed when the date is changed as expected.
QCCR1E56885	When opening a record from a record list and then clicking a menu item (on the system navigator) that launches the us.launch.external application, the Web client hangs.	The web client no longer hangs when you click the menu item that launches the us.launch.external application.

Global ID	Problem	Solution
QCCR1E58341	Web client users cannot see long descriptions in conditional read-only text area fields. The scroll bar is inactive, so users cannot scroll down or up to read descriptions.	The scroll bar is now active even when the text area is read only, so users can scroll to see long descriptions in read-only text area fields.
QCCR1E59527	In environments deploying a case-sensitive RDBMS in combination with a case-insensitive LDAP server for authentication, it might be impossible for users to successfully log in to Service Manager (SM). After login, the System Navigator displayed an empty tree and the main screen was partially rendered, which resulted in an inability to use SM.	If the LDAP is used for authentication, users can now successfully log in with a lowercase, uppercase, or mixed-case user name and use SM properly after login. Without LDAP authentication, the case-sensitivity of login depends on the case-sensitivity setting of the RDBMS. Note: To take advantage of this fix, users must also update their server to SM 9.21.p5 or later.
QCCR1E61175	Users are unable to add activities because the buttons become unusable after selecting the update type in the list of activities. The reason is that the detail window is not loaded properly.	Now when users click the Activities tab (or expand the Activities section) and select an update type, the buttons are available for use and working properly.
QCCR1E61880	After updating a few other fields of a problem ticket, the user received the following error message when updating the Affected CIs field using Fill: "Cannot find related information in device using query: true and logical.name#"Work In Progress"".	Reset the focus field so that when the focus is moved, the Web Tier will send the correct field to the background and fetch the correct records. The error no longer occurs.
QCCR1E62049	When deploying the web tier, an XSLT compilation error is displayed in the sm.log for <webtier>\WEB-INF\templates\topaz\datetime.xsl.	The XSL file has been formatted correctly, so the compilation error no longer occurs.
QCCR1E62168	If a user has an LW-SSO cookie but the user is not created in Service Manager, there is a loop in the application.	Web client displays an error page if a user has an LW-SSO cookie but the user is not created in Service Manager.
QCCR1E62821	Using the ALT+CTRL+C key command in the Web client to start spell check does not work when using the OS's Polish language pack. Instead, an HTML error page is displayed.	Now, if the specified language dictionary cannot be found in Service Manager, a default dictionary will be used, which prevents the error page from being displayed.
QCCR1E63661	Keyboard shortcuts in the accessible web client were not working for the Save display option button.	For the Save option, keyboard shortcuts in Service Manager 9.21 P5 and later have been changed to Ctrl+Shift+F4.
QCCR1E64226	A misused Service Manager keyboard event	The code has been fixed so that the

Global ID	Problem	Solution
	handler prevents the browser toolbar from being freed. This behavior causes a memory leak.	Service Manager keyboard event handler is released properly from the toolbar.
QCCR1E65001	Users are not able to do simple things like approve a change request due to the following error: "Field contains an invalid numeric value (display,show.rio)"	Revised the handling of read-only comfill widgets so the proper value will be posted to the server.
QCCR1E66683	It is not possible to select a catalog line item by clicking on the group value when the group value is missing.	Empty columns are rendered properly in the table so users can select rows by clicking on an empty column.
QCCR1E66961	The wrong incident is displayed after selecting it from the ToDo queue.	The correct record is displayed after it is selected from the ToDo queue and refreshed.
QCCR1E67011	Users lose unsaved ticket information after closing a QBE list within another thread.	Corrected a tab update issue where it was using the wrong url after displaying a hover form.
QCCR1E67134	When a Format Control validation fails on a field that is inside a collapsed group, the focus does not jump to that field.	A group that contains a focused field is automatically expanded to show this field.
QCCR1E67196	When users add an attachment to a ticket with the "Specify File Location" field empty and then click OK, they receive a logged-out message in the Attachment window. If they attempt to continue to work in the session, a log-in screen appears. Note: The Web Tier was deployed on WebSphere 7.0.	When users attempt to add an attachment to a ticket with the "Specify File Location" field empty, the "OK" button is disabled, unless they select an existing file from the file chooser.
QCCR1E67900	Users receive the following error message when opening a view on the web client if the view uses a "CONTAINS" comparison operator in the AutoFormat rules. "Message: Syntax error Line: 3752 Char: 111 Code: 0 URI: http://<hostname>/client/gwt/com.hp.ov.sm.client.webtier.gwt.list.SmList/984A08B996FB3EA2340381B694BDF8BA.cache.html"	The regular expression for comparing and replacing the CONTAINS and NOT CONTAINS has been corrected so that this error does not occur.

Global ID	Problem	Solution
QCCR1E68704	The hover form in Service Manager 9.21 P3 HF2 caused serious browser lockups and issues when it was used on an array field. Symptoms included delays in the pop-up being displayed, accompanied by an audible clicking noise.	The pop-up displays in a timely manner without an audible clicking noise.
QCCR1E69005	Selecting a record in a recordlist caused the whole recordlist to refresh, which caused a performance issue.	When a record is selected in a recordlist, the recordlist is not automatically refreshed.
QCCR1E68989	On a form that contains Dynamic View Dependency (DVD) conditions, the dependency result is incorrect after the user clicks "Validate Format" or presses Enter.	The dependency result is now correct.
QCCR1E69216	The web browser hangs after navigating between queues. Often users will get the following message: "Internet Explorer Cannot display the web page." Users need to delete temporary files and cookies, and then restart Internet Explorer to get to a log-in page.	The web client no longer produces errors or hangs when users navigate between queues.
QCCR1E69316	In Trusted Sign-On (TSO) mode, when a user pressed F5 on the browser multiple times during initial communications between the client and server, multiple server sessions were established.	In TSO mode, when the user launches the web client in a browser, a login progress screen displays, which instructs the user to wait and not to refresh the screen. Even if the user ignores this warning and presses F5 or the refresh button on the browser, Service Manager will not establish new sessions for the user.
QCCR1E69299	A java.lang.RuntimeException occurs when processing dynamic form data.	No java.lang.RuntimeException occurs when processing dynamic form data.
QCCR1E69488	Multiple users are simultaneously disconnected from the Service Manager (SM) web client, and then directed to the "login again" page (session timeout). This creates multiple sessions, which are seen connecting back to SM although users have not logged in but instead left the browser on the "login again" screen.	Multiple sessions are no longer created for clients when there are log-in problems.
QCCR1E69476	In the web client, in the Approval Log section of Change Management, the comments column does not display input values after the first row.	The comments column displays input values after the first row in the Approval Log section.
QCCR1E69692	The major Service Manager CSS and JavaScript resources do not expire if the	The locations of the major CSS and JavaScript resources are changed to a

Global ID	Problem	Solution
	customer upgrades the Web tier without changing the context path.	path that reflects the current build number. Therefore, the client's browser does not make use of the CSS and JavaScript cache from an old version. See the "Changes to the Web Tier Directory Structure" section of this document.
QCCR1E69868	On a search screen, if the user adds a Comfill whose value is "masked" using a value-display list and then selects a value and searches on it, no results are returned.	The correct data (the value list value) is now sent to the server so that the correct records are returned.
QCCR1E69969	The Service Manager Tomcat instance has a large and increasing number of HTTP connections. Java monitoring data indicates that Service Manager creates over 500 HTTP connections. The Service Manager Web Tier thread dumps indicate that numerous threads are in a state of BLOCKED while waiting to acquire a monitor lock.	Concurrency handling has been improved to avoid numerous threads being blocked during long-running queries. - Times out the socket reading operation in a timely manner to avoid a thread being infinitely blocked by the socket IO operation. Added a parameter named socketReadTimeout to specify the timeout when reading from the socket; the default value is 180s. - Times out the lock acquiring in a timely manner to avoid a thread infinitely waiting for the lock. Added a parameter named lockWaitTimeout to specify the maximum time to wait for the lock; the default is 15s. - Does not acquire the lock for the heartbeat request (service.do?name=getMessages) as it does not communicate with the SM server, but only fetches the messages from the message store on which the accessing is already synchronized. See the "New Mask and Timeout Parameters" section of this document.
QCCR1E69952	A Java exception occurs when printing in Service Manager.	No Java exception occurs when printing in Service Manager.

Global ID	Problem	Solution
QCCR1E70298	When the user opens a recordlist in the web client, the recordlist is not displayed and the web client hangs. This issue occurs when the user switches the tab page before the current tab page finishes its rendering. Starting from Service Manager 9.2, CWC5 assumes that user does not switch tab pages when the current page is still loading.	The mask feature has been improved so that the mask persists long enough in a user transaction to prevent user operation before the current page finishes its rendering. -
QCCR1E70511	A java.util.ConcurrentModificationException occurs when users use the HTML Viewer. This issue could occur when multiple clients are accessing the same HTML Viewer object simultaneously.	No ConcurrentModificationException occurs when users use the HTML Viewer.
QCCR1E71070	After a failed attempt of an employee self-service (ESS) user to access Service Manager, the client session still remains for that user. This issue occurs in an LWSSO-enabled environment.	The web client now terminates the session before forwarding the request to the authFailure.jsp page.
QCCR1E71294	SOAP messages are not logged even though you set the tracesoap parameter to true.	Soap message are now logged as expected if the user sets the tracesoap parameter to true.
QCCR1E71381	On the Web client, when an operator accesses a change ticket with partial approval, and then clicks Save without making any changes to the ticket, the Reset Approvals form is displayed. This form indicates that a change has been made to the ticket even though no change has been made.	When editing contents with multiple lines in a textarea component with a visible/invisible DVD condition, no extra blank lines will be inserted in the contents after saving the record.
QCCR1E71734	The copyright date on the splash screen and the about page needs to be updated to the current year.	Copyright date in splash screen and about pages are updated to the current year.
QCCR1E72029	Using Internet Explorer 8, the web client intermittently hangs when performing actions like cancelling a Service Desk interaction or performing a Fill operation.	When a JavaScript error is detected and the window mask is displayed for 15 seconds, a red close button to the left of the logout button will appear. Clicking this button will close the window mask and prevent the browser from hanging.
QCCR1E72392	The incorrect ESS starting page is displayed if the user has previously attempted to log in with the incorrect account details.	The correct ESS starting page is displayed even if the user has previously attempted to log in with the incorrect account details.
QCCR1E72650	A selected Incident record is not highlighted on	The selected Incident is still highlighted

Global ID	Problem	Solution
	the QBE list after changing the Closure Code.	on the QBE list after the Closure Code.
QCCR1E72764	When creating a new Incident and then canceling the Incident, the user sees a blank page.	Now, the user sees a refreshed page as expected.
QCCR1E73037	The original minimum value of unmaskDeferMillis parameter is 750 milliseconds. This does not allow for a lot of space for users to tune this value.	Service Manager now allows the unmaskDeferMillis parameter value to be set to a lower minimum value of 350 milliseconds. Note: The default value is changed from 1000 milliseconds to 750 milliseconds. Users should be very cautious when setting this paramter to a lower value. The Web client will log a warn message when setting it to a value less than 550 milliseconds.
QCCR1E73617	Leaving the Web client by pressing ALT+TAB causes the page to reload.	Leaving the Web client by pressing ALT+TAB no longer causes the page to reload.

Windows Client Updates

The following item (identified by reference number) is fixed in the current software release.

Global ID	Problem	Solution
QCCR1E57474	Dynamic view dependency (DVD) does not work when the source is on a tab that comes after an invisible tab in a notebook.	DVD conditions now work properly on a notebook tab that comes after an invisible tab.
QCCR1E65372	When the user went into the Knowledge Base search form and de-selected the Incident_Library check box, all the other options also disappeared.	When the user goes into the Knowledge Base search form and de-selects the Incident_Library check box, the other options will remain.
QCCR1E65709	The focus is returned to the beginning of the form when tabbing through a comfill widget with the data changed event set.	If the Tab key is pressed on a combo box, it will no longer fire a Data Change Event. Therefore, the focus of the form will not change.
QCCR1E66750	You cannot print a record using the "File>Print" option in the Windows client if the record has an attachment.	You can use the "File>Print" option in the Windows client to print a record.
QCCR1E69500	When a table object is added to a format by using Forms Designer to retrieve/add/update data and one of the columns or fields is a datetime datatype, users expect to be able to select a date using the visual calendar	This issue occurs because of differing data types. Now, this data type has been converted so that the dateTime control can be created correctly.

Global ID	Problem	Solution
	widget. This does not work in the Windows client, but works correctly in the Web client.	
QCCR1E72633	A Script error prompt is received when user tries to execute a print job in the Service Manager Windows client. Regardless of the users action at the prompt, nothing is printed.	The user now can print properly in the Service Manager Windows client.

Known Problems, Limitations, and Workarounds

This software release has the following known issues.

Global ID	Known Issue	Workaround
QCCR1E66663	As of SM9.20 the plug-in technology that allowed 3rd parties to directly access the SM server to create their own SM clients has been deprecated. However, all the documentation on how to use and implement a plug-in still exists in the online help server confusing customers and implementers on whether plug-ins are still to be used or not.	Use Web services to enable all interfaces in and from SM. The documentation has been updated for the latest release of Service Manager. However, for older versions of Service Manager, the documentation cannot be updated.
QCCR1E69449	When a user tries to update a DBDICT for an Incident, they receive the following "Signal 11" error: RTE E Caught XML API exception scxmlapi(40). This issue occurs when another user is updating the probsummary dbdict record at the same time.	To work around this issue, make sure that no other users are updating existing records or inserting new records in DBDICT at the same time. Note: This workaround will be included in the "Database dictionary (DBDICT) utility" section of the Tailoring Best Practices Guide of the next release of Service Manager.
QCCR1E71543	Customer-developed RAD applications hangs with a "Signal 11" error. This issue occurs even after applying a previous hotfix meant to fix this issue.	If your JavaScript files are very large (>340k lines), try setting the "jsgctrigger" parameter from the default (8 MB) to 80 MB.

Global ID	Known Issue	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.	Two workarounds are available. 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 the following location:
		
		<Service Manager server installation path>\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.

QCCR1E73858	The SM9.30.201 build (Patch 3) Windows client cannot open attachments that have a long filename (120 characters).	There is no workaround at this time.

Installation Notes

Digital signature notice

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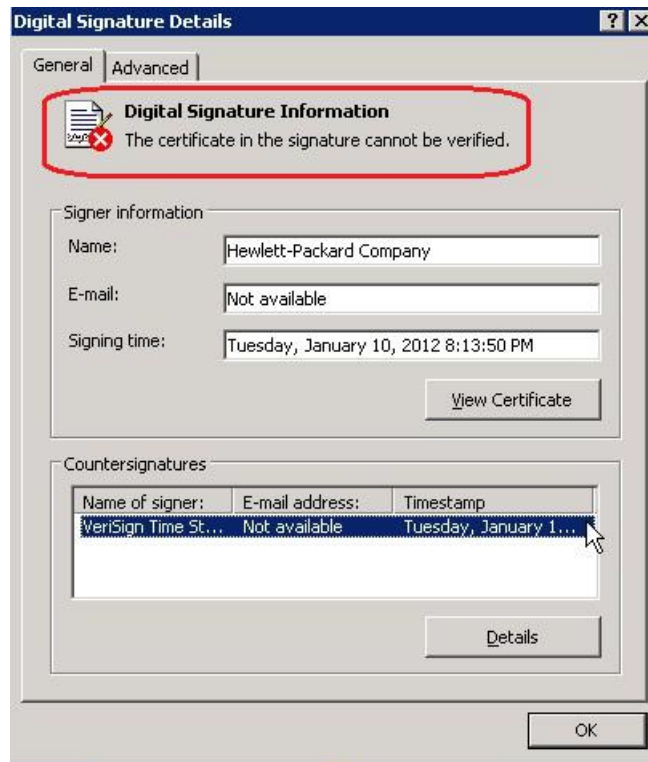
To resolve this issue, either enable Windows Update or download and install the G5 Root certificate as documented at: https://knowledge.verisign.com/support/ssl-certificates-support/index?page=content&actp=CROSSLINK&id=SO19140

Web Tier installation

Important Note: The Service Manager 9.21 Patch 5 release introduces important changes to the Web tier Directory structure. For more information on these changes, see the "Changes to the Web Tier Directory Structure" section this document and the **"Updates to the Service Manager Web Tier Directory Structure"** white paper at the HP Software support Web site:

www.hp.com/go/hpsoftwaresupport

The Web Tier update consists of a compressed file, `sm9.21.290-P5_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 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.

To install the Web Tier update:

1 Back up your web.xml file, splash screen, style sheets, and any other customizations you made, including your `webtier-9.21.war` (`.ear`) file.

2 Delete or uninstall the existing webtier-9.21.war (.ear) file.

3 Deploy the new webtier-9.21.war (.ear) file by following the instructions in the Service Manager Installation Guide.

4 Replace the new versions of any files you customized with your customized versions.

5 Make any new customizations necessary for your deployment.
   Note: Be sure to set the `securelogin` and `sslport` parameters.

6 Restart the Application server.

Windows Client Installation

The Windows client update consists of a compressed file, `sm9.21.290-P5_Win_Client.zip`, which contains `setup.exe`.

To install the Windows client update:

1 Stop the Service Manager Windows client.

2 Uninstall the Service Manager Windows client. (Your connection and personalized settings are retained.)

3 Run `setup.exe` and install the client by following the instructions in the Service Manager Installation guide and Release Notes for your version.

4 Check the version in **Help > About Service Manager Client**.
   The client should be Release: 9.21.290.

Server Installation

The server update for your operating system (OS) consists of a compressed file, `sm9.21.290-P5_<OS>.zip` (or `.tar`), which contains the Service Manager server files. These files add to or replace the files in the `[SM Root]\` (`[SM Root]/)` RUN, `irlang`, `legacyintegration`, and `platform_unloads` directories.

To install the Server update:

1 Stop all Service Manager clients.

2 Stop the Service Manager server.

3 Make a backup of the RUN directory.

4 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 9.21.

5 For UNIX servers, set the file permissions for all Service Manager files to 755.

6 Remove the following files from the "\RUN\lib" directory:

- `saaj-impl-2.1.jar`
- `saaj-api-2.1.jar`
- `jgroups-all-2.5.0.jar`

7 Remove the following files from the "\RUN\lib\endorsed" directory:

- `xercesImpl-jaxp-1.3.2.jar`
- `xalan-jaxp-1.3.2.jar`
- `jaxp-api-1.3.2.jar`
- `dom-jaxp-1.3.2.jar`
- `sax-jaxp-1.3.2.jar`

8 Restart the Service Manager server.

9 Restart the Service Manager clients.

10 Check the version in **Help > About Service Manager Server**.
The server should be Release: 9.21.290.

Application Unload Installation

The application consists of the unload files that come with the server updates. When you extract `sm9.21.290-P5_<OS>.zip` (or `.tar`), it will add the new files to your `[SM Root]\platform_unloads` (`[SM Root]/platform_unloads`) directory.

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 this suffix is omitted, the unload file is then intended for all applications versions compatible with the server version. For example, for Service Manager server 9.21, the compatible applications versions are 7.11 and 9.20.

New Application Updates in the Current Patch

There are following new application updates are included in this release:

Unload file	Used for applications version(s)	Description
QCCR1E67647_SM921P5.unl	7.11 and 9.20	Updated the scmessage record from "Doc Engine call failed" to include the message number.
QCCR1E70163_SM921P5_SM711.unl	7.11	Prevents the KMUpdate process from terminating when the Search Engine server is shut down or an indexing document error occurs.
QCCR1E70163_SM921P5_SM920.unl	9.20	Prevents the KMUpdate process from terminating when the Search Engine server is shut down or an indexing document error occurs.

Application Updates in Previous Patches

Important Note: The unload files must be loaded in order of patch. That is, all Patch 1 unload files must be loaded before any Patch 2 unload file is loaded and so on for Patch 3, Patch 4 etc... However, the order in which you load the unload files for Patch 1 does not matter.

Additional application updates have been included with this cumulative release. If you have not already applied them for a previous patch, you should also apply the unload files that are used for your applications version (see the following table). For more details about these applications updates, see the Release Notes for those patches, also included with the release.

Unload file	Introduced in 9.21 patch	Used for applications version(s)	Description
QCCR1E55715_SM921p1.unl	P1	7.11 and 9.20	Includes application changes to reduce database I/O on login.
QCCR1E57767_SM921p1.unl	P1	7.11 and 9.20	Includes application changes to reduce jgroups traffic on login.
QCCR1E59753_SM921p2.unl	P2	7.11 and 9.20	Includes application changes to fix the ToDo bar.
QCCR1E31545_SM921P2_SM711.unl	P2	7.11	Prevents backslashes included in a template from being duplicated in the output. **Note**: This file is not required for Applications 7.00.

Unload file	Introduced in 9.21 patch	Used for applications version(s)	Description
QCCR1E31545_SM921P2_SM920.unl	P2	9.20	Prevents backslashes included in a template from being duplicated in the output.
QCCR1E49721_SM921P3_SM711.unl	P3	7.11	Enables translation of Display/Value lists on dynamic forms. This is a required fix for the Export to Excel redesign.
QCCR1E56678_SM921P3_SM711.unl	P3	7.11	Lists the records in the right group order when a record list is refreshed.
QCCR1E58562_SM921P3_SM711.unl	P3	7.11	Includes applications changes for Export to Excel redesign.
QCCR1E58562_SM921P3_SM920.unl	P3	9.20	Includes applications changes for Export to Excel redesign.
QCCR1E67610_SM921P4.unl	P4	7.11 and 9.20	Enables you to block potentially dangerous attachments.
QCCR1E67072_SM921P4.unl	P4	7.11 and 9.20	Enables you to improve the Knowledge Management update process (KMUpdate) performance.

To load an unload file:

1 Make sure the Windows client is configured for server-side load/unload.

   a) From the Windows client, go to **Window > Preference > 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 options menu and select **Import/Load**.

4 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.

Field	Description
Messages Option — None	Select this option to hide all messages that Service Manager generates when loading the file.

Note: You can view the contents of an unload file before importing it by clicking **List Contents**.

5   Click **Load FG**.

Verified Environments

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

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.

Local Language Support

UTF-8 is part of the Unicode standard, which enables you to encode text in practically any script and language. Service Manager 9.21 supports UTF-8 as an encoding method for new or existing data. It can support multiple languages that adhere to the Unicode standard on the same server.

Support

You can visit the HP Software support web site at:
www.hp.com/go/hpsoftwaresupport

This web site provides contact information and details about the products, services, and support that HP Software offers.

HP Software online software support provides customer self-solve capabilities. It provides a fast and efficient way to access interactive technical support tools needed to manage your business. As a valued support customer, you can benefit by using the support site to:

*   Search for knowledge documents of interest
*   Submit and track support cases and enhancement requests
*   Download software patches
*   Manage support contracts
*   Look up HP support contacts
*   Review information about available services
*   Enter into discussions with other software customers
*   Research and register for software training

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 the following URL:
http://h20230.www2.hp.com/new_access_levels.jsp

To register for an HP Passport ID, go to the following URL:
http://h20229.www2.hp.com/passport-registration.html

Legal Notices

Warranty

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

The information contained herein is subject to change without notice.

Restricted Rights Legend

Confidential computer software. Valid license from HP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Copyright Notice

© Copyright 1994-2012 Hewlett-Packard Development Company, L.P.

Trademark Notices

- Adobe™ is a trademark of Adobe Systems Incorporated.
- Java™ is a registered trademark of Oracle and/or its affiliates.
- Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.
- Oracle® is a registered US trademark of Oracle Corporation, Redwood City, California.
- UNIX® is a registered trademark of The Open Group.

For a complete list of open source and third party acknowledgements, visit the HP Software Support Online web site and search for the product manual called HP Service Manager Open Source and Third Party License Agreements.