HP Service Manager

Software Version: 9.41 For the supported Windows[®] and UNIX[®] operating systems

What's New help topics for printing





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What's new in HP Service Manager 9.41?

HP Service Manager 9.41 contains the following new and enhanced features.

Feature	Description
Smart Search	Smart Search is a brand new search experience that enables you to search across Service Manager modules and into a variety of content such as SharePoint sites (including SharePoint documents with entitlement), static webpages, and shared folders. Smart Search provides a greater search capability than SOLR, and supports various operators such as AND, OR, NEAR, NOT, BEFORE, and AFTER. You can integrate multiple knowledge libraries by configuring different search connectors, so that all change analysts, incident analysts, request analysts, service desk analysts, problem analysts, change managers, incident managers, request managers, service desk managers, problem managers, and SRC users can search all the information that they can access.
	By configuring Smart Search preconditions and actions, IT users can search for content from different libraries easily and quickly. Users can also process a record with the context aware search, which automatically searches and displays records or articles related to the current record. From the search result, users can perform actions such as copying solutions or finding similar records, so as to improve the resolution rate and reduce resolution time.
Hot Topic Analytics enhancements	Hot Topic Analytics in the new version of Smart Analytics for Service Manager9.41 includes the following enhancements:
	 Hot Topic Analytics is now available in three modules
	After you enable Smart Analytics in an out-of-box system, you can use Hot Topic Analytics for the Service Desk, Incident Management, and Problem Management modules. Additionally, you can access Hot Topic Analytics from the report dashboards for these modules.
	Creating knowledge articles
	Now you can easily create knowledge articles based on the analysis performed by Hot Topic Analytics.
	 Setting parent/child relationship among incidents
	When you review the hot topics suggested by Hot Topic Analytics in Incident Management, you can use the Set Parent action to open a wizard, and then select the parent and child incident. The system will suggest a list of parent incidents, ordered by their relevance to the

Feature	Description	
	selected child incidents, and then you can select the parent for the child incidents. You can also create a new parent incident from the same wizard.	
	• New RESTful APIs	
	New RESTful APIs are provided for Hot Topic Analytics, as well as Smart Ticket and Smart Search.	
Logical Name solution	In previous versions of Service Manager, the device table used the logical.name field (labeled CI Identifier) as both a unique key field and a CI display name field, and used the id field (labeled CI Name) to display CI identification numbers. As a result, duplicate CI names were not allowed, while some external systems that integrate with Service Manager, such as HP Universal CMDB (UCMDB), allow duplicate CI names, which caused so-called "duplicate logical names issue." Moreover, other modules that consume CI data, such as the Incident and Change modules, cannot have their CI data automatically synchronized when CIs are renamed or removed, which leads to data integrity loss.	
	The following features of the logical name solution in Service Manager 9.41 resolve these problems:	
	Updated Configuration Item dbdict and form	
	Allowing user-specified CI Identifiers for new CIs	
	Ensuring cross-module CI data integrity through the Reference Field mechanism	
	Skipping Query Rewriting in link line records	
	Auto Complete in the web client	
	Behavior changes of the Fill and Find functions	
	Updated DEM Reconciliation Rules functionality	
	New or updated RAD and JavaScript functions	
	Support for CI reports	
	Tip:	
	• For more detailed information about this solution and the post- upgrade manual tasks required to adopt it in a production environment, see the <i>Service Manager Logical Name Solution</i> white paper.	

Feature	Description	
	• To enable the logical name solution, you must upgrade the Service Manager applications, server, and clients to version 9.41. If you are still running an earlier version of the applications, the solution is not enabled and your integrations are not impacted.	
	Integrating Service Manager 9.41 with other HP Products	
	Service Manager 9.41 has implemented code changes to resolve the impact of the logical name solution on integrations. A few integrations also require code changes on the other endpoint product side, which are available only after the Service Manager 9.41 release and hence require manual changes by the customer at the time of the Service Manager 9.41 release.	
	Note: For more detailed information, see the <i>Service Manager Logical Name Solution</i> white paper.	
Global ID solution	Service Manager 9.41 supports HP's Global ID solution for product integrations such as HP Service Asset Configuration Management (SACM).	
	Previously, the identification of CIs from the UCMDB and UD solutions was difficult, and potentially resulted in the duplication of CIs in products such as Service Manager, Asset Manager, and Run-time Service Model. The Global ID solution uses the UCMDB global ID as a reconciliation key in the data push framework, thus facilitating the reconciliation of CIs across Service Manager and other products.	
	For more information, refer to HP Software Recommendations for Global ID Best Practices in CMS.	
Support of Automated Service Modeling (ASM)	As version of 9.41, Service Manager supports the ASM functionality in the UCMDB Browser. Service CIs and consumer-provider relationships that are discovered by ASM can be pushed to Service Manager; additionally, you can tailor Service Manager such that Service Manager users can access ASM in the context of a business service, and access Impact Simulation in the context of an affected CI.	
	Support of ASM enables Service Manager users to view the accurate service trees that are discovered by ASM and facilitates service modeling in Service Manager.	
	Note: Automated Service Modeling requires the UCMDB ASM Enhanced package to be deployed in UCMDB.	
	For more information, refer to "HP Universal CMDB Browser" on page 1.	

Feature	Description
Hybrid mode	In Hybrid mode, Process Designer technology can be fully functional, but the mode also supports legacy technology such as Format Control. Service Manager 9.41 Hybrid is designed explicitly to ease the transition between Service Manager Classic and Service Manager Codeless by enabling you to continue to take advantage of your previous investments in legacy tailoring. This mode is available only to customers who are upgrading from a Service Manager 9.3x system that has Process Designer Content Pack 9.30.2 (PDCP3) applied.
	Note: If you are upgrading a Service Manager 9.3 <i>x</i> system that has Process Designer Content Pack 9.30.1 (PDCP2) applied, you can upgrade to Hybrid mode by first applying PDCP3.
	When you upgrade to Service Manager 9.41 Hybrid, a migration tool that is embedded into the Applications Upgrade Utility automatically migrates some legacy technology to Process Designer (for example, the tool automatically generates Process Designer workflows that continue to use legacy states, format control, and process). The extra steps in the Applications Upgrade Utility that comprise the migration tool are displayed automatically when you upgrade from an applicable system.
	Additionally, further manual tailoring enables you to continue using even more legacy features (for example, you can run the legacy Request Management module and the Process Designer-based Request Fulfillment module in parallel).
	For detailed information, refer to the Service Manager Hybrid Migration Guide.
Service Manager Collaboration	As of version 9.41, HP Service Manager Collaboration supersedes the previous HP Enterprise Collaboration (EC) based instant messaging solution. As an instant messaging tool embedded in Service Manager, Service Manager Collaboration enables Service Manager IT operators to collaborate in real time (or anytime) when handling an Interaction, Incident, Incident Task, Request, Request Task, Problem, Problem Task, Change, or Change Task. Service Manager users who do not log on to Service Manager but are available on Microsoft Office Lync can also be invited to a Collaboration conversation.
	Note: The chat server can be deployed on the Windows system only, but it works well with the Service Manager servers on all the platforms such as Linux.
	For more information, refer to "Service Manager Collaboration overview" on page 1.
Service Manager	In Service Manager 9.41, Service Manager Reports can display in the same

Feature	Description	
Reports enhancements	report both the raw data from the system and the new data calculated from the raw data. Particularly, you can generate a duration report that displays Service Level Management information against status, phase, and assignment group changes, such as the duration of record handling.	
	The following is a summary of the implementation.	
	Calculation Report and duration Report	
	Calculation Reports can reorganize the standard report data to show an overlapping report, which can display both the raw standard report and the calculated report. Duration Reports can count and display the time duration reports against status, phase and assignment group changes depending on the system data provided by the SLM module license and configuration.	
	 Data preparation framework for duration reports 	
Service Level Management enhancements	Service Level Management is enhanced in this version to support calculating the Process Target expiration based on assignment groups, s that you can monitor the performance of internal/external teams as per the agreed Operational Level Agreements or Underpinning Contracts. In addition, we offer a new calculation type to calculate the Process Target expiration time based on your work schedule. For more information about these features, refer to "Calculation of	
	Process Target metrics" on page 1.	
Streamlined interaction	 Note: The streamlined interaction solution is disabled by default. This enables you to continue to use your existing interaction workflows without any issues or additional configuration after you upgrade to Service Manager 9.41. To use the new streamlined interaction solution, simply manually enable it after you upgrade to Service Manager 9.41 Codeless or Service Manager 9.41 Hybrid. For information about how to enable the streamlined interaction solution, see the Service Manager 9.41 Help Center (Codeless version). 	
	To increase IT agents' efficiency and to enhance user experience, Service Manager 9.41 introduces a new, streamlined interaction solution. This streamlined interaction solution provides the following features and benefits:	
	 A simplified, intuitive form for interaction logging that requires fewer fields to fill and fewer clicks 	
	 A streamlined workflow that requires fewer steps in interaction handling 	

Feature	Description
	Status synchronization between interaction and fulfillment records:
	• End users have full visibility of fulfillment status
	• IT agents can focus on fulfillment records
	• Visibility on the attachment of interaction in the fulfillment record
	 Consolidated menu entry for interaction creation, which is based on whether Smart Analytics and the streamlined interaction solution are enabled or not
	For more information on the streamlined interaction solution, see the Service Desk section in Service Manager 9.41 Help Center (Codeless version) and the Service Manager 9.41 Processes and Best Practices Guide (Codeless version).
Service Request Catalog enhancements	Service Request Catalog 9.41 introduces the following new enhancements:
ennancements	• SRC Survey
	SRC Survey is based on the HP Service Manager HTML Email solution (JavaMail) and applies the out-of box internal Survey connector. By sending surveys from the records, you can collect user satisfaction by ratings or open comments. The system automatically generates an interaction record of a Complaint or Compliment category if the user registers an interaction. The administrators can add new questions to surveys and customize the answer types in the survey.
	Show related records
	The request details page lists all related records in the Fulfillment Summary section. The information includes the ID, the title, and the status of the related record.
Service Manager Mobility enhancements	Service Manager Mobility in this version includes the following enhancements:
	 A Related Records tab is added to the Detail view of a record in the power user view in Service Manager 9.41 Codeless.
	 A list of related records is added to the open tickets and the closed tickets in the self-service user view.
	 The display name of a CI can be displayed in comfill for mobility. Now you can fill a CI by its display name.
	• You can now search from SharePoint and Wiki pages (such as HTTP library) in addition to the knowledge base library in self-service user

Feature	Description	
	view, based on the prerequisites that you have purchased a Smart Analytics module license, enabled Smart Analytics, and configured the connectors to the SharePoint and HTTP libraries correctly.	
	 When Smart Analytics is enabled, the attachments in the knowledge base library can be searched directly. 	
	• When Smart Analytics is enabled, the search will perform a spell check to return meaningful results. For example, if you search for "offica," the search result will return records that include the term "office" if there is no exact result for "offica."	
	 The Open Ticket button is renamed to Submit a Request in the self- service user view. 	
Service Manager Upgrade Utility	Service Manager Upgrade Utility in this version includes the following enhancements:	
enhancements	 Provides a simplified UI wizard by grouping the upgrade process to various phases with sequential step numbers. 	
	• Provides two extra wizard screens for the customers who are upgrading from Service Manager 9.3 <i>x</i> with Process Designer Content Pack 9.30.2 (PDCP3) applied to Service Manager 9.41 Hybrid.	
	Removes the data scan option.	
HTML Editor whitelist	The HTML Editor enables you to visually add and edit rich text content formatted with HTML tags. Though the HTML Editor is powerful, web sites may be abused without a proper security control. Therefore, as of HP Service Manager 9.41, you can use the HTML Editor whitelist to define a list of allowed HTML elements.	
	For more information about the HTML Editor whitelist, see "Enable HTML Editor whitelist" on page 1.	
Enhanced query hash algorithm	Service Manager 9.41 provides an enhanced query hash algorithm, which ensures a higher level of system security when the Service Manager web client or Service Request Catalog (SRC) is handling URLs. By default, this functionality is disabled for backward compatibility.	
	Prerequisites	
	To use this functionality, your system must have the following configurations:	
	• Service Manager server, web client, and SRC version 9.41 or later	
	• Service Manager 9.41 or later applications, or	

QCCR1E1208 available fro	-	Ix (earlier than 9.41) applications with M940.unl applied. This unload file is
	there is no SRC ι	Service Manager 9.4x applications only. Inload for Service Manager 9.3x
upgrade ut applying th Manager se	ility or the applic e unload for this erver. Additionall	applications 9.41 (by running the ations patch manager) or after functionality, restart your Service y, after applying the unload, you need ation Record form (info.company.g).
Tailoring the S	System Inform	ation Record form
or 9.40 applicati	ons, after applyir need to tailor th	ervice Manager system running the 9.3 <i>x</i> ng the unload for your applications e System Information Record form. To do
1. Log in to the administrate	-	r Windows client as a system
2. Open the inf	o.company.g fori	mat in Forms Designer in Design mode.
	3. In the General tab, add a check box with the following settings in the Properties pane.	
Property	Setting	
Caption	Enable E	nhanced Query Hash
input	strong.qu	ueryhash.flag
	 In the General tab, add another check box with the following settings in the Properties pane. 	
Visible Con	dition	[strong.queryhash.flag]
Caption		Allow Legacy Query Hash
input		keep.old.queryhash.flag

Feature	Description		
	 6. Restart the Service Manager server. 7. Go to System Administration > Base System Configuration > Miscellaneous > System Information Record, and then click the General tab to verify the two check boxes are successfully added. 		
Demo data unload file	Service Manager 9.41 provides a demo data unload file (demodata.unl) for testing and demonstrating the 9.41 new features after you have upgraded to the 9.41 applications on a fresh installation environment. This demo data package is for Service Manager9.41 Codeless only. To import the data package, you must use the new Apply Demo Data wizard provided by Service Manager 9.41. For detailed instructions about how to access the Apply Demo Data wizard and load the demo data package, see <i>HP Service</i> <i>Manager Installation and Upgrade Documentation Center</i> .		
To-Do alerts	To-Do alerts are operator-specific notifications that appear in a floating window at the top of the screen immediately after an operator logs in to the system. The window appears only when there are pending alerts. The operator can view and acknowledge the To-Do alerts, and check the details of the records listed. The To-Do alerts feature must be enabled for individual operators by an administrator.		
User experience improvements (web client)	Service Manager 9.41 includes a number of user experience improvements to the web client. For more information, refer to the Service Manager 9.41 Release Notes.		
Inactivity timer default behavior change	The inactivity timer is a feature that administrators can configure to close user sessions that have been idle for a specified period of time. In Service Manager9.41, this feature is enabled by default, and the time-out value is set to 30 minutes.		
	For more information about the inactivity timer and how to configure it, see "Inactivity timer" on page 1.		

Parameters introduced or updated in Service Manager 9.41

This release introduces the following new parameter.

Parameter	Description
maxMessageNumber	This parameter defines the maximum number of messages displayed in the Messages And Alerts window.
generateIndexDDL	This command enables the Service Manager server to generate the DDL of indexes and constraints for your database and save the DDL to the following

Parameter	Description	
	file: <server directory="" installation="">/RUN/ddls/index.ddl.</server>	
mailBCC	Specifies a list of blind carbon copy (BCC) recipients to all emails.	

Additionally, the following previously hidden parameters are made public in this release.

Parameter	Description
debugjni	This parameter provides detailed debugging in the Java Native Interface implementation.
debugadhocsql	This parameter enables adhocsql debugging messages.
dbcachequery	This parameter creates a cache for a comma separated list of table names.
sqlnullclause	This parameter allows to use nulls first clause in SQL statements.
arraysizelimit	Defines the maximum number of entries in an array (for example, a drop-down box).
recordlistcount	Set the default number of records displayed in a record list.
ir_opt_path	This parameter defines the IR option file path for the morphological analyzer.

New JavaScript functions introduced in Service Manager 9.41

JavaScript function St	State	Description
JavaScript method: N XML.removeAttribute ()	New	This method removes an XML attribute from the current element. It requires that you use other XML get methods to navigate through an XML document.

New RAD functions introduced in Service Manager 9.41

RAD function	State	Description
clean.display.value	New	A RAD function that cleans up the internal display value cache associated with a file variable.
cursor.field.display.content	New	A RAD function that returns a string containing the display value of the field where the cursor was last

RAD function	State	Description
		positioned when the user performed an action such as clicking Fill or Find, or double-clicking on a QBE list.
cursor.field.display.content.set	New	A RAD function that sets the display value of the field where the cursor is currently positioned.
display.value.copy	New	A RAD function that copies the internal display value cache from one file variable to another.
get.display.value	New	This RAD function returns the display value of a field in a Service Manager file.
set.display.value	New	A RAD function that sets the display value for a specified field of a file variable
same	Updated	A RAD function that compares two values.
cleanup	Updated	A RAD function that frees the storage associated with a variable.
dbdict.helper("db.type")	New	A RAD utility function that helps retrieve the current RDBMS type.
dbdict.helper("field.type")	New	A RAD utility function that helps retrieve the field type property efficiently.
dbdict.helper("is.alias")	New	A RAD utility function that helps determine whether a field is an alias or not.
dbdict.helper("joinfile.names")	New	A RAD utility function that helps retrieve an array of names of the sub files that belong to a join file.
dbdict.helper("unique.key")	New	A RAD utility function that helps retrieve the first unique key or the primary key of a file efficiently.
policyread	Updated	A RAD function that reads the data policy from a datadict table.

Deprecations

As of version 9.41, the following functionality items are obsolete.

ltem	Notes
ir_save_interval	
ir_sharedlock	

What's New help topics for printing What's new in HP Service Manager 9.41?

ltem	Notes
ir_techload	
usemasterlink	
sourcecontroldirectory	
load_type_new	
cache_percent	

What's new in HP Service Manager 9.35?

HP Service Manager 9.35 contains the following new and enhanced features.

Feature	Description
Smart Analytics	Smart Analytics heralds the debut of the "Big Data" edition of Service Manager. Using an OEM-licensed version of HP IDOL, this powerful Service Manager-IDOL integration drives automation further into ITSM processes by mining unstructured data and by extracting information from different types of data.
	With the Smart Ticket and Hot Topic Analytics features, Smart Analytics enables Service Manager to become a more intelligent and efficient system. In addition to the functionalities provided in Service Manager Smart Analytics 9.34, Service Manager 9.41 Smart Analytics introduces the following enhancements:
	• You can install Image Servers in a distributed setup.
	Hot Topic Analytics is provided for the Service Desk, Incident Management, and Problem Management modules.
	• The Query Editor is added to Hot Topic Analytics so that you can build complex queries to refine the intelligent analysis performed by Hot Topic Analytics.
	 You have more tailoring choices (for which corresponding tailoring instructions are provided).
	For more information about using Smart Analytics, see the "Smart Analytics overview" section.
	Note: In this release, Hot Topic Analytics does not support the accessibility features.
Case Exchange	HP Service Manager Case Exchange is a solution that exchanges data between two Service Manager systems or between a Service Manager system and a Service Anywhere system. You can use the Case Exchange framework to transfer data between the two integrated systems and view or process the exchanged data in your native environment.
	Service Manager 9.41 includes all the functionality of the Case Exchange Content Pack for Service Manager 9.34. You can use the Case Exchange framework to set up the following integrations for the Incident Management module:

Feature	Description	
	The integration of two Service Manager systems	
	Note: The other Service Manager system must be 9.34 that has the Case Exchange Content Pack applied or later versions.	
	Service Manager 9.41 includes two integration templates: CaseExchangeSM_SM_Pull and CaseExchangeSM_SM_Push. These two templates allow you to set up the integration with the other Service Manager system by using the Pull or Push mechanism. One improvement made in this release is the ability to turn on the attachment transferring functionality for both Service Manager systems when the Push mechanism is used.	
	The integration of Service Manager and Service Anywhere	
	Service Manager 9.41 provides an integration template: CaseExchangeSM_SAW. This template allows you to set up the integration with a Service Anywhere system by using the Pull mechanism.	
	For more information about using the Case Exchange functionalities, see the "Case Exchange framework" section.	
JRE 8 support	As Oracle does not provide further updates for Java SE Runtime Environment (JRE) 7, HP Service Manager 9.41 starts supporting JRE 8. The JRE 8 support of different Service Manager 9.41 components is as follows:	
	 The Service Manager 9.41 server requires the upgrades of the embedded JRE of the Windows, Linux, HP-UX, and AIX. 	
	Note: Solaris 9 and Solaris 10 do not support JRE 8, so you need to manually install JRE 1.6.0_20 or its later updates for Solaris 9 and JRE 1.7.0_45 or its later updates for Solaris 10, and then make Server/RUN/jre a symbolic link that points to the JRE 6 or 7.	
	 The Service Manager 9.41 web client requires a 32-bit version of JRE 5 or greater; however, a 32-bit version of JRE 8 is recommended. 	
	 The Service Manager 9.35 Knowledge Management Search Engine requires JDK 6 (Update 21 or greater), JDK 7 (Update 67 or greater), or JDK 8. 	
	• The embedded JRE version in Service Manager 9.35 Windows client and its Configuration Utility is upgraded to JRE 8.	

Feature	Description
	See <i>HP Service Manager 9.35 Support Matrix</i> for more information. You can also get more information about Java SE Runtime Environment from the Oracle website at http://www.oracle.com.
Mobile Applications enhancements	Service Manager 9.35 Mobile Applications introduces the following new enhancements.
	Self-service user interface
	As of Service Manager 9.35, the Employee Self-service (ESS) functionality that was previously available through content packs is now incorporated directly into Service Manager. The Service Manager Mobile Applications self-service user view is intended for end-users as an entry point to Service Desk and provides a simplified Service Desk interface for users to perform the following tasks:
	Search the knowledge base
	Submit a self-service request
	Submit a smart request
	View opened and closed tickets
	• View, approve, or deny pending approval requests
	New mobile operating system support
	Service Manager 9.35 Mobile Applications supports iOS 8.x.
	New parameter
	The <i>maxRequestPerSecond</i> parameter in the HP Service ManagerMobile Applications configuration file (web.xml) defines the maximum number of requests allowed per second for one user session from the Service ManagerMobile Applications client. The default value for this parameter is 10. To allow unlimited requests, set the value to -1.
	New behavior change
	When searching the knowledge base in the Service ManagerMobile Applications self-service user view, the maximum length of the query keyword string is limited to 1024 characters. Any query string longer than 1024 characters will be truncated to 1024 characters.

Feature	Description
Service Request Catalog enhancements	Service Request Catalog 9.41 introduces the following new enhancements.
	Enable TLS/SSL connection
	To ensure secure data transmission, the default value of the src.security.secureLogin parameter is set as true to enable a TLS/SSL connection between the Service Request Catalog web application server and the web browser. If you do not want to enable the TLS/SSL connection, you can set the value of the parameter to false.
	Note: TLS/SSL creates an encrypted connection that allows private information to be transmitted without the risk of eavesdropping, data tampering, or message forgery. HP recommends enabling TLS/SSL communication between the Service Request Catalog (SRC) web application server and the web browser.
	Query fields auto-fill
	The Lookup fields in the dynamic user options and the Checkout Panel are automatically filled when only one result is returned.
	Improved ID affiliation
	Approvers can view the Request ID and its affiliated Cart Item IDs as necessary, so that it is easy for them to identify the cart items to be approved or denied.
	Advanced search for interactions
	Service Request Catalog supports advanced search for interactions.
	Administrators can customize the search fields in Service Manager, and then Service Request Catalog users can filter the search results based on the predefined search fields.
	Setting variables as the default values for custom fields
	You can use variables as the default values for fields in the Checkout Panel.

Feature	Description
	Multiple selection for user options
	Users now are able to select multiple values (for example, multiple CIs from the device table) in an Item Option field when they order a catalog item in Service Request Catalog.
	View attachments in Change records
	Change approvers can view the attachments in the Change approval records when they approve Change requests.
	Copy read-only fields
	You can now copy the read-only fields in Service Request Catalog pages, such as the Catalog Item Details, Request Details, Approval Details, and the Subscription Details pages.
	User option template
	Service Manager client users are able to save the existing User Selections in a catalog item as a template, and then apply the template to one single catalog item or to mass-apply it to selected catalog items.
Primary key feature enabled by default	In Service Manager 9.35, the primary key feature is enabled by default. Therefore, you no longer need to specify <i>primary_key_mode:1</i> in the sm.ini file to enable the primary key feature. Additionally, the primary_ key_mode server configuration parameter is now obsolete and is therefore removed. For example, when you add a key to a dbdict record, the primary key type is always available for selection.
	The rest of the primary key feature behaves almost the same way as in previous releases, except that Service Manager does not convert a unique key to a primary key unless you explicitly change the unique key to a primary key either in the Service Manager client or by running the system_addconstraint command.
	 Note: If you already have the <i>primary_key_mode</i> parameter specified in the server's sm.ini file, remove it. If you do not do so, an error message is generated in the server log, indicating that the command could not be recognized. The updated primary key feature requires Service Manager applications 9.32 or later.

Parameters introduced or updated in Service Manager 9.34 patches and in Service Manager 9.35

No parameters are introduced or updated in Service Manager 9.35.

The following table lists, in alphabetical order, parameters that are added in Service Manager 9.34 patch releases.

Parameter	State	Description
semaphoreWaitTime	New	This parameter defines the number of seconds the Service Manager server waits for a semaphore before generating a core dump. For more information, see "Parameter: semaphoreWaitTime".
sslProtocols	New	This parameter enables you to specify the protocols to use when Service Manager clients (Windows, web, or web services) are connecting to the server through Secure Socket Layer (SSL) or when the Service Manager server is connecting as a client to another application through SSL. For more information, see "Parameter: sslProtocols".

JavaScript global methods introduced in Service Manager 9.35

None.

New JavaScript functions introduced in Service Manager 9.35

None.

New RAD functions introduced in Service Manager 9.35

None.

What's new in HP Service Manager 9.40?

HP Service Manager 9.40 contains the following new and enhanced features.

Feature	Description
Smart Analytics	Built on Service Manager 9.40 and using an OEM-licensed version of HP IDOL, HP SM Smart Analytics heralds the debut of the "Big Data" edition of Service Manager.
	Smart Analytics enables your Service Manager to become a more intelligent and efficient system by extracting and understanding your content. Smart Analytics includes the following features in this release:
	Smart Ticket
	With Smart Ticket, you can quickly submit a Service Desk record by just entering a description or attaching a picture. SM Smart Analytics will intelligently populate other fields such as category or affected services by extracting and analyzing the content that you entered in the record.
	Hot Topic Analytics
	Hot Topic Analytics intelligently displays an interactive diagram indicating the hot topics among recent incidents so that you can easily discover incident trends and identify problem candidates.
	Note: In this release, Hot Topic Analytics does not support accessibility features.
	For more information, see "Smart Analytics" on page 1.
Service Manger Reports	The Service Manager Reports feature provides reports and dashboards to enable faster analysis and improved time to resolution. Service Manager reports organize data into various chart formats, and dashboards display one or more reports. In this way, Service Manager Reports can provide global information about critical activities or metrics.
	The Service Manager The Service Manager Reports feature provides light- weight reporting for active operational data. As such, the reports are designed to retrieve, represent, and visualize at most 100,000 active records out of millions. To define analytic reports against the entire dataset, we recommend that you use third party business intelligence tools.
	Important: Please note that this initial release of Service Manager Reports has minimal calculation capabilities. As such, we recommend that you continue to use Crystal Reports or other third party tools for

Feature	Description
	calculation-intensive reporting.
	Service Manager Reports schedules assist report managers or administrators to send reports or dashboard information to the relevant users or user groups at scheduled intervals. The report schedule specifies who is to be notified, when they are notified, and the notification method.
	Service Manager monitors the performance impact of reports and dashboards. If the time spent on generating a report exceeds the time threshold that the administrator sets, the report performance log collects the information and displays it on Report Running Status dashboard. Report Administrators can take the following measures to eliminate the impact of the slow reports:
	Enable the cache
	Enable database replication
	Enable indexing for the table query
	Disable the report
	After you upgrade to Service Manager 9.40, MySM is disabled.
	• MySM is not supported on Service Manager 9.40 applications +Service Manager 9.40 binaries. Customers can leverage the new Service Manager Reports feature to meet their requirements. Service Manager Reports can incorporate the charts and pages created in MySM by using the provided migration script.
	 MySM is supported on Service Manager 9.3x applications + Service Manager 9.40 binaries. Existing customers can continue to use MySM after upgrading to Service Manager 9.40 binaries only.
User experience	New System Navigator
improvements	Service Manager 9.40 provides a new System Navigator, which has the following enhancements:
	• You can easily switch the System Navigator between the following two modes:
	 Sidebar mode. In the sidebar mode, the System Navigator only displays the icons of the top-level menu items. When the mouse hovers over an icon, a pop-up menu immediately appears on the right side of this icon and displays the submenu.
	Note: The sidebar mode only works in Power User view (index.do) and Enterprise Self-Service view (ess.do), but does

Feature	Description
	not work in Accessible view (accessible.do) and Self-Service Accessible view (accessible_ess.do).
	 Accordion mode. The accordion mode looks and works similar as the traditional System Navigator.
	For more information about the two modes, see Switching the System Navigator.
	Note:
	When you deploy the web client of Service Manager 9.40 together with an earlier version of Service Manager application, you need to perform the following actions:
	 You must install the QCCR1E114612_SM940_SM930.unl unload file. Otherwise, the System Navigator does not work. For more information about how to install an unload file, refer to the following section in the Service Manager 9.40 Release Notes:
	Installation notes > Application Unload installation
	• We recommend that you set the <i>Enablesidebarmenu</i> parameter to FALSE to disable the icons and the sidebar mode of the System Navigator. Otherwise, the Service Manager web client uses the default icon for all menu items.
	• You can customize the icons of the first-level menu items. Service Manager provides the out-of-box icons so that you can easily specify them in the menu record. For a complete list of the out-of-box icons, see Service Manager menu icons.
	For more information about how to customize the menu icons, see Customize System Navigator menu icons.
	• Service Manager 9.40 enhances the branding capability for the new System Navigator. For more information, see Additional branding implementation options.
	Vertical layout
	Service Manager 9.40 provides a new vertical layout for the list pane and the detail pane. You can easily toggle between the horizontal and vertical layouts by using the switch.
	The vertical layout has the following advantages:

Feature	Description
	 The vertical layout can present more information in the detail pane and list more records in the list pane.
	• When you move the mouse over a record ID in the record list, a hover window can display the values of all the fields that are configured as record list columns.
	For more information about how to configure columns in the record list, see Create customized column views for record lists.
	By default, the vertical layout displays the first four columns in the list pane. You can easily show or hide columns. To do this, follow the instructions in the Show or hide columns section in Working with record lists.
	For more information about the vertical and horizontal layout, see Horizontal and vertical layouts.
	Color indicator
	The color indicator can apply a color mark-up on a field if the value of the field matches the pre-defined color indicator setting. The color indicator settings apply to record list, detail form, and reporting.
	Note:
	 In detail form, the color indicator setting only applies to the Combo and Comfill widgets.
	• Color indicator does not support Accessible view (accessible.do) and Self-Service Accessible view (accessible_ess.do).
	Service Manager 9.40 already provides out-of-box color indicator settings on several fields. For example, the Severity , Priority , and Impact fields in several tables. You can customize the out-of-box settings on these fields or create new color indicator settings for other fields. For more information about how to create or edit the color indicator setting, see Configuring color indicator .
	In the record list, you can quickly switch on or off the color indicator of a column. To do this, use the Color Indicate option in the drop-down menu of that column.
	Note: Color indicator requires the 9.40 version of Service Manager application.
	Enhanced Quick Jump

Feature	Description
	The following new capabilities are available in the Quick Jump component so that users can move even faster among sections in record details:
	• Expand All : Expand all first-level sections in record details.
	• Collapse All : Collapse all first-level sections in record details.
	• Back To Top: Go back to the top of record details.
	For more information, see Using Quick Jump in record details.
	Quick help
	Service Manager 9.40 provides a quick help that lists all the web client keyboard shortcuts. You can open this quick help by using one of the following methods:
	Click the Help button
	 If the web client does not have online help, the shortcut list directly opens.
	 If the web client has online help, a drop-down menu appears. Click Shortcut List from the drop-down menu.
	Use the keyboard shortcut: Alt+Ctrl+/
	Note: Service Manager 9.40 moves the keyboard shortcut configurations from the web.xml file to the shortcut.xml file. The shortcut.xml file is also in the WEB-INF folder.
	If you have customized keyboard shortcuts in a previous version of Service Manager and you upgrade to Service Manager 9.40, you must move the keyboard shortcut configurations from your old web.xml file into the shortcut.xml file. Otherwise, your customized keyboard shortcuts do not work. For more information about how to configure the shortcut.xml file, see Editing Web client keyboard shortcuts. If the configuration of the shortcut.xml file is incorrect, the shortcut list displays an error message.
Functionality merged from Process Designer Content Pack 9.30.3	 Process Designer Content Pack 9.30.3 introduced the following new features that are now merged into Service Manager Codeless: Implementation of the Process Designer framework and workflows
	for the Help Desk modules (Service Desk, Incident Management, and Problem Management)
	• Support for interaction between Process Designer-based Help Desk modules and other modules

Feature	Description
	 Support for phase-based Response SLOs (referred to as Service Level Targets (SLTs) in Service Manager 9.40) for Service Desk and for Incident Management
	 Introduction of Incident tasks to Help Desk and support for Service Level Agreements (SLAs) for Incident tasks
	A Process Designer security mechanism for Help Desk modules, including:
	\circ $$ New Process Designer security areas for Help Desk modules
	\circ $$ New Process Designer security roles for Help Desk modules
	 Help Desk security profiles are migrated to security roles and rights
	 Access rights for the navigation menu and for the Inbox are replaced by Process Designer security roles and rights
	The following usability improvements:
	\circ $$ Simplification of related records in Help Desk modules
	 The ability to switch between the Group style and the Tab style for a Notebook control in the web client
	 The addition of record numbers to record titles, including Interactions, Incidents, Incident tasks, Problems, and Problem tasks
	 A real-time counter in the Attachments and Related Records sections
	 Enhancements to the ability to trace phase transition in the workflow figure
	• The following Process Designer framework enhancements:
	\circ $$ Workflow-based rule sets to replace file level format control
	\circ $$ Workflow-based actions can be re-used across phases
	\circ $$ Workflow backend transitions enable cross-module interaction
	 A new tool that exports workflows into an unload file, so that you can copy workflows from one Process Designer-based system to another Process Designer-based system

Feature	Description
	 Phase orders to specify the sequences for Process target calculation
Process Designer-based modules	The following modules are fully reimplemented on Process Designer workflows.
	Request Fulfillment
	The Request Fulfillment application in Service Manager Codeless enables business staff to improve their productivity and the quality of business services and products. It can also help to reduce the cost of providing services and the effort involved in requesting and receiving access to services. Moreover, the use of the Request Fulfillment application can increase the control level of an organization's services and the number of fulfilled requests.
	Request Fulfillment includes the following key features:
	 The Request model, which defines the prerequisites, required authorizations, and sequenced or parallel standard tasks that are used to fulfill the service request
	A detailed and customizable product catalog
	Scheduling of service requests and tasks
	Automated request fulfillment
	Order and stock management
	 Interaction with other Service Manager applications, such as Service Catalog, Configuration Management, Service Desk, Incident Management, Change Management, and Service Level Management
	Integration with other products:
	 Providing a common web service interface so that other products are able to access service requests and tasks
	\circ Integration with Asset Manager for request fulfillment billing
	For the Request Fulfillment processes and best practices, see the corresponding sections in <i>Processes and Best Practices Guide</i> for Service Manager Codeless.

Feature	Description
	Service Desk
	The Service Desk application includes the following key features.
	Automatic updates of records
	Service Manager Codeless enhances the Service Desk by providing an auto-update feature between an interaction and a related incident, problem, change, or request. After the initial escalation of an interaction (where the status of the interaction updates the related link), the auto-update feature will update an interaction when certain status changes occur in the related record.
	In addition, when customer-visible activities in related records occur, these activities may also be reflected in the interaction record.
	For more information, see "Automatic updates of Service desk records" on page 1.
	New Categories
	You can now escalate from an interaction directly to a problem.
	A new "Compliment" type has been added, which follows the same workflow as complaints.
	Behavior change
	In this version of Service Manager, you may escalate an interaction only one time. Previous versions of Service Manager allowed you to escalate an interaction multiple times.
	Problem Management
	Problem Management includes the following enhancements.
	 Problems that are designated as "Major Problems" now make the review phase at the end of the workflow mandatory.
	 Problems now have a "Source"field, which allows you to specify the origin of the incident as an end user, event, an internal source, or elsewhere.
	• Known Errors are separated out from Problems and given their own identifier. For details, see "Open a known error" on page 1.
	• A new Cost tab was added.

Feature	Description
	• You can modify the categorization of the problem while using the closure wizard.
	• You can send a survey directly from the problem to a designated recipient. For more information, see "Service Manager Survey" on page 1.
	Incident Management
	Incident Management has a number of small enhancements:
	 Incidents can now be designated as parent or child of another incident, and includes supporting fields such as "Parent" to designate whether an incident is parent, and "Parent Link" to designate a child and to create the actual link to the parent incident.
	 Incidents now have a Source field, which allows you to specify the origin of the incident as an end user, event, an internal source, or elsewhere.
	Incidents can now link directly to known errors.
	 You can send a survey directly from the incident to a designated recipient. For more information, see "Service Manager Survey" on page 1.
	• A new Cost tab is added.
	• You can modify the categorization of the incident while using the closure wizard.
	 You can mark an incident as major incident. After you do this, Service Manager notifies the specified Incident Manager, and the Review Details field in the Major Incident Reviewsection is mandatory in the Review phase.
	Change Management
	The Change Management application in HP Service Manager 9.41 Codeless is reimplemented on Process Designer. The Process Designer based Change Management workflows (including Change and Change Tasks workflows) are easier to maintain than the legacy ones.
	ITIL aligned Change workflows

Feature	Description
	The new Change Management workflows (Change Proposal, Normal Change, Standard Change, and Emergency Change) in the out-of-box system are aligned with the latest version of ITIL:
	• Change Proposal: The Change Proposal process allows users to analyze, evaluate, and develop a business case for a change. A Change Proposal is used to describe and document a large, proposed change, usually when the proposed change has significant impact on the organization's IT infrastructure (for example, such as when an organization wants to move all their existing servers to a Linux-based environment). Such changes usually involve planning and evaluation, feasibility studies and the like.
	Note: To support change proposals, Knowledge Management has added two new document subtypes: Business Case and Project Information.
	• Normal Change: The Normal Change process defines the steps necessary to process changes that are categorized, prioritized, planned and follow all approvals before deployment. Normal Changes can be further categorized as Major, Significant, and Minor.
	• Standard Change: The Standard Change process defines the steps necessary to process a pre-authorized change that follows a standard procedure. For example, a password reset or the provision of standard equipment to a new employee.
	• Emergency Change: The Emergency Change process defines the steps necessary to process changes that are intended only to repair an IT service error that is negatively impacting the business at a high level of severity.
	Change Models and Change Categories
	Change Management can be configured such that new change records are created from either a Change Model or a Change Category.
	• A Change Model allows you to define a set of change settings, such as Category, Subcategory, Change Template, Service, Company, Department, Allowed Roles (security roles), and Tasks. When a change is created based on this change model, the change record is automatically populated with the predefined values in the change model.
	• A Change Category has a workflow associated with it and one or more subcategories defined for it. When a change is created based on this

Feature	Description
	change category, the change record is automatically populated with the predefined values in the change category. The out-of-box system provides the following change categories: Change Proposal, Standard Change, Normal Change, and Emergency Change.
	Task Workflows and Task Categories
	To work with the new change workflows, a number of Change Task categories are provided. Each of the task categories has a Process Designer based task workflow associated with it. Additionally, change tasks can be planned within change records by using Task Planner, or planned within change models.
	Other enhancements
	• A Cost tab is added to Change records to improve impact analysis and evaluation of business cost of downtime.
	 Remediation planning is expanded for failed changes to allow other options than "back out".
	 Change categorization is enhanced: Sub-category "Significant" is added for Normal changes. Significant changes are more larger in scope than minor changes but do not require the enhanced planning and review of a major change.
	 You can modify the categorization of the change while using the closure wizard.
	 A Review Required option is provided for Standard, Normal, and Emergency changes, which is used to disallow changes to bypass the Post Implementation Review phase. Once you turn on this flag, the change record cannot bypass the Post Implementation Review phase, and the system automatically sends a notification to the Change Coordinator and Change Manager once the change record enters the Post Implementation Review phase.
	• The previous "Backout" phase is renamed to the more general "Remediation" phase to more aptly reflect the different mitigation scenarios that may occur as a result of a unsuccessful change. This makes it more clear that some remediation plans may be to take an action other than backing out the change, such as taking no action, trying to implement the change again, raise a problem, etc
	 You can send a survey directly from the change to a designated recipient. For more information, see "Service Manager Survey" on page 1.

Feature	Description
	Service Level Management
	Service Level Management in Service Manager9.41 implements Process Designer for management of Service Level Agreements (SLAs), Underpinning Contracts (UCs) and Operational Level Agreements (OLAs). In addition, the following terminology changes are implemented: service level objectives are renamed to service level targets (in forms and display values only; the underlying table columns and code have not changed due to compatibility considerations), response targets are now process targets, and availability targets are now service targets.
	In addition, all three types of service agreements are now treated as equal, and the relationships between them clarified to show OLAs and UCs as supporting (underpinning) agreements to an SLA. Support for regular service reviews has been added through the addition of service review fields, and the addition of new Knowledge document subtypes for Service quality plans, and service improvement plans.
	Note: Other aspects of Service Level Management, such as the management and behavior of Service Level Targets (SLTs), Service Contracts, Outage handling, and Service Level Management data have not been modified.
	For more information on the new Service Level Management, see the entire Service Level Management documentation set in the Help Center.
	Knowledge Management
	Knowledge Management has a number of small enhancements in the release. Reference documents now have a new "Subtype" field to support a wider variety of documentation types. These types are described as follows:
	 Service Design Package (a document that provides the initial outline of a service agreement and denotes what agreements will be required, who the signatories shall be, and other process oriented details).
	 Service Quality Plan (SQP, a long term quality improvement plan for a service agreement)
	• Service Improvement Plan (SIP, a limited short term improvement plan for a service agreement)
	• Business case (provides a business justification for a change proposed

Feature	Description
	by a formal Change Proposal)
	 Project Information (provides information about the project proposed by a formal Change Proposal)
	Availability Plan
Enhanced PD framework	This release includes the following enhancements to the Process Designer framework.
	Workflow viewer and workflow editor
	enhancements
	The user experience of viewing, creating, and editing Process Designer workflows is enhanced with the following new features:
	• You can now copy and paste phases within a workflow.
	 You can now add descriptions to transitions between phases, as well as to phases and workflows.
	• The description field for transitions, phases, and workflows now supports formatting (such as italics and bold text) and hyperlinks.
	 You can now view a phase's description by hovering the mouse over the phase in the workflow viewer.
	 An icon is now displayed in phases in the workflow viewer and workflow editor if the phase has approvals.
	Note: In Service Manager Classic, Knowledge Management and Survey Integration workflows are Process Designer-based.
	Condition Editor enhancements
	The Condition Editor widget is completely redesigned with an easy-to-use graphical interface that includes the following new features:
	• You can now build conditions by using meaningful operators instead of characters. For example, the enhanced Condition Editor uses "Greater than" instead of ">" and "Not equals" instead of "!=."
	• You can drag and drop individual expressions within conditions. This

Feature	Description
	makes it very easy to modify complex conditions that have many nested expressions.
	• You can now copy and paste conditions between condition editors. For example, if you want to apply the same complex condition to an automatic transition in two different workflows, you can create the condition by using Condition Editor in one workflow, copy it, open Condition Editor in the second workflow, and then paste the condition.
	• Condition validation is now built into Condition Editor. You cannot save an invalid condition, and the specific elements in the condition that fail validation are highlighted in the graphical interface.
	Task Planner enhancements
	Task Planner is now available for Request Fulfillment as well as for Change Management, and can be used at both the record and model level. The Task Information section in change models, changes, request models, and requests now contains a graphic display of the tasks that are planned for that record. You can open Task Planner directly from this section by clicking Edit .
	You can now use Task Planner to configure input and output fields in tasks and to set the recommended maximum number of concurrent tasks.
	Task Planner is now itself customizable. You can add fields to Task Planner and configure the mapping between the statuses of tasks and the statuses that are displayed by Task Planner.
	New and enhanced rule types
	New rules
	• Popup Message Box rule : This rule enables you to create and configure popup message boxes that appear to end users.
	• Assignment rule : This rule enables you to automatically distribute records (such as tasks or records) to the groups and assignees who are most able to process them.
	• Run Action rule : This rule automatically runs actions (defined by rule sets and/or backend transitions) on records that have a specified relationship to the record that triggers the rule. For example, you can

Feature	Description			
	use this rule to change the workflow phase of related records under specific conditions.			
	• Run Scheduled Action rule : This rule automatically runs an action (defined by rule sets and/or backend transitions) on records after a specified length of time has passed. For example, you can use this rule to automatically close incident records that have been in a Resolved state for a certain number of days.			
	Enhanced rule			
	Start or Stop Clock rule : This rule enables you to start or stop an HP Service Manager clock to measure elapsed time. In this release, the rule is enhanced to enable you to set the timezone of the clock, schedule the clock, and include fields in the clock name when you set the clock name by using a JavaScript.			
	Note: Additionally, the execution order of rule sets and format control is updated so that rule sets are always executed before format control. Additionally, when a workflow transition occurs, the "update" format control is run instead of the "add" format control. These changes prevent an issue in which rule sets may run twice.			
	Improved development auditing			
	Changes to Process Designer elements, such as workflows, phases, or rules, are now logged in the devaudit table. This allows you to track the customizations that you make by using Process Designer, and to unload them from your development environment.			
Case Exchange	The out-of-box HP Service Manager 9.40 includes all the functionalities of the Case Exchange Content Pack for Service Manager 9.34. These functionalities enable the setup of the following Case Exchange integrations.			
	Note: These integrations are limited to the Incident Management module between the integrated systems.			
	The integration between two Service Manager systems			
	Note: The other Service Manager system must be 9.40 or 9.34 with Case Exchange Content Pack applied.			

Feature Description				
	The integration between Service Manager and Service Anywhere			
	For more information about how to create a Case Exchange integration, see "Case Exchange framework" on page 1.			
Entity relationship management tools	 Three entity relationship management tools were introduced. Relationship Manager: a tool that can automatically discover logical entity relationships between tables and fields in your HP Service Manager system by querying the erddef, link, and relatedObjectMap tables and then save the results in the relation table. For more information, see "Relation Manager" on page 1. Entity Relationship Diagram utility: a utility that presents entity relationships for selected files and fields in your database in dynamic diagrams (called Entity Relationship Diagrams or ERDs). For more 			
	 information, see "Entity Relation Diagram utility" on page 1. Note: This utility is intended to replace the legacy Entity Relationship Diagram (ERD) creation utility. The legacy ERD creation utility and its documentation are still accessible from the product user interface (Tailoring > Tailoring Tools > ERD Create Records) and the online help, and might be removed in a future release. Missing Reference Report utility: a utility that can generate a report for selected files to help you find out and solve potential data integrity 			
	problems (missing references). For more information, see "Missing Reference Report utility" on page 1.			
Mobile Applications enhancements	Service Manager 9.40 Mobile Applications introduces the following enhancements.			
	Self-service user interface			
	The employee self-service (ESS) functionality that was previously available through content packs is now incorporated directly into Service Manager. The Service Manager Mobile Applications self- service user view is intended for end-users as an entry point to Service Desk and provides a simplified Service Desk interface for users to perform the following tasks:			
	 Search the knowledge base 			
	 Submit a self-service request 			
	• Submit a smart request			

Feature	Description
	 View opened and closed tickets
	\circ $\:$ View, approve, or deny pending approval requests
	For more information on installing and using Service Manager Mobile Applications, see the <i>HP Service Manager Mobile Applications User</i> <i>Guide</i> .
	 New mobile operating system support
	Service Manager 9.40 Mobile Applications supports iOS 8.
Service Manager Survey	In this release, Service Manager additionally provides the Service Manager Survey tool, which enables you to implement email surveys in Service Manager independently without integration with a third party survey tool.
	The Service Manager Survey feature is based on the HTML Email solution (JavaMail), and enables users to manually send individual surveys directly from a record to selected users. Additionally, it enables the system to automatically send scheduled surveys to specified users through an out-of-box internal survey connector based on the survey integration framework.
	When users receive a survey link, they can directly click the link or open the link in a web browser, and then log in to Service Manager to complete the survey. They can also view open surveys that they have been invited to join and closed survey that they have completed in the Service Manager portal. In the out-of-box system, Service Manager surveys are designed to achieve the following goals:
	 Collect user satisfaction ratings for the following areas: the level of service provided, the speed of response that the user received, and the level of communication regarding the service.
	Collect additional comments from the user (if any)
	• Allow the user to select if a complaint or compliment needs to be registered. If the user selects to do so, the system automatically generates an interaction record (Complaint or Compliment category) with the information that the user provided, and sends an email to the user with information about the interaction record. The user can click the record link to view the record details and status.
	For more information, see "Service Manager Survey" on page 1.
Other enhancements	This release also includes the following enhancements.

Feature	Description			
	Service Request Catalog			
	enhancements			
	 Notification of updates for your requests 			
	To improve the overall communication between IT and end users, a new flag is added to the Your Requests list to inform the requesters about updates that are made to their requests by IT operators.			
	Once a "Visible to Customer" update is added to a request, a flag that contains the following message is displayed to the requester:			
	This record has new updates.			
	• Copy read-only fields			
	You can now copy read-only fields in SRC pages such as Catalog Item Details, Request Details, Approval Details, and Subscription Details.			
	For example, you can copy the request ID of an item on the Your Request Details View page.			
	SRC user interface improvement			
	The SRC user interface is updated.			
	 Approve requests and view request details 			
	Users can now approve or deny request fulfillment records on the Your Approvals Request page, and view their current approvals on the Request Approval Details page.			
	Enhanced integration with			
	UCMDB Browser			
	In this release, the UCMDB integration has been enhanced. Once you have enabled an integration to UCMDB and UCMDB Browser, a Primary CI History in UCMDB tab is added for each problem record whose Primary CI is synchronized from UCMDB. You can view the CI changes on that primary CI for root cause investigation.			
	The steps to enable an integration to UCMDB and UCMDB Browser are the same as in previous releases. For details, see "Enable an integration to HP Universal CMDB" on page 1.			

Feature	Description
	Support of Unicode data type for
	Microsoft SQL Server
	Prior to version 9.40, HP Service Manager used the VARCHAR, CHAR, and TEXT data types to store text strings in a Microsoft SQL Server database. Microsoft SQL Server relies on database collation to support a specific language. Although some languages share the same collation, most languages do not. As a result, Service Manager did not support multiple languages when running on a SQL Server database. Service Manager 9.40 is enhanced to support the Unicode data type on SQL Server. During a new installation of the Service Manager 9.40 server, when you run the server configuration utility, if you select the Use Unicode Data Type check box for SQL Server (see the following figure), Service Manager creates data with the Unicode data type when it loads the applications and demo data, except for the following system tables: dbdict, licenseinfo, lock, and lockshared.
	Note: This feature is available for new customers only. Existing customers that have upgraded to version 9.40 cannot use this feature.
	For more information, see "Microsoft SQL Server database Unicode support" on page 1.
	Encryption of client keystore
	passwords
	Service Manager supports encryption of keystore passwords in the Windows and web clients. For more information, see "Encryption of client keystore passwords" on page 1.
	Allowing only attachments with
	certain file extensions from the web client
	To prevent potentially dangerous attachment files from being submitted to Service Manager, the Service Manager Server provides support for blocking certain types of attachments submitted through the Windows and web clients, as well as through web services, based on a pre-defined

Feature	Description
	list of forbidden file extensions (a so-called "blacklist"). Only attachments whose file types are in this blacklist are blocked. For detailed information on this feature, see the following topics in the online help:
	 "Support for blocking attachments with certain file extensions" on page 1
	• "Customize the forbidden list of attachment file extensions" on page 1
	Beginning with this release, the web client provides additional protection using a so-called "whitelist" to control what types of attachments are allowed to be submitted to Service Manager. From the web client, you can submit only attachments whose file types are in this whitelist. In the out- of-box system, this whitelist includes the following file types, which are considered safe: bmp, jpg, jpeg, png, gif, txt, log, unl, and csv. This whitelist is defined in the web tier configuration file (web.xml). You can adjust the list at your own risk.
	For more information, see "Support for blocking attachments with certain file extensions" on page 1.
	Accessibility improvements
	In addition to the default accessibility functions of the web client, this release also includes accessibility support for the following components:
	Embedded Service Manager Calendar
	Service Manager Reports
	Process Designer Request fulfillment

Parameters introduced or updated in Service Manager 9.40

Service Manager 9.40 introduces or updates the following parameters.

Parameter	State	Description
disableKeyHelp	New	This parameter allows you to disable the contextual help.
		For more information, see Web parameter: disableKeyHelp.

Parameter	State	Description
preventDuplicatedAttachmentName	e New	This parameter controls whether to prevent an attachment that has the same file name with existing ones from being uploaded to Service Manager.
		For more information, see Web parameter: preventDuplicatedAttachmentName.
showHelp	Updated	This parameter no longer controls the visibility of the Help button, which is now always visible.
		When this parameter is set to true , two options are displayed if you click the Help button:
		• Online Help : allows users to access the help server that is defined in the web tier configuration file (web.xml).
		 Shortcut List: allows users to access a list of web client keyboard shortcuts.
		When this parameter is set to false , only a list of web client keyboard shortcuts is displayed if you click the Help button.
ir_asynchronous	Updated	The default value is changed from 0 to 1.
		Note: Synchronous IR mode could cause performance issues and is therefore not recommended.
requestviaproxy	New	Specifies if the Service Manager Windows client is allowed to connect to the server through a proxy.
semaphoreWaitTime	New	Defines the number of seconds the Service Manager server waits for a semaphore before generating a core dump.
keystorePassword	Updated	This parameter is removed from the web.xml file. You should configure it in a webtier.properties file that you create under < <i>Customize-Folder</i> >/config. For more information, see "Encryption of client keystore passwords" on page 1.
enableSidebarMenu	New	This parameter specifies if the System Navigator of the web client can use the sidebar mode and icons.

Parameter	State	Description
certExpireWarningDays	New	This parameter specifies the number of days before the user's certificate expires when Service Manager starts to issue a warning message at user login.
[oracle_replicate]	New	This parameter creates a section header in the initialization file for connection parameters to a replicated Oracle database
[sqlserver_replicate]	New	This parameter creates a section header in the initialization file for connection parameters to a replicated Microsoft SQL Server database
dashboard_export_path	New	This parameter specifies the path to save the exported report and dashboard files.
dashboardonreplicatedb	New	This parameter defines whether queries against a replicated database for dashboard reporting are enabled.
dashboardquerycache_enable	New	This parameter defines whether caching query results in the database is enabled or disabled.
dashboardquerycache_dbtime	New	This parameter defines the time threshold in milliseconds for queries against the database when a report is generated. If the time exceeds this threshold, Service Manager saves the query results to the reporting cache.
dashboardquerycache_expire	New	This parameter defines the expiration time in minutes of one database query in reporting cache.
clean	New	This parameter enables the Service Manager Reports functionality to exclude a message from email notifications about exported dashboards and reports.

New JavaScript functions introduced in Service Manager 9.40

JavaScript function	State	Description	
isfileexist	New	Determines whether a file exists or not.	
		For more information, see JavaScript function: isfileexist.	

New RAD functions introduced in Service Manager 9.40

RAD function	State	Description	
isfileexist	New	Determines whether a file exists or not.	
		For more information, see RAD function: isfileexist.	

Deprecations

As of version 9.40, the following functionality items are obsolete.

ltem	Notes
SCSMTP	You can use SCAuto Email instead to enable inbound email.
SCAuto Fax and Pager	You can use the Service Manager Email solution instead for notification purposes.
MySM	You can use Service Manager Reports instead.

What's new in HP Service Manager 9.34?

HP Service Manager 9.34 contains the following new and enhanced features.

Feature	Description		
User Experience improvements	Service Manager 9.34 includes the following user experience improvements in the web client to reach a higher level of readability, efficiency, and consistency:		
	• New look and feel		
	The new look and feel of the web client follows a clean and modern design that aligns with the HP brand. The new design refreshes almost all user interface (UI) elements, such as headers, toolbars, and icons.		
	• The new design increases the size of some UI elements (for example, widgets and the space between widgets) to improve readability.		
	 The new UI elements are clean and simple, and the newly introduced icons are more meaningful. 		
	\circ $\;$ The new design uses fewer background colors.		
	All these improvements help users to focus on the information, so users can find the information they want more easily.		
	Note: If you use Internet Explorer, we recommend that you use Internet Explorer 10 or a higher version for better experience and performance. Internet Explorer 8 has some known limitations, for example:		
	• The browser cannot automatically adjust the size of the login graphic when the size of the browser window changes.		
	• The browser does not support certain HTML styles. For example, round corners of a box and the shadow effect when an item is in focus.		
	User interface backward compatibility		
	Service Manager 9.34 provides the following capabilities for you to bring back some of the UI elements and styles of Service Manager 9.33:		
	• Bringing back the icons in toolbar and forms		

Feature	Description
	In the event that you prefer to retain the previous icons, you can download them from the live network: https://hpln.hp.com/node/6/otherfiles/?dir=20276
	To apply the icons, follow the instructions in the following online help topic:
	System Administration > Tailoring > Web tier > Branding the web client > Additional branding implementation options
	• Using the compact layout
	The compact layout can bring back the page layout that is used in Service Manager 9.33. In your existing tailored forms, there is a possibility that the increased size of some UI elements in the new look and feel may introduce certain display issues, for example, truncated text or overlapped UI elements. You can use the compact layout to work around these issues. For more information, refer to the following online help topic:
	System Administration > Tailoring > Web tier > Using the compact layout
	• Date picker
	The new date picker provides a more efficient way to select date and time. You no longer need to open a new window to select a date and time. The new date picker supports keyboard shortcuts. For more information, see Keyboard shortcuts for date picker.
	Auto complete
	The auto complete functionality in the Comfill widget displays matching values as you type. You can quickly select a value from the list, so you no longer need to jump back and forth several pages to select the value for the field.
	For more information about how to configure the auto complete feature, see Auto complete.
	• Message bar
	The new message bar floats over the page so that the content of the page no longer moves down. The background color of the message bar identifies the type of the messages.
	Message history box

Feature	Description		
	The new message history box is modeless, which means you can perform other tasks in Service Manager while leaving this box open. This feature is particularly helpful when you need to copy text from the message history box and paste the text into somewhere else in Service Manager. The new message history box no longer opens a new browser window,		
	and hence is quicker than the old message history box.		
	Easy branding		
	Service Manager 9.34 provides a graphic user interface that facilitates the branding, tailoring, and upgrading of the web client. Now you no longer need to clear the cache after branding, and the new branding settings can take effect immediately.		
	For more information, see Branding the web client.		
Case Exchange framework	HP Service Manager Case Exchange is a solution to exchange data between two Service Manager systems or between Service Manager and another product. The Case Exchange framework mainly facilitates the following operations:		
	Sending and receiving data		
	• Viewing and processing the exchanged data in the native environment		
	The Case Exchange framework enhances the existing Service Manager Integration Suite (SMIS), which provides an interface to enable the Case Exchange solution. Case Exchange takes advantage of SMIS and provides the following core features:		
	Note: For more information about these features, see the topics under "Case Exchange framework features" on page 1.		
	• Connector		
	Case Exchange is enabled by connectors, which can open, update, and close records in the system of another provider. Connectors can also perform the following tasks:		
	• Listen for events or updates related to record exchange.		
	 Take care of the physical communication to the system via REST- based Web Services in JSON format. 		
	 Manage appropriate authentication and identity credentials required by the connected system. 		

Feature	Description
	 Field mapping and value mapping
	Field mapping and value mapping determine how the record data is transformed into the internal or external normalized case format.
	Field mapping ensures that the data from one system is send to the correct field on the second system. To avoid interface failures the field names and the field name description should <i>not</i> contain any special characters.
	Value mapping ensures the data is correctly transformed according to the rules required in each system. The value mapping supports expressions and calculations to ensure the data is correctly manipulated prior to sending or updating records in the local database.
	Outbound trigger rules
	The outbound trigger rules determine which kind of record shall be sent to the external system. The Case Exchange framework includes a dedicated rule type in Rule Sets. This type of rules can trigger the Case Exchange request from Service Manager to the integrated systems.
	If Process Designer is implemented in the object of the exchanging record, you can invoke a Rule Set from workflows. However, if Process Designer is not implemented, you must invoke a Rule Set from the table trigger by using the following new API:
	lib.CaseExchange_RuleExecute.executeSingleRuleSet (record,oldrecord,RuleSetID)
	• Error handling
	In addition to the existing retry mechanism on the failed exchange request, the Case Exchange framework introduces this new feature to better handle errors. With this feature, SMIS can automatically submit a new Incident record for the failed exchange request.
	Audit and logging
	For administrators, the Case Exchange framework introduces the new SMIS task log feature to track all transactions of exchange requests. Administrators can access this log from SMIS. For users, the Case Exchange framework introduces the Case Exchange section in the Incident record detail. When a Case Exchange integration instance is active and a Case Exchange task has occurred to an Incident record, the Case Exchange section appears and contains the details of the Case Exchange information.

Feature	Description
	With these core features of the Case Exchange framework, you can set up the Case Exchange integration with an easy and flexible approach.
	SMIS enhancements
	To enable the Case Exchange framework, SMIS includes the following enhancements:
	 Integration templates for Case Exchange
	SMIS includes an out-of-box template for the Case Exchange integration: CaseExchangeDefaultTemplate . When you set up the integration, you can use and modify the out-of-box template as needed.
	Dynamic connector form
	Instead of the legacy table format, connector parameters are currently maintained within a dynamic form, which is customizable in the SMIS template.
	Configurable background scheduler
	To save system resources, multiple integration instances can share the same background scheduler. When you create an integration template, you can define a default shared scheduler for the instances that are based on this template. All instances that are based on this template can use the same shared scheduler. However, if you create an instance that specifies a different scheduler, SMIS creates a new scheduler accordingly.
	• Task log
	The SMIS task log keeps all transactions of exchange requests. An integration administrator or a user has access to the SMIS task log to view the transaction details. A log entry in the SMIS task log always links to a task in the SMIS task queue. Through the link, you can manually solve an unsuccessful exchange request when needed.
	• Field Mapping
	Field mapping has the following enhancements:
	 Field Mapping is currently configurable in the SMIS template. You can directly import the field mappings from the template when you create a SMIS instance.
	 You can specify an Alias when you define the field, and use the Alias in value mapping to represent the field.

Feature	Description
	 Field mapping introduces a new field type: variable, which can be used to define a variable field. For example, the Update field (activity log) for the Incident object.
	 When you use the when callback function in field mapping, you can define multiple entities with different conditions, and use placeholders to express a condition that is more complex than true and false. For more information about how to use placeholders, see Use placeholders.
	Value Mapping
	Value mapping has the following enhancements:
	 When you configure value mapping entries, you can set a condition to an entry. The condition can be true, false, or an expression that uses placeholder. For more information about how to set a condition for a value mapping entry, see Configure a condition.
	 To make the value mapping customization more flexible, SMIS introduces the pre script and post script. For more information, see Pre script and Post script.
Calendar Administration	As of version 9.34, Service Manager additionally provides a calendar (referred to as Service Manager Calendar) that is based on the Calendar widget. Service Manager Calendar displays time period records and associated business records in a graphic and intuitive user interface, and enables users in different locations and departments of your organization to perform the following tasks and optimize their task planning accordingly: • To easily see how their activities will be affected in a specific time range.
	 To easily see which business records are scheduled for or associated with a specific time range.
	 To directly view important details of time period records and associated records from tooltips.
	• To directly open records from the calendar to view their details.
	 To view time conflicts of object records from either conflict icon tooltips and shadow bars.
	For more information, see Calendar administration.
Time Period Management	You can use Time Period Management to manage time period definitions for your organization so that end users can see how their activities will be affected during different time periods. If integrated with another module in HP Service Manager, Time Period Management will enable you to directly

Feature	Description		
	view time periods from that module. For example, if integrated with Change Management, time period definitions will enable users to view time periods and changes in a Calendar widget and view time periods and changes in the context of a selected change.		
	For more information, see Time Period Management.		
Text Import Wizard enhancements	The Text Import Wizard is enhanced to better support importing of data in CSV (Comma Separated Values) format into Service Manager. For example, the wizard now can import master data (such as Roles, Categories) and business data (such as Contacts, Departments, Assignment Groups, Service Catalog Items, and Configuration Items).		
	The enhancements include:		
	• The order of columns in the source CSV file no longer has to match the exact order of the fields in the destination file (table) in Service Manager. You can specify a mapping between the source columns and the destination fields.		
	 The text import feature now can handle CSV files with a complex data structure such as array data. 		
	 You can now manipulate source data during import, by specifying JavaScript expressions for the import. 		
	For more information, see Import a character-delimited text file.		
Delta migration tool You can use this delta migration tool to transfer the data that is updated during a specified range of time ("delta data") from or Manager environment to another. Depending on your data range choose to manually export or import a single UNL file or to auto export or import multiple UNL files by running background sche One typical use case is that after an upgrade of your Service Ma applications, you use this tool to migrate delta production data upgraded environment.			
	For more information, see Delta migration tool.		
Service Request	User experience improvements to the request submission process		
Catalog (SRC) enhancements	All panels are expanded by default so that you do not need to click the Next button to complete a request. Therefore, you are not blocked by mandatory fields, and can view and edit any sections directly.		
	Additionally, all sections can be expanded or collapsed. You can click the Expand All and Collapse All buttons for all sections or click the Expand and Collapse arrow buttons for a single section to improve the readability for the long scrolling screen.		
	Change your password		

Feature	Description			
	You can now change your expired password during login to Service Request Catalog.			
Support of multiple Operations Manager i	The SMOMi integration template is enhanced to support more than one OMi server.			
(OMi) servers	For more information, see BSM Operations Manager i (OMi) integration setup.			
Survey integration enhancement	The Survey integration is enhanced by the addition of a new API-based survey connector that enables you to integrate Service Manager with the third-party Medallia survey tool.			
Improvement of the "Session mixed up"	This solution has been improved by optimizing the behavior in the following two power user scenarios:			
solution	 You log in through power mode first, and then click an email link in power mode as well. 			
	 You log in through power mode first, and then click an email link in self- service mode. 			
	In these scenarios, a new tab or window (depending on your browser's setting for opening external links) opens always in power mode without a warning, and the original working tab no longer expires.			
	For more information, see Logging on from the web client.			
To-Do queue behavior	The following behavior changes apply to the To-Do queue:			
changes	 When you open a view from the To-Do queue, all groups in the view are collapsed by default. 			
	 When you switch to a new view in the To-Do queue, all groups in the new view are collapsed. 			
	 If you have not manually expanded any group in a view, or if you have expanded a group without selecting a record, when you click the Refresh button, all groups in the view are collapsed. 			
	• If you have expanded one group and selected one record in the group, when you click the Refresh button, the previously selected record is still selected and the corresponding group is expanded no matter whether the group of the record has been changed or not.			

Parameters introduced or updated in Service Manager 9.33 patches and in Service Manager 9.34

Service Manager 9.34 introduces or updates the following parameters.

Parameter	State	Description
autoCompleteDelayTime	New	This parameter defines the delay time (in milliseconds) to trigger auto complete after the user stops typing characters.
		For more information, see "Web parameter: autoCompleteDelayTime" on page 1.
autoCompleteListSize	New	This parameter defines the maximum number of records that are fetched from the server side at one time and returned to an auto complete selection list. For more information, see "Web parameter: autoCompleteListSize" on page 1.
autoCompleteMinChars	New	This parameter indicates the minimum number of characters that is required to trigger the auto complete feature.
		For more information, see "Web parameter: autoCompleteMinChars" on page 1.
autoCompleteSkipCachingChar	New	This parameter is specified so that when the user input contains the specified character, Service Manager retrieves the query results from the backend rather than from the cache.
		For more information, see "Web parameters: autoCompleteSkipCachingChar" on page 1.
comfillAutoComplete	New	This parameter enables auto complete for comfill widgets globally.
		For more information, see "Web parameter: comfillAutoComplete" on page 1.
customize-folder	New	This parameter defines the directory on the web tier host to save web client rebranding configurations.
		For more information, see "Web parameter: customize-folder" on page 1.

Parameter	State	Description
enableRecordlistOddEvenRowStyle	New	This parameter determines if the odd and even rows in record lists have different background colors.
		For more information, see "Web parameter: enableRecordlistOddEvenRowStyle" on page 1.
gcthreshold	New	This parameter specifies the threshold at which an increase in native memory usage in Service Manager triggers JavaScript garbage collection.
		For more information, see "Parameter: gcthreshold" on page 1.
maxattachmentcount	New	This parameter specifies the maximum number of files that can be attached to an individual record.
		For more information, see Parameter: maxattachmentcount.
messageBarError messageBarInfo	New	These parameters indicate how different types of messages are displayed.
messageBarWarning		For more information, see Web parameter: message display properties.
restaccessviabrowser	New	This parameter determines if RESTful access to the Service Manager server through a web browser is allowed.
		For more information, see "Startup parameter: restaccessviabrowser" on page 1.
shared_memory	Updated	HP recommends setting this parameter to at least 128 MB. A warning has been added to the server log (sm.log) that is displayed when the parameter has a value less than 128 MB.
		For more information, see "Startup parameter: shared_memory" on page 1.
startDayOfWeek	New	This parameter defines the first day of the week of the Calendar widget.
		For more information, see Web parameter: startDayOfWeek.

The following table lists, in alphabetical order, parameters that are added or updated in Service Manager 9.33 patch releases.

Parameter	State	Description
viewcontexthelp	New	This parameter enables the web client to display the same context- sensitive help debug information in field help as the Windows client does.
		For more information, see "Web parameter: viewcontexthelp" on page 1.
attachmentsegmentsize	Updated	The default value has been changed from 5M to 500 KB.
		For more information, see "Parameter: attachmentsegmentsize" on page 1.
threadTerminateWait	New	This parameter defines the length of time (in seconds) the HP Service Manager server continues to handle a client request after the client session is closed (for example, the client session is manually disconnected or is timed out). When the specified time is reached, the server terminates the server thread that handles the client request.
		For more information, see "Parameter: threadTerminateWait" on page 1.

JavaScript global methods introduced or updated in Service Manager 9.33 patches and in Service Manager 9.34

JavaScript global method	State	Description
doHTTPRequest	Updated	This method has been updated to support four new arguments: response headers, binary request data, binary response data, and follow redirects.

JavaScript global method	State	Description
		For more information, see "JavaScript global method: doHTTPRequest" on page 1.

New JavaScript functions introduced in Service Manager 9.34

None.

New RAD functions introduced in Service Manager 9.34

None.

What's new in HP Service Manager 9.33?

HP Service Manager 9.33 contains the following new and enhanced features.

Feature	Description
Attachment handling	Service Manager 9.33 includes enhancements to the attachment handling functionality.
	You can now attach multiple files to records concurrently and download multiple attachments from records concurrently. In the event that a file fails to be uploaded, an error message is displayed below the file name, and the remaining files are uploaded as expected.
	Additionally, Service Manager 9.33 includes the following improvements to the attachment handling UI:
	• A progress bar is displayed during the file upload process.
	• The "Attachment" section displays when a file was attached and the login name of the user who attached the file. To accommodate this information, the width of the attachments grid is widened. Therefore, you may need to redesign the form if you do not want a horizontal scroll bar to appear.
	• An attachment count is added to the header of the "Attachment" section. This enables you to determine whether files are attached to a record without expanding the "Attachments" section.
	• Checkboxes are added beside file names in the attachment grid, to enable the multiple file download and removal functionality.
	Limitations and recommended versions
	• To avoid a potential issue that may occur when a large number of users attaches files concurrently, we recommend that you upgrade the JRE version of the web tier to 1.7 Update 45 or a later update.
	 If you are using a IBM Web Application Server (WAS)-based application server, we recommend that you upgrade to version 8.0.0.7. In earlier versions of WAS, you cannot download attached files that have non- Roman characters in the file name.
	• You can only upload multiple files if your browser supports the HTML5 File API (this includes, Mozilla Firefox, Google Chrome, and Windows Internet Explorer 10). Otherwise, you can only upload single files.
	When you download multiple attachments concurrently, Service

Feature	Description
	 Manager 9.33 packages the files in a compressed (zipped) folder. Some third-party unzipping tools may not correctly handle file names that contain non-Roman characters. In this situation, the name of the unzipped file may change unexpectedly. We recommend that you use WinRAR to unzip the compressed folder. In Internet Explorer, if you want to trigger the Add file button by using the keyboard instead of the mouse, you must press the spacebar instead of Enter. Additionally, you must press Tab two times to move the focus away from the Add file button. Be aware that if Kerberos or TSO is enabled, Internet Explorer 10 behaves as Internet Explorer 8 or 9. Therefore, the following attachment handling functionality is unavailable: Progress bar during file upload Multiple file selection Size validation before file upload
Case-insensitive Oracle solution	Resolves the performance issue when customers use an Oracle case- insensitive database. Executes all statements within Service Manager using UPPER clauses in WHERE condition, GROUP BY clauses and ORDER BY clauses. This solution eliminates the need to use case-insensitive Oracle which can slow down system performance. For details, see Parameter: sqlupper and Parameter: system_createupperindex.
Magnify Table icon	This feature enables users to magnify Array fields or table widgets in detail forms through a resizable pop-up window, by clicking the Magnify Table icon. This enables users to view the entire list in the array or table without scrolling down. You can disable this feature by setting the enableTableMagnify parameter to false in the web tier configuration file (web.xml).
Auto refresh of grouped views	When users create, update or delete a record, grouped views (such as an Incident view) are automatically refreshed. The Auto-Refresh feature is supported only in list/detail mode, which means you need to set viewrecordlist:1 in the sm.ini file.
Support of S/MIME signatures in outbound emails	This feature enables you to configure Service Manager to secure outbound emails with an S/MIME signature. The recipients can verify the signature on their mail system (for example, Microsoft Outlook), to make sure that the email messages are truly originated from Service Manager without being intercepted in transit. For details, see Append an S/MIME digital signature to outbound emails

Feature	Description	
	and Emailout parameters in the sm.ini file.	
Scripts utilities	Service Manager 9.33 includes two new scripts:	
	 smfsdel.bat, which provides a mechanism to securely delete files from the file system on which you have installed Service Manager. 	
	 smfchecksum.bat, which provides a mechanism to verify the Service Manager binaries. 	
	These two scripts were created to meet the Federal Service for Technical and Export Control (FSTEC) certification as per the government regulations of Russia. These two scripts are packaged together with Service Manager. Most customers will have no reason to run these scripts but you can run them freely as you like.	
	For details, see Scripts for FSTEC Certification on Service Manager.	
Service Request Catalog	Knowledge article feedback	
	You can now add feedback to a knowledge article from within Service Request Catalog. This feedback is reflected in the Service Manager Knowledge Management process.	
	Knowledge article usage	
	Service Request Catalog now stores the search history and KM usage history in Service Manager.	
	Login names are stored	
	Service Request Catalog now stores your login name.	
	Additional contact information	
	You can now see additional contact information, such as the first name, last name, and email address of the contact. You can configure the additional contact information by modifying the applicationContext.properties file. For more information about customizing Service Request Catalog, see the "Add additional contact information" section in the <i>Service Request Catalog Customization Guide</i> .	
	Comments on service requests	
	You can now post comments on open, pending, or denied service requests by clicking Comment & History button.	
	Google Chrome support	
	Service Request Catalog now supports Google Chrome.	
	Tablet support	

Feature	Description	
	Service Request Catalog now supports tablet devices, such as Apple iPad and Google Android tablets. This release merges the Service Request Catalog content pack (9.32.cp1). Because of this, the content pack's method to customize Service Request Catalog is now also present in this current version. Administrator's have the option of choosing the original method of customization, which works only for browsers in a desktop, or the new method, which works for both desktop and tablets. For more information about customizing Service Request Catalog, see the "Appendix D" in the <i>Service Request Catalog Customization Guide</i> .	
	Additional Information on encryption algorithm	
	The encryption tool used during the installation of Service Catalog was modified slightly to provide better explanations of the encryption process and also better documentation of the available encryption algorithms. For more information, see the encryption section of the <i>Service Request</i> <i>Catalog Interactive Installation Guide</i> .	
	Support for the Service Manager software load balancer	
	Service Request Catalog now supports the Service Manager software load balancer. For more information, see the <i>Service Request Catalog 9.33 Customization Guide</i> .	
Version control for tailoring	As of version 9.33, Service Manager can integrate with Apache Subversion (SVN) to provide a version control solution for your customized applications.	
	Before you can tailor the Service Manager applications by using SVN, a system administrator must export the application records from Service Manager to XML files and store them on an SVN server as a shared repository. By using an SVN client, you can check out the latest version of the data files from the SVN repository and then import those files to your own development database in your development environment. When you modify the application code in your development environment, your modifications are automatically synchronized to your local XML files. You can then commit your code changes back to the SVN repository. In this way, SVN retains a clear history of any changes made to a specific application.	
	For more information, see "Implementing version control for your tailoring" on page 1.	

Parameters introduced or updated in Service Manager 9.32 patches and in Service Manager 9.33

Service Manager 9.33 introduces or updates the following parameters.

Parameter	State	Description
system_addconstraint	Updated	This parameter adds a Not Null constraint to the first unique key or converts the unique key to a primary key for the specified database tables, depending on usage. Note: Previously, running this command without specifying any target tables would update all tables in the system. As of version 9.33, running this command will do nothing if you do not specify target tables.
utallocmode	New	Enables the HP Service Manager server to log the memory allocation details for each server thread.
memusagereportgranularity	New	Specifies the memory granularity (in megabytes) when the Service Manager server reports detailed memory usage of a single server thread.
ldapserver	Updated	The character that separates attributes in the <i>ldapserver</i> parameter is changed from a comma (",") to a percentage symbol ("%"). The parameter uses the following syntax: <hostname>%<port>%<base directory=""/>%<certificate file="" path=""></certificate></port></hostname>
maxattachuploadsize	New	This parameter specifies the maximum size limit for individual attachments in a record.
maxtotalattachuploadsize	New	This parameter specifies the maximum total size of all the attachments in a record.
sqlupper	New	Enables the Service Manager server to convert new tables in an Oracle database to use UPPER indexes and to implement a case-insensitive search behavior in Service Manager.
system_createupperindex	New	Enables the Service Manager server to convert specified tables in an Oracle database to use UPPER indexes.
maxpagesize	New	This parameter defines the maximum number of records that the Windows client requests from the server when displaying a record list.
sqllimit	Updated	The default value has been changed from 30 to 5 (seconds).

Parameter	State	Description
cache_locks	New	Defines the number of locks the Service Manager server allocates to the cache table.
enableTableMagnify	New	Enables the Magnify Table feature.

The following table lists, in alphabetical order, parameters that are added or updated in Service Manager 9.32 patch releases.

Parameter	Description	
allowunsupporteddbversion	Note: Introduced since Service Manager 9.32 patch 1.	
	This parameter specifies whether the unsupported Oracle DB versions are allowed or not when Service Manager connects to the DB server. After Service Manager is connected to Oracle DB and prints out the "Connection to dbtype" message, Service Manager checks the Oracle server and client versions. If the DB version is unsupported and the parameter allowunsupporteddbversion is configured to 0, Service Manager will disconnect the DB server.	
ldapsslallownocert	Note: Introduced since Service Manager 9.32 patch 1.	
	When this parameter is enabled, the Service Manager RTE does not check a CA's root certification. In this situation, you do not need to set a root certificate for the CA that issued the LDAP server's certificate on the SM server in order to enable LDAP over SSL in SM.	
maxmemoryperthread	Note: Introduced since Service Manager 9.32 patch 1.	
	This parameter specifies the maximum memory allowed for a session (in MB). After the limit is reached, the session is terminated. By default, this parameter is disabled (set to 0), which means there is no memory limit for each session and therefore each session can use the maximum memory available to the server's operating system.	

New JavaScript global methods introduced in Service Manager 9.32 patches and in Service Manager 9.33

None.

New JavaScript functions introduced in Service Manager 9.33

None.

New RAD functions introduced in Service Manager 9.33

RAD function	Description
rtecall ("resetnotebook")	A RAD function that adds an XML attribute "resetnotebook=true" to the "execute" response of the current RAD thread. The Service Manager client will set the active page of a notebook to its first page when this XML attribute is present.
us.js.call	A RAD routine that can invoke any JavaScript function in the ScriptLibrary. This routine enables you to run a JavaScript function without connecting to the Service Manager server through a client.

Deprecations

As of this release, the following functionality items are deprecated.

Item Name	Туре	Notes
appOnloadFirst		
AppServerEncoding		
copyStylesheets		These previously-supported
essuser	Web parameter (in the web xml file)	parameters in the web.xml file no longer work in the latest
hideTreelcons		versions of Service Manager. This release of Service
isBackChannelUsed		Manager no longer includes
isBottomTrayUsed		these parameters in the web.xml file or in the
isBreadCrumbTrayUsed		documentation.
isButtonTrayUsed		
isFullScreenLogin		

Item Name	Туре	Notes
isKeepAliveEnabled		
isMessageTrayUsed		
isSaveNavPathSkipped		
isTabTrayUsed		
keyBookmark		
keySyncTree		
lazyloadNavTree		
logoutJspExtension		
printDateFormat		
printOptions		
refreshInterval		
showAddBookmark		
showDetailCollapse		
showFrameworkReset		
showListCollapse		
showLogoutLink		
showMessages		
showNavCollapse		
showPrint		
showReloadDetailButton		
showSyncTree		
srcDetail		
srcImages		
srcList		
srcListDetail		
srcMessages		
srcNavigation		
strAppName		
timeoutReminder		

What's new in HP Service Manager 9.32?

Service Manager 9.32 contains the following new and enhanced features:

Feature	Description
Mobility Client	This version of the Mobility client (also referred to as the "Mobile Applications client" in the Service Manager documentation) offers the following features:
	Broad Smartphone Support
	The Mobility client adds support for iOS, Android, and BlackBerry mobile operating systems, with a modern flat-style UI.
	Additional Language Support
	This version of the Mobility client supports all languages that the Service Manager server supports, except for two right-to-left display languages, Arabic and Hebrew. The Mobility client directly retrieves the list of login languages from the SM server, without the need to configure supported languages.
	 Increased Load Capacity
	The Mobility client now supports up to 1000 concurrent users.
	 Support of More Approval Types
	This version of the Mobility client supports approvals of the Service Desk and Change Management modules.
	Robust Tailoring Capability
	This version of the Mobility client provides a variety of tailoring options, which allow you to customize views, forms, action bar options, and the prefix for a record type that is used for quick search. In addition, the Mobile Applications now supports 15 form controls.
	Quick Search
	This version of the Mobility client adds the search functionality. Users now can immediately locate a record by entering its record ID (including the ID prefix) in a search box.
	 Support of SSL, TSO, and LW-SSO

Feature	Description			
	Administrators now can set up SSL, TSO, and LW-SSO to provide different ways of authentication between the client and the Service Manager server.			
	For more information, see the Service Manager 9.32 Mobile Applications User Guide.			
Service Request Catalog	This version of SRC provides the following new features:			
	Rebranding			
	SRC is now re-branded to match the version of Service Manager with which SRC is released. This version is now numbered the same as the Service Manager version with which it is released, 9.32.			
	Recurring Costs			
	Recurring Costs are now clearly identified in the costs area when you select an item.			
	Dynamic user options			
	Administrators can now configure items in the Service Catalog in Service Manager to present options and fields dynamically to users.			
	User Interface Customization			
	In this version, Service Request Catalog extends its customizability features by allowing administrators to tailor virtually every label in Service Request Catalog. In addition, administrators can customize the default SRC checkout panels.			
	 Additional Language Support 			
	This version of Service Request Catalog adds Hebrew to the list of translated languages in which SRC is deployed. In addition, Right- to-Left support was fixed so that Right-to-Left languages like Hebrew and Arabic behave as expected. Also, an organization can now translate the SRC UI to any language because of the extended customizability of the user interface.			
	Enhanced Look-up Fields			
	In this version of Service Request Catalog, when you make a request and select a value from a look-up field, you can select the data from a multi-column list (a QBE list in Service Manager) that displays all information for that record.			

Feature	Description			
	• Upgrade Tool			
	This version of Service Request Catalog introduces a new upgrade tool. The Upgrade Tool allows you to automatically migrate your customizations from your deployed SRC 1.4 .war to SRC 9.32.			
	 Support for IPv6, Common Access Cards (CAC), and Federal Information Processing Standards (FIPS) 			
	Together with Service Manager 9.32, Service Request Catalog offers support for IPv6, Common Access Cards (CAC), and Federal Information Processing Standards (FIPS). For more information on these features, see the Service Manager documentation in addition to the Service Request Catalog documentation.			
	For more information, see the following documents:			
	• Service Request Catalog 9.32 Interactive Installation Guide			
	• Service Request Catalog 9.32 Customization Guide			
RESTful API Framework	Service Manager now supports a RESTful API framework, which supports lightweight queries and operations on Service Manager data through a single Uniform Resource Identifier (URI).			
	By using the RESTful API Framework, you can also create an application that can perform actions, including intrinsic operations such as CRUD (Create, Read, Update and Delete) and extrinsic operations such as SM specific actions (Close, Resolve, and so on), on Service Manager objects.			
	For more information, see the Service Manager 9.32 Web Services Guide.			
Support of F5 Hardware Loa &u	pported Scenarios			
Balancers	As of version 9.32, Service Manager (SM) provides full support for F5 hardware load balancers (F5LBs). The following is a list of supported scenarios:			
	 Web server (s) + Web application servers <-> F5 LB <-> SM application servers 			
	• Browsers <-> F5 LB <-> Web server(s) + Web application servers			
	 Browsers <-> F5 LB <-> Web application servers (not recommended if requires TSO/SSO) 			
	• Web Services clients <-> F5 LB <-> SM application servers			

Feature	Description				
	Note: A web server refers to Apache or IIS, a web application server refers to Tomcat, WebSphere, JBoss, or WebLogic, and an SM application server refers to a server hosting the SM RTE, which is comprised primarily of SM servlets.				
Supported Configurations					
	See Common F5 hardware load balancer deployments for details.				
	For more information, see Hardware load balancers.				
Cross-Table Join Query Improvements	Service Manager 9.32 uses a new mechanism to execute queries across tables. This new mechanism greatly improves the query performance and also reduces data duplication to ensure data integrity.				
	For more information, see Cross-table join query improvements.				
Support of Primary Keys and Not Null Constraints	Service Manager 9.32 supports primary keys and "Not Null" constraints on the unique keys.				
	For more information, see the following documents:				
	Service Manager 9.32 help: Working with primary keys				
	Service Manager 9.32 Release Notes				
IPv6/IPv4 Dual Network Support	As of version 9.32, Service Manager supports IPv4/IPv6 as a dual stack network. This addresses the needs of being able to run Service Manager infrastructure in an organization where both IPv6 and IPv4 are enabled in parallel.				
	Most Service Manager components support IPv6 from Service Manager 9.32, except for the following legacy features which still support only IPv4:				
	SCAuto SDK				
	ODBC Driver for Crystal Reports				
	For more information about supported IPv6 address formats and required IPv6 configuration for the Service Manager server, clients (Windows, web, SRC, and Mobility), integrations (KM search engine, LDAP, and SMTP), see IPv6 overview.				
Common Access Card (CAC) Sign-On	Starting with version 9.32, the Service Manager web client supports Common Access Card (CAC) sign-on.				
	Note:				

Feature	Description		
	 Once enabled, CAC sign-on is enforced for all web client users. Standard login using a username and password is no longer possible. The Windows client does not support CAC sign-on. CAC sign-on requires two-way SSL between the SM server and all clients (Windows, web, Mobility, SRC, and web service integrations), and between the web server or web application server and user's browser. 		
	For more information, see the following help topics:		
	Common Access Card (CAC) sign-on		
	Requirements for CAC sign-on		
	Example: enabling CAC sign-on		
FIPS 140-2 Compliance	FIPS (Federal Information Processing Standards) are a set of standards that describe document processing, encryption algorithms and other information technology standards. As of version 9.32, Service Manager is FIPS 140-2 (level 1) compliant. By default, Service Manager runs in non-FIPS mode, and uses the same data encryption algorithm (64-bit DES) as in previous versions.		
	For information on how to enable FIPS mode in Service Manager, SRC, and the Mobility client, see the following documents:		
	Service Manager 9.32 help:		
	• FIPS mode		
	• Configure FIPS mode in Service Manager		
	• Service Request Catalog 9.32 Customization Guide		
	• Service Manager 9.32 Mobile Applications User Guide		
HTML Email Solution	This solution is intended for system administrators who manage Service Manager notifications or email setup, and for engineers who send HTML emails to notify users. The solution provides an out-of- box set of email notification definitions and HTML templates that supports most common notification scenarios in three Service Manager applications: Service Desk, Change Management, and Incident Management.		
	You can use these notification definitions and HTML templates as a basis for customizing your notifications. You can also create your own		

Feature	Description		
	notifications and templates for other Service Manager applications.		
	For more information, see HTML Email.		
Survey Integration	The Survey Integration enables you to integrate your Service Manager installation with third-party survey solutions. The integration provides you with two integration methods: an API-based connector that uploads data directly to the survey solution (enabling you to manage the survey directly through Service Manager) and a URL-based connector that sends survey request emails containing a survey-specific URL to intended survey-takers.		
	For more information, see Survey Integration.		
Service Manager Doctor (SM Doctor)	As of version 9.32, the Service Manager server provides an embedded troubleshooting tool, SM Doctor. Once your server has upgraded to version 9.32, you can find the smdoctor folder directly under the server installation directory (<sm server="">). This folder contains all files required for running this tool.</sm>		
	For more information, see HP Service Manager Doctor.		
Enhanced Inactivity Timer Mechanism	This release has enhanced the inactivity timer mechanism so that administrators can set up an inactivity timer for a specific operator; this enhancement also improves performance by eliminating the use of the inactive.startup background process.		
	For more information, see the following documents:		
	Service Manager 9.32 help: Inactivity timer		
	Service Manager_9.32 Release Notes		
Updated Web Tier Directory Structure	In this release, the directory structure of the Web tier has been modified to reflect the current build number of the Web tier. With this revised implementation, users will no longer need to clear their browser cache if they do not use the MySM module (which does not use the new version numbering system).		
	Additionally, the default cache time (maximum age value in the application-context.xml file) has been changed from 8 hours (28800 seconds) to 6 months (15552000 seconds) to better utilize browser cache.		
	For more information, see whitepaper <i>Updates to the Service Manager Web Tier Directory Structure</i> shipped with this release.		

Parameters introduced or updated in Service Manager 9.31 patches and 9.32

Service Manager 9.32 has introduced (or updated) the following parameters.

Parameter	State	Description
agstackl	Updated	This parameter defines the length of the stack the HP Service Manager server allocates to run RAD applications.
		Note: The default has been changed from 400 to 600.
antiCSRFEnabled	New	This parameter enables Cross-Site Request Forgery (CSRF) prevention for the web client.
CAClogin	New	Enabling this parameter causes the Web client to present a Common Access Card (CAC) certificate as authentication information and use SSL connections to the Web tier.
cacsignon	New	This parameter defines whether trusted clients can log on to the Service Manager server with a Common Access Card (CAC), without entering log-on information. Enable this parameter to allow trusted clients to bypass the Service Manager log-on screen and directly log in with a valid certificate stored in a CAC.
changeencrkey	New	This parameter changes the database encryption key by updating all encrypted fields. The value of this parameter must be either 8 characters long (in non-FIPS mode) or 32 characters long (in FIPS mode) . It must consist of alphanumeric characters.
debugrest	New	This parameter enables the HP Service Manager server to write detailed log trace for RESTful web services diagnostics. by default, this feature is disabled.
dao_sessiontimeout	New	This parameter specifies the seconds HP Service Manager server to wait before terminating RESTful threads. Unless the client sends subsequent requests within the timeout, the HP Service Manager server will recycle the session for re-use and re-allocate it on demand.
dao_threadsperprocess	Updated	This parameter specifies the maximum number of threads allowed to run concurrently in the process for a RESTful Web Service application.

Parameter	State	Description
		Note: The default has been changed from 5 to 10.
disableloginautocomplete	Updated	This parameter allows administrators to enable password auto-complete for the SM web client login page.
		Note: The default has been changed from false to true.
disableJumpAddress	New	This parameter controls if the Quick Jump component displays in a record detail form (for example, the Change Detail form). The Quick Jump component enables you to navigate to a group section quickly.
enableExitConfirmMessage	New	If this parameter is enabled (set to "true"), when the user clicks the Close ("x") button of the SM web client page or manually refreshes the entire web client page, a confirmation message displays that indicates the user might have unsaved data and asks the user to confirm whether to stay on the current page or leave the page.
encryptionkey	Updated	This parameter defines the encryption key for encrypting fields in the database.
		Note: This parameter has been updated to support encryption keys that are either 8 characters long (in non-FIPS mode) or 32 characters long (in FIPS mode).
enableListFrameStateRetain	New	This parameter enables the list detail page to retain the expand-collapse state of the List Pane when the list detail page refreshes. If you set this parameter to false, the List Pane is always in expanded state once the list detail page refreshes.
external_lb	New	Must be set to "1" in the sm.ini file when the Service Manager server uses an external hardware load balancer (default:0).
externalLB	New	Must be set to "1" in the web tier's web.xml file when the Service Manager server uses an external hardware load balancer (default: false)
fipsmode	New	This parameter determines if the Service Manager server runs in FIPS 140-2 compliant mode ("FIPS mode").
ir_sql_limit	Updated	This parameter determines the maximum number of records to be fetched from the RDBMS in a combined IR

Parameter	State	Description
		and SQL query.
		Note: In this release, support of value "O" has been added: ir_sql_limit:0 means there is no limit.
JCEProviderClassName	New	This parameter specifies the class name of a FIPS- certified third-party Java Cryptography Extension (JCE) provider (for example, RSA BSAFE) that you plug in when configuring FIPS mode in the web client.
JCEProviderName	New	This parameter specifies the name of a FIPS-certified third-party Java Cryptography Extension (JCE) provider (for example, RSA BSAFE) that you plug in when configuring FIPS mode in the web client.
primary_key_mode	New	This parameter specifies whether Service Manager is in primary key mode or not.
showNavIcon	New	If this parameter is set to true, each System Navigator menu item will display an icon that indicates the type of menu item. If the parameter is set to false or not present, the navigator menu items do not display icons.
system_addconstraint	New	This parameter can only be used from an OS command line. It adds a Not Null constraint to the first unique key or converts the unique key to a primary key for the specified database tables, depending on usage.
tracememerror	New	This parameter specifies whether to print memory trace information in the sm.log file and generate coredump when the memory is handled incorrectly.
upgradeencralg	New	This parameter upgrades the database encryption algorithm from DES to AES by updating all encrypted fields with a new 256-bit key.
usedmemcompmode	New	This parameter determines the method for calculating memory usage.

The following table lists, in alphabetical order, parameters that have been added or updated in SM9.31 patch releases.

Parameter	Description	
acceptsharedcert	Note: Introduced since SM9.31 patch 2.	
	This parameter defines how the HP Service Manager server handles	

Parameter	Description
	signed SSL certificates from incoming client requests in a Trusted Sign-On configuration.
	When the parameter is enabled (acceptsharedcert:1), the Service Manager server allows Trusted Sign-On connections using a so-called "shared certificate."
emailout	Note: Updated since SM931 patch 2.
	Prior to SM9.32p2, there are N+1 "EMAILOUT" threads in System Status and the logged-in users are counted as N+1; as of SM9.32p2, there is only one "EMAILOUT" thread and the logged-in users are counted as 1.
KMSearchEngineTimeout	Note: Introduced since SM9.31 patch 2.
	This parameter defines a timeout value in seconds for all Knowledge Management search server hosts (including indexing hosts, search hosts, and load balancer hosts).
	This parameter is used to prevent overloaded KM search servers from causing Service Manager to hang.
maxloginspercluster	Note: Introduced since SM9.31 patch 2.
	In a horizontal scaling implementation, Max Logins for operators is enforced at the cluster level. This parameter allows administrators to turn off this feature.
onewayssl4ws	Note: Introduced since SM9.31 patch 2.
	This parameter provides the option to use one-way/anonymous SSL for web services clients in a Trusted Sign-On (TSO) or Common Access Card (CAC) configuration. When enabled, this parameter allows web services clients to access SM SOAP interfaces without a certificate.

New JavaScript global methods introduced in Service Manager 9.31 patches and 9.32

Name	Descriptionn
SCFile.setBinary()	This method saves binary data to a field in a Service Manager file object.

Name	Descriptionn	
	Note: Introduced since SM9.31 patch 1.	

New JavaScript functions introduced in Service Manager 9.32

Name	Descriptionn
skipApproval	A JavaScript function that allows you to prevent an item's approval status from being reset to "pending."
removeTemplate restoreTemplate	A JavaScript function that removes / restores the relationship between operator records and their associated template.
	Note: These functions are not documented in the Programing Guide. For more information about these functions, see the Service Manager 9.32 Release Notes.

New RAD functions introduced in Service Manager 9.32

RAD function	Description
datecmp	A RAD function that translates the 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.
	Note: Introduced since SM9.31 patch 1.
filequeryex	A RAD function that returns the query parameters of a file variable.
isExpressionValid	A RAD function that determines if a RAD expression is a valid expression of a specified data type.
rtecall ("getprimary")	A RAD function that returns an array containing the primary key values for a current record. The keys can later be used to retrieve the record using the rtecall ("getrecord") function. This function can only be used against tables that have a primary key. Otherwise, error code 2 is returned.
rtecall	A RAD function that returns an array containing the Unique key values for a

RAD function	Description
("getunique")	current record. The keys can later be used to retrieve the record using the rtecall ("getrecord") function.
sysinfo.get ("PKMode")	A RAD function that returns the primary key mode for the system.
updatestatus	A RAD function that returns the result of the last update operation on a Service Manager file.

Deprecations

Item Name	Туре	Notes
unmaskDeferMillis	Web parameter (in the web.xml file)	In previous releases, this parameter defers the unmasking of a browser window after an unmask request is issued. It relates to how much time the client browser needs to finish rendering after a page is loaded.
inactive.startup	Background process (in System Status)	In previous releases, you need to start this process to run the Inactivity Timer. As of SM version 9.32, the Inactivity Timer no longer needs it.

As of this release, the following functionality items are deprecated:

What's new in HP Service Manager 9.31?

Service Manager 9.31 contains the following new and enhanced features:

Feature	Description
Support of Service Request Catalog (SRC) version 1.4	Global Catalog Search This version of SRC enables extended search capabilities from the Service Catalog items, Support Catalog items, and Knowledge Management documents from Service Manager 9.31.
	Service Subscriptions
	SRC now allows users to quickly view and manage their subscribed services through the introduction of a new Subscription page and Dashboard widget.
	Approvals
	SRC now supports Approvals and Approval delegation. Upon logging into SRC, users will see a new Approvals widget that displays the number of approvals in their queue.
	Default Layout Improvements
	Popular Requests and Popular Bundles widgets now appear on the Service tab, or can be hidden. Service Status and Support Status are merged into a single Request Status widget. Display the most important Service Managerinformation using the smallest amount of screen real estate
	Custom field editing
	SRC allows users to edit custom fields when submitting a Service Request or updating a Support Request. In addition, support for a date/time picker has been added for custom fields and user selections.
	Launcher to support third party applications
	SRC also adds an area, called the Launcher, which allows you to add links to launch third party applications. Examples of third party links might include such things as a video for training, the launching of a chat support application, or a link to a search Web site. The administrator can customize the Launcher fields, buttons and mapping through simple manipulation of the manifest.xml file.
	Customized user interface
	This version of SRC allows for greater control of the look and feel of the catalog. In this version, you can customize the visibility and

Feature	Description
	arrangement of the widgets, brand the SRC by adding your organizations logo, modify the color scheme, and adjust text sizes and fonts.
	For more information, seeHP Service Request Catalog for Service Manager.
Service Manager Collaboration (SM Collaboration)	By integrating with HP Enterprise Collaboration (EC), HP Service Manager Collaboration (SM Collaboration) enables SM and non-SM users to collaborate in real time (or anytime) in the context of an Incident, Service Desk Interaction, Change, or Change Task. Non-SM users can participate in the conversation using the EC stand-alone web interface or using Microsoft Office Communicator/Lync. SM Collaboration suggests participants to be invited to the conversation based on the context of a record, such as contact, configuration item (CI), service, or assignment group. You can also search users by email address or user name, and invite them to the conversation. The conversation is stored as a permanent part of the corresponding record. For more information, see HP Enterprise Collaboration (EC).
Improvements of the RecordList functionality for the Web client	The RecordList functionality has been improved to achieve better performance and usability in the Web client. In addition to performance improvement, improvements have been made in the following areas for list-only and list-detail pages: grouping, page navigation, drilldown, and keyboard/mouse operations.
	For more information, see RecordList improvements (Web client) and Working with record lists.
Enhancement of Mobile Applications and Smartphone support	 Localization support. Four additional languages are supported: French, German, Japanese, and Spanish. Support of custom date formats for date/time fields in Change Management views. Ability to reassign Incident and Change records.
Downtime Management for the CLIP solution	The integration between Service Manager (SM) and BSM supports synchronization of scheduled downtimes from SM RFCs and tasks to BSM in order to suppress events. For more information, see SM-BSM downtime synchronization.
Enhanced Lock Management	This version of Service Manager introduces a new lock management system. This new locking mechanism consists of a record entry for each locked resource in a database table. The new Lock table (for exclusive locks) and LockShare table (for shared locks) have been created to house these records.

Feature	Description For more information, see Lock management.	
UCMDB integration enhancement	The integration has been enhanced in the following areas:Support of UCMDB 10.0	
	Accessing the UCMDB Browser from the Service Manager UI	
	 Populating UCMDB with CI/CI Relationship data from Service Manager 	
	 Improved error handling for data synchronization from UCMDB to Service Manager 	
	 Performance tuning for data synchronization from UCMDB to Service Manager 	
	Additional DEM Rule options for duplicated logical names	
	Ability to automatically load managed fields in DEM rules	
	Support for enabling outage spreading	
	New options for synchronizing CI deletions from UCMDB to Service Manager	
	For more information, see HP Universal CMDB Integration Guide.	
Enhanced Web client session management	As of version 9.31, only one live Web client is allowed in the same browser session. This is to prevent data loss that could occur when users open multiple Web client instances in the same browser session.	
	For more information, see Accessing the Web client.	
Support of SQL Server 2012,	For more information, see the Support Matrix.	
and VMWare vSphere 5	For information about vMotion recommendations and known issues, see whitepaper <i>Service Manager 9.31 vMotion Test Report</i> , which is available from the HP Software Support web site at: www.hp.com/go/hpsoftwaresupport	
Support of LW-SSO v2.5	The Service Manager server and Web tier have upgraded to LW-SSO v2.5 since version 9.30p5. The Web tier's LW-SSO configuration file contains a new security parameter: secureHTTPCookie. This parameter must be specified in combination with secureLogin in the Web tier configuration file (web.xml).	
	For more information, see Configure LW-SSO in the server and Configure LW-SSO in the Web tier.	

Parameters introduced or updated in Service Manager 9.30 patches and 9.31

Service Manager 9.41 has introduced (or updated) the following parameters.

Parameter	Description	
	Specifies the virtual directory name where the Service Manager help is installed on a web server. It excludes the web server's document root directory path.	
Web parameter: AppServerEncoding	Specifies the encoding of the web application server (Tomcat, WebSphere, etc).	
Parameter: debugdiagnostics	Allows administrators to disable the Diagnostic Service when encountering performance issues.	
	By default, the Diagnostic Service is disabled. Before running the reportdiagnostics command, administrators must specify debugdiagnostics:1 to enable the Diagnostic Service.	
Parameter: localizedecimalpoint	Enables users to use a pre-configured decimal symbol (for example, the comma) when completing numeric fields.	
Parameter: disableWSEss	This parameter controls whether or not a non-ESS user consumes a floating or named license when logging in to Service Manager through Service Request Catalog.	
Web parameter: unmaskDeferMillis Web parameter: autoCloseMaskDelay Web parameter: lockWaitTimeout Web parameter: socketReadTimeout <u>Web parameter:</u> maskMessageDelay	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 introduced to facilitate control over the mask behavior. For more instructions on correct configuration of these parameters, see the <i>Mask and Timeout</i> <i>Parameters in HP Service Manager</i> white paper at the HP Software support Web site: www.hp.com/go/hpsoftwaresupport	
Startup parameter: ldapnosizelimitmsg	Disables the LDAP server's "Size limit exceeded" message so that it will not display to and therefore not disturb end users.	

Parameter	Description	
Startup parameter: cache_ slots	The default value has been changed from 2003 (which is too slow) to 9973.	
Parameter: reportLBInterval	Automatically logs information about available ports and threads in horizontal and vertical scaling servlet implementations periodically (every n seconds).	
	Note : The reportLBInterval JVM option is no longer used.	
New parameter for emailout: mailThreadCount	A new emailout parameter that specifies the number of threads to send emails. This parameter has been introduced to improve the	
See Startup parameter: emailout.	system performance when sending email notifications.	
Startup parameter: maxgroupsperview	Defines the maximum number of groups that can be used in a view. This limit is useful if a user runs a poorly created view that causes servlets to consume too much CPU and memory and terminates the servlets.	
Web parameter: disableLoginAutoComplete	Controls password auto-complete for the web client login page.	
Startup parameter: enableAnubisMonitor Startup parameter: anubisPollInterval	These parameters eliminate the need for the anubis process. You are recommended to use the new functionality instead of the old method to automatically restart stopped background processes. To do so, before enabling enableAnubisMonitor, disable the anubis RAD applications by deleting the anubis agent record and anubis schedule record that you created when using the old method.	
Startup parameter: maxhttpreqresponse	Defines the maximum response size (in bytes) for HTTP requests.	
Parameter: grouptimeout	Defines the timeout value (in milliseconds) for Jgroups remote procedure calls.	
Web parameter: maxGroupSize	The range of valid values has been changed to "25 -100".	
Web parameter: maxGroupCacheSize	Defines the maximum number of records that can be cached in user's web browser when users navigate through the groups in a record list.	
Web parameter: recordListArrayDisplayStyle	Defines how array field values are displayed in record lists.	
Web parameter: recordListArrayMaxChars	Defines the maximum field length of array fields in record lists. Effective only when recordListArrayDisplayStyle is set to 1.	
Database parameter: sqlstats	This parameter allows statistics from an Oracle database to log in the sm.log file.	

Parameter	Description	
System Information Parameter: usedmemcompmode	This parameter determines the calculation method for how memory usage is calculated.	
Web parameter: acceptBrowserLang	This parameter specifies if the browser's language preference is used for trusted sign-on login when the "lang" parameter is not set in the web client login URL.	
Parameter: fetchnotnullsystemp	This parameter specifies whether or not to fully enable the template merge functionality for tables.	
Startup parameters: JavaScript access	These parameters specify access restrictions from JavaScript code for file access and command execution.	

New JavaScript global methods introduced in Service Manager 9.30 patches and 9.31

Name	Descriptionn
uncompressFile	This method expands a .zip file into a specified location. For more information,see HP Service Manager Programming Guide.
setAppMessage	This method defines the message returned in the "message" attribute in a SOAP response. For more information, see HP Service Manager Programming Guide.

New JavaScript function introduced in Service Manager 9.31

Name	Descriptionn	
getBinary	This function retrieves the binary representation of a field.	
	For more information, see HP Service Manager Programming Guide.	

What's new in HP Service Manager 9.30?

Service Manager 9.30 contains several new and enhanced features:

Feature	Description
Mobile applications and Smartphone support	You can perform key tasks in Incident Management and Change Management on your Smartphone. Mobile applications on HP Service Manager are designed to maximize the following user tasks:
	Field Support Engineer, Incident Analyst
	 View and update an incident record's resolution status, description, and more
	Check for newly assigned or high-priority records
	 Reassign the record to a different assignment group, for example, from hardware support to application support
	Change Approver
	View or update changes requests
	Administrator
	 Provide users access to the Mobile applications on their Smartphone by enabling the following: cookies, Java, Javascript, pop-ups
	Create a Web Services connection
	Configure the Web Services information settings
	Deploy Mobile applications
	Map Service Manager fields using Web Services
	Configure Mobile applications
	For more information, see HP Service Manager Mobile Applications.
Service Request Catalog (SRC) enables users to perform self-service tasks	A new self-service requesting and approval interface has been added to the web client. The new interface makes the following user tasks easy and intuitive:
easily	End user
	• Submit support requests to IT for catalog and non-catalog items

Feature	Description	
	View details of your requests	
	View request status	
	Edit and update open requests	
	Close requests for which support is no longer required	
	Approver	
	 Appoint others to approve requests on your behalf. You can delegate approvals to any user with the same level of privileges. 	
	• Specify the effective time period of the approval delegation.	
	Remove or reassign approvals	
	Administrator	
	• Add a custom field to a catalog form. Fields can be radio buttons, checkboxes, single or multiline editable text fields, or lookup fields.	
	Remove a field from catalog form.	
	 Pull data from the fields to support backend fulfillment, approval, workflow, or automation purposes. 	
	 Add triggers for the validation of business rules (set from Service Manager) in catalog forms. 	
	 Easier tailoring of the catalog forms by using wizard-driven customizations that leverage localization mechanisms. 	
	• Form customizations are preserved during product upgrades.	
	• Enhanced Single Sign-On access for self-service (SRC):	
	 Users logged in to the enterprise SSO system are not required to log in to get to the Service Catalog. 	
	\circ $$ Provides seamless authentication between other HP products.	
	\circ $$ Leverages the HP standard security authentication framework.	
	For more information, see HP Service Request Catalog for Service Manager	
Search engine and search form for Knowledge Management	The new Knowledge Management search engine and search form bring you additional capabilities and speed in your searches. The following search tasks are enhanced:	

Feature	Description	
	End user	
	Enhanced search results with improved search relevancy	
	 Knowledge Management Search form redesigned to align with familiar consumer search engines; reduced complexity and improved efficiency 	
	Enhanced language support	
	Administrator	
	 Set up and maintain the search engine using a highly scalable search engine designed for enterprise requirements 	
	 Index multiple file types including Microsoft Office 2007 and 2010 files, PDF, HTML/XML, compression, image, and audio 	
	 Flexible architecture Multiple index servers can be used to provide scalability and improve performance 	
	 Supports high availability by allowing search server to be decoupled from index servers; by allowing search servers to be replicated to multiple servers, and load balanced as needed 	
	 Provides fail-safe capabilities such as the creation of a second index server or search server for failover and the ability to switch to a backup server immediately without having to restart or log out and log back in to the Service Manager server 	
Process Designer for Knowledge Management	The Process Designer provides an easy-to-use set of tools for designing and visualizing your workflows and business rules. The graphical Workflow Designer enables you to design a KM workflow and to visualize the status of a workflow. You can also model advanced processes. The Process Designer also includes a Business Rules Editor that enables you to create and edit business rules and associate rules with workflow states and transitions to easily build a process. The following user tasks are enhanced:	
	Business Analyst	
	 Design a workflow graphically by using the Workflow Designer visualize the status of the workflow 	
	• Model advanced processes	
	 Create and edit business rules by using the Business Rules Editor Associate rules with workflow states and transitions to easily build a process 	

Feature	Description	
	• Provide a role-based security model	
Upgrade process and documentation enhancements	New Upgrade utilities and enhanced documentation make the upgrade process for all four supported upgrade paths easier to implement. Upgrade enhancements include the following:	
	 New interactive documentation that enables you to customize the upgrade instructions for your specific upgrade path, environment, and upgrade scenario 	
	Reduced number of manual steps required for an upgrade	
Custom components in	The following enhancements to MySM are now available:	
MySM and the ability to export them to Change	Ability to create and share custom MySM components	
Management	Availability of MySM to Change Management	
HP Change Configuration and Release Management	HP Change Configuration and Release Management (CCRM) new features in 9.30:	
(CCRM) new features	 Leverage RC to suggest optimal time window for RFC: RFC scheduling utilizes the Change Planner to suggest the next available "ideal" timeframe for particular type of RFC 	
	 Automate change implementations: Integrate Operations Orchestration (00) flows to initiate change actions automatically 	
	 Multi-tenant SM + RC integration: Enhanced support for RC integration in Multi-Tenant environment 	
	 Additional Single Sign On support PPM integration 	
	SM supports LW-SSO for inbound web services requests	
	• SM supports LW-SSO for inbound UI requests (PPM calling SM)	
	 RC integration SM supports LW-SSO for inbound UI requests 	
	 Symphony adapter and use of Trusted Sign On is no longer required 	
	For more information, see HP Change Configuration and Release Management (CCRM).	
Web tier uses SSL encryption between the web browser and web	The Service Manager Web tier uses SSL encryption between the web browser and web application server by default. You must provide a valid web application server certificate to use the following SSL features:	

Feature	Description		
application server	Encrypt all communication with the web application server		
	• Protect against complex SSL-rel	ated attacks	
	 Authenticate that the web application server is a valid host Note: HP recommends using the default SSL settings when connectin to a web application server in a production environment, but you can disable this mode for demonstration purposes by setting the secureLogin parameter to false in the web configuration file (web.xml). 		
Emailout enhancement	JavaMail has replaced SCMail for outbound emails.		
	For more information, see Emailout	parameters in the sm.ini file.	
Application forms modernized and simplified	Application forms in Configuration Management, Knowledge Management, and Request Management are enhanced to improve usability:		
	Collapsible sections and sub-sections enable enhanced browser- based interaction		
	• Field and label alignment has been improved		
Localization Enhancements	New localizations have been made to the Service Manager components.		
	Component	Language	
	Applications, Windows Client, Web Client, SRC, Online Help	Brazilian Portuguese, English, French, German, Italian, Japanese, Korean, Russian, Simplified Chinese, Spanish	
	Applications, Windows Client, Web Client, SRC	Dutch, Czech, Hungarian, Polish	
	Applications, Web Client, Windows Client, Online Help	Arabic	

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