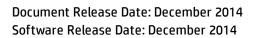
HP Service Manager

Software Version: 9.40 For the supported Windows[®] and Linux[®] operating systems

What's New help topics for printing





Legal Notices

Warranty

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

The information contained herein is subject to change without notice.

Restricted Rights Legend

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

Copyright Notice

© 1994-2014 Hewlett-Packard Development Company, L.P.

Trademark Notices

Adobe® is a trademark of Adobe Systems Incorporated.

Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.

Oracle and Java are registered trademarks of Oracle and/or its affiliates.

UNIX® is a registered trademark of The Open Group.

Linux[®] is the registered trademark of Linus Torvalds in the U.S. and other countries.

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

Documentation Updates

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

- Software Version number, which indicates the software version.
- Document Release Date, which changes each time the document is updated.
- Software Release Date, which indicates the release date of this version of the software.

To check for recent updates or to verify that you are using the most recent edition of a document, go to: https://softwaresupport.hp.com

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

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

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

Support

Visit the HP Software Support Online website at: https://softwaresupport.hp.com

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

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

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

Most of the support areas require that you register as an HP Passport user and sign in. Many also require a support contract. To register for an HP Passport ID, go to:

http://h20229.www2.hp.com/passport-registration.html

To find more information about access levels, go to:

http://h20230.www2.hp.com/new_access_levels.jsp

HP Software Solutions Now accesses the HPSW Solution and Integration Portal website. This site enables you to explore HP Product Solutions to meet your business needs, includes a full list of Integrations between HP Products, as well as a listing of ITIL Processes. The URL for this website is http://h20230.www2.hp.com/sc/solutions/index.jsp

About this PDF Version of Online Help

This document is a PDF version of the online help. This PDF file is provided so you can easily print multiple topics from the help information or read the online help in PDF format. Because this content was originally created to be viewed as online help in a web browser, some topics may not be formatted properly. Some interactive topics may not be present in this PDF version. Those topics can be successfully printed from within the online help.

Contents

What's new in HP Service Manager 9.40?	5
Deprecations	34
What's new in HP Service Manager 9.34?	35
What's new in HP Service Manager 9.33?	50
Deprecations	58
What's new in HP Service Manager 9.32?	61
Deprecations	75
What's new in HP Service Manager 9.31?	77
What's new in HP Service Manager 9.30?	85
Send Documentation Feedback	91

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.

Feature	Description
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 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.

Feature	Description
	 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.

Feature	Description
User experience improvements	New System Navigator
	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 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 Enablesidebarmenu 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.

Feature	Description
	• 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 easily switch.
	The vertical layout has the following advantages:
	• 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.

Feature	Description
	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
	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

Feature	Description
	 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.

Feature	Description
Feature Functionality merged from Process Designer Content Pack 9.30.3	 Description 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 Process Designer-based modules, including Change Management, Request Fulfillment, Knowledge Management, and Service Level Management Support for phase-based Process Service Level Targets (SLTs) 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:
	 New Process Designer security areas for Help Desk modules
	 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:
	 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

Feature	Description
	 Enhancements to the ability to trace phase transition in the workflow figure
	• The following Process Designer framework enhancements:
	 Workflow-based rule sets to replace file level format control
	 Workflow-based actions can be re-used across phases
	 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
	 Phase orders to specify the sequences for Process target calculation

Feature	Description
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
	 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.

Feature	Description
	• 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.
	 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.

Feature	Description
	Change Management
	The Change Management application in HP Service Manager 9.40 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
	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.

Feature	Description
	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, Company, 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 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.

Feature	Description
	• 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.
	Service Level Management
	Service Level Management in Service Manager9.40 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.

Feature	Description
	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 by a formal Change Proposal)
	 Project Information (provides information about the project proposed by a formal Change Proposal)
	Availability Plan

Feature	Description
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 makes it very easy to modify complex conditions that have many nested expressions.

Feature	Description
	 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

Feature	Description
	relationship to the record that triggers the rule. For example, you can 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.

Feature	Description
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.
	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.

Feature	Description
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 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.

Feature	Description
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
	 View opened and closed tickets
	 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.

Feature	Description
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.

Feature	Description
Other enhancements	This release also includes the following enhancements.
	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

Feature	Description	
	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.	
	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	

Feature	Description
	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 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

Feature	Description	
	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.
preventDuplicatedAttachmentName	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.

Parameter	State	Description
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.
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.

Parameter	State	Description
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. 		
	 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 		
	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		

Feature	Description			
	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.

Feature	Description		
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. 		
	 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		

Feature	Description			
	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.			
	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			

udes an out-of-box template for the Case Exchange on: CaseExchangeDefaultTemplate . When you set up the on, you can use and modify the out-of-box template as needed.
connector form
f the legacy table format, connector parameters are currently ed within a dynamic form, which is customizable in the SMIS
able background scheduler
ystem resources, multiple integration instances can share the kground scheduler. When you create an integration template, efine a default shared scheduler for the instances that are this template. All instances that are based on this template he same shared scheduler. However, if you create an instance ifies a different scheduler, SMIS creates a new scheduler gly.
task log keeps all transactions of exchange requests. An on administrator or a user has access to the SMIS task log to transaction details. A log entry in the SMIS task log always links in the SMIS task queue. Through the link, you can manually unsuccessful exchange request when needed.
oping
ping has the following enhancements:
Apping is currently configurable in the SMIS template. You can ly import the field mappings from the template when you e a SMIS instance.
in specify an Alias when you define the field, and use the Alias ie mapping to represent the field.
napping introduces a new field type: variable, which can be o define a variable field. For example, the Update field (activity r the Incident object.
you use the when callback function in field mapping, you can

Feature	Description		
	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.		

Feature	Description		
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 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 added or updated during a specified range of time ("delta data") from one Service Manager environment to another. Depending on your data range, you can choose to manually export or import a single UNL file or to automatically export or import multiple UNL files by running background schedule tasks. One typical use case is that after an upgrade of your Service Manager applications, you use this tool to migrate delta production data to the upgraded environment. For more information, see Delta migration tool.		

Feature	Description		
Service Request Catalog (SRC) enhancements	User experience improvements to the request submission process		
	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		
	You can now change your expired password during login to Service Request Catalog.		
Support of multiple Operations Manager i (OMi) servers	The SMOMi integration template is enhanced to support more than one OMi server.		
	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.		

Feature	Description		
To-Do queue behavior changes	 The following behavior changes apply to the To-Do queue: 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 		
	 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.

Parameter	State	Description
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.
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.

Parameter	State	Description
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 messageBarWarning	New	These parameters indicate how different types of messages are displayed. 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.	
		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 Manager 9.33 packages the files in a compressed (zipped) folder. Some third-party unzipping tools may not correctly handle file names 	

Feature	Description	
	 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 	
Case-insensitive Oracle solution	 Size validation before file upload 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.	

Feature	Description	
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 and Emailout parameters in the sm.ini file.	
Scripts utilities		

Feature	Description			
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			
	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			

Feature	Description			
	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: < <i>hostname</i> >%< <i>port</i> >%< <i>base</i> <i>directory</i> >%< <i>certificate file path</i> >
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.

Parameter	State	Description
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).
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		
essuser		
hideTreelcons		
isBackChannelUsed		
isBottomTrayUsed		
isBreadCrumbTrayUsed		
isButtonTrayUsed		
isFullScreenLogin		
isKeepAliveEnabled		
isMessageTrayUsed		These previously-supported parameters in the web.xml file no longer work in the latest versions of Service Manager. This release of Service Manager no longer includes these parameters in the web.xml file or in the documentation.
isSaveNavPathSkipped		
isTabTrayUsed	Web parameter (in the	
keyBookmark	web.xml file)	
keySyncTree		
lazyloadNavTree		
logoutJspExtension		
printDateFormat		
printOptions		
refreshInterval		
showAddBookmark		
showDetailCollapse		
showFrameworkReset		
showListCollapse		
showLogoutLink		
showMessages		
showNavCollapse		

Item Name	Туре	Notes
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
	Administrators now can set up SSL, TSO, and LW-SSO to provide different ways of authentication between the client and the Service Manager server.

Feature	Description	
	For more information, see the Service Manager 9.32 Mobile Applications User Guide.	

Feature	Description			
Feature Service Request Catalog	Description 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			
	 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. Upgrade Tool 			

Feature	Description			
	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.			

Feature	Description	
Support of F5 Hardware Loa &upported 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	
	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	

Feature	Description		
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:		
	 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		

Feature	Description
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 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.

Feature	Description		
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. For more information, see HP Service Manager Doctor.</sm>		
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.
		Note: The default has been changed from 5 to 10.

Parameter	State	Description
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").

Parameter	State	Description
ir_sql_limit	Updated	This parameter determines the maximum number of records to be fetched from the RDBMS in a combined IR 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.
showNavlcon	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 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.	
	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 ("getunique")	A RAD function that returns an array containing the Unique key values for a 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

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

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.

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 arrangement of the widgets, brand the SRC by adding your organizations logo, modify the color scheme, and adjust text sizes

Feature	Description
	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.

Feature	Description
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. 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.

Feature	Description
Support of SQL Server 2012, and VMWare vSphere 5	For more information, see the Support Matrix. 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 9.40 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.

Parameter	Description
Web parameter: unmaskDeferMillis Web parameter: autoCloseMaskDelay Web parameter: lockWaitTimeout Web parameter:	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.
socketReadTimeout <u>Web parameter:</u> <u>maskMessageDelay</u>	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.
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 See Startup parameter: emailout.	A new emailout parameter that specifies the number of threads to send emails. This parameter has been introduced to improve the 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.

Parameter	Description
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.
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.	

Feature	Description
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
	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

Feature	Description	
	log in to get to the Service Catalog.	
	 Provides seamless authentication between other HP products. 	
	 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:	
	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 	

Feature	Description
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 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 MySM and the ability to export them to Change Management	 The following enhancements to MySM are now available: Ability to create and share custom MySM components Availability of MySM to Change Management

Feature	Description
HP Change Configuration and Release Management (CCRM) new features	 HP Change Configuration and Release Management (CCRM) new features in 9.30: 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 (OO) 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 application server	 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: Encrypt all communication with the web application server Protect against complex SSL-related attacks Authenticate that the web application server is a valid host Note: HP recommends using the default SSL settings when connecting 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).

Feature	Description		
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	

Send Documentation Feedback

If you have comments about this document, you can contact the documentation team by email. If an email client is configured on this system, click the link above and an email window opens with the following information in the subject line:

Feedback on What's New help topics for printing (Service Manager 9.40)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to ovdoc-ITSM@hp.com.

We appreciate your feedback!



