# HP Database and Middleware Automation

### Release Notes

Software version: 10.21 / July 2014

This document provides an overview of the changes made to HP Database and Middleware Automation (HP DMA) for the 10.21 release. It contains the following important information not included in the manuals.

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### In This Version

HP DMA 10.21 is an incremental step forward, incorporating over 60 new or enhanced features when compared to HP DMA 10.20.

### Release Highlights

- Lifecycle management features are now fully supported for SQL Server 2014 and Windows Server 2012 R2, including discovery, provisioning, patching, compliance checking, code release management, upgrades and migrations, and test data management.
- SQL Server cluster patching has been enhanced to support *rolling patches*, which identify nodes in the cluster and patches each node automatically, all while the cluster remains up and available to users.
- SQL Server has been enhanced to support in-place upgrades from SQL Server 2000 through 2012 to SQL Server 2012 R2 or 2014.
- Slipstreamed versions of SQL Server installation media are now supported.
- Incremental support for Sybase 15.7 discovery and provisioning and DB2 compliance and provisioning.
- Miscellaneous improvements to Oracle workflow processing, including support for patch conflicts.
- New options in the security model optionally require Administrators to enter passwords versus using predefined and stored passwords. Also, miscellaneous improvements to password management have been made.

- Significant effort has been made to standardize SQL Server workflows, improving prerequisite
  checking, moving this process to the first steps of a workflow, as well as standardizing workflow
  naming conventions to simplify administration.
- HP product portfolio integrations and support for:
  - HP Server Automation Ultimate Edition and Server Automation Premium Edition version 10.10
  - HP Operations Orchestration 10.10
  - HP Cloud Service Automation 4.1
- New documentation guides and other materials are now available in DMA 10.21, including:
  - HP DMA Concepts Guide
  - Best practices white papers for SQL Server and DB2
  - Videos
  - Documentation Library provides one-click access to all available DMA documentation
- The overall quality and reliability of HP DMA 10.21 is a key focus of this release. As a result of these changes, many workflows have been modified and some have been replaced or deprecated. Refer to the *HP DMA 10.21 Support Matrix* for specific details, which is available at the following web site:

http://h20230.www2.hp.com/selfsolve/manuals

See Documentation Updates for information about accessing this web site.

## Installation Notes

Installation requirements and instructions for installing HP DMA 10.21 are documented in the *HP DMA Installation Guide*. The document file is included on the HP DMA DVD as:

DMA\_10.21\_Documentation/DMA\_10.21\_Installation\_Guide.pdf

# Platform Requirements

The HP DMA version 10.21 server requires:

• Red Hat Enterprise Linux version 5.8 or 6.1 (or later), 64-bit,

Or

• SUSE Enterprise Linux version 11 (or later), 64-bit.

See the HP DMA Installation Guide for additional information, including sizing requirements.

This document is available at the following web site:

http://h20230.www2.hp.com/selfsolve/manuals

See Documentation Updates for information about accessing this web site.

# Supported Browsers for HP DMA

The HP DMA web UI supports the following browsers: Chrome, Firefox, and Internet Explorer 8, 9, 10, and 11.

### Supported HP DMA Target Platforms

HP DMA supports managed target servers that use the following operating systems:

- Linux
- Solaris
- AIX
- Windows
- HP-UX

For details regarding the operating systems and versions supported by each HP DMA workflow, see the *HP DMA Support Matrix*. This document is available at the following web site:

### http://h20230.www2.hp.com/selfsolve/manuals

See Documentation Updates for information about accessing this web site.

## **HP DMA Solution Packs**

The HP DMA version 10.21 solution packs are included on the installation media. This includes the following solution packs:

DVD Directory Name	Solution Packs
DMA_10.21_Database_Solution_Packs	Database Compliance
	Database Provisioning
	Advanced Database Provisioning
	Database Patching
	Advanced Database Patching
	Database Release Management
	Database Refresh
DMA_10.21_Middleware_Solution_Packs	Application Server Provisioning
	Application Server Patching
	Application Server Configuration Management
	Application Server Release Management
DMA_10.21_Server_and_Client	Discovery
	Promote



The Discovery solution pack is not automatically installed when the HP DMA server is installed. You must import it manually, as you would any other solution pack. See the *HP DMA Quick Start Tutorial* for instructions. This document is available at the following web site:

http://h20230.www2.hp.com/selfsolve/manuals

See Documentation Updates for information about accessing this web site.

# **Backward Compatibility**

#### To use HP DMA 10.00 or HP DMA 10.01 Content on the HP DMA 10.21 Platform:

If you desire to continue to use HP DMA 10.00 or HP DMA 10.01 content on the HP DMA 10.21 platform, you must install the HP DMA 10.01 Content Forward Compatibility Solution Pack. To do this, contact HP support by going to:

#### http://support.openview.hp.com/

Open a support case for Database and Middleware Automation and request the HP DMA 10.01 Content Forward Compatibility Solution Pack.

#### To use HP DMA 10.10 (or later) Content on the HP DMA 10.21 Platform:

HP has improved the upgrade experience. Existing HP DMA 10.10 (or later) workflows will run on HP DMA 10.21 without any changes.

#### To take advantage of the HP DMA 10.21 features and enhancements:

To use any new features or enhancements of the new HP DMA 10.21 workflows, after you have upgraded the HP DMA server you must import the HP DMA 10.21 solution pack, make a copy of the pertinent HP DMA 10.21 workflow, and then merge your customizations into it.

The benefit is that you can now upgrade one workflow at a time, which allows you to upgrade workflows over a period of time rather than all at once.

### Fixed Issues

To display details about each software fix, click the Change Request's link in the table to go to the HP Software Online Support web site. The first time you click a link, you must enter your HP passport information (see Support).

Change Request	Area	Description
QCCR1D183340	DB2	The DB2 – Provision Software (Step Install DB2 Software) workflow now runs the db2prereqcheck validation against the specific DB2 version of binary being used for the software installation.
QCCR1D185880	DB2	The Run DB2 Compliance Audit workflow can use either a fully qualified domain name or non-fully qualified domain name for the target host machine.
QCCR1D177908	MS SQL	When attempting to install patches on different instances on the same SQL server, the MS SQL - Install Patch workflow now completes successfully.

Change Request	Area	Description
QCCR1D178687	MS SQL	Extracted files are now deleted after running the MS SQL - Rollback Patch workflow.
QCCR1D178688	MS SQL	The backup database step in the MS SQL Install Patch workflow has been modified so that the database backups are executed automatically.
QCCR1D178691	MS SQL	Slipstream installations are now supported. Previously, installation would fail to recognize the slipstreamed versions of the installation media. This update impacts the following workflows:  • MS SQL - Install Standalone SQL Instance • MS SQL - Install Clustered SQL Instance • MS SQL - Add Node to Cluster • MS SQL - Upgrade Standalone SQL Instance
QCCR1D179156	MS SQL	The MS SQL - Rollback Patch workflow verification checks to ensure that the target instance's build number has decreased after a successful rollback. If a rollback of a patch fails, the zip files are cleaned up.
QCCR1D179497	MS SQL	The MS SQL - Install Patch workflow now succeeds if/when the Check Build of Patch File step successfully runs, indicating that the patch was installed. If the file is on a network drive, it will not be deleted.
QCCR1D182476	MS SQL	The MS SQL Verify SQL Installation step now runs tests the connection to the instance.
QCCR1D182478	MS SQL	The MS SQL - Add Node to Cluster and MS SQL - Install Clustered SQL Instance workflows now delete the installation files after a successful completion of an install.
QCCR1D182479	MS SQL	The MS SQL - Rollback Patch workflow now performs the appropriate substitutions within the default rollback command to ensure the patch rollback works for SQL 2012 and 2014.
QCCR1D176122	Oracle	The Apply Critical Patch to Oracle Home modifies file permissions after the files are written, helping to ensure successful completion of the validation phase.
QCCR1D177385	Oracle	To gather process information about Oracle, HP DMA runs the command 'ps eww <pid>' to locate the execution environment for the process and then parses it with shlex. On AIX, unmatched double quotes in the returned string have been removed, correcting an issue with Discovery for AIX.</pid>
QCCR1D177491	Oracle	The Apply Oracle CPU to Oracle Home (Step: Conditional Unzip) workflow uses a new call to set the read permissions on the folder containing the downloaded patches zip file, ensuring that the patch file unzips successfully.

Change Request	Area	Description
QCCR1D177907	Oracle	The Archive Logs query has been updated to only check archive logs that have not been deleted by RMAN. This update impacts the DB Compliance workflow.
QCCR1D178472	Oracle	The Provision Oracle Dataguard workflow has been updated to address issues creating directories and using remote listener. By adding the tns entry in the tnsnames.ora file, the workflow uses the correct host and port number.
QCCR1D179042	Oracle	Searches for the LISTENER port are no longer dependent upon the order of entries in the listener.ora file.
QCCR1D179053	Oracle	The Oracle - Patch Grid Infrastructure and Databases workflow has been modified to ensure that the workflow retrieves the correct SID value.
QCCR1D179255	Oracle	The DiscoverOracleDatabases.xml content has been modified to accurately reflect the parameters in the step.
QCCR1D179345	Oracle	The Oracle - Patch Grid Infrastructure and Database workflow now completes successfully when there is an unused database home with no instance running out of it.
QCCR1D180560	Oracle	The Clone Oracle Home workflow now completes successfully when trying to create the New Oracle Home directory, and now allows for the creation of a multiple level directory structure.
QCCR1D180769	Oracle	The Oracle Patch Home and Databases workflow now determines the OPatch Version when running in Grid infrastructure.
QCCR1D180770	Oracle	When running the Oracle - Provision or Upgrade Grid Infrastructure workflow, the inventory_loc value defined in the /etc/oraInst.loc file is now used.
QCCR1D180914	Oracle	The Oracle - SQL Release workflow includes an add function call to modify permissions of SQL files after they have been downloaded. This ensures that the workflow scripts are executed.
QCCR1D180916	Oracle	The Oracle - Patch Grid Infrastructure and Databases workflow includes an add function call to modify permissions of SQL files after they are created, so Oracle now has access to and can read the files.
QCCR1D180917	Oracle	The Oracle - Patch Grid Infrastructure and Databases workflow now handles conflicting patches.
QCCR1D182273	Oracle	The Oracle - Patch Grid Infrastructure and Databases V2 workflow now uses the attribute option "NONE" when no Oracle database homes will be patched.
QCCR1D185147	Oracle	The Oracle – Export Database via Data Pump validation functions have been updated to only return tuple values (rather than three).

Change Request	Area	Description
QCCR1D186007	Oracle	The Oracle – Export Database via Data Pump workflow includes a new function (in the Execute Data Pump step) that checks for active data pump jobs by job name; any jobs that are still running after data pump has already returned a success or failure response are ended.
QCCR1D186553	Oracle	The Oracle - Rollback Patch from Home and Databases workflow has been revised to use the correct case for the index key so that users can correctly specify an include or exclude list for Oracle SIDs.
QCCR1D186630	Oracle	The Oracle - Rollback Patch from Home and Databases workflow includes exit codes for any failures that occur in a step. This ensures that the workflow ends in failure if/when any step fails.
QCCR1D186632	Oracle	The Oracle - Rollback Patch from Home and Databases workflow ignores any comments (lines starting with the "#" character) when processing the /etc/oratab file.
QCCR1D186641	Oracle	The Oracle - Rollback Patch from Home and Databases workflow has revised the way it parses information to assign values to variables so that users can track values regardless of the order they appear in.
QCCR1D180190	Platform	When the MS Windows login contains the '#' character; the call has been modified and now encloses the login user name in single quotation marks, enabling workflows to complete successfully.
QCCR1D180324	Platform	The West APX tool has been modified to correctly set the Windows Admin user.
QCCR1D180360	Platform	Updated to set the Post Install script instead of the Pre Uninstall script for DMA Unix JRE Packages in SA.
QCCR1D180704	Platform	When a user attempts to delete a workflow that has deployments attached to it, a confirmation appears indicating the number of deployments that are attached to the workflow.
QCCR1D181142	Platform	Database objects that were not updated properly on certain error conditions are now correctly updated on all error conditions.
QCCR1D181291	Platform	Added validation to prevent invalid characters for "Required Result" and "Next" fields on the Workflow editor page.
QCCR1D185263	Platform	Scheduled workflows on AIX no longer hang after successful runs.
QCCR1D186707	Platform	Users with Execute permission can cancel a workflow as well as a deployment run.
QCCR1D181321	Documentation	The Configure HP DMA and SA to Use the SA Gateway Network as a Proxy Network white paper has been updated as follows:  • Edited all "SA auto select" references to "SA_auto_select".  • Updated screen shots.

Change Request	Area	Description
QCCR1D185679	Documentation	There is a new troubleshooting section (in both the <i>HP DMA Installation</i> and <i>HP DMA Troubleshooting Guide</i> ) that provides information on how to use a script to reset the dma_initial_admin password:  Troubleshooting > Password Security > Reset the HP DMA Initial Admin password.

# **Enhancements**

To display details about each software enhancement, click the Change Request's link in the table to go to the HP Software Online Support web site. The first time you click a link, you must enter your HP passport information (see Support).

Change Request	Area	Description
QCCR1D182463	DB2	The DB2 - Provision Software workflow documentation has been updated to show that it supports using the SA Repository.
QCCR1D179155	MS SQL	For the MS SQL workflows, non-DMA Admin users are now prompted for credentials at run time when attempting to use active directory connections to execute a deployment.
QCCR1D179485	MS SQL	A new workflow, MS SQL - Install Cluster Patch, patches multi- node clusters in a rolling fashion and handles the failover from the current active node to a standby node.
QCCR1D180927	MS SQL	DMA now supports Windows 2012 R2 for MS SQL Server.
QCCR1D182111	MS SQL	The following workflows have been updated so that a user can use an advanced parameter to skip Simulation during SQL Standalone/Cluster Install:  • MS SQL - Add Node to Cluster  • MS SQL - Install Clustered SQL Instance  • MS SQL - Install Standalone SQL Instance  • MS SQL - Upgrade Standalone SQL Instance
QCCR1D176257	Oracle	When using the Apply Oracle GRID Standalone Patch and Apply Database Patch workflow, if you specify a patch download location that does not already exist, the workflow creates that path.
QCCR1D181985	Oracle	The Oracle-Patch Grid Infrastructure and Databases workflow now offers the option "NONE" for the 'Oracle Database Homes' parameter, so you can now patch the Grid only (without patching the Database Homes).
QCCR1D182109	Oracle	The Oracle Patch Grid Infrastructure and Databases workflow now uses Oracle Inventory Location by default (rather than Oracle Base) when backing up Oracle Installations.

Change Request	Area	Description
QCCR1D182625	Oracle	In Oracle Grid Patching workflows, the patching and rollback validation steps now run the olsnodes command to identify the nodes in the cluster (if a parameter has not already been provided).
QCCR1D183242	Oracle	HP DMA now allows the extended support versions of OPatch.
QCCR1D186297	Oracle	In the Oracle – Provision Database workflow, the time required to create an Oracle database is improved significantly with the introduction of the new "General Purpose" template (rather than using the "New Database" template).
QCCR1D176893	Sybase	The new Sybase - Patch EBF to Home and Instance workflow checks for sufficient target server disk space.
QCCR1D176894	Sybase	In the Sybase - Rollback EBF Patch From Home and Instance workflow, there is a new rollback process that restores stored procedures and system databases.
QCCR1D177384	Sybase	The Discovery workflow now discovers the Sybase ESD number, regardless of whether or not it is a floating point or integer number.
QCCR1D177387	Sybase	The Discovery workflow has been updated with a new metadata custom field for "version."
QCCR1D177389	Sybase	The Sybase – Patch EBF To Home and Instance workflow now allows users to specify independent names for the backupserver, whose name was previously derived from the dataserver (adaptiveserver) name.
QCCR1D177391	Sybase	The Sybase – Patch EBF To Home and Instance workflow can now handle and apply patches even if the existing Sybase installation logs are corrupted during initial setup.
QCCR1D177464	Sybase	The Sybase – Patch EBF To Home and Instance workflow has been updated to validate the EBF Patch file compatibility with the target environment. If there is an incompatibility, HP DMA delivers a failure notice and exits the workflow.
QCCR1D178293	Sybase	Both the Sybase – Patch EBF To Home and Instance and Sybase - Rollback EBF Patch From Home and Instance workflows now use the modified grep command to capture the 'dataserver'/'backupserver' and 'monserver' processes to validate post server reboots. This is a generic method for ensuring that the processes that show up are the correct ones requested for the post-restart Sybase instance.
QCCR1D178296	Sybase	The Sybase - Rollback EBF Patch From Home and Instance workflow now handles the management of sybsecurity / dbccdb database systems on Sybase target instances.

Change Request	Area	Description
QCCR1D179495	Sybase	Both the Sybase – Patch EBF To Home and Instance and Sybase - Rollback EBF Patch From Home and Instance workflows have been updated to detect the error if/when any are found in the DBCC (database consistency checks) error log file, and provide warning notifications to the user in the DMA Step log (instructing the user to examine and fix database issues). For easier reference, this enhancement also tags the name of DBCC check log file with the timestamp.
QCCR1D181001	Sybase	The Patching workflow now supports and handles the Monitor Server (monserver instance) running on Sybase targets, which is used for supervision of data server (adaptive server) for the Sybase – Patch EBF To Home and Instance and Sybase - Rollback EBF Patch From Home and Instance workflows.
QCCR1D173710	Platform	A Sort button has been added to the Custom Fields List Type Options on the Custom Field page.
QCCR1D180934	Platform	A user can now reset the "dma_initial_admin" account password by using the shell script "changeInitialAdminPassword.sh".
QCCR1D183192	Promote	DMA now strips out any trailing spaces from the input parameter values that are parsed with parametertools.parse_dma_params.
QCCR1D178832	Documentation	The <i>HP DMA Platform User Guide</i> now mentions that middleware (along with databases and instances) is automatically discovered on managed servers when using the Discovery workflow.
QCCR1D176980	Documentation	Added guidance to both the <i>Installation Guide</i> and <i>Troubleshooting Guide</i> on how to troubleshoot problems if using an internal SSL certificate. The new topic is "Run Time Errors" and includes the sub-topic, "Workflow aborts using an internal SSL certificate."
QCCR1D179935	Documentation	<ul> <li>The HP DMA Database Release Management User Guide has updated the Oracle - SQL Release workflow &gt; Prerequisites as follows:</li> <li>Added CREATE USER and DROP USER as valid SQL commands.</li> <li>Included description that SQL commands that are not in the table can still be used as long as Execute Rollback is set to N.</li> </ul>

# Support

You can visit the HP Software support web site at:

## http://www.hp.com/go/hpsoftwaresupport

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

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

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

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

#### http://h20230.www2.hp.com/new\_access\_levels.jsp

To register for an HP Passport ID, go to the following URL:

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

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.

# **Documentation Updates**

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

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

To check for recent updates or to verify that you are using the most recent edition, visit the following URL:

#### http://h20230.www2.hp.com/selfsolve/manuals

This site requires that you register for an HP Passport and sign-in. To register for an HP Passport ID, go to:

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

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