



Discovery

DMA provides special Discovery workflows that you can use to automatically discover instances, databases, and middleware residing on your managed servers. You can run the Discovery workflows manually, or you can set up scheduled deployments to run them periodically. This workflow discovers as much about a physical environment's SQL Server, Oracle, Sybase, and DB2 databases. This workflow also discovers WebSphere,

JBoss, and WebLogic application server products. Instances that are "up" will



Hewlett Packard
Enterprise

provide more information than instances that are “down”.

The Discovery workflow is only additive. It will not remove instances or databases currently in your environment.

Note: In cluster situations where one node is active while other nodes are inactive, Discovery will only find instances and databases on the active node. Nothing will be added to inactive nodes.

The workflow performs validation checks at the operating system level, including file system space checks.

Topic	Information Included
"How this Workflow Works" on page 4	Information about what the workflow does, including validation checks performed, steps executed, and a high-level process flow
"How to Run this Workflow" on page 6	Instructions for running this workflow in your environment
"Sample Scenarios" on page 8	Examples of typical parameter values for this workflow
"Parameters for Discovery" on page 9	List of input parameters for this workflow

The process of deploying and running this workflow is the same for all scenarios, but the parameters required will differ depending on the specific scenario that you are implementing.

The workflow provides default values for most parameters. These default values are usually sufficient for a typical provisioning scenario. You can override the defaults by specifying parameter values in the deployment. You can also expose additional parameters in the workflow, if necessary, to accomplish more advanced scenarios.

Any parameters not explicitly specified in the deployment will have the default values listed in ["Parameters for Discovery" on page 9](#).

Note: The documentation for this workflow contains steps that are referred to by their base names. The names in the DMA user interface may have a version appended, for example, v2.

Prerequisites for this Workflow

The following prerequisites must be satisfied before you can run the Apache - Provision Software workflow:

1. The workflow requires unchallenged `sudo` access to a user (typically `root`) who can access all required files and directories.
2. The workflow requires OpenSSL to be installed.
3. Adequate disk space must be available to install the Apache web server binaries.
4. This workflow deploys the Apache distribution archive file. You must compile and build the Apache archive file before running this workflow.

For information about prerequisites for Apache Tomcat, refer to the [Apache HTTP Server Documentation](#).

How this Workflow Works

This topic contains the following information about the Discovery workflow:

Steps Executed

The Discovery workflow includes the following steps. Each step must complete successfully before the next step can start. If a step fails, the workflow reports a failure, and subsequent steps are skipped.

Process Flow

This workflow performs the following tasks:

1. Gathers mandatory and optional input parameters (user-provided) to run Discovery workflow.
2. Validates if Oracle discovery is enabled.
3. If true, audits the server's physical environment looking for Oracle instances and databases.

In cluster situations where one node is active while other nodes are inactive, Discovery will only find instances and databases on the active node.

4. Validates if SQL Server discovery is enabled.
5. Audits the server's physical environment looking for SQLServer instances and databases.
6. Validates if DB2 discovery is enabled.
7. Audits the server's physical environment looking for DB2 databases.
8. Validates if Oracle discovery is enabled.
9. Audits the server's physical environment looking for Oracle instances and databases.
10. Validates if MySQL discovery is enabled.
11. Discovers the MySQL instances and databases on the target machine.
12. Validates if WebSphere discovery is enabled.
13. Audits the server's physical environment looking for WebSphere cells, clusters, and managed servers.
14. Validates if WebLogic discovery is enabled.
15. Audits the server's physical environment looking for WebLogic domains, clusters, and managed servers.
16. Validates if JBoss discovery is enabled.
17. Audits the server's physical environment looking for JBoss instances.
18. Validates if Apache Tomcat discovery is enabled.
19. Audits the server's physical environment looking for Apache Tomcat instances.
20. Validates if Apache Tomcat web server discovery is enabled.
21. Audits the server's physical environment looking for Apache Tomcat web server instances.
22. Gathers summary of discovery of databases and application servers.

How to Run this Workflow

This topic explains how to customize and run the Discovery workflow in your environment.

To customize and run the Apache - Provision Software workflow:

1. Create a deployable copy of the workflow.
2. Determine the values that you will specify for the following parameters. These are the parameters that are visible in the deployment by default.

Parameters in the step: Gather Parameters for Discovery

Parameter Name	Default Value	Description
Run Apache Tomcat Server Middleware	True	If value is True, then the Apache Tomcat Server middleware platform will be discovered and updated in DMA. If value is False, the Apache Tomcat Server middleware platform will not be discovered and updated in DMA.
Run Apache Web Server Middleware	True	If value is True, then the Apache web server middleware platform will be discovered and updated in DMA. If value is False, the Apache web server middleware platform will not be discovered and updated in DMA.
Run DB2 Database	True	If value is True, then the DB2 database platform will be discovered and updated in DMA. If value is False, the DB2 database platform will not be discovered and updated in DMA.
Run JBoss Middleware	True	If value is True, then the JBoss middleware platform will be discovered and updated in DMA. If value is False, the JBoss middleware platform will not be discovered and updated in DMA.
Run MySQL Database	True	If value is True, then the MySQL server database platform will be discovered and updated in DMA. If value is False, the MySQL server database platform will not be discovered and updated in DMA.
Run Oracle Database	True	If value is True, then the Oracle database platform will be discovered and updated in DMA. If value is False, the Oracle database platform will not be discovered and updated in DMA.
Run SQL Server Database	True	If value is True, then the SQL server database platform will be discovered and updated in DMA. If value is False, the SQL server database platform will not be discovered and updated in DMA.
Run Sybase Database	True	If value is True, then the Sybase database platform will be discovered and updated in DMA. If value is False, the Sybase database platform will not be discovered and updated in DMA.

Parameters in the step: Gather Parameters for Discovery, continued

Parameter Name	Default Value	Description
Run WebSphere Middleware	True	If value is True, then the Weblogic middleware platform will be discovered and updated in DMA. If value is False, the Weblogic middleware platform will not be discovered and updated in DMA.
Run Weblogic Middleware	True	If value is True, then the WebSphere middleware platform will be discovered and updated in DMA. If value is False, the WebSphere middleware platform will not be discovered and updated in DMA.

See "[Parameters for Discovery](#)" on page 9 for detailed descriptions of all input parameters for this workflow, including default values.

3. In the workflow editor, expose any additional parameters that you need. You will specify values for those parameters when you create the deployment.
4. Save the changes to the workflow (click **Save** in the lower right corner).
5. Create a new deployment.
6. On the Parameters tab, specify values for the required parameters listed in step 2 and any additional parameters that you have exposed. You do not need to specify values for those parameters whose default values are appropriate for your environment.
7. On the Targets tab, specify one or more targets for this deployment.
8. Save the changes to the workflow (click **Save** in the lower right corner).
9. Run the workflow using this deployment.

The workflow will complete and report "Success" on the Console if it has run successfully. If an invalid parameter value is specified, an error is logged, and the workflow terminates in the "Failure" state.

Sample Scenarios

This topic shows you how to use various parameters to achieve the following provisioning scenarios in your environment using the Discovery workflow.

Step Name	Parameter Name	Example Value
Gather Parameters for Discovery	Run Apache Tomcat Server Middleware	True
	Run Apache Web Server Middleware	True
	Run DB2 Database	True
	Run JBoss Middleware	True
	Run MySQL Database	True
	Run Oracle Database	True
	Run SQL Server Database	True
	Run Sybase Database	True
	Run WebSphere Middleware	True
	Run Weblogic Middleware	True

Be sure that the default values for all remaining parameters are appropriate for your environment.

Parameters for Discovery

The following table describes the required input parameters for this workflow. Several of these parameters are not initially visible in a deployment. For many parameters, if you do not specify a value for a parameter, a default value is assigned.

Parameters in the step: Gather Parameters for Discovery

Parameter Name	Default Value	Description
Run Apache Tomcat Server Middleware	True	If value is True, then the Apache Tomcat Server middleware platform will be discovered and updated in DMA. If value is False, the Apache Tomcat Server middleware platform will not be discovered and updated in DMA.
Run Apache Web Server Middleware	True	If value is True, then the Apache web server middleware platform will be discovered and updated in DMA. If value is False, the Apache web server middleware platform will not be discovered and updated in DMA.
Run DB2 Database	True	If value is True, then the DB2 database platform will be discovered and updated in DMA. If value is False, the DB2 database platform will not be discovered and updated in DMA.
Run JBoss Middleware	True	If value is True, then the JBoss middleware platform will be discovered and updated in DMA. If value is False, the JBoss middleware platform will not be discovered and updated in DMA.
Run MySQL Database	True	If value is True, then the MySQL server database platform will be discovered and updated in DMA. If value is False, the MySQL server database platform will not be discovered and updated in DMA.
Run Oracle Database	True	If value is True, then the Oracle database platform will be discovered and updated in DMA. If value is False, the Oracle database platform will not be discovered and updated in DMA.
Run SQL Server Database	True	If value is True, then the SQL server database platform will be discovered and updated in DMA. If value is False, the SQL server database platform will not be discovered and updated in DMA.
Run Sybase Database	True	If value is True, then the Sybase database platform will be discovered and updated in DMA. If value is False, the Sybase database platform will not be discovered and updated in DMA.
Run WebSphere Middleware	True	If value is True, then the Weblogic middleware platform will be discovered and updated in DMA. If value is False, the Weblogic middleware platform will not be discovered and updated in DMA.
Run Weblogic Middleware	True	If value is True, then the WebSphere middleware platform will be discovered and updated in DMA. If value is False, the WebSphere middleware platform will not be discovered and updated in DMA.

