



# PlateSpin® Transformation Manager 2019.5 User Guide

May 2019

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# About This Book

The *PlateSpin Transformation Manager User Guide* provides information about using PlateSpin Transformation Manager to plan, execute, and monitor migration projects for a data center or enterprise. It includes conceptual information, an overview of the user interface, and step-by-step guidance for common tasks.

- ◆ Part I, “Getting Started,” on page 15
- ◆ Part II, “Dashboard,” on page 51
- ◆ Part III, “Projects,” on page 69
- ◆ Part IV, “Workloads,” on page 99
- ◆ Part V, “Resources,” on page 183
- ◆ Part VI, “Target Platforms,” on page 205
- ◆ Part VII, “VMware Platform Resources,” on page 227
- ◆ Part VIII, “Azure Platform Resources,” on page 253
- ◆ Part IX, “AWS Platform Resources,” on page 283

## Audience

This document is intended for PlateSpin Transformation Manager users who manage server migration projects. PTM users have role-based access to application options and project data.

Users who plan workload transformations are assumed to have a working knowledge of network operations, Windows and Linux operating systems on x86 and x64 architectures, and virtualization and cloud technologies.

## Additional Documentation

For the most recent version of this guide and other PlateSpin Transformation Manager documentation resources, visit the [PlateSpin Transformation Manager 2019.5 Documentation website](https://www.microfocus.com/documentation/platespin/platespin-transformation-manager-2019-5/) (<https://www.microfocus.com/documentation/platespin/platespin-transformation-manager-2019-5/>).

## Contact Information

For specific product issues, contact Micro Focus Support at <https://support.microfocus.com/contact/>.

Additional technical information or advice is available from several sources:

- ◆ **Product information and resources:** <https://www.microfocus.com/products/platespin-transformation-manager/>
- ◆ **Micro Focus Customer Center:** <https://www.microfocus.com/customercenter/>

- ♦ **Product Knowledge Base and Videos:** <https://www.microfocus.com/support-and-services/>
- ♦ **PlateSpin Idea Exchange:** [https://community.softwaregrp.com/t5/PlateSpin-Idea-Exchange/idb-p/PlateSpin\\_Ideas/](https://community.softwaregrp.com/t5/PlateSpin-Idea-Exchange/idb-p/PlateSpin_Ideas/)

# Getting Started

PlateSpin Transformation Manager is a migration lifecycle solution for large-scale data center and enterprise transformation projects. You can plan, schedule, execute, and monitor server migrations across physical, virtual, and cloud infrastructures. Its multi-tenancy architecture segregates data for organizations and projects, ensuring data confidentiality for each organization and project.

PlateSpin Transformation Manager includes PlateSpin Migrate Connector, which your administrator deploys in your migration environment to help capture details for source workloads and target platforms. In a PlateSpin Migration Factory deployment, Migrate Connector also integrates PTM with PlateSpin Migrate to automate migration of workloads to supported platforms and to track external migrations performed on Migrate servers.

As a PTM user, most of your interactions with PlateSpin Transformation Manager are performed in its Web Interface. Review the following sections to get familiar with the PlateSpin Transformation features and how to leverage them for workload transformation planning.

- ♦ [Chapter 1, “Planning for PlateSpin Transformation Manager,” on page 17](#)
- ♦ [Chapter 2, “Using the Web Interface,” on page 31](#)
- ♦ [Chapter 3, “Getting Started Checklist,” on page 47](#)

For information about managing the PlateSpin Transformation Manager application, users, and global settings, see the [PTM 2019.5 Administrator Guide](#).





# 1 Planning for PlateSpin Transformation Manager

Before you begin using PlateSpin Transformation Manager to manage a transformation project, review the following information about supported migration types, supported configurations, and requirements for using key features.

- ◆ [Section 1.1, “Supported Migration Types,” on page 17](#)
- ◆ [Section 1.2, “Supported Configurations,” on page 19](#)
- ◆ [Section 1.3, “Requirements for Discovery,” on page 23](#)
- ◆ [Section 1.4, “Requirements for Automated Migration,” on page 24](#)
- ◆ [Section 1.5, “Requirements for Tracking External Migrations,” on page 26](#)
- ◆ [Section 1.6, “Network Connectivity and Access Requirements,” on page 26](#)
- ◆ [Section 1.7, “Antivirus Setup for Discovery,” on page 30](#)

## 1.1 Supported Migration Types

PlateSpin Transformation Manager supports the planning and execution workflow for migrations with the following goals: automated, manual (tracking), manual, and decommission. See [Table 1-1](#) for a high-level understanding of each type of migration and related actions.

*Table 1-1 Migration Types*

| Migration Type   |   |
|--|---|
| Planning Actions   | Migration Actions   |
| <b>Automated</b>   |   |
| Automated migration requires the deployment of PlateSpin Migration Factory components in your migration environment.<br><br>In a PTM project, add workloads and target platforms, then configure the transformation plan for each workload. You can group workloads in waves and batches for planning.<br><br>PlateSpin Migrate Connector subscribes to event messages for your Migrate servers.<br><br>Automation supports pre-cutover tests and post-cutover tests performed manually or through your custom scripts | PTM controls the migration execution on your PlateSpin Migrate servers, in accordance with the transformation plan and migration preferences.<br><br>Migrate Connector detects and synchronizes any changes you make to the configuration from PlateSpin Migrate.<br><br>Migrate Connector listens for status events.<br><br>PTM displays the status and progresses the workflow as appropriate.<br><br>You can also add notes in the Transformation History. |

| <b>Migration Type</b>  |   |
|--|---|
| <b>Planning Actions</b>  | <b>Migration Actions</b>  |
| <b>Manual (Tracking)</b>   |   |
| <p>Tracking external migrations requires the deployment of PlateSpin Migration Factory components in your migration environment.</p> <p>In PlateSpin Migrate, add workloads and target platforms, then configure the migration job for each workload.</p> <p>In PTM, add workloads to the PTM project to initiate tracking by PTM. You can group workloads in waves and batches for planning. After tracking begins, PTM disables some planning options in the Workload dialog, displaying information from Migrate instead.</p> <p>PlateSpin Migrate Connector subscribes to event messages for your Migrate servers, and matches the imported workloads to workloads on the Migrate servers.</p> | <p>The migration specialist controls the migration execution on your PlateSpin Migrate Servers.</p> <p>Migrate Connector listens for status events for tracked workload migrations.</p> <p>Migrate Connector detects and synchronizes any changes you make to the configuration from PlateSpin Migrate.</p> <p>PTM displays the status and information from Migrate. It updates the migration workflow as reported.</p> <p>PTM supports enhanced tracking for workloads if you add a matching target platform in PTM. PTM displays richer details in the Workload dialog. In the Platform dialog, you can view associations between platform resources and the tracked workload migrations.</p> <p>You can specify values in the project's Custom fields for a tracked workload.</p> <p>You can also add notes in the Transformation History.</p> |
| <b>Manual</b>  |   |
| <p>Deploy and configure PlateSpin Transformation Manager and PlateSpin Migrate Connector in your migration environment.</p> <p>In a PTM project, add workloads. You can group workloads in waves and batches for planning.</p> <p>You can add target platforms for reference only. Workloads in Manual mode cannot be assigned to platforms in the Workload dialog.</p>  | <p>The migration specialist controls the migration execution manually or through third-party migration tools.</p> <p>The migration specialist can manually update the migration status and workflow.</p> <p>You can also add notes in the Transformation History.</p>   |
| <b>Decommission</b>  |   |
| <p>Deploy and configure PlateSpin Transformation Manager and PlateSpin Migrate Connector in your migration environment.</p> <p>In a PTM project, add workloads. You can group workloads in waves and batches for planning.</p>   | <p>The migration specialist controls the decommission.</p> <p>The migration specialist can manually update the decommission status and workflow.</p> <p>You can also add notes in the Transformation History.</p>   |

## 1.2 Supported Configurations

Use the information in this section to understand the supported configurations for workloads and platforms, depending on your planning and migration goals.

- ◆ [Section 1.2.1, “Supported Configurations for Source Workload Discovery,”](#) on page 19
- ◆ [Section 1.2.2, “Supported Configurations for Target Platform Discovery,”](#) on page 19
- ◆ [Section 1.2.3, “Supported Configurations for Migration,”](#) on page 20

### 1.2.1 Supported Configurations for Source Workload Discovery

PlateSpin Transformation Manager supports discovery of details for Windows workloads and Linux workloads running on x86 and x64 architectures.

---

**NOTE:** For automation and tracking, PTM supports the operating systems that are supported by PlateSpin Migrate. See [“Supported Configurations”](#) in the *PlateSpin Migrate 2019.5 User Guide*.

---

A variety of operating systems and versions are preconfigured in the Operating Systems list in the PTM Web Interface. A user with Administrator privileges can configure custom operating system names and versions to be presented globally to all projects. See [“Configuring Operating Systems”](#) in the *PTM 2019.5 Administrator Guide*.

### 1.2.2 Supported Configurations for Target Platform Discovery

PlateSpin Transformation Manager supports discovery of resource details for the platforms listed in [Table 1-2](#).

---

**NOTE:** For automation and tracking, the target platforms must additionally be supported by PlateSpin Migrate. See [“Supported Configurations”](#) in the *PlateSpin Migrate 2019.5 User Guide*.

---

**Table 1-2** *Supported Platforms for Discovery*

| Platform               | Remarks  |
|------------------------|--|
| VMware vCenter Servers | Supported VMware environments: <ul style="list-style-type: none"><li>◆ On premises</li><li>◆ VMware Cloud (VMC) in AWS</li></ul> Discovery is performed by PlateSpin Migrate Connector instance that has access to the network for the target platforms. |

| Platform                               | Remarks  |
|--|--|
| Microsoft Azure cloud environments     | Supported Cloud environments: <ul style="list-style-type: none"> <li>◆ Azure Global (default)</li> <li>◆ Azure China</li> <li>◆ Azure Germany</li> <li>◆ Azure U.S. Government</li> </ul> Discovery is performed by PTM using HTTPS queries for the user account through the appropriate Azure portal. |
| Amazon Web Services cloud environments | Supported Cloud environments: <ul style="list-style-type: none"> <li>◆ AWS Global (default)</li> <li>◆ Azure GovCloud</li> </ul> Discovery is performed by PTM using HTTPS queries for the user account through the appropriate AWS portal.  |

### 1.2.3 Supported Configurations for Migration

PlateSpin Transformation Manager supports planning for migration of any Windows and Linux workload. Migration automation and tracking capabilities depend on the supported configurations for PTM and PlateSpin Migrate. For configuration requirements based on migration type, see [Table 1-3](#).

---

**NOTE:** For automation and tracking of migrations, PlateSpin Migrate validates the source workload and target platform combinations that it supports.

---

**Table 1-3** Supported Configurations for Migration by Migration Type

| Migration Type             | Supported Configurations   | Remarks   |
|----------------------------|--|---|
| <b>Automated Migration</b> |  |   |
| Source workloads           | Windows and Linux operating systems supported by PlateSpin Migrate for migration to the target platform    | <p>Refer to the following information in the <i>PlateSpin Migrate 2019.5 User Guide</i>:</p> <ul style="list-style-type: none"> <li>◆ <b>VMware vCenter Clusters:</b> “Supported Source Workloads For Migration to Non-Cloud Platforms”, as limited by caveats for migration to VMware vCenter Cluster target platforms.</li> <li>◆ <b>Microsoft Azure:</b> “Supported Source Workloads for Migration to Cloud Platforms”, as limited by caveats for migration to Azure cloud environments.</li> </ul> <p><b>NOTE:</b> Migration of workloads to a target platform is subject to the support of the guest operating system on the target host by the host vendor.</p> |
| Target VMware platform     | VMware vCenter Cluster versions supported by PlateSpin Migrate   | Refer to “VMware vCenter” in the table titled “Supported Target VMware Platforms for the Migrate Web Interface and Migrate Client” in the <i>PlateSpin Migrate 2019.5 User Guide</i> .  |
| Target Azure platform      | Microsoft Azure cloud environments supported by PlateSpin Migrate  | Refer to “Microsoft Azure” in the table titled “Supported Target Cloud Platforms for the Migrate Web Interface” in the <i>PlateSpin Migrate 2019.5 User Guide</i> .   |
| <b>Manual (Tracking)</b>   |  |   |
| Source workloads           | Any Windows and Linux operating system supported by PlateSpin Migrate for migration to the target platform | <p>Refer to the following information in the <i>PlateSpin Migrate 2019.5 User Guide</i>:</p> <ul style="list-style-type: none"> <li>◆ “Supported Source Workloads For Migration to Non-Cloud Platforms”</li> <li>◆ “Supported Source Workloads for Migration to Cloud Platforms”</li> </ul> <p>Tracking is initiated when an imported workload in PTM matches a workload on a PlateSpin Migrate Server that is associated with the same project. After tracking begins, the source workload information is display-only in PTM.</p>   |

| Migration Type                         | Supported Configurations  | Remarks  |
|--|---|--|
| Target platforms                       | Any target platform supported by PlateSpin Migrate                        | <p>Refer to the following information in the <i>PlateSpin Migrate 2019.5 User Guide</i>:</p> <ul style="list-style-type: none"> <li>◆ “Supported Target Virtualization Platforms”</li> <li>◆ “Supported Target Cloud Platforms”</li> </ul> <p><b>NOTE:</b> Target platform information is display-only in PTM for Manual (tracking) mode. The level of detail available depends on whether the migration is configured in the PlateSpin Migrate Web Interface or in the PlateSpin Migrate Client. See <a href="#">Section 19.1, “About Tracking External Migrations,”</a> on page 163.</p> <p>PlateSpin Transformation Manager does not support association of target platforms with source workloads in Manual (Tracking) mode.</p> |
| Target platforms for enhanced tracking | VMware vCenter, Azure, and AWS versions supported by PlateSpin Migrate    | <p>For enhanced tracking, you can optionally discover platforms for VMware, Azure, and Amazon Web Services. For tracking mode, PTM makes platform resource information available to your project for reference only. You can view associations between the platform resources and tracked workloads.</p> <p>Refer to the following information in the <i>PlateSpin Migrate 2019.5 User Guide</i>:</p> <ul style="list-style-type: none"> <li>◆ “VMware vCenter”</li> <li>◆ “Microsoft Azure”</li> <li>◆ “Amazon Web Services (AWS)”</li> </ul>   |
| <b>Manual</b>                          |   |  |
| Source workloads                       | Any Windows and Linux operating system in the PTM Operating Systems list  | See “ <a href="#">Configuring Operating Systems</a> ” in the <i>PTM 2019.5 Administrator Guide</i> .   |
| Target platforms                       | Not applicable  | PlateSpin Transformation Manager does not support association of target platforms with source workloads in Manual transformation mode. You can optionally discover platforms for VMware and Azure, which makes platform resource information available to your project for reference only.   |
| <b>Decommission</b>                    |   |  |
| Source workloads                       | Any Windows and Linux operating system in the PTM Operating Systems list. | See “ <a href="#">Configuring Operating Systems</a> ” in the <i>PTM 2019.5 Administrator Guide</i> .   |
| Target platforms                       | Not applicable  |  |

## 1.3 Requirements for Discovery

PlateSpin Migrate Connector performs discovery for source workloads and target platforms. Ensure that your environment meets the deployment requirements in this section to take advantage of discovery features.

- ◆ [Section 1.3.1, “PlateSpin Migrate Connector Requirements for Discovery,” on page 23](#)
- ◆ [Section 1.3.2, “Workload Discovery,” on page 23](#)
- ◆ [Section 1.3.3, “Platform Resources Discovery,” on page 24](#)

### 1.3.1 PlateSpin Migrate Connector Requirements for Discovery

PlateSpin Transformation Manager uses PlateSpin Migrate Connector to discover details about source Windows and Linux Workloads. You must deploy an instance of Migrate Connector in the same network as the source workloads. If workloads reside in multiple networks, you must deploy at least one Connector instance in each source network.

PlateSpin Transformation Manager uses PlateSpin Migrate Connector to discover details about VMware vCenter Clusters. If the target platform is in a different network than the source workloads, you must deploy an instance of PlateSpin Migrate Connector in the same network as the platform.

PlateSpin Transformation Manager discovers target platforms in Microsoft Azure by using HTTPS connections. A Connector instance is not required for Azure discovery.

Contact your PTM Administrator to request Migrate Connector instances to be deployed in your migration environment. See [“Planning for PlateSpin Migrate Connector”](#) in the *PTM 2019.5 Administrator Guide*.

### 1.3.2 Workload Discovery

PlateSpin Transformation Manager supports discovery of details for Windows workloads and Linux workloads running on x86 and x64 architectures. It first attempts automated discovery when you import a workload to a project. You can retry discovery or rediscover workloads as needed. For port information, see [Section 1.6.2, “Ports and Protocols: Workload Discovery,” on page 28](#).

The following information is required for discovery of source workloads:

- ◆ FQDN or IP address, or range of IP addresses
- ◆ Administrator-level or domain-level credentials for the source workloads  
Domain-level credentials are required for the source workloads in a domain environment.
- ◆ Open ports on the network as required for workload discovery

### 1.3.3 Platform Resources Discovery

When you add a platform to the project, PTM attempts automated discovery of resources on the target platform, such as networks and storage. Resources are automatically created and associated with the parent platform. For port information, see [Section 1.6.3, “Ports and Protocols: Target Platform Resource Discovery,”](#) on page 28.

The following information is required for discovery of platform resources:

- ◆ **VMware vCenter Cluster**
  - ◆ FQDN or IP address of the VMware vCenter Cluster
  - ◆ Administrator-level credentials for the VMware vCenter Cluster
  - ◆ Open ports on the network as required for VMware platform discovery
- ◆ **Microsoft Azure**
  - ◆ Azure Subscription ID
  - ◆ Credentials for the Azure subscription
  - ◆ Open ports on the network as required for Azure platform discovery
- ◆ **Amazon Web Services**
  - ◆ Access Key ID
  - ◆ Secure Access Key
  - ◆ Open ports on the network as required for AWS platform discovery

## 1.4 Requirements for Automated Migration

PlateSpin Transformation Manager and PlateSpin Migrate Connector work together to manage automated execution of a workload’s transformation plan by using your PlateSpin Migrate servers.

Before you execute automated migrations, ensure that your environment meets the deployment requirements for PlateSpin Migration Factory.

- ◆ [Section 1.4.1, “Transformation Manager Requirements,”](#) on page 24
- ◆ [Section 1.4.2, “Migrate Connector Requirements,”](#) on page 25
- ◆ [Section 1.4.3, “PlateSpin Migrate Requirements,”](#) on page 25
- ◆ [Section 1.4.4, “Target Platform Requirements,”](#) on page 26

### 1.4.1 Transformation Manager Requirements

- ◆ **Network Connectivity and Access**

Ensure that network communications are properly configured and operational.
- ◆ **Migrate Connector Settings**
  - ◆ Configure the global migration settings that apply to all Migrate Connector instances.



- ◆ **Migration Server Resources**

- ◆ Configure a Migration Server resource for each Migrate server that you plan to use for your project.
- ◆ For each workload, use auto-assignment of Migration Server resources, or associate a specific Migration Server resource with the workload.

- ◆ **Credentials Resources**

Ensure that associated Credential resources are valid before you submit the workload for automated execution:

- ◆ Source workload
- ◆ Target Platform resource
- ◆ Target Migration Server resource

- ◆ **Source Workload**

- ◆ Ensure that the workload Transformation Plan is in Automated Mode.  
The **Mode** setting in the workload Transformation Plan must be set to **Automated**. This value is inherited from the project **Mode** setting by default, but you can alternatively set the value at the workload level.
- ◆ Configure required information for the target workload.
- ◆ Automated workload discovery is required prior to submitting the workload for execution. Information added from the Import Spreadsheet is not sufficient for automation.
- ◆ Ensure that the workload is up and running.

- ◆ **Target Platform**

Ensure that the target platform is up and running.

- ◆ **Target Migration Server**

Ensure that the assigned PlateSpin Migrate Server is up and running.

## 1.4.2 Migrate Connector Requirements

- ◆ Deploy a Migrate Connector instance in the same network as the source workloads.
- ◆ You need the Project ID to configure a dedicated Migrate Connector for a project.  
See “[Configuring a Dedicated Project for a Connector](#)” in the *PTM 2019.5 Administrator Guide*.
- ◆ The Migrate Connector must be up and running for the automated migration setup and status monitoring.

## 1.4.3 PlateSpin Migrate Requirements

Before you begin to submit a workload for automated migration, you must deploy PlateSpin Migrate servers in your environment. See the *PlateSpin Migrate 2019.5 Installation and Upgrade Guide*.

- ◆ PlateSpin Migrate servers must be accessible from the source network.
- ◆ Ensure that the Event Messaging port is open on the Migrate Server.
- ◆ Configure a Migration Server resource for each Migrate server that you plan to use for your project.

You can create Migration Server resources without the detailed information for initial planning. Select **Automated Migration** in the workload's Transformation Plan to allow the PlateSpin Migrate Connector to manage PlateSpin Migrate server assignments from among the Migration Server resources that you create for the project.

- ◆ Before you submit the workload for execution, ensure that associated Credential resource is valid for each Migrate server.
- ◆ Ensure that the assigned Migrate server is up and running.

#### 1.4.4 Target Platform Requirements

Before you submit a workload for automated migration:

- ◆ Ensure that the Credentials resource associated with the target platform is still valid. It is needed for the setup of the target VM on the platform.
- ◆ Ensure that the target platform is up and running.
- ◆ Ensure that the network connections are working between the assigned PlateSpin Migrate Server and the target platform.

### 1.5 Requirements for Tracking External Migrations

PlateSpin Transformation Manager supports tracking for migrations performed on PlateSpin Migrate servers. The following prerequisites apply:

- ◆ Deploy PlateSpin Migrate Connector instances in the source networks and configure them to work with the project. See “[PlateSpin Migrate Connector](#)” in the *PTM 2019.5 Administrator Guide*.
- ◆ Deploy one or more PlateSpin Migrate servers in your environment. See the *PlateSpin Migrate 2019.5 Installation and Upgrade Guide*.
- ◆ Enable event messaging on each of the PlateSpin Migrate servers. See “[Enabling Event Messaging for PlateSpin Migration Factory](#)” in the *PlateSpin Migrate 2019.5 User Guide*.
- ◆ Add workloads to PlateSpin Migrate and configure them for migration. See the *PlateSpin Migrate 2019.5 User Guide*.
- ◆ Configure PlateSpin Migrate servers as a Migration Server sources for the project.
- ◆ Associate each Connector instance with one or more Migration Server resources. Each PlateSpin Migrate server can be associated with only a single Connector.
- ◆ Import the workloads to your project. Tracking begins when PTM associates the workloads in PTM with matching workloads in PlateSpin Migrate.

See [Table 19-4, “Checklist for Tracking External Migrations,”](#) on page 165.

### 1.6 Network Connectivity and Access Requirements

Ensure that the network connections are working:

- ◆ Between the PlateSpin Migrate Connector and the source workloads

- ◆ Between the PlateSpin Migrate Connector and the PlateSpin Migrate servers
- ◆ Between the source network and target network

PlateSpin Migrate Connector requires network connectivity to the following resources, based on its assignment to the PlateSpin Transformation Manager server or to a specific project:

- ◆ Its assigned PTM server
- ◆ Source workloads
- ◆ Target platforms (for automated migrations)
- ◆ PlateSpin Migrate servers

In addition, review the security guidelines in “[Security Guidelines](#)” in the *PTM 2019.5 Administrator Guide*.

Your environment must meet the following requirements for network connectivity and access:

- ◆ [Section 1.6.1, “Ports and Protocols: Event Messaging,”](#) on page 27
- ◆ [Section 1.6.2, “Ports and Protocols: Workload Discovery,”](#) on page 28
- ◆ [Section 1.6.3, “Ports and Protocols: Target Platform Resource Discovery,”](#) on page 28
- ◆ [Section 1.6.4, “Ports and Protocols: Workload Migration,”](#) on page 29

## 1.6.1 Ports and Protocols: Event Messaging

PlateSpin Transformation Manager publishes workload workflow state change messages for its registered listeners. Each PlateSpin Migrate Connector instance registers with its assigned Transformation Manager server or project and listens for events and performs the appropriate actions.

In a PlateSpin Migration Factory environment, each PlateSpin Migrate server publishes workload migration state change messages for its registered listeners. Each PlateSpin Migrate Connector instance registers with its assigned Migrate servers, then listens for messages and delivers them to the appropriate project and workload in Transformation Manager.

PlateSpin uses RabbitMQ for event messaging. The event message queues are pre-configured on the PTM Server and the PlateSpin Migrate Server. The messaging function starts, stops, and restarts automatically with its parent PTM service or Migrate service, respectively.

---

**NOTE:** Do not modify the PlateSpin default settings for the RabbitMQ message service.

---

The PlateSpin Migrate message queues are inactive unless you open the required STOMP port on the Migrate Server. When the port is open, one or more PlateSpin Migrate Connector instances can register as subscribers for the event messages.

Table 1-4 shows the protocol and port required for event messaging between the PTM Server and the PlateSpin Migrate Connector instances registered with PTM Server. Each Migrate Connector instance also handles event messages for its assigned PlateSpin Migrate servers.

---

**NOTE:** The messages reflect events and state changes and do not contain sensitive information.

---

**Table 1-4** Event Messaging Requirements for Network Protocols and Ports

| Traffic         | Network Protocol and Port                              | Other Requirements   |
|-----------------|--|--|
| Event Messaging | 61613 (Stomp, allow TCP, incoming)<br><br>(not secure) | This port is open by default on the PTM Appliance VM.<br><br>Open this port on all other Connector host servers, the PlateSpin Migrate servers configured for the project, and the firewalls between them. |

## 1.6.2 Ports and Protocols: Workload Discovery

Workload discovery in PlateSpin Transformation Manager requires that you enable incoming ping (ICMP echo reply and ICMPv4-In echo request) traffic for source workloads and firewalls. PlateSpin supports only IPv4. For information about required software, network, and port settings for workload discovery, see Table 1-5.

**Table 1-5** Workload Discovery Requirements for Network Access and Communications

| Discovery Target  | Network Protocols and Ports  | Other Requirements   |
|-------------------|--|--|
| Windows workloads | <ul style="list-style-type: none"> <li>◆ ICMP, incoming</li> <li>◆ SMB (TCP 445 or 139)</li> </ul>   | <ul style="list-style-type: none"> <li>◆ Microsoft .NET Framework 2.0 SP2, 3.5 SP1 or 4.0</li> <li>◆ Credentials with Domain Admin or built-in Administrator privileges</li> </ul>   |
| Linux workloads   | <ul style="list-style-type: none"> <li>◆ ICMP, incoming</li> <li>◆ SSH (TCP 22, incoming)</li> </ul> | Root-level access. For information on using an account other than <code>root</code> , see <a href="https://support.microfocus.com/kb/doc.php?id=7920711">KB Article 7920711 (https://support.microfocus.com/kb/doc.php?id=7920711)</a> . |

## 1.6.3 Ports and Protocols: Target Platform Resource Discovery

Platform resource discovery requires that you enable incoming ping (ICMP echo reply and ICMPv4-In echo request) traffic for platforms and firewalls. PlateSpin supports only IPv4. For information about required software, network, and port settings for platform discovery, see Table 1-6.

**Table 1-6** Target Platform Discovery Requirements for Network Access and Communications

| Discovery Target     | Network Protocols and Ports   | Other Requirements   |
|----------------------|---|--|
| VMware Cluster hosts | <ul style="list-style-type: none"><li>◆ ICMP, incoming</li><li>◆ SMB (TCP 445 or 139, incoming)</li></ul> | VMware account with an Administrator role  |
| Physical hosts       | <ul style="list-style-type: none"><li>◆ ICMP, incoming</li><li>◆ SMB (TCP 445 or 139, incoming)</li></ul> | Local Administrator or Domain credentials  |
| Microsoft Azure host | <ul style="list-style-type: none"><li>◆ ICMP, incoming</li><li>◆ SMB (TCP 445 or 139, incoming)</li></ul> | <ul style="list-style-type: none"><li>◆ Azure account and subscription ID</li><li>◆ PlateSpin Replication Environment enabled for the subscriber account</li><li>◆ PlateSpin Migrate server in Azure</li></ul> |

See [“Prerequisites for Migration to Microsoft Azure”](#) in the *PlateSpin Migrate 2019.5 User Guide*.

## 1.6.4 Ports and Protocols: Workload Migration

[Table 1-7](#) provides the ports to open in the firewall and on each of the Migrate servers in order for PlateSpin Transformation Manager to use the Migrate REST APIs for automated migration. In addition, the Migration Server resource for Migrate server must provide a valid Credentials resource for the Migrate Administrator user.

**Table 1-7** REST API Requirements for Network Access and Communications

| REST API Traffic  | Network Protocol and Port            | Access   |
|-------------------|--------------------------------------|--|
| HTTPS (secure)    | Port 443, TCP, incoming and outgoing | Administrator login credentials for the Migrate server |
| HTTP (non-secure) | Port 80, TCP, incoming and outgoing  | Administrator login credentials for the Migrate server |

Ensure that you open the port required for event messaging on the PlateSpin Transformation Manager server and on each PlateSpin Migrate server. See [“Ports and Protocols: Event Messaging”](#) on page 27.

In addition, Transformation Manager requires that your migration environment meets the PlateSpin Migrate requirements for network communications. See [“Requirements for Migration”](#) in the *PlateSpin Migrate 2019.5 User Guide*.

## 1.7 Antivirus Setup for Discovery

To run discovery on Windows workloads, you might need to exclude certain services, files, and folders from antivirus protection.

- ♦ **Service:** Exclude the PTM Discovery Service (`PTMDiscoverySvc.exe`) from antivirus protection.

This service uses the `PsExec` and `PSAdmin` utilities to run remote commands on the target `MachineDiscoveryReader.dll`.

- ♦ **Files and Folders:** Exclude the `PlateSpinDiscovery` directory, including any subdirectories and files, from antivirus protection.

During each discovery attempt, all binaries and services files that the PTM Discovery Service creates and uses are located under the `PlateSpinDiscovery` directory in the first Windows share it discovers, such as `Admin$`.

For Linux workloads, the `PlateSpinDiscovery` folder is found under the `/opt/` directory.

- ♦ **Ports:** The antivirus software must not restrict any of the ports needed for discovery. For port information, see [Section 1.6.2, “Ports and Protocols: Workload Discovery,”](#) on page 28.

# 2 Using the Web Interface

Most of your interaction with PlateSpin Transformation Manager takes place through the browser-based Web Interface.

- ◆ [Section 2.1, “Prerequisites for Using the Web Interface,” on page 31](#)
- ◆ [Section 2.2, “Accessing the Web Interface,” on page 33](#)
- ◆ [Section 2.3, “Changing a User Password,” on page 33](#)
- ◆ [Section 2.4, “Web Interface Toolbar,” on page 33](#)
- ◆ [Section 2.5, “Global Project Selector,” on page 36](#)
- ◆ [Section 2.6, “Bulk Actions,” on page 37](#)
- ◆ [Section 2.7, “Show Links for Navigation URLs,” on page 39](#)
- ◆ [Section 2.8, “Bookmarks,” on page 39](#)
- ◆ [Section 2.9, “Object IDs,” on page 41](#)
- ◆ [Section 2.10, “Custom Display for Lists,” on page 41](#)
- ◆ [Section 2.11, “Custom Filter or Search for Lists,” on page 43](#)
- ◆ [Section 2.12, “Scrolling Up and Down in Lists,” on page 45](#)
- ◆ [Section 2.13, “Multiple Item Selection in Lists,” on page 45](#)

## 2.1 Prerequisites for Using the Web Interface

Ensure that your network environment meets the requirements in this section for accessing and using the PlateSpin Transformation Manager Web Interface.

- ◆ [“User Account with Role-Based Access” on page 31](#)
- ◆ [“Port Requirements” on page 32](#)
- ◆ [“Supported Browsers for the Web Interface” on page 32](#)
- ◆ [“Session Timeout” on page 33](#)

### 2.1.1 User Account with Role-Based Access

Access to features is role-based. You must have a PTM user account and be assigned to a role with permissions for your project. A user with the PTM System Administrator role or a member of the Administrators group can create PTM users and assign roles to them. See [“Managing Users”](#) in the *PTM 2019.5 Administrator Guide*.

A Project Manager can also create users and assign them to roles in their project. See [“Roles”](#) in the *PTM 2019.5 Administrator Guide*.

PlateSpin Transformation Manager provides the following roles for managing your project:

**Table 2-1** Project Roles

| Project Role         | Description  |
|----------------------|--|
| Project Manager      | The Project Manager is responsible for managing all aspects of the project.  |
| Project Architect    | The Project Architect is responsible for configuring transformation plans for the workloads, scheduling the transformations, and monitoring the health of transformations. |
| Migration Specialist | The Migration Specialists are responsible for executing the transformations.   |
| Dashboard Viewer     | The Dashboard Viewers are stakeholders who want to observe the progress and metrics for projects.  |

## 2.1.2 Port Requirements

Ensure that you open the ports on your computer firewall and in any firewalls in your network between the PlateSpin Server and the computers you use to access the Web Interface.

---

**NOTE:** For remote communications, Micro Focus recommends that you use the secure port and SSL options for accessing the Web Interface.

---

**Table 2-2** Default Network Ports for the Web Interface

| Network Port | Security     | Description  |
|--------------|--------------|--|
| 8183         | Secure (SSL) | HTTPS port for the Web Interface. Allow TCP and UDP traffic, incoming and outgoing.  |
| 8182         | Not secure   | HTTP traffic for the Web Interface. This port is disabled by default. If you enable this port, allow TCP and UDP traffic, incoming and outgoing. |

## 2.1.3 Supported Browsers for the Web Interface

You can access the PlateSpin Transformation Manager Web Interface using any of the following supported browsers:

- ◆ Mozilla Firefox, latest release
- ◆ Microsoft Internet Explorer 11
- ◆ Google Chrome, latest release

---

**NOTE:** You must enable JavaScript (Active Scripting) and the TLS 1.2 protocol in your web browser.

---



## 2.1.4 Session Timeout

The default session timeout occurs after 30 minutes of user inactivity. The timeout interval is configurable with a global setting on the PlateSpin Transformation Manager Appliance. Contact your System Administrator if you would like to specify a shorter or longer interval. See “[Web Interface Session Timeout](#)” in the *PTM 2019.5 Appliance Guide*.

## 2.2 Accessing the Web Interface

During the Appliance installation, you set up the default System Administrator user account for the Web Interface. This user has system-wide permissions for the PTM Server application. Log in as the System Administrator to create accounts for other users and assign roles to them. Access control and data visibility are role-based.

**To log in to the Web Interface:**

- 1 In a supported web browser, launch the PTM Server Web Interface:  
  
https://<ptm-server-dns-name\_or\_ipaddress>:8183 (secure, default)  
http://<ptm-server-dns-name\_or\_ipaddress>:8182 (not secure, disabled by default)
- 2 Specify the email address and password of your PTM user account, then click **Log In**.

## 2.3 Changing a User Password

The initial password set for a new PlateSpin Transformation Manager user account is temporary. Users should modify the password after their first login to the Web Interface. The new password is stored, and takes effect the next time the user logs in for a session.

---

**NOTE:** For improved security, we recommend that users regularly modify their PTM user account passwords.

---

A System Administrator user or a user assigned the System Administrator role can change the password for any user account. Non-administrator users can change the password only for their own user account.

- 1 In the Web Interface toolbar, select **Users**.
- 2 Select the **Users** tab.
- 3 In the Users list, double-click the user name, or select the user name and click **Edit**.
- 4 In the Edit User dialog, type the preferred password, then type it again to confirm the change.
- 5 Click **Save**.
- 6 Click **Close**.

## 2.4 Web Interface Toolbar

The PlateSpin Transformation Manager Web Interface toolbar gives you access to the key product features described in [Table 2-3](#).

Figure 2-1 PTM Web Interface Toolbar

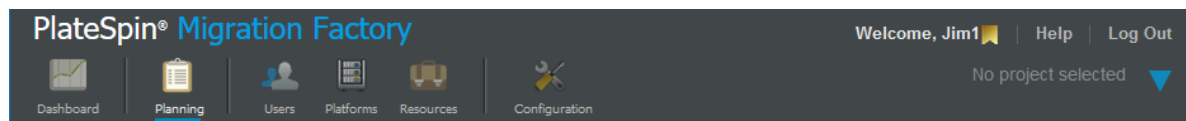











Table 2-3 Toolbar Options

| Icon  | Option                  | Description  |
|---|-------------------------|--|
|  | <b>Dashboard</b>        | <p>The Dashboard tab provides a summary view of status and health information about workload transformations. It also provides convenient access to planning events, bookmarks, and recently viewed pages.</p> <p><b>NOTE:</b> Information is restricted based on the permissions associated with the user's assigned role.</p>  |
|   | <b>Workload Status</b>  | <p>The Workload Status panel in the Dashboard provides the total number of workloads for the project, wave, or batch currently being displayed, and the counts for those workloads in each transformation state, on hold, and with health warnings. Click the category title or value to open a Workloads list with the related member items.</p> <ul style="list-style-type: none"> <li>◆ Total Workloads</li> <li>◆ Imported</li> <li>◆ On Hold*</li> <li>◆ Defining</li> <li>◆ Submitted</li> <li>◆ In Progress</li> <li>◆ Completed</li> <li>◆ Warning*</li> </ul> <p>* Workloads that are On Hold or have a Warning are counted in one of transformation categories, and are also tallied separately.</p> |
|   | <b>What's Happening</b> | <p>The What's Happening panel in the Dashboard displays key planning events for workloads on the current date, a specified period, or a custom day or period. Users can easily see and do the important tasks for the day or an upcoming date, without performing navigation or complex queries.</p>   |
|   | <b>Bookmarks</b>        | <p>The Bookmarks panel in the Dashboard lists the personal bookmarks for the logged-in user. Bookmarks retain the state of the page or dialog visited. You can easily revisit favorite pages or dialogs without performing repetitive and complex queries. You can also share bookmark URLs with colleagues and stakeholders. Transformation Manager honors the role-based permissions when it displays the page.</p>  |

| Icon  | Option                 | Description  |
|---|------------------------|--|
|   | <b>Recently Viewed</b> | The Recently Viewed panel in the Dashboard displays links to pages and dialogs that the logged-in user has recently accessed for View or Edit actions. Duplicate instances with the same URL are represented by a single entry. You can quickly return to a location without repeating the navigation or complex search criteria. You can share the URL with colleagues, or add the link to your bookmarks. Transformation Manager honors the role-based permissions when it displays the page.  |
|    | Planning               | <p>The Planning tab enables users to configure the following information for your transformation project:</p> <ul style="list-style-type: none"> <li>◆ Projects <p>The PTM System Administrator (or Administrator user) creates the project and assigns a user to the Project Manager role.</p> </li> <li>◆ Waves</li> <li>◆ Batches</li> <li>◆ Applications</li> <li>◆ Workloads</li> </ul>   |
|    | Users                  | <p>The Users tab enables the PTM System Administrator (or member of the Administrators group) to configure and manage the following objects for transformation projects:</p> <ul style="list-style-type: none"> <li>◆ Organizations</li> <li>◆ Users <ul style="list-style-type: none"> <li>◆ User accounts</li> <li>◆ User role assignments</li> </ul> </li> <li>◆ Groups <ul style="list-style-type: none"> <li>◆ Group accounts</li> <li>◆ Group role assignments</li> </ul> </li> </ul> <p>Users can modify the password for their own PTM user account.</p> |
|  | Platforms              | <p>The Platforms tab enables users to add and manage platforms that a project will use as migration targets.</p> <p>PTM automatically discovers information about the platform and its associated resources. You can exclude a resource to hide it in planning menus.</p>  |
|  | Resources              | <p>The Resources tab enables users to configure the following information for a transformation project:</p> <ul style="list-style-type: none"> <li>◆ Credentials</li> <li>◆ Migration Servers</li> <li>◆ Environments</li> </ul>   |

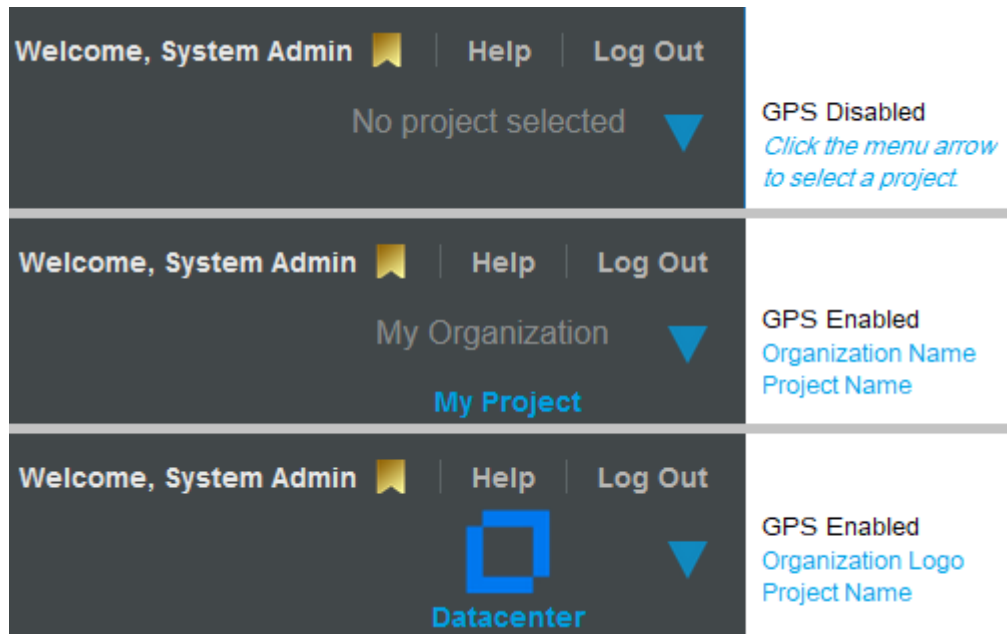
| Icon  | Option                  | Description  |
|---|-------------------------|--|
|  | Configuration           | <p>The Configuration tab enables the PTM System Administrator (or member of the Administrators group) to manage the following application features:</p> <ul style="list-style-type: none"> <li>◆ Connectors</li> <li>◆ Migrate Connector</li> <li>◆ Operating Systems</li> </ul>   |
|  | Global Project Selector | <p>The Global Project Selector (GPS) enables users to narrow the scope globally to a single project for the information displayed and acted on. When GPS is enabled, the dialogs automatically complete fields for the project and its parent organization.</p> <p>Expand the menu to select from projects available to the logged-in user. The selected project name and its parent organization image (if available) displays in the GPS area.</p> |
|  | Bookmarks               | The Bookmarks menu provides a list of bookmarks to pages, dialogs, and queries that the logged-in user has saved.  |
|  | Help                    | The Help menu provides links to help pages for your current location, help for common tasks, a link to online documentation, and information about the product.  |

## 2.5 Global Project Selector

The Global Project Selector (GPS) sets the global scope to a single project for the information displayed and acted on in the Web Interface for the logged-in user. If you have permissions to work with multiple projects, the Global Project Selector helps you focus on workloads and resources for a single project at a time. If you have permissions only for a single project, the GPS is set automatically to your project.

The Global Project Selector is available on the right side of the Web Interface toolbar. When the GPS is disabled, its display area clearly indicates that no project is selected. When a project is selected, the Global Project Selector displays the name of the project and its parent organization's name or logo (if it is available).

**Figure 2-2** Display Area for Global Project Selector



When you set the Global Project Selector, the dialogs throughout the product automatically complete fields for the project and its parent organization. The GPS applies a project-level filter to all tables to display only the components assigned to or associated with the selected project. The Advanced Search form and the Bulk Edit form display the Custom fields (if any) that are defined for the project and allow them to be used in search and edit actions.

**To add the GPS project-level filter:**

- 1 Click the Global Project Selector menu arrow ▼ to open a list of projects.
- 2 Locate and select the appropriate project. You can scroll or filter the list to locate the project of interest.

The selected page refreshes the list to display objects only for the selected project.

The selected project filter remains in effect until you deselect that project or select a different project. If you have permissions for only a single project, you cannot deselect the project.

**To remove the GPS project-level filter:**

- 1 Pause over the Global Project Selector area, then click the X to remove the project filter.  
The selected page refreshes the list to display objects for all projects the user has permissions to view.

## 2.6 Bulk Actions

PlateSpin Transformation Manager provides bulk actions to help you manipulate and perform actions on multiple objects at a time.

- ♦ “[Spreadsheet Import](#)” on page 38
- ♦ “[Import](#)” on page 38

- ♦ [“Import Progress” on page 38](#)
- ♦ [“Bulk Edit” on page 38](#)
- ♦ [“Bulk Status Change” on page 38](#)

## 2.6.1 Spreadsheet Import

You can import source workload information by importing or re-importing the machine information using the **Import Spreadsheet** action on the Workloads page.

In the PlateSpin Migration Factory environment, the PlateSpin Migrate Connector provides automated discovery of details for machines in the spreadsheet after a successful spreadsheet import.

## 2.6.2 Import

You can import a single IP address or a range of up to 256 IPv4 addresses using the **Import** action on the Workloads page. The PlateSpin Migrate Connector provides automated discovery of details for IP addresses for Windows or Linux workloads.

## 2.6.3 Import Progress

You can view the progress of import activities for workloads imported during the past 24 hours. The report displays Import Results for workloads by status: All, Success, In Progress, Failed, and Not Found. Set the Global Project Selector to limit the report to imports attempted for a specific project.

---

**NOTE:** PTM restricts workload visibility according to the permissions of the logged-in user.

---

## 2.6.4 Bulk Edit

You can apply settings to multiple target workloads at a time by setting values in the **Bulk Edit** action on the Workloads page. Use the Global Project Selector, Filter, Advanced Search, sort, and multiple-select functions to refine the Workloads list and select the items for action. Use the Bulk Edit dialog to specify a value for one or more parameters in the selected workloads. Each specified value is set independently for a selected workload only if the value is a valid setting for it.

Bulk Edit performs a pre-check of the intended changes. The Bulk Edit Results report identifies workloads where changes will be fully performed, partially performed, or not performed. The report provides warnings that help you to understand implications of the requested changes. After reviewing the report, you can apply the edits, or cancel the request and try again.

## 2.6.5 Bulk Status Change


You can apply state change settings to multiple target workloads at a time by using the **Bulk Status Change** action. Use the advanced search and sort options to refine the list and select the items for action. Use the Bulk Status Change form to specify the appropriate state for the selected workloads.

## 2.7 Show Links for Navigation URLs

The **Show Link** icon for a dialog provides a navigation URL that takes you directly to the dialog for the selected object. You can paste the link in the Location bar of a supported web browser to return directly to the location in the Web Interface. You can also paste the link in other applications, such as email, Excel, and Word, to share with stakeholders.

Users who follow the link will be prompted to log in to the Web Interface. The user must have a PlateSpin Transformation Manager user account to log in. To see the target page and its contents, the user account must be assigned to a role that has permission to access the page and to view or edit the objects displayed on it.

### To access a dialog's Navigation URL for a selected object:






- 1 On the dialog, click the **Show Link** icon  in the upper right corner to show the URL to the dialog for the selected object.
- 2 (Optional) Click the link to open the dialog in a new tab, then log in again to the Web Interface to gain access.
- 3 (Optional) Copy the URL to the clipboard, then do any of the following. Users of the link must log in to access the dialog.
  - ◆ Paste the link in the Location bar of any supported web browser to open the dialog in a different browser window.
  - ◆ Paste the link in an email to share it with stakeholders.
  - ◆ Paste the link in other applications to provide convenient access to the object's information.

## 2.8 Bookmarks

PlateSpin Transformation Manager Bookmarks enable you to save repetitive and complex queries, to quickly revisit pages or dialogs, and to share views into the workflow with your team. The bookmark URL includes state information for the page, including all Advanced Search settings and the Global Project Selector setting.

Bookmarks are personal for each user and are retained in the PlateSpin Transformation Manager database. Bookmarks persist across sessions, web browsers, and computers. You can access the same bookmarks from any computer and add bookmarks from anywhere, too.

**Table 2-4** Bookmark Actions

| Action | Description  |
|--------|--|
| Create | <p>On the page or dialog of interest:</p> <ul style="list-style-type: none"> <li>◆ <b>Tab:</b> Click the <b>Add Bookmark</b> icon  in the upper right corner of the page.</li> <li>◆ <b>Dialog:</b> Click the <b>Show Link</b> icon  in the upper right corner to show the URL to the dialog for the selected object, then click <b>Add to Bookmarks</b> .</li> <li>◆ <b>Recently Viewed:</b> Select the entry for the recently viewed page or dialog, then click <b>Add to Bookmarks</b> .</li> </ul> <p>Ensure that you provide a robust description that reminds you about the content and usage of the target page or query. It should include relevant keywords and necessary information in a meaningful way. A good description will help you easily find the correct bookmark when you need it.</p> |
| View   | <p>In the toolbar:</p> <ul style="list-style-type: none"> <li>◆ Click the <b>Bookmark</b> icon  to display the quick-access Bookmarks list.</li> </ul> <p>-OR-</p> <ul style="list-style-type: none"> <li>◆ Click <b>Dashboard</b>, then scroll down to view the Bookmarks panel.</li> </ul>  |
| Edit   | <p>You cannot edit a bookmark.</p>   |
| Open   | <p><b>To follow a bookmark from the Bookmarks quick access:</b></p> <ul style="list-style-type: none"> <li>◆ Click the bookmark name to go to the bookmarked page.</li> </ul> <p><b>To follow a bookmark from the Bookmarks panel in the Dashboard:</b></p> <ul style="list-style-type: none"> <li>◆ In the Bookmarks list, select the bookmark, then click <b>Open</b> to go to the bookmarked page.</li> </ul> <p>The bookmarked page or dialog opens in the current web browser tab.</p>  |
| Search | <p>Above the Bookmarks list, enter text in the <b>Search</b> field to filter the bookmarks to ones of interest.</p> <p>The search query applies to bookmark titles and descriptions.</p>   |
| Delete | <p>On the Bookmarks panel, select one or multiple bookmarks, then click <b>Delete</b>.</p>   |
| Clear  | <p>On the Bookmarks panel, use <b>Clear</b> to delete all currently displayed bookmarks. You can delete a filtered list of bookmarks or all bookmarks.</p>   |
| URL    | <p>You can follow the URL for bookmarks that other users send to you. The data you see and actions you can perform on the target page are determined by the permissions associated with your user role.</p> <p>You can share bookmark URLs with others. Bookmarks honor the individual user's permissions based on the roles assigned to the user in one or more projects, as appropriate. Users who follow the link will be prompted to log in to the Web Interface. The user must have a PlateSpin Transformation Manager user account to log in. To see the target page and its contents, the user account must be assigned to a role that has permission to access the page and to view or edit the objects displayed on it.</p>   |



## 2.9 Object IDs

PlateSpin provides object ID information as infotips in the header area of each dialog. Pause over the icon in a dialog header area to view the related object ID.

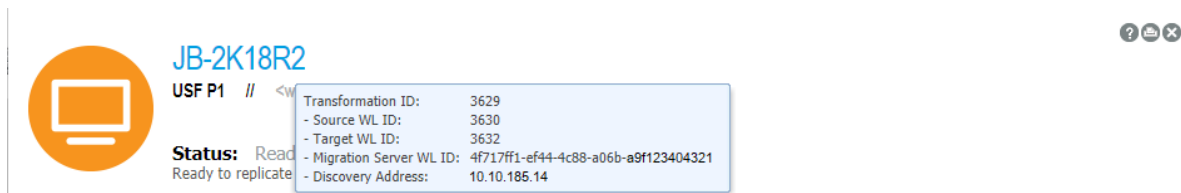
For example, you need the project ID to configure a PlateSpin Migrate Connector for dedicated use by a single project.

**Figure 2-3** Project ID in the Project Dialog



The Workload dialog provides information for the Workload transformation and related objects.

**Figure 2-4** Multiple Object IDs in the Workload Dialog



## 2.10 Custom Display for Lists

In the Web Interface, you can personalize the display for lists by using display tools integrated throughout the product.

- ◆ [“Refresh List Items” on page 41](#)
- ◆ [“Number of Items in a List” on page 41](#)
- ◆ [“Show More Data in a Cell” on page 42](#)
- ◆ [“Sort Data” on page 42](#)
- ◆ [“Show/Hide Columns in a List” on page 42](#)

### 2.10.1 Refresh List Items

Lists poll to refresh the data about once per minute. Double-click the tab title to force any list to refresh immediately, regardless of its normal polling cycle.

### 2.10.2 Number of Items in a List

Pause over the tab title to view an infotip with the total number of items in the list and the total number of selected items currently selected in the list.

Figure 2-5 Workload List Size and Number of Selected Items



### 2.10.3 Show More Data in a Cell

If a list table cell contains more information than can be displayed, the text ends in an ellipsis (...). You can pause over the cell to show the additional information in a pop-up infotip.

### 2.10.4 Sort Data

You can sort list data in ascending order (A to Z) or in descending order (Z to A), based on values in the selected column. The sort function treats numbers as text values and sorts them alphabetically, not numerically. When you sort data, an arrow icon in the column heading indicates the that column is the key for the sort. An Up arrow ▲ indicates an ascending sort order. A Down arrow ▼ indicates a descending sort order.

Most columns are available as data sort keys. If a column is not available as a sort key, the toggle sort does not work, and its Columns menu does not contain the sort options.

#### To sort data in a list:

- 1 Use either of the following methods to effect a sort:
  - ◆ **Toggle Sort:** Click a column heading to sort entries in ascending order based on values in that column. Click the column heading again to sort in descending order.
  - ◆ **Menu Sort:** Pause over a column heading to activate its options, then click the arrow on the right column edge to access the menu for that column. Select **Sort Ascending** (A to Z) or **Sort Descending** (Z to A) to specify the preferred sort order.

### 2.10.5 Show/Hide Columns in a List

You can show or hide data in a list by specifying which parameters to display. Although the hidden data is not displayed, any filter or advanced search action considers the values. For example, in the Workloads list, hidden data includes location (site, enclosure, slot), custom fields, IP address, MAC address, workload type, and virtualization technology.

---

**NOTE:** Your column display preferences for each personalized list persists across your sessions.

---

#### To personalize the columns in a list:

- 1 Pause over a column heading to activate its options, then click the arrow on the heading's right edge to access the menu for that column.
- 2 Select **Columns** to display the parameters available for the list.

The menu lists parameters in the left-to-right display order in the list. Selected parameters show in the list. Deselected parameters are hidden.

- 3 Select the check box next to the parameter you want to show. The list updates to immediately add the column.
- 4 Deselect the check box next to the parameter you want to hide. The list updates immediately to remove the column.
- 5 When you are done, click anywhere on the page to exit the menu.

## 2.11 Custom Filter or Search for Lists

In the Web Interface, you can personalize the display for lists by using filter, search, and advanced search tools integrated throughout the product.

- ♦ [Section 2.11.1, “Filter Data in a List,” on page 43](#)
- ♦ [Section 2.11.2, “Advanced Search of Data,” on page 43](#)

### 2.11.1 Filter Data in a List

Most lists in the Web Interface have a Filter option available to help you search the list and locate the information of interest. The filter applies to all searchable fields in the list, including any hidden columns. For example, on the Workloads list, the default hidden columns include custom fields, IP addresses, MAC addresses, and workload type.


---

**NOTE:** When you filter a list for a status condition, you must replace hyphens and spaces in the status name with underscores. Examples:


```
in_progress  
pre_cutover_testing
```

---

**To filter the objects in a list:**

- 1 In the **Filter** field, begin typing a sequence of characters to display only the entries with values that match.  
The search and filter apply to the list almost immediately as it matches entries.
- 2 Click the **Filter** icon  to clear the **Filter** field.

### 2.11.2 Advanced Search of Data

The Advanced Search  option for lists helps you to locate multiple objects that you want to perform the same action on. Advanced Search is not available for every list.

The Advanced Search dialog is a multiple-option form that allows you to search on any combination of the following parameters for Workloads that make sense for the target of your search:


| Planning  | Platform   | Workload   | Resources   |
|---|--|--|---|
| Project<br>Wave<br>Batch<br>Status<br>Sub Status<br>Health<br>On Hold | Platform<br><br><b>For AWS:</b><br>Region<br>IAM Role<br>Placement Group<br>Security Group<br>Key Pair<br>Encryption Key<br><br><b>For Azure:</b><br>Location<br>Resource Group<br><br><b>For VMware:</b><br>Cluster<br>Cluster Host | Hostname<br>Migrate Server<br>OS Type<br>Application<br>Environment<br>Transform Method<br><br><b>For Azure:</b><br>Azure Machine Size | Total Storage<br>Single Disk Size<br>Total Number of Cores<br>Amount of Memory<br><br><b>For AWS:</b><br>VPC<br>Datastores<br><br><b>For Azure:</b><br>Network<br>Subnet<br>Storage Accounts<br><br><b>For VMware:</b><br>Network<br>Datastores |
| <b>Custom Fields</b>  |  |  |   |
| Field 1<br>Field 5  | Field 2<br>Field 6   | Field 3<br>Field 7   | Field 4<br>Field 8  |

**NOTE:** The Global Project Selector limits the workloads in the Workloads list to the specified project. It also adds the custom fields you defined for the project to the Advanced Search form and Bulk Edit form.

You can use the **Health > All Warning State** option on the Workloads list Advanced Search function to see all workloads in the Warning state. For objects with warnings, you can pause over the Status cell to view the condition that triggered the warning.


You can use the **Status** option to find all objects in a given transformation state, such as Imported, Ready to Submit, Transforming, Ready to Cutover, and so on.

**To search:**

- 1 (Optional) If you have permissions on multiple projects, click the **Global Project Selector**, then select the project of interest.
- 2 Click the **Advanced Search** icon  to the right of the Filter field.
- 3 In the Advanced Search dialog, specify a value for any search parameter.  
The search filters the list to show matches to that setting.
- 4 (Optional) For combination searches, specify a value for additional parameters until you locate the objects of interest.
- 5 (Optional) Click **Clear** to reset the Advanced Search and try again with different fields.

- 6 After you have narrowed the list to the items of interest, click in the list to exit the Advanced Search dialog.

The Advanced Search icon is shaded blue  when any option has been enabled with a search value.

- 7 When you are done, click the **Advanced Search** icon  to the right of the Filter field, then click **Clear** to reset the Advanced Search.

The Advanced Search is cleared automatically if you navigate to a different tab.

## 2.12 Scrolling Up and Down in Lists

The Web Interface is optimized to navigate lists using the scroll bar. Lists have special handling to provide responsive display and scrolling of list items, even for lists containing thousands of items. A list can display up to 25 items at a time. It caches about 200 nearby items in the browser to accommodate scrolling up and down the list. As you scroll, the Web Interface loads nearby items to the cache and releases items further away from the currently displayed items.

---

**NOTE:** Ensure that you use the scroll bar to move up and down lists in the Web Interface. Do not use the Up Arrow or Down Arrow keys to navigate lists.

---

## 2.13 Multiple Item Selection in Lists

In the Web Interface, lists have special handling to provide responsive display and scrolling of list items, even for lists containing thousands of items. A list can display up to 25 items at a time. It caches about 200 nearby items in the browser to accommodate scrolling up and down the list. As you scroll, the Web Interface loads nearby items to the cache and releases items further away from the currently displayed items.

The Web interface supports the familiar keyboard shortcuts for item selection: Shift+Click (consecutive items), Ctrl+Click (non-consecutive items), and Ctrl+A (all items). When you select an item, the Web Interface adds its information to a separate Selected Items cache. Selected rows are shaded light blue. Actions performed on the list apply only to items in the Selected Items cache.

Before you select items, use the Filter and Advanced Search options to reduce the list to the items of interest. Use the Sort function to group like items in the list to accommodate consecutive selection.

You can pause over the list's Tab title to show the following:

- ♦ **List Size:** The total number of items in the list
- ♦ **Selected:** The current number of selected items in the list

Use the following instructions to navigate the list and select items:

- ♦ [“Selecting Consecutive Items” on page 46](#)
- ♦ [“Selecting Non-Consecutive Items” on page 46](#)
- ♦ [“Selecting All Items” on page 46](#)

## 2.13.1 Selecting Consecutive Items

Use the Shift+Click action to select consecutive items in a list. Before you begin, use the sort option in column headers to group the items of interest and facilitate consecutive selection.

**To select consecutive items in a list:**

- 1 Click the first item of interest, press and hold the Shift key, and then click the last item of interest in the displayed list to add those consecutive items to the cached list of selected items.
- 2 (Optional) Scroll up or down to show the next set of deselected items, press and hold the Shift key, then make your next last item selection to extend the consecutive item selection. Repeat the scroll and selection process as needed.
- 3 (Optional) Pause over the list's Tab title to view the current count for the number of selected items.

## 2.13.2 Selecting Non-Consecutive Items

Use the Ctrl+Click action to select non-consecutive items in a list.

**To select non-consecutive items in a list:**

- 1 Press and hold the Ctrl key, and then click each item in the displayed items that you want to add to the cached list of selected items.
- 2 (Optional) Scroll up or down to show the next set of deselected items, press and hold the Ctrl key, then make your next non-consecutive item selection. Repeat the scroll and selection process as needed.
- 3 (Optional) Pause over the list's Tab title to view the current count for the number of selected items.

## 2.13.3 Selecting All Items

The Ctrl+A action selects all of the currently loaded items in the list cache instead of selecting only the currently displayed items. After you select the loaded items, you will scroll through 140 to 200 selected items before you see the next set of deselected items.

**To select all items in a list:**

- 1 Pause over the list's Tab title to view the total number of items in the list.  
The item count gives you an idea of how much scrolling is needed to load and select items.
- 2 Press Ctrl+A to select the currently loaded set of items and add them to the cached list of selected items.
- 3 Scroll up or down until you see the next set of deselected items.
- 4 Press Ctrl-A to add the currently loaded items to the cached list of selected items.
- 5 Repeat [Step 3](#) and [Step 4](#) until all items are selected.
- 6 Pause over the list's Tab title to see the total item count and total selected item count. If they are the same, then all items in the list are selected.

# 3 Getting Started Checklist

Use this checklist to get acquainted with the Web Interface and set up a transformation project for your organization.

**Table 3-1** Getting Started Checklist

| Status                   | Task  | For information, see   |
|--------------------------|---|--|
| <input type="checkbox"/> | <p>1. Log in to the Web Interface using your assigned PTM user account and password.</p> <p>To ensure secure access, you should change your password after your first login, and then log in using your custom password.</p> <p>Visibility of features, options, and data is based on the PTM roles you have been assigned.</p> | <p><a href="#">Accessing the Web Interface (page 33)</a></p> <p><a href="#">Changing a User Password (page 33)</a></p>   |
| <input type="checkbox"/> | <p>2. Familiarize yourself with the Web Interface.</p>  | <p><a href="#">Web Interface Toolbar (page 33)</a></p> <p><a href="#">Global Project Selector (page 36)</a></p> <p><a href="#">Bulk Actions (page 37)</a></p> <p><a href="#">Show Links for Navigation URLs (page 39)</a></p> <p><a href="#">Bookmarks (page 39)</a></p> <p><a href="#">Custom Display for Lists (page 41)</a></p> <p><a href="#">Multiple Item Selection in Lists (page 45)</a></p> |
| <input type="checkbox"/> | <p>3. Create an organization.</p>   | <p>See “<a href="#">Managing Organizations</a>” in the <i>PTM 2019.5 Administrator Guide</i>.</p>  |
| <input type="checkbox"/> | <p>4. Create a transformation project.</p>  | <p>See “<a href="#">Managing Projects</a>” in the <i>PTM 2019.5 Administrator Guide</i>.</p>   |
| <input type="checkbox"/> | <p>5. Create one or more Waves for the project.</p>   | <p><a href="#">About Waves (page 85)</a></p> <p><a href="#">Creating a Wave (page 86)</a></p>  |
| <input type="checkbox"/> | <p>6. For each Wave, create one or more Batches.</p>  | <p><a href="#">About Batches (page 89)</a></p> <p><a href="#">Creating a Batch (page 91)</a></p>   |
| <input type="checkbox"/> | <p>7. Create user accounts for your project, and assign each user to project roles as appropriate.</p>  | <p>See “<a href="#">Managing Users</a>” in the <i>PTM 2019.5 Administrator Guide</i>.</p>  |

| Status                   | Task  | For information, see  |
|--------------------------|---|---|
| <input type="checkbox"/> | 8. Prepare one or more Import Spreadsheets for the project, or use Import with automated discovery.                     | <a href="#">Preparing an Import Spreadsheet (page 169)</a><br><a href="#">Importing Workloads with a Spreadsheet (page 105)</a><br><a href="#">Importing Workloads with the Import Dialog (page 106)</a>  |
| <input type="checkbox"/> | 9. Create applications that are available to target workloads as you define transformations.                            | <a href="#">About Applications (page 95)</a><br><a href="#">Creating Applications (page 96)</a><br>Table A-8, “Application Parameter,” on page 180  |
| <input type="checkbox"/> | 10. Create target platforms to discover resources that are available to target workloads as you define transformations. | <b>Platforms</b> <ul style="list-style-type: none"> <li>◆ VMware Clusters               <ul style="list-style-type: none"> <li>◆ Clusters</li> <li>◆ Hosts</li> <li>◆ Networks</li> <li>◆ Datastores</li> <li>◆ Resource Pools</li> </ul> </li> <li>◆ Azure Cloud               <ul style="list-style-type: none"> <li>◆ Locations</li> <li>◆ Networks and Subnets</li> <li>◆ Storage Accounts</li> <li>◆ Resource Groups</li> <li>◆ Availability Sets</li> </ul> </li> <li>◆ AWS Cloud (Manual (tracking) mode only)               <ul style="list-style-type: none"> <li>◆ Regions</li> <li>◆ VPCs and Subnets</li> <li>◆ Datastores</li> <li>◆ Security Groups</li> <li>◆ Placement Groups</li> <li>◆ Key Pairs</li> <li>◆ Encryption Keys</li> <li>◆ IAM Roles</li> </ul> </li> </ul> |
| <input type="checkbox"/> | 11. Create resources that are available to target platforms and workloads as you define transformations.                | <b>Resources (page 183)</b> <ul style="list-style-type: none"> <li>◆ Credentials</li> <li>◆ Migration Servers</li> <li>◆ Environments</li> </ul>  |



| Status                   | Task  | For information, see   |
|--------------------------|---|--|
| <input type="checkbox"/> | 12. For each imported workload, use bulk edit or individual edit to define the transformation method and details for the target workload.   | <a href="#">Overview of Workloads (page 101)</a><br><a href="#">Editing the Workload Transformation (page 141)</a><br><a href="#">Bulk Edit for Multiple Target Workloads (page 143)</a>   |
| <input type="checkbox"/> | 13. As a Project Architect, submit one or more workloads for transformation.  | <a href="#">Status and Retry (page 119)</a><br><a href="#">Figure 16-1, “The Transformation Workflow,” on page 120</a><br><a href="#">Bulk Status Change for Multiple Target Workloads (page 150)</a>  |
| <input type="checkbox"/> | 14. (Automated Migration) As a Migration Specialist, monitor the workload transformations.  | <a href="#">Requirements for Automated Migration (page 24)</a><br><a href="#">Status and Retry (page 119)</a>  |
| <input type="checkbox"/> | 15. (Manual Migration) As a Migration Specialist, execute the workload transformations, and update their transformation status in PTM.  | <a href="#">Status and Retry (page 119)</a><br><a href="#">Figure 16-1, “The Transformation Workflow,” on page 120</a><br><a href="#">Bulk Status Change for Multiple Target Workloads (page 150)</a>  |
| <input type="checkbox"/> | 16. (Tracking External Migration) As a Migration Specialist, set up, configure, and execute migrations on the project’s PlateSpin Migrate servers. Monitor status changes in PTM that are received from the Migrate server. | <a href="#">Tracking External Workload Migrations (page 163)</a>   |
| <input type="checkbox"/> | 17. Monitor the project status by viewing core metrics and related reports in the real-time visual dashboard.   | <a href="#">Workload Status (page 53)</a><br><a href="#">Viewing Workload Status Counts by Project, Wave, or Batch (page 65)</a><br><a href="#">What’s Happening (page 55)</a><br><a href="#">Bookmarks (page 57)</a><br><a href="#">Recently Viewed (page 63)</a> |





# Dashboard

In PlateSpin Transformation Manager, the Dashboard provides a variety of information about project health, transformation status, and planning events. Users and stakeholders can easily view the current progress of transformations for an entire project or for a particular wave or batch. The What's Happening panel reports events in a specified period with links directly to their related tasks. Bookmarks and Recently Viewed panels enable quick access to workload tasks and events of interest.

- ◆ [Chapter 4, "Workload Status," on page 53](#)
- ◆ [Chapter 5, "What's Happening," on page 55](#)
- ◆ [Chapter 6, "Bookmarks," on page 57](#)
- ◆ [Chapter 7, "Recently Viewed," on page 63](#)
- ◆ [Chapter 8, "Workload Status," on page 65](#)



# 4 Workload Status

The Workload Status panel in the Dashboard displays a summary view of status and metrics for the project. Users and stakeholders can easily view the current progress of transformations for an entire project or for a particular wave or batch.

- ◆ [Section 4.1, “Workload Status,” on page 53](#)

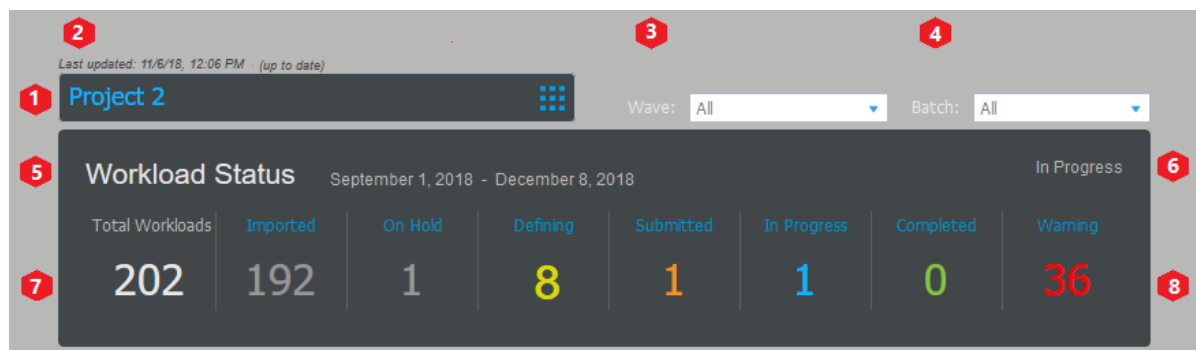
## 4.1 Workload Status

The Workload Status panel in the Dashboard provides summary metrics for a transformation project. The report does the following:

- ◆ Displays metrics for a selected project based on the role and permissions for the logged-in user. All waves and batches are included by default.
- ◆ Displays custom metrics by a specified wave or batch.
- ◆ Runs status and count calculation jobs every 5 minutes.

Each column heading links to a view of the Workloads list that has been filtered to list the related workloads. In the report, the Status column shows the transformation workflow state and the migration sub state. You can pause over the state or sub state message to view details in a tooltip.

**Figure 4-1** Project View of Workload Status



**Table 4-1** Dashboard Information

| Key | Metric  | Description   |
|-----|---------|---|
| 1   | Project | <p>If you have roles on multiple projects, use the Project field to select which project’s information to display. If you have a project set in the Global Project Selector, PTM automatically sets this field.</p> <p>If you have a role on a single project, the Project field and Global Project Selector settings are static.</p> |

| Key | Metric          | Description   |
|-----|-----------------|---|
| 2   | Last Updated    | The PTM Server compiles status and counts for each project every 5 minutes. This time stamp indicates when the statistics were last updated. If a status change occurs while the Dashboard is open, PTM changes the Last Updated status from <code>Up to date</code> to <code>Update pending</code> , then refreshes the statistics at the end of the measurement interval.   |
| 3   | Waves           | If a project has multiple waves, the Waves field enables you to select which wave's information to display. The default is all waves.   |
| 4   | Batches         | If a project has multiple batches, the Batches field enables you to select which batch's information to display. The default is all batches.  |
| 5   | Schedule        | At the top of the Workload Status pane, PTM displays the start date and cutover date of the project, wave, or batch currently being displayed.  |
| 6   | Project Status  | The current state of the project. For example: Planning, In Progress, Closed.   |
| 7   | Workload Status | <p>The Workload Status panel in the Dashboard provides the total number of workloads for the project, wave, or batch currently being displayed, and the counts for those workloads in each transformation state, on hold, and with health warnings. Click the category title or value to open a Workloads list with the related member items.</p> <ul style="list-style-type: none"> <li>◆ Total Workloads</li> <li>◆ Imported</li> <li>◆ On Hold*</li> <li>◆ Defining</li> <li>◆ Submitted</li> <li>◆ In Progress</li> <li>◆ Completed</li> <li>◆ Warning*</li> </ul> <p>* Workloads that are On Hold or have a Warning are counted in one of transformation categories, and are also tallied separately.</p>                      |
| 8   | Warning         | <p>The count includes any workload transformation that has one or more of the following conditions:</p> <ul style="list-style-type: none"> <li>◆ Transformation is in a failed state.</li> <li>◆ Transformation is not in progress, but the transformation start date has passed.</li> <li>◆ Transformation has not been completed, but the transformation cutover date has passed.</li> <li>◆ Transformation start date is before its parent's start date (batch, wave, project).</li> <li>◆ Transformation cutover date is after its parent's cutover date.</li> </ul> <p>You can alternatively use the <b>Health &gt; All Warning States</b> option on the Advanced Search dialog to see all workloads in the Warning state.</p> |

# 5 What's Happening

The What's Happening panel reports events in a specified period with links directly to their related tasks.

- ♦ [Section 5.1, "What's Happening Overview," on page 55](#)

## 5.1 What's Happening Overview

The What's Happening panel in the Dashboard displays key planning events for workloads on the current date, a specified period, or a custom day or period. Users can easily see and do the important tasks for the day or an upcoming date, without performing navigation or complex queries.

*Figure 5-1 Project View of What's Happening This Week*

| What's Happening   |  |          |              |              |
|--|--|----------|--------------|--------------|
| This Week  |  | Open     |              | Filter by... |
| Name   | Details  | Type     | Date         |              |
| <b>wasatch</b>   | The workload will automatically be cut over on Thu, Nov 15 | Workload | Nov 15, 2018 |              |
| <b>Migrate</b><br><small>Automated for Azure West US</small> | The Batch's start date has arrived                         | Batch    | Nov 12, 2018 |              |
| <b>angel</b>   | The workload will automatically be cut over on Sat, Nov 17 | Workload | Nov 17, 2018 |              |
| <b>MF P2_W2</b>  | The Wave's end date is Sat, Nov 17                         | Wave     | Nov 17, 2018 |              |
| <b>MF P2_W2_B2</b>   | The Batch's end date is Sat, Nov 17                        | Batch    | Nov 17, 2018 |              |
| <b>Project 2</b><br><small>Microfocus Linux Machines</small> | The Project's end date is Sat, Nov 17                      | Project  | Nov 17, 2018 |              |
| <b>Datacenter</b><br><small>Migration to Azure</small>       | The Project's start date has arrived                       | Project  | Nov 12, 2018 |              |

What's Happening identifies common events, such as:

- ♦ The <Project, Wave, Batch, or Workload> start date has arrived.
- ♦ The <Project, Wave, or Batch> is scheduled to be completed today.
- ♦ The workload should be cut over manually today.
- ♦ The workload will be cut over automatically today.
- ♦ The workload will be submitted to a Migration Server today to begin preliminary configuration. Replication begins in {3} days.
- ♦ The completed workload job will be deleted from the Migration Server today.

Table 5-1 identifies actions available to customize the events that are displayed. You can filter the events for specified a project, wave, and batch by using the controls at the top of the Dashboard. If you have roles on multiple projects, the Project field allows you select which project's information to display. If you have a role on a single project, the Project field and Project Selector settings are static.

**Table 5-1** Actions for What's Happening

| Options  | Action  |
|----------|---|
| Date     | <p>Choose from the following predefined periods, or set a custom period:</p> <ul style="list-style-type: none"> <li>◆ Today</li> <li>◆ Yesterday</li> <li>◆ Tomorrow</li> <li>◆ This week (default)</li> <li>◆ Last week</li> <li>◆ Next week</li> <li>◆ This month</li> <li>◆ Last month</li> <li>◆ Next month</li> <li>◆ Custom</li> </ul> <p>Select <b>Custom</b>, then click the <b>Calendar</b> icon to open a calendar tool for selecting the From and To dates of interest.</p> <p>Your Date setting for What's Happening persists across sessions. A Custom setting persists as Custom with From and To dates that correspond to the This Week option.</p> <p><b>NOTE:</b> Dates are based on the time zone of the PlateSpin Transformation Manager server.</p> |
| Open     | Select an object, then click <b>Open</b> to go to the related page or dialog.   |
| View URL | Pause over the <b>Name</b> of the object to view the page-specific part of the URL in a tooltip.  |
| Filter   | Type characters in the <b>Search</b> field to find the object of interest.  |



# 6 Bookmarks

PlateSpin Transformation Manager Bookmarks enable you to save repetitive and complex queries, to quickly revisit pages or dialogs, and to share views into the workflow with your team. The bookmark URL includes state information for the page, including all Advanced Search settings and the Global Project Selector setting.

- ◆ [Section 6.1, “Bookmarks Overview,” on page 57](#)
- ◆ [Section 6.2, “About Bookmarks,” on page 58](#)
- ◆ [Section 6.3, “Creating Bookmarks,” on page 59](#)
- ◆ [Section 6.4, “Viewing Bookmarks,” on page 60](#)
- ◆ [Section 6.5, “Opening Bookmarks,” on page 60](#)
- ◆ [Section 6.6, “Searching for Bookmarks,” on page 61](#)
- ◆ [Section 6.7, “Deleting Bookmarks,” on page 61](#)

## 6.1 Bookmarks Overview

The Bookmarks panel in the Dashboard lists the personal bookmarks for the logged-in user. Bookmarks retain the state of the page or dialog visited. You can easily revisit favorite pages or dialogs without performing repetitive and complex queries. You can also share bookmark URLs with colleagues and stakeholders. Transformation Manager honors the role-based permissions when it displays the page.

Your bookmarks are stored in the PTM database so that they are always available to you. Bookmarks persist across sessions and do not depend on the browser or computer you use to access PTM.

**Table 6-1** Actions for Bookmarks

| Options        | Action  |
|----------------|---|
| View bookmarks | In the list, view the bookmark name, description, and type.   |
| Open           | Select a bookmark entry, then click <b>Open</b> to open the page in the current browser tab with the saved filters and selections applied.  |
| Delete         | Select one or more bookmarks, then click <b>Delete</b> to remove the selected bookmarks from your personal bookmarks. The removal is permanent.   |
| Clear          | Click <b>Clear</b> to delete all bookmarks in the list.<br><br>Filter the list to include only the bookmarks you want to delete, then click <b>Clear</b> . Refresh the page to display the remaining bookmarks. |
| View URL       | Pause over the <b>Name</b> of the bookmark to view the page-specific part of the URL in a tooltip.  |

| Options | Action  |
|---------|---|
| Filter  | Type characters in the <b>Search</b> field to find the bookmark of interest. The search checks the bookmark name and description. |

## 6.2 About Bookmarks

Bookmarks are personal for each user and are retained in the PlateSpin Transformation Manager database. Bookmarks persist across sessions, web browsers, and computers. You can access the same bookmarks from any computer and add bookmarks from anywhere, too.

You can share bookmark URLs with others. Bookmarks honor the individual user’s permissions based on the roles assigned to the user in one or more projects, as appropriate. Users who follow the link will be prompted to log in to the Web Interface. The user must have a PlateSpin Transformation Manager user account to log in. To see the target page and its contents, the user account must be assigned to a role that has permission to access the page and to view or edit the objects displayed on it.

A bookmark includes the following information:

### Name

A friendly name for the bookmark. A suggested name is based on the page name. A custom name is helpful in distinguishing bookmarks over time. Names are not forced to be unique.

The name must begin with a letter or number. It can contain only letters, numbers, and the following special characters: space, hyphen, underscore, apostrophe, percent, ampersand, comma, and period.

### Description

(Optional) A brief description of the bookmark.

Ensure that you provide a robust description that reminds you about the content and usage of the target page or query. It should include relevant keywords and necessary information in a meaningful way. A good description will help you easily find the correct bookmark when you need it.


### URL












PTM automatically compiles a bookmark URL that contains state information for the page, including all Advanced Search settings and the Global Project Selector setting. You can view the URL after you create the bookmark.

### Type

The bookmark type reflects its parent location in the Web Interface.





**Table 6-2** *Bookmark Types*

| Icon  | Type     |
|---|----------|
|  | Projects |


| Icon  | Type              |
|---|-------------------|
|    | Waves             |
|    | Batches           |
|    | Applications      |
|    | Workloads         |
|    | Organizations     |
|    | Users             |
|    | Groups            |
|    | Platforms         |
|    | Credentials       |
|    | Migration Servers |
|  | Environment       |

## 6.3 Creating Bookmarks

To add a bookmark:

- 1 Navigate to the page or dialog of interest
- 2 (Optional) For lists, apply a search filter to narrow the scope of the results.
- 3 Create the bookmark:
  - ◆ **Tab:** Click the **Add Bookmark** icon  in the upper right corner of the page.
  - ◆ **Dialog:** Click the **Show Link** icon  in the upper right corner to show the URL to the dialog for the selected object, then click **Add to Bookmarks** .
  - ◆ **Recently Viewed:** Select the entry for the recently viewed page or dialog, then click **Add to Bookmarks** .
- 4 Specify a name for the bookmark to describe the content or context of page or dialog.  
The default bookmark name is the name of the page or dialog. A custom name can help distinguish the bookmark.
- 5 In **Description**, specify information that adequately identifies this location and search conditions in your Bookmarks list.  
The Description displays along with the Name in Bookmarks lists. It can be helpful to plan an approach for describing bookmarks with keywords or tags meaningful to you.


- 6 Click **Save**.

A confirmation infotip displays in the toolbar next to the quick-access Bookmarks icon .

## 6.4 Viewing Bookmarks

You can view your personal bookmarks in the quick access Bookmarks list or in the Bookmarks panel in the Dashboard.

### To view bookmarks and information about them:

- 1 In the toolbar:
  - ♦ Click the **Bookmark** icon  to display the quick-access Bookmarks list.
  - OR-
  - ♦ Click **Dashboard**, then scroll down to view the Bookmarks panel.
- 2 In the Bookmarks list, view the bookmark name, description, and type.
- 3 Type text the **Search** field to locate bookmarks of interest.
- 4 Pause above the bookmark name to view the bookmark URL in an infotip.

## 6.5 Opening Bookmarks


You can find and follow your personal bookmarks from the Bookmarks list in the Bookmarks quick access or the Bookmarks panel in the Dashboard.

---

**NOTE:** You can follow the URL for bookmarks that other users send to you. The data you see and actions you can perform on the target page are determined by the permissions associated with your user role.

---

### To open a bookmark from the Bookmarks quick access:

- 1 In the toolbar, click the **Bookmark** icon  to display the Bookmarks list.
- 2 Type text in the **Search** field to locate bookmarks of interest.

The search query applies to bookmark titles and descriptions.
- 3 Click the bookmark name to go to the bookmarked page.

The bookmarked page or dialog opens in the current web browser tab.

### To open a bookmark from the Bookmarks panel in the Dashboard:

- 1 In the **Dashboard**, scroll down to view the Bookmarks panel.
- 2 Type text in the **Search** field to locate bookmarks of interest.


The search query applies to bookmark titles and descriptions.
- 3 In the Bookmarks list, select the bookmark, then click **Open** to go to the bookmarked page.

The bookmarked page or dialog opens in the current web browser tab.

## 6.6 Searching for Bookmarks

The Bookmarks list has a search function that filters the displayed list of bookmarks.

### To search for a bookmark:

- 1 In the toolbar:
  - ♦ Click the **Bookmark** icon  to view the quick access Bookmarks list.
  - OR-
  - ♦ Click **Dashboard**, then scroll down to view the Bookmarks panel.
- 2 Type text in the **Search** field to filter the bookmarks to ones of interest.  
The search query applies to bookmark titles and descriptions.

## 6.7 Deleting Bookmarks

You can delete your personal bookmarks by using the **Delete** or **Clear** options in the Bookmarks panel in the Dashboard. **Delete** removes selected bookmarks, while **Clear** deletes the currently listed bookmarks.

### To delete selected bookmarks:

- 1 In the **Dashboard**, scroll down to view the Bookmarks panel.
- 2 (Optional) Filter the Bookmarks list to search for bookmarks of interest.
- 3 In the Bookmarks list, select one or multiple bookmarks.
- 4 Click **Delete**, then click **Yes** to confirm the delete.

### To delete a filtered list of bookmarks:

- 1 In the **Dashboard**, scroll down to view the Bookmarks panel.
- 2 Filter the Bookmarks list to locate the bookmarks of interest.
- 3 Click **Clear**, then click **Yes** to confirm the delete.
- 4 Refresh the page to display the remaining bookmarks.

### To delete all bookmarks:

- 1 In the **Dashboard**, scroll down to view the Bookmarks panel.
- 2 Click **Clear**, then click **Yes** to confirm the delete.



# 7 Recently Viewed

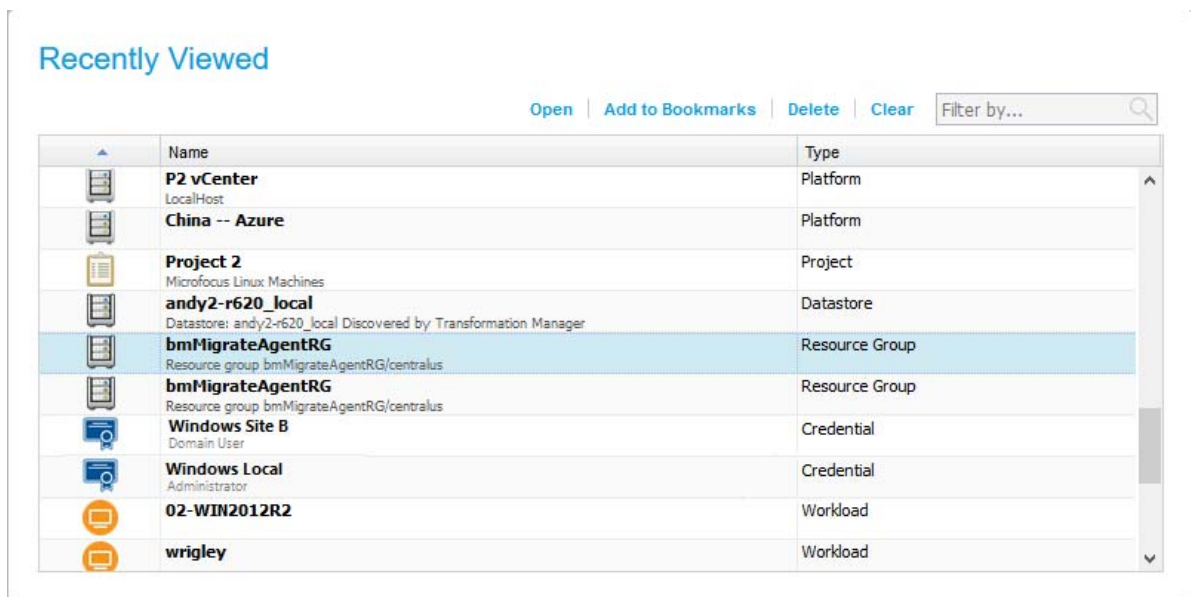
The Recently Viewed panel in the Dashboard enables quick access to workload tasks and events of interest.

- ♦ [Section 7.1, “Recently Viewed Overview,” on page 63](#)

## 7.1 Recently Viewed Overview

The Recently Viewed panel in the Dashboard displays links to pages and dialogs that the logged-in user has recently accessed for View or Edit actions. Duplicate instances with the same URL are represented by a single entry. You can quickly return to a location without repeating the navigation or complex search criteria. You can share the URL with colleagues, or add the link to your bookmarks. Transformation Manager honors the role-based permissions when it displays the page.

**Figure 7-1** Recently Viewed



**Table 7-1** Actions for Recently Viewed

| Options          | Action   |
|------------------|--|
| View links       | In the list, view the page or dialog name, description, and type.  |
| Open             | Select an entry, then click <b>Open</b> to return to the page with the previous filters applied.         |
| Add to Bookmarks | Select an entry, then click <b>Add to Bookmarks</b> to return to create a personal bookmark for the page |

| <b>Options</b> | <b>Action</b>  |
|----------------|--|
| Delete         | Select one or more entries, then click <b>Delete</b> to remove the entries from the list.<br><br>The removal is temporary. The entry will be displayed again the next time you view that page.   |
| Clear          | Click <b>Clear</b> to delete all links in the list, including their undisplayed duplicate entries.<br><br>Filter the list to include only the links you want to delete, then click <b>Clear</b> . Refresh the page to display the remaining links. |
| View URL       | Pause over the <b>Name</b> of the entry to view the page-specific part of the URL in a tooltip.  |
| Filter         | Type characters in the <b>Search</b> field to find the recently viewed page of interest.   |



# 8 Workload Status

PlateSpin Transformation Manager provides health and status information throughout the Web Interface.

- ◆ [Section 8.1, “Viewing Workload Status Counts by Project, Wave, or Batch,” on page 65](#)
- ◆ [Section 8.2, “Viewing Workload Health and Status,” on page 66](#)

## 8.1 Viewing Workload Status Counts by Project, Wave, or Batch

The lists for Projects, Waves, and Batches include the following summary health and status counts in the **Counts** column.

### Total Workloads

Total number of workloads in the project that are in one of the following transformation phases:

- ◆ Imported
- ◆ Defining
- ◆ Submitted
- ◆ In Progress
- ◆ Completed

Workloads that are On Hold or have a Warning are counted in one of the transformation categories, and are also tallied separately.

### Imported

The number of workloads that have been successfully imported and discovered. Transformation planning has not begun for these workloads. The list excludes attempted imports that are pending discovery or were not found.

### On Hold

The number of workloads that are currently in an On Hold state. On Hold is set in the Workload dialog or Bulk Edit dialog.

You can leverage the On Hold link in the Dashboard to find On Hold workloads for a Project, Wave, or Branch, then remove the hold for multiple workloads through Bulk Edit.

### Defining

Total number of workloads currently in the Defining state, typically with a status of Needs Additional Info or Ready to be Submitted.

### Submitted

Total number of workloads that have been defined and submitted for migration and are waiting for transformation to start.

### In Progress

Total number of workloads currently in the Transforming state, typically with a status of Preparing Workload, Replicating Workload, Pre-Cutover Testing, Cutover, and Post-Cutover Testing.

### Completed

Total number of workload transformations currently in the Completed state. Cutover and post-cutover testing has occurred.

### Warning

Total number of workloads in the project that currently have one or more warning conditions.

The count includes any workload transformation that has one or more of the following conditions:

- ◆ Transformation is in a failed state.
- ◆ Transformation is not in progress, but the transformation start date has passed.
- ◆ Transformation has not been completed, but the transformation cutover date has passed.
- ◆ Transformation start date is before its parent's start date (batch, wave, project).
- ◆ Transformation cutover date is after its parent's cutover date.

You can alternatively use the **Health > All Warning States** option on the Advanced Search dialog to see all workloads in the Warning state.

## 8.2 Viewing Workload Health and Status

Table 8-1 identifies the various ways to view health and status information for workloads.

**Table 8-1** Views of Workload Health and Status

| Health and Status View                                    | How to View   |
|---|---|
| Overview of workload status for a project, wave, or batch | <ol style="list-style-type: none"><li>1. Select <b>Dashboard</b>, then view the <b>Workload Status</b> panel.</li><li>2. Set the project, wave, or batch to customize the report.</li><li>3. Click the column heading link to view the list of workloads for each reported state.</li></ol> |
| Workloads in a particular Health state                    | <ol style="list-style-type: none"><li>1. Select <b>Project &gt; Workloads</b> tab &gt; <b>Advanced Search</b>.</li><li>2. Under <b>Planning</b>, select <b>Health</b> and choose the state of interest.</li></ol>   |
| Workloads in a particular Transformation State            | <ol style="list-style-type: none"><li>1. Select <b>Project &gt; Workloads</b> tab &gt; <b>Advanced Search</b>.</li><li>2. Under <b>Planning</b>, select <b>Status</b> or <b>Sub Status</b> and choose the state of interest.</li></ol>  |

| Health and Status View                 | How to View  |
|--|--|
| Workloads that are on hold             | <ol style="list-style-type: none"> <li>1. Select <b>Project &gt; Workloads</b> tab &gt; <b>Advanced Search</b>.</li> <li>2. Under <b>Planning</b>, select <b>On Hold</b> and choose <b>True</b>.</li> </ol> <p>- OR -</p> <ol style="list-style-type: none"> <li>1. Select <b>Dashboard</b>, then view the <b>Workload Status</b> panel.</li> <li>2. Set the project, wave, or batch to customize the report.</li> <li>3. Click the <b>On Hold</b> heading link to view the list of workloads that are on hold.</li> </ol> |
| Workload status for multiple workloads | <ol style="list-style-type: none"> <li>1. Select <b>Project &gt; Workloads</b> tab to view the Workloads list.</li> <li>2. Use Advanced Search to narrow your search to the workloads of interest.</li> <li>3. In the Workloads list, the <b>Status</b> column shows the transformation workflow state and the migration sub state.</li> <li>4. Pause over the state or sub state message to view details in a tooltip.</li> </ol>   |
| Workload status for a single workload  | <ol style="list-style-type: none"> <li>1. Select <b>Project &gt; Workloads</b> tab.</li> <li>2. In the Workloads list, locate and double-click the workload of interest to open the Workload dialog.</li> <li>3. View the health and status information in the header area.</li> </ol>   |





# Projects

PlateSpin Transformation Manager provides the tools you need to create elements and organize them to define your transformation projects.

- ◆ [Chapter 9, “Overview of Project Planning,” on page 71](#)
- ◆ [Chapter 10, “Managing Projects,” on page 77](#)
- ◆ [Chapter 11, “Managing Waves,” on page 85](#)
- ◆ [Chapter 12, “Managing Batches,” on page 89](#)
- ◆ [Chapter 13, “Managing Applications,” on page 95](#)



# 9 Overview of Project Planning

PlateSpin Transformation Manager provides planning tools that enable you to organize and schedule workload transformations.

- Section 9.1, “About Planning Objects,” on page 71
- Section 9.2, “About Project Roles,” on page 74
- Section 9.3, “About Project Dates,” on page 74

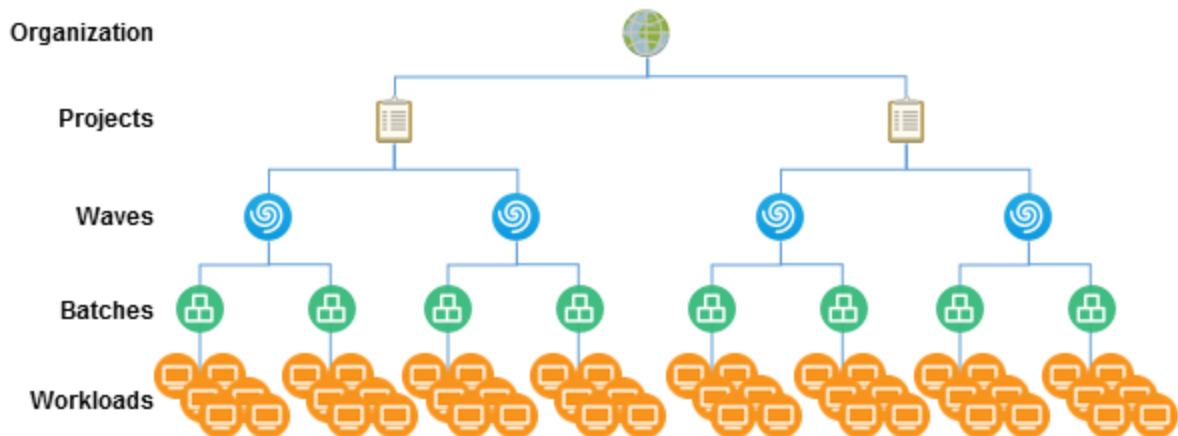
## 9.1 About Planning Objects

Because your production environment is complex and changeable, an IT transformation project can take months, or even years, to complete. PlateSpin Transformation Manager supports rolling wave planning to accommodate the near-term and long-term planning of your transformation tasks.

PTM is designed to handle hundreds to tens of thousands of workloads per project. Within each project, you can schedule the transformations to occur in waves with smaller groupings of batches in each wave.

Figure 9-1 shows the parent-child relationships between planning objects: Organizations, Projects, Waves, Batches, and Workloads.

*Figure 9-1 Parent-Child Relationships of Planning Objects*



- Section 9.1.1, “Organizations,” on page 72
- Section 9.1.2, “Projects,” on page 72
- Section 9.1.3, “Waves,” on page 72
- Section 9.1.4, “Batches,” on page 73
- Section 9.1.5, “Applications,” on page 73
- Section 9.1.6, “Workloads,” on page 73

## 9.1.1 Organizations



An organization in PlateSpin Transformation represents a business organization or tenant that consumes the PTM services. PTM provides logical secure segregation of data for each organization.

## 9.1.2 Projects



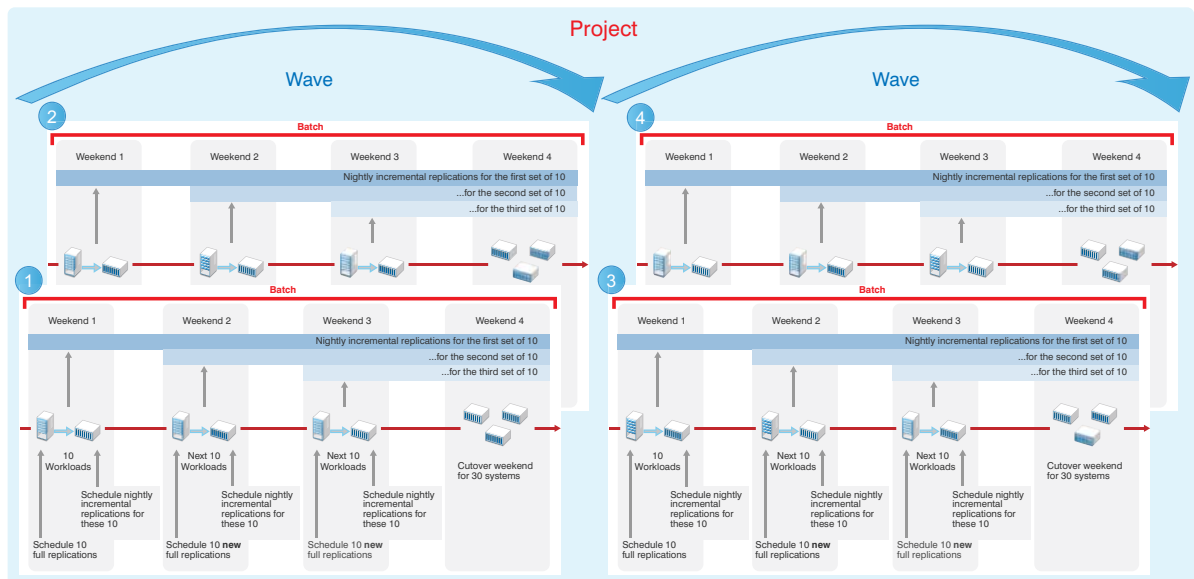
Each organization in PlateSpin Transformation Manager can have one or more projects. The scope and purpose for each project depends on your business needs and migration goals. PTM provides logical secure segregation of data for each project.

## 9.1.3 Waves



You can organize the project's transformation tasks in waves, as shown in [Figure 9-2](#). For near-term waves, you can plan the tasks in detail. You can refine the transformation plan for future waves as newer and better information becomes available.

*Figure 9-2 Wave Planning*



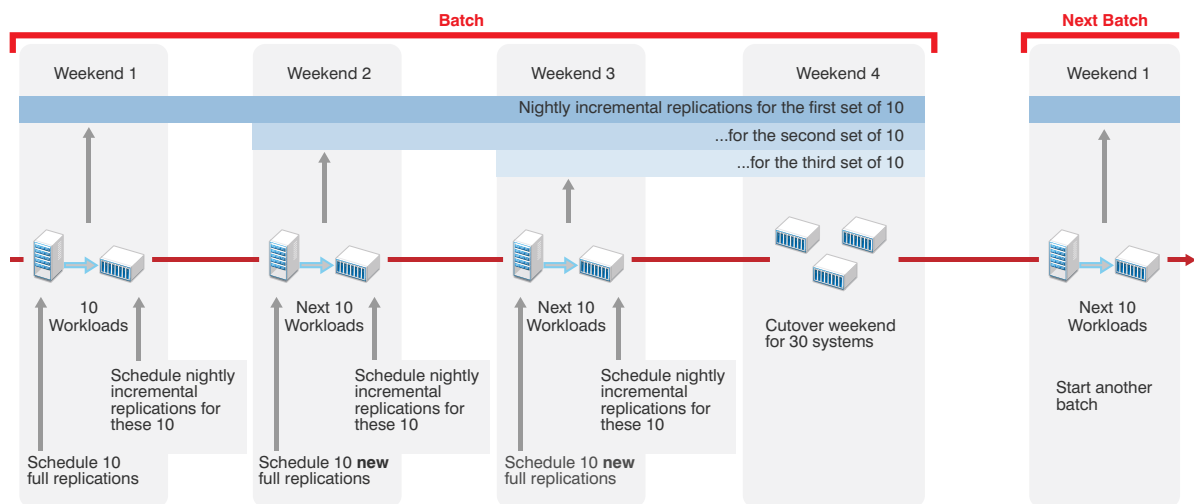


## 9.1.4 Batches



Within a wave, batches group like workloads that you want to transform together. Batches can be more easily scheduled during intervals when Network resources are available. You can deliver valuable results in each batch and wave. Schedules are flexible. You can coordinate the start dates and cutover dates with stakeholders to work around planned events that are critical to the business.

*Figure 9-3 Batch Planning*



## 9.1.5 Applications



Applications represent the business purpose of workloads based on the software installed on them. They are defined at the project level, then associated as attributes of source workloads. Application information can help you identify workloads with interdependent or mutually exclusive relationships as you organize workloads for migration.

## 9.1.6 Workloads



Transforming workloads from their current operational mode to a future operational mode is the fundamental management goal for your transformation project. PlateSpin Transformation Manager helps you plan three types of transformation: automated, manual, and decommission. See [Table 9-1](#) for a description of each transformation type.

**Table 9-1** Transformation Planning

| Transformation Type         | Description   |
|-----------------------------|---|
| Automated                   | You import workloads and configure a custom transformation plan for each workload based on the target platform. PTM controls the migration workflow based on the migration preferences.   |
| Manual or Manual (Tracking) | <p>You import workloads and configure a basic transformation plan for each workload.</p> <p>For manual migrations, you manually enter the migration status changes for the imported workloads as migration tasks are completed.</p> <p>For manual migrations with tracking, you perform the external migrations using your PlateSpin Migrate servers. PTM automatically gets the migration status from the Migrate server as migration tasks are completed.</p> |
| Decommission                | You import workloads and configure a basic transformation plan for each workload. You manually enter the status changes as tasks are completed for decommission.  |

## 9.2 About Project Roles

PlateSpin Transformation Manager provides the following roles for managing your project:

**Table 9-2** Project Roles

| Project Role         | Description  |
|----------------------|--|
| Project Manager      | The Project Manager is responsible for managing all aspects of the project.  |
| Project Architect    | The Project Architect is responsible for configuring transformation plans for the workloads, scheduling the transformations, and monitoring the health of transformations. |
| Migration Specialist | The Migration Specialists are responsible for executing the transformations.   |
| Dashboard Viewer     | The Dashboard Viewers are stakeholders who want to observe the progress and metrics for projects.  |

## 9.3 About Project Dates

Project dates can be set according to your business and network needs. Business factors include your project priorities and the availability of resources. Network environmental factors include available bandwidth, connection speeds, and the amount of data being transformed.

You might have a specific cutover date in mind, or simply want to create a plan to get the work accomplished as efficiently and quickly as you can. External events might determine when certain tasks must be completed. IT and human resources availability also constrain your schedule.

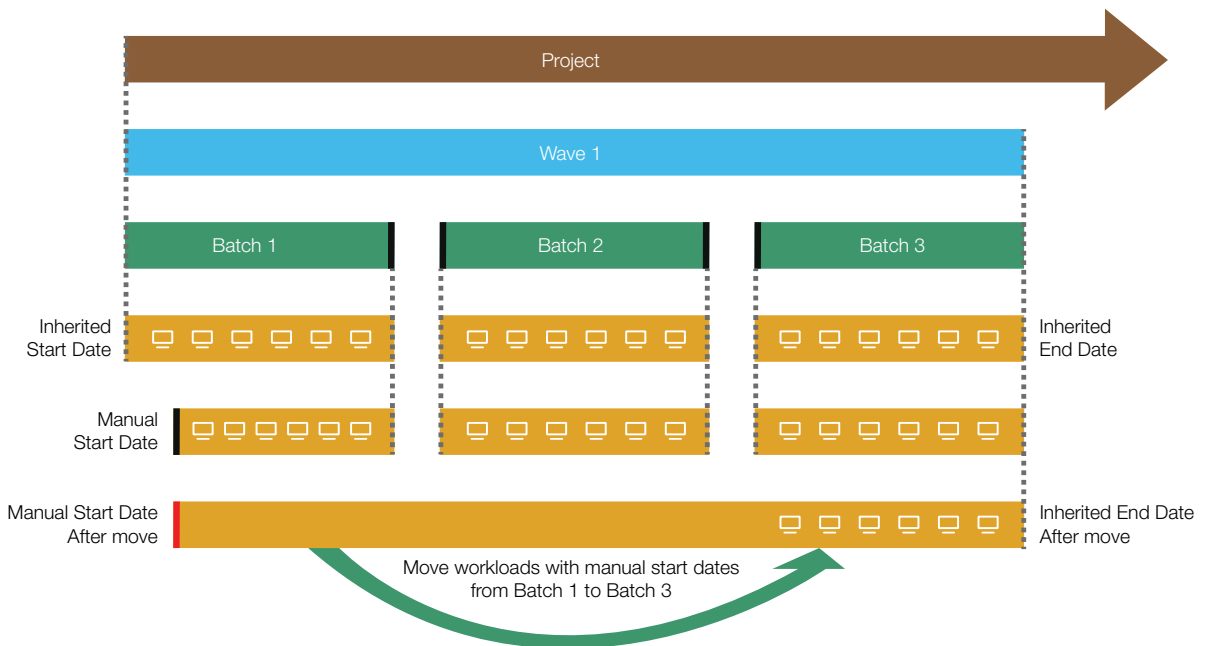
Dates for waves and batches can be set manually or inherited from their parent objects. Dates of child objects must fall within the execution window of its parent object.

Figure 9-4 demonstrates how the dates flow down from parent to child. Manually set dates appear in a black font in fields and tables. Inherited dates appear in a gray font in fields and tables.

If you set dates manually, the date setting overrides inheritance rules. If you move a workload with a manual date from one batch to another, the manual date setting does not change, but the inherited date setting changes automatically.

Figure 9-4 shows how the manual date remains the same after you move the workloads from Batch 1 to Batch 3. If the manual date falls outside the execution window for the new batch, the date appears in a red font in fields and tables. You must re-configure the dates for workloads if their execution windows extend outside their new parent window.

**Figure 9-4** Inherited Start Date and End Date



**NOTE:** Dates display in the format of your computer browser's Locale setting.

PlateSpin Transformation Manager displays an object's dates in the following font colors, depending on how the object obtained the setting:

| Font Color for Dates | Condition   |
|----------------------|---|
| Gray                 | The date is inherited from its parent object.   |
| Black                | The date has been set directly on the object. The new date is automatically inherited by child objects.   |
| Red                  | The date does occurs before or after the execution window set on the parent object: <ul style="list-style-type: none"> <li>◆ The object's start date occurs before the parent's start date.</li> <li>◆ The object's end or cutover date occurs after the parent's end or cutover date.</li> </ul> |



# 10 Managing Projects

PlateSpin Transformation Manager enables you to analyze and organize information about workload transformations into projects based on your business needs.

- ♦ [Section 10.1, “About Projects,” on page 77](#)
- ♦ [Section 10.2, “Prerequisites for Projects,” on page 79](#)
- ♦ [Section 10.3, “Viewing a Project,” on page 80](#)
- ♦ [Section 10.4, “Creating a Project,” on page 80](#)
- ♦ [Section 10.5, “Editing a Project,” on page 81](#)
- ♦ [Section 10.6, “Configuring Custom Field Names for a Project,” on page 81](#)
- ♦ [Section 10.7, “Configuring Project Associations,” on page 82](#)
- ♦ [Section 10.8, “Closing or Reopening a Project,” on page 83](#)
- ♦ [Section 10.9, “Deleting a Project,” on page 83](#)

## 10.1 About Projects

The Project enables you to track the following information for your transformation project:

### **Name**

A friendly name for the project that is unique in your organization. The name must begin with a letter or number. It can contain only letters, numbers, and the following special characters: space, hyphen, underscore, apostrophe, percent, ampersand, comma, and period.

### **Organization**

The name of the parent organization for the project.

### **Description**

(Optional) A brief description of the project.

### **Start Date**

The date that the transformation of workloads is planned to begin.

### **End Date**

The date that the transformation of all workloads must be completed successfully.

### **Custom Field Names**

Additional information types that you want to track for a project. You can define 1 to 8 custom fields. Each custom field is independent, and can be used for any purpose. Uses might include a new attribute, a logical tag, a priority system, contact information, business unit, and so on.

For example, if you want to identify the workload with its day-to-day IT administrator, you might define the **Custom 1** field name to be **Contact** for the project. Values might be the contact person's name, user name, or email address, as appropriate for your project. You specify a workload's value for the Contact field in the Workload dialog.

---

**NOTE:** The custom field names are added to the Advanced Search dialog and Bulk Edit dialog when the Global Project Selector is set to the project.

---

## Associations

Associations define the relationships between a variety of components and the project. You can perform the same tasks on each tab that you can on their primary tab, with the exception of the Workloads tab. For workloads, you can view information about the source and target workloads associated with the project.

- ◆ **Planning**

- ◆ Waves (Create, Edit, View, Delete)
- ◆ Batches (Create, Edit, View, Move, Delete)
- ◆ Applications (Create, Edit, View, Delete)
- ◆ Workloads (View, Edit, Delete, Status Change)

- ◆ **Resources**

- ◆ Credentials (Create, Edit, View, Delete)
- ◆ Platforms (Create, Edit, View, Delete, Retry)
  - ◆ VMware Clusters
    - ◆ Clusters
    - ◆ Hosts
    - ◆ Networks
    - ◆ Datastores
    - ◆ Resource Pools
    - ◆ Workloads
  - ◆ Azure
    - ◆ Location
    - ◆ Networks
    - ◆ Datastores
    - ◆ Resource Groups
    - ◆ Workloads
- ◆ Migration Servers (Create, Edit, View, Delete)
- ◆ Environments (Create, Edit, View, Delete)

- ◆ **Users**

Project role assignments at the project level are automatically inherited by their child components.

- ◆ Dashboard Viewer (View, Add, Remove)
- ◆ Migration Specialist (View, Add, Remove)

- ♦ Project Architect (View, Add, Remove)
- ♦ Project Manager (View, Add, Remove)

### Project Status

You can use the **Set to Completed** option to close a project at the end of the project lifecycle. A closed project provides a **Reopen** option to reactivate the closed project.

## 10.2 Prerequisites for Projects

PTM automatically creates a default organization (*My Organization*), project (*My Project*), wave (*My Wave*), and batch (*My Batch*). See [Figure 10-1](#). The start date is set by default to the installation date, with an end date one year later. Workloads are automatically assigned the default wave and batch unless you create additional waves and batches for the project.

*Figure 10-1* Default Project Planning Objects



A user with Administrator privileges can manage the project, or assign the Project Manager role to another user. The Project Manager has all the privileges needed to customize the objects, assign users to project roles, and perform all project tasks.

A PTM user with Administrator privileges can create additional organizations and projects. The Administrator user must perform the following tasks.

1. Create the Organization.
2. Create the Project.
3. Create users for the project.
4. Assign the Project Manager role to a user. Assign roles at the System, Organization, or Project level, according to your operational needs.

---

**NOTE:** The Project Manager role has all the necessary permissions to assign users to project roles and to perform all project tasks.

---

## 10.3 Viewing a Project

The View option allows users with the View permissions to view the project information.

**To view project information:**

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Projects** tab.
- 3 In the **Projects** list, search for and locate the appropriate project.
- 4 Select the project, then click **View**.
- 5 Click **Close** when you are done.

## 10.4 Creating a Project

---

**NOTE:** Administrator privileges are required to create a project and assign a Project Manager.

---

**To create a project:**

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Projects** tab.
- 3 Click **Create**.
- 4 In the **Project** pane, specify the following information:
  - ◆ Name
  - ◆ Organization
  - ◆ (Optional) Description
  - ◆ Start Date
  - ◆ End Date
  - ◆ (Optional) Custom Field Names (Field 1 to Field 8)
- 5 Click **Save** to create the project and activate the **Associations** pane.
- 6 In the **Associations** pane, select the Users tab, then assign a user to the Project Manager role for the project.
  - 6a Select **Project Manager**, then click **Add**.
  - 6b On the Add Project Manager dialog, select the user name from the System Users list, then click **OK**.

The user information displays in the list of Project Managers.
- 7 (Optional) In the **Associations** pane, click each tab to configure settings for the associated components.

You can alternatively exit the dialog to work with the main tabs for these components.
- 8 If you made changes, click **Save**.
- 9 Click **Close** to exit the dialog.



## 10.5 Editing a Project

You might need to modify dates, custom fields, and associations for a project as you configure the project and as the project matures.

---

**NOTE:** The Project Manager or Project Architect can modify project settings.

---

### To edit a project:

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Projects** tab.
- 3 Double-click the project to open the Edit Project dialog, then view the project details.  
You can alternatively select the project, then click **Edit**.
- 4 Modify the values as appropriate:
  - ◆ Name
  - ◆ Organization
  - ◆ (Optional) Description
  - ◆ Start Date
  - ◆ End Date
  - ◆ (Optional) Custom Field Names (Field 1 to Field 8)
- 5 (Optional) View or modify Associations.
- 6 (Optional) In the Status area of the Edit Project dialog, click **Set to Completed**, or click **Reopen**.  
Typically, you use this option only at the end of the project lifecycle to close the project, or to reopen a closed project.
- 7 Click **Save**.
- 8 Click **Close**.

## 10.6 Configuring Custom Field Names for a Project

The custom fields define additional information that you want to track for a project. The custom fields apply project-wide. Each field name must be unique in the project. The defined custom fields are available in the Workload dialog and in Advanced Search.

---

**NOTE:** The Project Manager or Project Architect can define custom field names for the project.

---

The custom field names are added to the Advanced Search dialog when the Global Project Selector is set to the project.

### To define custom field names:

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Projects** tab.
- 3 Double-click the project to open the Edit Project dialog, then view the project details.

You can alternatively select the project, then click **Edit**.

- 4 Under **Custom Field Names**, specify a name for up to 8 custom fields in Field 1 to Field 8.  
Add field names sequentially. As you add a name, the next field becomes available.
- 5 Click **Save**.
- 6 Click **Close**.

## 10.7 Configuring Project Associations

The Associations pane for a project shows all of the possible associations.

Depending on your permissions, you can perform the same actions from the tabs under Associations as you can from the main tabs for these components. Some actions might not be available at this time. You can save the project and return later to complete information.

### To associate components with a project:

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Projects** tab.
- 3 Double-click the project to open the Edit Project dialog, then view the project details.  
You can alternatively select the project, then click **Edit**.
- 4 Under Associations, click each tab to view or modify settings for the associated components:

#### Planning

- ◆ Wave
- ◆ Batches
- ◆ Applications
- ◆ Workloads

#### Resources

- ◆ Credentials
- ◆ Platforms
- ◆ Migration Servers
- ◆ Environments

#### Users

- ◆ Dashboard Viewer
- ◆ Migration Specialist
- ◆ Project Architect
- ◆ Project Manager

- 5 Click **Save**.
- 6 Click **Close**.

## 10.8 Closing or Reopening a Project

You might want to close a project when the transformations are completed, or when you need to halt related activities for the project for an extended period. Closing the project retains the information and history in the PTM database. If you reopen the project, the data are again available to users.

---

**NOTE:** The Project Manager or Project Architect can modify project settings.

---

### To edit a project:

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Projects** tab.
- 3 Double-click the project to open the Edit Project dialog, then view the project details.  
You can alternatively select the project, then click **Edit**.
- 4 (Optional) In the Status area of the Edit Project dialog, click **Set to Completed**, or click **Reopen** for a closed project.
- 5 Click **Save**.
- 6 Click **Close**.

## 10.9 Deleting a Project

---

**NOTE:** Administrator privileges are required to delete a project.

---

---

**WARNING:** Deleting a project deletes all data for the project from the PTM database.

---

### To delete a project:

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Projects** tab.
- 3 Select the appropriate project, click **Delete**, then click **Yes** to confirm the deletion.



# 11 Managing Waves

PlateSpin Transformation Manager supports rolling wave planning to accommodate the near-term and long-term planning of your transformation tasks. Waves represent a major effort for workload transformation. For near-term waves, you can plan the tasks in detail. You can refine the transformation plan for future waves as newer and better information becomes available.

- ◆ [Section 11.1, “About Waves,” on page 85](#)
- ◆ [Section 11.2, “Prerequisites for Waves,” on page 86](#)
- ◆ [Section 11.3, “Viewing Waves,” on page 86](#)
- ◆ [Section 11.4, “Creating a Wave,” on page 86](#)
- ◆ [Section 11.5, “Editing a Wave,” on page 87](#)
- ◆ [Section 11.6, “Configuring Wave Associations,” on page 87](#)
- ◆ [Section 11.7, “Deleting a Wave,” on page 88](#)

## 11.1 About Waves

The Wave enables you to track the following information for your transformation activities:

### **Name**

A friendly name for the wave that is unique in your transformation project. The name must begin with a letter or number. It can contain only letters, numbers, and the following special characters: space, hyphen, underscore, apostrophe, percent, ampersand, comma, and period.

### **Organization**

The name of the parent organization for the wave.

### **Project**

The name of the parent project for the wave.

### **Description**

(Optional) A brief description of the wave.

### **Start Date**

The date that the transformation of workloads is planned to begin. By default, the start date is inherited from its parent project’s start date. Dates with a gray font indicate inherited values.

### **End Date**

The date that the transformation of all workloads must be completed successfully. By default, the end date is inherited from its parent project’s end date. Dates with a gray font indicate inherited values.

## Associations

Associations define the relationship between a variety of component types and the wave.

- ◆ Batches (Create, Edit, View, Delete)
- ◆ Workloads
  - ◆ Source (Edit, View, Delete)
  - ◆ Target (Edit, View, Delete)
- ◆ Users
  - ◆ Dashboard Viewer (View)
  - ◆ Migration Specialist (View, Add, Remove)
  - ◆ Project Architect (View)
  - ◆ Project Manager (View)

## 11.2 Prerequisites for Waves

When you create a wave, you must associate it with a specific organization and project. Before you can create a wave, you must create the parent organization and project to ensure that they are available when you create the wave.

For instructions, see the following in the *PTM 2019.5 Administrator Guide*:

- ◆ [“Creating an Organization”](#)
- ◆ [“Creating a Project”](#)

## 11.3 Viewing Waves

The View option allows users with only the View permissions to view the wave information.

**To view wave information:**

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Waves** tab.
- 3 In the **Waves** list, search for and locate the appropriate wave.
- 4 Select the wave, then click **View**.
- 5 Click **Close** when you are done.

## 11.4 Creating a Wave

A System Administrator user and a Project Manager can create waves.

**To create a wave:**

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Waves** tab.
- 3 Click **Create**.

- 4 In the **Waves** pane, specify the following information:
  - ◆ Name
  - ◆ Organization
  - ◆ Project
  - ◆ (Optional) Description
  - ◆ Start Date
  - ◆ End Date
- 5 Click **Save** to create the wave object and activate the **Associations** pane.
- 6 (Optional) In the **Associations** pane, click each tab to configure settings for the associated components.
- 7 (Optional) Click **Set to Completed**.
- 8 Click **Save**.
- 9 Click **Close**.

## 11.5 Editing a Wave

You might need to modify dates and associations for a wave as you configure the wave and as its parent project matures. The System Administrator and Project Manager can modify the wave.

### To edit a wave:

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Waves** tab.
- 3 Double-click the wave to open the Edit Wave dialog, then view the wave details.  
You can alternatively select the wave, then click **Edit**.
- 4 Modify the values as appropriate.
- 5 (Optional) View or modify the Associations.
- 6 (Optional) Click **Set to Completed**.
- 7 Click **Save**.
- 8 Click **Close**.

## 11.6 Configuring Wave Associations

The Associations pane for a wave shows all of the associations. The System Administrator user, Project Manager user, and Project Architect user can configure associations for a wave.

Depending on the status of workloads, some actions might not be available at this time. You can save the wave and return later to complete information.

### To associate components with a wave:

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Waves** tab.

- 3 Double-click the wave to open the Edit Wave dialog, then view the wave details.
- 4 Under Associations, click each tab to view or modify settings for the associated components:
  - ◆ Batches
  - ◆ Workloads
  - ◆ Users
    - ◆ Dashboard Viewer
    - ◆ Migration Specialist
    - ◆ Project Architect
    - ◆ Project Manager
- 5 (Optional) Click **Set to Completed**.
- 6 Click **Save**.
- 7 Click **Close**.

## 11.7 Deleting a Wave

Only the System Administrator user and Project Manager can delete a wave. Deleting a wave deletes all data for the wave from the PTM database. It moves the member workloads to an Imported state, but it does not delete the associated workload information.

### To delete a wave:

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Waves** tab.
- 3 Select the appropriate wave, click **Delete**, then click **Yes** to confirm the deletion.



# 12 Managing Batches

Batches are the component efforts for waves in the workload transformation. A batch groups like workloads that you want to transform together. Batches can be more easily scheduled during intervals when Network resources are available. You can coordinate the start dates and cutover dates with stakeholders to work around planned events that are critical to the business.

- ◆ [Section 12.1, “About Batches,” on page 89](#)
- ◆ [Section 12.2, “Prerequisites for Batches,” on page 90](#)
- ◆ [Section 12.3, “Viewing a Batch,” on page 90](#)
- ◆ [Section 12.4, “Creating a Batch,” on page 91](#)
- ◆ [Section 12.5, “Editing a Batch,” on page 92](#)
- ◆ [Section 12.6, “Modifying the Owner of a Batch,” on page 92](#)
- ◆ [Section 12.7, “Moving a Batch to a Different Wave,” on page 93](#)
- ◆ [Section 12.8, “Configuring Batch Associations,” on page 93](#)
- ◆ [Section 12.9, “Deleting a Batch,” on page 94](#)

## 12.1 About Batches

The Batch enables you to track the following information for your transformation activities:

### **Name**

A friendly name for the batch that is unique in your transformation project.

The name must begin with a letter or number. It can contain only letters, numbers, and the following special characters: space, hyphen, underscore, apostrophe, percent, ampersand, comma, and period.

### **Organization**

The name of the parent organization for the batch.

### **Project**

The name of the parent project for the batch.

### **Wave**

The name of the parent wave for the batch.

### **Description**

(Optional) A brief description of the batch.

### **Owner**

The Transformation Manager who is responsible for overseeing the successful completion of the migrations performed in this batch. The owner is selected from a list of users who are assigned to any of the user roles for the batch.

### Start Date

The date that the transformation of its member workloads is planned to begin. By default, the start date is inherited from its parent wave's start date. Dates with a gray font indicate inherited values.

### End Date

The date that the transformation of all of its member workloads must be completed successfully. By default, the end date is inherited from its parent wave's end date. Dates with a gray font indicate inherited values.

### Associations

Associations define the relationship between a variety of component types and the batch.

- ◆ Workloads
  - ◆ Source (Edit, View, Delete)
  - ◆ Target (Edit, View, Delete)
- ◆ Users
  - ◆ Dashboard Viewer (View)
  - ◆ Migration Specialist (View, Add, Remove)
  - ◆ Project Architect (View)
  - ◆ Project Manager (View)

## 12.2 Prerequisites for Batches

When you create a batch, you must associate it with a specific organization, project, and wave. Before you can create a batch, you must create the parent organization, project, and wave to ensure that they are available when you create the batch.

For instructions, see the following in the *PTM 2019.5 Administrator Guide*:

- ◆ [“Creating an Organization”](#).
- ◆ [“Creating a Project”](#)

## 12.3 Viewing a Batch

The View option allows users with only the View permissions to view the batch information.

### To view batch information:

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Batches** tab.
- 3 In the **Batches** list, search for and locate the appropriate batch.
- 4 Select the batch, then click **View**.
- 5 View the following information about the batch:
  - ◆ Name
  - ◆ Organization

- ◆ Project
- ◆ Wave
- ◆ (Optional) Description
- ◆ Start Date
- ◆ End Date
- ◆ Owner
- ◆ Associations
  - ◆ Workloads
  - ◆ Users

6 Click **Close** when you are done.

## 12.4 Creating a Batch

A System Administrator user and a Project Manager can create batches.

**To create a batch:**

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Batches** tab.
- 3 Click **Create**.
- 4 In the **Batches** pane, specify the following information:
  - ◆ Name
  - ◆ Organization
  - ◆ Project
  - ◆ Wave
  - ◆ (Optional) Description
  - ◆ Start Date
  - ◆ End Date
  - ◆ (Optional) Owner
- 5 Click **Save** to create the batch object and activate the **Associations** pane.
- 6 (Optional) In the **Associations** pane, click each tab to configure settings for the associated components.
  - ◆ Workloads
  - ◆ Users
- 7 (Optional) Click **Set to Completed**.
- 8 Click **Save**.
- 9 Click **Close**.

## 12.5 Editing a Batch

You might need to modify dates and associations for a batch as you configure the batch and as its parent project matures. The System Administrator and Project Manager can modify the batch.

### To edit a batch:

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Batches** tab.
- 3 Double-click the batch to open the Edit Batch dialog, then view the batch details.  
You can alternatively select the batch, then click **Edit**.
- 4 Modify the values as appropriate.
  - ◆ Name
  - ◆ Organization
  - ◆ Project
  - ◆ Wave
  - ◆ (Optional) Description
  - ◆ Start Date
  - ◆ End Date
  - ◆ (Optional) Owner
- 5 (Optional) View or modify Associations.
  - ◆ Workloads
  - ◆ Users
- 6 (Optional) Click **Set to Completed**.
- 7 Click **Save**.
- 8 Click **Close**.

## 12.6 Modifying the Owner of a Batch

You might need to modify the Owner of a batch as tasks are reassigned in your organization. The owner can be any of the users who are assigned to roles in the batch.

### To modify the batch owner:

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Batches** tab.
- 3 Double-click the batch to open the Edit Batch dialog, then view the batch details.  
You can alternatively select the batch, then click **Edit**.
- 4 Select the preferred user from the **Owner** menu.
- 5 Click **Save**.
- 6 Click **Close**.

## 12.7 Moving a Batch to a Different Wave

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Batches** tab.
- 2 Select one or more batches from the list that you want to move to a different wave. The batches can be in the same or different wave. Press Shift and click the appropriate batches to select multiple batches.
- 3 Click **Move**.
- 4 In the Move dialog, select the appropriate destination wave, then click **OK**.
- 5 If there are date conflicts between the dates set for the batches and their new parent wave, specify your preference for how you want to handle the dates.  
  
For example, you might choose to allow the batch dates to change to fit into the window scheduled for the new parent wave, or keep the existing dates and fix them later. Conflicted dates display in a red font.  
  
If the batches' dates are inherited, the batches automatically inherit the dates from the new parent wave.
- 6 Click **Save**.
- 7 Click **Close**.
- 8 For each batch that has dates in conflict, select the batch, click **Edit**, modify the dates, then click **Save**.

## 12.8 Configuring Batch Associations

The Associations pane for a batch shows all of the associations. The System Administrator user, Project Manager user, and Project Architect user can configure associations for a batch.

Depending on the status of workloads, some actions might not be available at this time. You can save the batch and return later to complete information.

### To associate components with a batch:

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Batches** tab.
- 3 Double-click the batch to open the Edit Batch dialog, then view the batch details.
- 4 Click each tab to view or modify settings for the associated components:
  - ◆ Workloads
  - ◆ Users
    - ◆ Dashboard Viewer
    - ◆ Migration Specialist
    - ◆ Project Architect
    - ◆ Project Manager
- 5 (Optional) Click **Set to Completed**.
- 6 Click **Save**.
- 7 Click **Close**.

## 12.9 Deleting a Batch

Only the System Administrator user and Project Manager can delete a batch. Deleting a batch deletes all schedule data for the batch from the PTM database. It moves the member workloads to an Imported state, but it does not delete the associated workload information.

### To delete a batch:

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Batches** tab.
- 3 Select the appropriate batch, click **Delete**, then click **Yes** to confirm the deletion.

# 13 Managing Applications

PlateSpin Transformation Manager enables you to define the application types to track for workload transformations.

- ♦ [Section 13.1, “About Applications,” on page 95](#)
- ♦ [Section 13.2, “Prerequisites for Applications,” on page 95](#)
- ♦ [Section 13.3, “Viewing Applications,” on page 96](#)
- ♦ [Section 13.4, “Creating Applications,” on page 96](#)
- ♦ [Section 13.5, “Creating Applications during Spreadsheet Import,” on page 96](#)
- ♦ [Section 13.6, “Editing Applications,” on page 96](#)
- ♦ [Section 13.7, “Associating Applications and Workloads,” on page 97](#)
- ♦ [Section 13.8, “Deleting an Application,” on page 97](#)

## 13.1 About Applications

The Application enables you to track the following information for your transformation activities:

### **Name**

A friendly name for the application that is unique in your transformation project. The name must begin with a letter or number. It can contain only letters, numbers, and the following special characters: space, hyphen, underscore, apostrophe, percent, ampersand, comma, and period.

### **Organization**

The name of the parent organization for the project.

### **Project**

The name of the parent project for the application component.

### **Description**

(Optional) A brief description of the application.

### **Associations**

The Workload associations are populated as you begin to plan workload transformations.

## 13.2 Prerequisites for Applications

When you create an application component, you must associate it with a specific organization and project. Before you can create an application, you must create the parent organization and project to ensure that they are available when you create the application.

For instructions, see the following in the [PTM 2019.5 Administrator Guide](#):

- ♦ “Creating an Organization”
- ♦ “Creating a Project”

## 13.3 Viewing Applications

The View option allows users with only the View permissions to view the application information.

**To view application information:**

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Applications** tab.
- 3 In the **Applications** list, search for and locate the appropriate application.
- 4 Select the application, then click **View**.
- 5 Click **Close** when you are done.

## 13.4 Creating Applications

A System Administrator user and a Project Manager can create application components.

**To create an application:**

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Applications** tab.
- 3 Click **Create**.
- 4 Specify the following information:
  - ♦ Name
  - ♦ Organization
  - ♦ Project
  - ♦ (Optional) Description
- 5 Click **Save** to create the batch object and activate the **Associations** pane.
- 6 Click **Close**.

## 13.5 Creating Applications during Spreadsheet Import

You can also create Application objects during the Spreadsheet Import. For each workload, add one or more **Application** columns. If an application does not match an existing Application object for the project, the import creates it. The specified applications are automatically associated with the workload. See [Table A-8, “Application Parameter,” on page 180](#).

## 13.6 Editing Applications

The System Administrator and Project Manager can modify the application.



#### To edit an application:

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Applications** tab.
- 3 Double-click the application to open the Edit Application dialog, then view the application details.  
You can alternatively select the application, then click **Edit**.
- 4 Modify the values as appropriate.
- 5 Click **Save**.
- 6 Click **Close**.

## 13.7 Associating Applications and Workloads

The Applications panel in the Workload dialog shows all of the applications associated with the workload. The System Administrator user, Project Manager user, and Project Architect can associate an application with a workload.

#### To associate an application with a workload:

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Workloads** tab.
- 3 Double-click the workload to open the Edit Workload dialog, then scroll down to the Applications panel to view the applications associated with the workload.
- 4 Click **Add** to add an application association.
- 5 Click **Remove** to remove an application association.
- 6 Click **Save**.
- 7 Click **Close**.

## 13.8 Deleting an Application

Only the System Administrator user and Project Manager can delete an application.

---

**NOTE:** If you delete an application, it automatically removes the associations for it, including those assigned to workloads that are in progress and completed. If the same associations apply, consider whether it is more appropriate to edit the application name and settings.

---

#### To delete an application:

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Applications** tab.
- 3 Select the appropriate application, click **Delete**, then click **Yes** to confirm the deletion.



# IV Workloads

PlateSpin Transformation Manager allows you to import information about source workloads for each transformation project. PTM creates an initial same-as-source configuration for the target workload. You can specify appropriate resources and configuration based on the target platform.

- ♦ [Chapter 14, “Overview of Workloads,” on page 101](#)
- ♦ [Chapter 15, “Importing and Discovering Workloads,” on page 103](#)
- ♦ [Chapter 16, “Configuring Workload Transformations,” on page 117](#)
- ♦ [Chapter 17, “Configuring Network Interfaces,” on page 155](#)
- ♦ [Chapter 18, “Configuring Azure VMs,” on page 159](#)
- ♦ [Chapter 19, “Tracking External Workload Migrations,” on page 163](#)
- ♦ [Appendix A, “Preparing an Import Spreadsheet,” on page 169](#)



# 14 Overview of Workloads

PlateSpin Transformation Manager allows you to import information about source workloads for each transformation project. PTM creates an initial same-as-source configuration for the target workload. You can specify appropriate resources and configuration based on the target platform.

Workloads are the cloud, physical, or virtual computers that you want to transform from their current mode of operation to a future mode of operation. You can use a variety of import methods to add workloads to the PlateSpin Transformation Manager database.

A successful import triggers an automated discovery process that inventories the workload configuration and adds the information to the database. You can modify the source workload information by re-importing or re-discovering the machine information.

After successful discovery, PlateSpin Transformation Manager creates a target workload based on the source workload configuration. You can use individual edit and bulk edit to customize the target workload.

- ◆ [Section 14.1, “Workload Types,” on page 101](#)
- ◆ [Section 14.2, “Workload Transformation Modes,” on page 101](#)
- ◆ [Section 14.3, “OS Types,” on page 102](#)
- ◆ [Section 14.4, “Custom Fields,” on page 102](#)

## 14.1 Workload Types

PlateSpin Transformation Manager supports the following workload types:

- ◆ **Cloud:** The workload is hosted in a cloud provider’s infrastructure-as-a-service environment, such as Amazon Web Services, Google Cloud Platform, Microsoft Azure, Rackspace, or VMware vCloud.
- ◆ **Physical:** The workload is hosted on a physical machine, such as a tower, rack, or blade server.
- ◆ **Virtual:** The workload is a virtual machine hosted on a virtualization host server running a hypervisor, such as Microsoft Hyper-V, VMware, Citrix XenServer, Linux Xen, or Linux KVM.

## 14.2 Workload Transformation Modes

PlateSpin Transformation Manager supports planning for the following workload migration methods:

### Automated

Workloads are set to Automated mode by default. You can plan workload migrations and automate execution of supported migrations on PlateSpin Migrate servers in your PlateSpin Migration Factory environment. You can begin planning without setting up the entire migration environment.

PlateSpin Migrate servers must be deployed in the network before you execute the automated migration tasks.

Automated migration supports automated execution for supported source workloads and target platforms.

### **Manual (tracking)**

Manual migration supports tracking of external migration efforts for supported source workloads that you perform on one or multiple PlateSpin Migrate servers associated with the project. If an imported workload matches a workload on one of the project's Migration Server resources, PTM tracks the workload details and migration workflow. The Workload dialog displays the source workload configuration plus the project, wave, batch, and schedule information. You can set custom fields and add notes to the Transformation History.

### **Manual**

Manual migration supports scheduling of external migration efforts for source workloads. The Workload dialog displays the source workload configuration plus the project, wave, batch, and schedule information. You can set custom fields and add notes to the Transformation History.

### **Decommission (Decom)**

For Decommission, the Workload dialog displays the source workload configuration, project, wave, batch, and schedule. You can also view and add notes to the Transformation History.

PTM does not display the target workload configuration, but it stores the values in the PTM database. It includes proposed values in Advanced Search, Bulk Edit, and Bulk Status Change actions and tracks indirect edits. Thus, you can move a workload in and out of a decommission state.

For manual and decommission methods, PTM does not display the Target workload configuration, but it stores the same-as-source target workload values in the PTM database. It includes proposed values in Advanced Search, Bulk Edit, and Bulk Status Change actions and tracks indirect edits.

## **14.3 OS Types**

The System Administrator manages a list of available Operating System Types for the product in the System Configuration settings.

Contact your Transformation Manager administrator if you need additional OS Types for your transformation projects.

## **14.4 Custom Fields**

You can define up to eight (8) custom fields for each project. The Workloads list can include custom field names as column headers if a project is selected in the Global Project Selector. PTM also adds the custom fields that you defined for the project to the Advanced Search form and the Bulk Edit form.

# 15 Importing and Discovering Workloads

Large-scale transformation projects can involve hundreds, or even thousands, of workloads. It can be time-consuming to gather details about each workload. PlateSpin Transformation Manager provides several import mechanisms that use an automated discovery process to retrieve details from your source workloads. Import with discovery simplifies and standardizes the setup of workloads for planning.

- ◆ [Section 15.1, “About Source Workload Details,” on page 103](#)
- ◆ [Section 15.2, “About Workload Discovery,” on page 104](#)
- ◆ [Section 15.3, “Viewing Workloads,” on page 105](#)
- ◆ [Section 15.4, “Importing Workloads with a Spreadsheet,” on page 105](#)
- ◆ [Section 15.5, “Importing Workloads with the Import Dialog,” on page 106](#)
- ◆ [Section 15.6, “Importing Workloads Using the PTM REST API,” on page 109](#)
- ◆ [Section 15.7, “Viewing Import Progress,” on page 112](#)
- ◆ [Section 15.8, “Retrying Workload Discovery,” on page 113](#)
- ◆ [Section 15.9, “Rediscovering Workloads,” on page 113](#)
- ◆ [Section 15.10, “Troubleshooting Discovery Failures,” on page 114](#)

## 15.1 About Source Workload Details

To effectively plan a workload migration, you need to gather information about the source workload, such as:

- ◆ FQDN
- ◆ IP address
- ◆ Host name
- ◆ Operating system
- ◆ Amount of RAM
- ◆ Number of CPUs or cores
- ◆ Storage disks and volumes
- ◆ Network and NICs

PlateSpin Transformation Manager automatically attempts to discover information about workloads imported for automated transformations.

## 15.2 About Workload Discovery

If a PlateSpin Migrate Connector is available to your project, PlateSpin Transformation Manager provides automated discovery of source workloads as you import them into the project. You can also rediscover details for a workload if necessary.

- ◆ [“Discovery Requirements for Source Workloads” on page 104](#)
- ◆ [“Import and Discovery Process” on page 105](#)

### 15.2.1 Discovery Requirements for Source Workloads

Before you attempt an import with auto-discovery, you must configure your PlateSpin Discovery Environment:

- ◆ **PlateSpin Transformation Manager 2019.5**

Configure PlateSpin Transformation Manager and set up a project for the workloads you want to discover.

- ◆ **PlateSpin Migrate Connector**

Deploy Migrate Connector in the following locations in your migration environment:

- ◆ Source network
- ◆ Target network

---

**NOTE:** Ensure that the Migrate Connector is up and running before you attempt discovery or rediscovery of workloads and targets.

---

- ◆ **Source Workloads**

- ◆ The Connector supports automated discovery of Windows and Linux source workloads for the following platforms:
  - ◆ Physical machines with x86 and x64 architectures
  - ◆ Virtual machines (VMs) with x86 and x64 architectures on VMware Cluster hosts

For cloud or other virtual workload types, you can use the Spreadsheet Import method to add workload details.

- ◆ Ensure that the source workloads are up and running.
- ◆ Ensure that the network connection is working between the PlateSpin Migrate Connector and the source workloads.

- ◆ **Credentials**

Create a Credentials resource to use for source workload discovery. The Credentials resource is also used later for replication to the target VM on the host.

- ◆ **Network Connectivity and Access**

For information about network connectivity and access information for automated discovery, see [“Ports and Protocols: Workload Discovery” on page 28](#).



## 15.2.2 Import and Discovery Process

The import and auto-discovery process performs the following actions:

1. The import creates a new Workload object unless it matches an existing workload.
2. The Workloads list displays the new workloads at the next page refresh, using the IP address as the workload name if the FQDN is not provided.
3. Auto-discovery begins for each new workload, using the provided Credentials resources to log in to the workload. Discovery status displays in the Workloads list and Workload dialog.
4. On successful workload discovery, the Workloads list or Workload dialog displays the newly discovered details at the next page refresh. The discovered host name replaces the IP address or FQDN as the workload name, as appropriate.

## 15.3 Viewing Workloads

You manage workloads through their transformation lifecycle from the Workloads tab. You import information about the source workloads, then track key settings and status for them from this page.

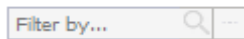
- 1 Select your project in the **Project Selector**.

If you have rights in only in a single project, the project is selected automatically.

- 2 In the Web Interface, select **Planning** in the toolbar.

- 3 Select the **Workloads** tab.

- 4 Use the Filter to perform a simple search on the list. Use the Advanced Search  to search on a variety of workload settings, custom fields, status, and health.



- 5 View the **Status** to follow the workload state.

## 15.4 Importing Workloads with a Spreadsheet

Large-scale transformation projects typically involve hundreds, or even thousands, of workloads. It is time-consuming to define each workload individually in your Transformation Manager system. You can use the Spreadsheet Import dialog on the Workloads page to import information about the workloads for a single project from a specially formatted spreadsheet.

---

**NOTE:** If a PlateSpin Migrate Connector is available to the project, the successful import of workloads initiates an automated discovery process that retrieves details about the source workloads.

---

---

**Users Who Can Perform This Task:** System Administrator, Project Manager, Project Architect

---

**To use a spreadsheet to import multiple workloads for a project:**

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.

- 2 Click **Spreadsheet Import**.
- 3 From the **Project** list, select the project to use for the workloads in the spreadsheet.

If the global scope of operations is set to a project, the **Project** field is pre-populated with that value. To select a different project, exit the Spreadsheet Import dialog, deselect the global scope or reassign the scope to the appropriate project, and then return to [Step 2](#) and try again.
- 4 Click **Browse**, then locate and select the Bulk Import spreadsheet (.xls file) that contains the workload information that you want to add to the specified project.
- 5 Click **Validate**, then view the **Validation Results** to verify that all required information is present and in the appropriate format.

For example, it reports if an entry is missing required information, uses an unknown option in a field, or uses wrong the format for values.
- 6 If the spreadsheet contains errors:
  - 6a Click **Get Results** at the bottom of the dialog to generate an annotated spreadsheet, and save the file to your computer.
  - 6b Correct the errors in your Bulk Import spreadsheet, and save the file.
  - 6c Return to [Step 5](#), and repeat the validation and correction process until there are no reported errors.
- 7 After the spreadsheet is validated, click **Import**.
- 8 After a successful import, click **Get Results** at the bottom of the dialog, then click **Save**.

PlateSpin Transformation Manager adds the assigned workload IDs to the spreadsheet, as well as the final status of `Imported`. If you provided NIC and Disk information, it also adds the UUIDs assigned for those components.
- 9 In the Web Interface, select to **Planning > Workloads** to view the list of workloads.
- 10 (Connector) If the spreadsheet included credential information for one or more workloads, view **Status** to confirm the automated discovery for the workloads.

## 15.5 Importing Workloads with the Import Dialog

If a PlateSpin Migrate Connector is available to the project, you can use the **Import** option to import workloads and leverage a discovery process to add details about them:

- ◆ Specify an IPv4 address or FQDN to import and discover details for a single workload.
- ◆ Specify a range of IPv4 addresses to import and discover details for up to 256 workloads at a time.

A workload can have only one instance in a transformation project. If a workload already exists in the project, the discovery process is not performed for it. The discovery also ignores non-computer networked devices.

---

**Users Who Can Perform This Task:** System Administrator, Project Manager, Project Architect

---

- ◆ [“About Import” on page 107](#)
- ◆ [“Importing a Single Workload by IP Address or FQDN” on page 107](#)
- ◆ [“Importing Multiple Workloads in an IP Address Range” on page 108](#)

## 15.5.1 About Import

The Import dialog for single, list, or range import requires the following information:

### Organization

Select the parent organization for the project.

### Project

Select the parent project for the workload.

### Description

(Optional) Specify a brief description of the workload or range of workloads. This text appears by default in the Workloads list. For a Range Import, the description is associated with each workload discovered in that range.

### IP or FQDN

Specify a single address or a range of addresses:

- ◆ **Single:** Specify the IP address or fully qualified domain name for the workload. PTM uses this information to discover and communicate with the workload. A workload can have only one instance in a transformation project.

Examples:

```
sqlserver5.paris.digitalair.com  
192.168.1.1
```

- ◆ **Range:** Specify the first IPv4 address in the workload range, then specify the fourth octet value for the last IPv4 address in the range. Valid values for the range octet are 0 to 255. PTM uses this information to discover and communicate with the workloads.

Examples:

```
10.10.1.0 - 255  
10.10.10.16 - 48
```

### Credential

PTM uses the credentials to discover and communicate with the workload. You can specify 1 to 4 Credentials resources to try. The import tries each specified Credentials resource. At least one of the specified Credentials resources must be valid in order for discovery to succeed.

## 15.5.2 Importing a Single Workload by IP Address or FQDN

You can specify a single IPv4 address or FQDN to import and discover details for a single workload.

### To import a single workload:

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 2 Select **Import**.
- 3 In the Import a Workload dialog, specify the following information:
  - ◆ Organization
  - ◆ Project

- ◆ Description
- ◆ IP or FQDN

Examples:

```
sqlserver5.paris.digitalair.com
192.168.1.1
```

- ◆ Credential

Specify 1 to 4 Credentials resources to try.

- If necessary, you can create up to four new Credential resources to use for the import.
  - On the Credential drop-down list, click **Create**.
  - Select the **Credential Type**: Linux Administrator, Windows Administrator, or Windows Domain.
  - Specify the authentication information.
  - Click **Save** to create the Credential resource and add it in the Import Workloads dialog.
- Click **Import**.
- Click **Close** to return to the Workloads list.
- In the Workloads list, monitor the discovery status for the workload.
- (Discovery Failed) If discovery fails, pause over the workload status to understand the problem, then resolve the issues and retry discovery.

### 15.5.3 Importing Multiple Workloads in an IP Address Range

You can specify a range of IPv4 addresses to import and discover details for up to 256 workloads at a time.

**To import workloads in a specified IP address range:**

- In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- Select **Import**.
- In the Import a Range of Workloads dialog, specify the following information:
  - ◆ Organization
  - ◆ Project
  - ◆ Description
  - ◆ IP or FQDN
 

Specify the first IP address in the range and last octet in the range.

Examples:

```
10.10.1.0 - 255
10.10.10.16 - 48
```
  - ◆ Credential
 

Specify 1 to 4 Credentials resources to try against each workload in the range.
- Click **Import**.
- (Optional) Click **Import Progress** to monitor the discovery progress.

- 6 Click **Close** to return to the Workloads list.
- 7 o(For up to 24 hours) In the Workloads list, click **Import Progress** to monitor the discovery progress.  
Progress is tracked for all imports during the the prior 24 hours. See [Section 15.7, “Viewing Import Progress,”](#) on page 112.
- 8 (Discovery Failed) If discovery fails, pause over the workload status to understand the problem, then resolve the issues and retry discovery for the failed workload.

## 15.6 Importing Workloads Using the PTM REST API

You can use PlateSpin Transformation Manager REST APIs to import Workloads from an external system to a project in PTM. An import succeeds if the workload has been properly defined and the credentials in a specified Credentials resource is valid. The Connector automatically initiates discovery for the imported workload to inventory the workload and add its details to PTM.

- ♦ [Section 15.6.1, “Generating a Custom PTM Client from the PTM REST API,”](#) on page 109
- ♦ [Section 15.6.2, “Using a Custom Client to Import Workloads,”](#) on page 111

### 15.6.1 Generating a Custom PTM Client from the PTM REST API

The PTM REST API leverages the Swagger framework to present descriptions for its REST APIs. Swagger is built around the OpenAPI Specification (OAS). You can use Swagger tools to generate a client to “talk” to PTM. That is, your client sends a request to PTM and PTM responds with the requested information. Swagger supports a variety of programming languages.

The PTM RESTAPI interface is available on your PTM server at the following URL:

`http://<your-ptmserver-ip-address-or-fqdn>:8082/restapi`

For example: `http://10.10.10.10:8082/restapi`

#### PlateSpin Transformation Manager

#### PlateSpin Migration Factory REST API

##### applications

Show/Hide | List Operations | Expand Operations

|        |                               |                                  |
|--------|-------------------------------|----------------------------------|
| GET    | /applications                 | Get a list of applications       |
| POST   | /applications                 | Create a new application         |
| DELETE | /applications/{applicationId} | Delete an application object     |
| GET    | /applications/{applicationId} | Get a specific application by id |
| PUT    | /applications/{applicationId} | Update an existing application   |

#### The basic workflow for generating a PTM client:

- 1 In a web browser, go to  
`http://<your-ptmserver-ip-address-or-fqdn>:8082/restapi/swagger.json`

2 Click **Raw Data** to expand the code.

```
JSON  Raw Data  Headers
Save  Copy  Pretty Print

{
  "swagger" : "2.0",
  "info" : {
    "version" : "2019.5",
    "title" : "PlateSpin Migration Factory REST API"
  },
  "basePath" : "/restapi",
  "tags" : [ {
    "name" : "applications"
  }, {
    "name" : "..."
  } ]
}
```

3 Click **Copy** to save the information to your computer clipboard.

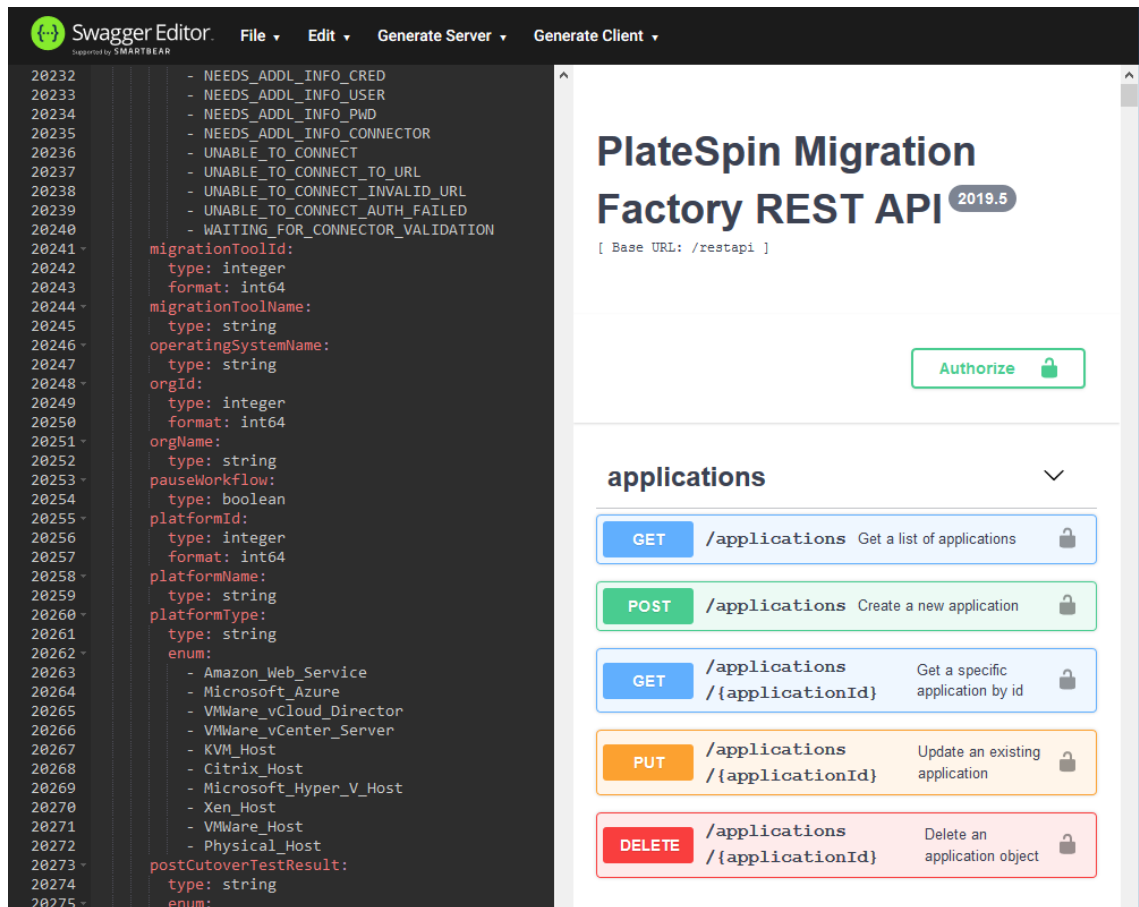
4 In a web browser, go to the Swagger Editor website at <http://editor.swagger.io>.

5 In the Swagger Editor toolbar, select **File > Clear editor**.

6 Right-click in the editing panel on the left, then click **Paste** to insert the information you copied.

7 Click **OK** to agree to convert the code from JSON to YAML.

The PlateSpin Transformation Manager REST API with REST commands and syntax display in the right panel.



This is the same type of information displayed when you visit the REST API location on your PlateSpin Transformation Manager server at `http://<your-ptmserver-ip-address-or-fqdn>:8082/restapi`.

- 8 In the Swagger Editor toolbar, select **Generate Client** > **Python** to download a client written in Python.

Our example code is written in Python. Swagger Editor supports over 50 other languages that you can use for the client interface you develop.

- 9 In the pop-up dialog, select **Save File** then click **OK** to save the a ZIP file that contains the generated Python client (`python-client-generated.zip`).

## 15.6.2 Using a Custom Client to Import Workloads

After you create an instance of the PTM Client in [Section 15.6.1, “Generating a Custom PTM Client from the PTM REST API,” on page 109](#), you can use your generated PTM client to import workloads to PTM.

A simple example of a Python script to import workloads is available (with annotations) on the PlateSpin Transformation Manager Appliance in the `<connector-path>\resources\` folder. It demonstrates how to use the REST APIs for PlateSpin Transformation Manager to import workloads for a single project. All values are sample values. You must replace them with information for your own project. We used Python for the example, but you can use any of the available programming languages supported by the Swagger Editor.

### The basic workflow in the sample Python script:

1. Create a blank, in-memory Transformation object.
2. Set the Workload Name and Project ID on the Transformation object.  
You can get the Project ID by using the REST API, using the PTM Client you generated, or pausing over the header area on the Workload dialog.
3. Create a blank, in memory Workload object.
4. Set the FQDN or IP address for the Workload object.
5. (Optional) Set one or more Application names to associate with the workload.
6. Set the Workload Admin Credential for authentication with the source workload by referencing an existing one or by creating a new one. Optionally encrypt the password.  
You can do this during the initial workload import. Both methods are illustrated in the sample script.
7. Perform the import. It returns a Transformation object that you can edit.
8. If the workload was imported successfully and the credentials you provided are valid, PTM automatically begins discovery on the workload.
9. Perform other edits on the returned object.  
For example, you can move the workload into a Wave and Batch.
10. Save the edited information to PTM.

### Before you run the sample script:

- 1 In a text editor, copy the script and save it as `example_simple_import.py`.

- 2 Modify the various values to correspond with your PTM server and workload environment.

For example, you provide values for the following. Refer to the script for a complete list of the variables that require your input.

- ◆ PTM User user name, which is an email address
- ◆ PTM User password
- ◆ PTM Server URL of the REST API

## 15.7 Viewing Import Progress

Import Progress provides a role-based view of the discovery status for workload imports to a project that were initiated by any Migrate user during the past 24 hours. When the Global Project Selector (GPS) is enabled, the GPS filters the list to include only import information for the selected project. Workload imports initiated prior to the 24-hour period are not considered.

---

**NOTE:** PTM restricts workload visibility according to the permissions of the logged-in user.

---

The report displays Import Results for workloads by status: All, Success, In Progress, Failed, and Not Found. For each workload, the Status column displays the discovery and import status. Pause over the Status cell to view information about any issues that delay or prevent discovery or import. Workloads with a status of Not Found are automatically deleted from the database after 24 hours.

Import Progress is a dynamic report that refreshes periodically and on demand. Each refresh progresses the 24-hour period and updates the list of workloads and their status. For example, a workload might move from the In Progress list to Success list or Failed list. New workload imports are included, while workloads initiated prior to the new 24-hour period are excluded.

The identity of the user who initiated an import request is not included in the Import Progress report. After a workload is successfully imported, you can view that information in the workload's Transformation History in the Workload dialog.

You can use the Search option to filter workloads by IP address or text that appears in the workload name, status, and infotips. You can also apply a list of imported workloads as a filter for the main Workload list. For example, search for newly imported workloads with similar planning and migration goals, apply the filter to the main Workload list, and then leverage bulk actions to configure and submit selected workloads for migration.

### To view import progress:

- 1 On the Workloads page, click **Import Progress**.
- 2 Monitor the current discovery status for workloads in the following categories:
  - ◆ All
  - ◆ Success
  - ◆ In Progress
  - ◆ Failed
  - ◆ Not Found



- 3 Pause over the workload Status to view information about possible issues that delay or prevent the import. For example:
  - ◆ *Discovery not yet started*
  - ◆ *Discovery not yet started; Connector might be down*
  - ◆ *Authentication failed*
- 4 Use the Search option to filter workloads by display name, workload IP address, or import IP address range.
- 5 Use the **Filter Main List** option to apply the currently displayed list as a filter of the main Workload list.

The Workload list displays the same list as the currently displayed list in the Import Progress dialog. Close the dialog to work with the workloads.

## 15.8 Retrying Workload Discovery

You might want to retry discovery for a workload if the initial discovery fails.

---

**NOTE:** Retry is not available for manual migration.

---

### To retry discovery for one or more workloads:

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 2 Use the Advanced Search to select one or more workloads where the initial discovery failed. In the **Sub Status** list, select **Initial workload discovery failed**.
- 3 Click in the Workloads list to exit the Advanced Search.
- 4 For each workload, pause over the **Initial workload discovery failed** status to view details about the reason the discovery failed.
- 5 Select one or multiple workloads in the refined list.
- 6 In the actions above the list, click **Retry** to initiate discovery for each of the selected workloads.

### To retry discovery for a single workload:

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 2 Use the Filter and Advanced Search to locate and select the workload, then click **Edit**.
- 3 Pause over **Retry** in the header area for information about why the initial discovery failed.
- 4 Click **Retry** to initiate discovery.

## 15.9 Rediscovering Workloads

You might want to rediscover a workload if you modify the source workload before you submit the transformation for execution. After you edit a target workload by using the Workload dialog or the Bulk Edit options, any rediscovered workload information applies only to the source workload.

### To rediscover one or more workloads:

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.

- 2 Use the Advanced Search to select one or more workloads where the initial discovery failed. In the **Sub Status** list, select **Discovery succeeded, ready to plan**.
- 3 Click in the Workloads list to exit the Advanced Search.
- 4 Select one or multiple workloads in the refined list.
- 5 In the actions above the list, click **Rediscover** to initiate rediscovery for each of the selected workloads.

**To rediscover a single workload:**

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 2 Use the Filter and Advanced Search to locate and select the workload, then click **Edit**.
- 3 In the header area, note the Sub Status **Discovery succeeded, ready to plan**.
- 4 Click **Rediscover** to initiate rediscovery.

## 15.10 Troubleshooting Discovery Failures

Discovery fails for any of the following conditions:

- ♦ A Migrate Connector is not available.
- ♦ The source workload is not supported for automated discovery.
- ♦ The necessary ports are not open in the source workload’s operating system firewall.
- ♦ The source workload Credentials resources are not provided.
- ♦ The Credentials resource has an invalid value for the user name and password.
- ♦ The source workload is not running at the time of discovery.
- ♦ The provided IP address or FQDN is used by a non-computer device such as a UPS, printer, or network equipment. The workload is automatically removed from the database.

After you resolve Migrate Connector, network, or credentials issues, you can retry discovery for supported source workloads.

If you retry discovery for a workload that has failed discovery and the workload goes into a transformation workflow phase of **Imported** with a sub status of **Workload Not Configured**, it might be an indication that there is no valid Credential resource assigned to the workload. In order for the initial discovery to proceed, go to the Workload dialog and assign a Credential resource in the Workload panel.

**Table 15-1** Common Reasons for a Status of Workload Discovery Failed

| Reason  | Troubleshooting Tips                               |
|---|--|
| Migration of a PlateSpin Server is not supported.   |  |
| Windows discovery was unable to authenticate to the source workload using the credentials provided. | Retry the import with the appropriate credentials. |
| Linux discovery was unable to authenticate to the source workload using the credentials provided.   | Retry the import with the appropriate credentials. |

| Reason  | Troubleshooting Tips   |
|---|--|
| <p>Failed to create directory:/opt/PlateSpinDiscovery/ on host &lt;IP address&gt;. Error: mkdir: cannot create directory '/opt/PlateSpinDiscovery/': Read-only file system.</p>                               | <p>PTM discovery creates a temporary directory, files, and service. Ensure that the username provided in the credentials has the administrator privileges necessary to perform these tasks.</p> <p>Ensure that the antivirus on the source workload is configured to permit discovery actions. See <a href="#">Section 1.7, “Antivirus Setup for Discovery,”</a> on page 30.</p> |
| <p>Likely a duplicate of a workload currently being discovered. This workload might be deleted after discovery completes.</p>   | <p>PTM tries to identify and delete duplicate workloads if import is attempted in the same project. You can manually delete known duplicates.</p>  |
| <p>Migration of detected Linux OS type not supported.</p>   | <p>PTM discovery compares discovered Linux OS types to the PTM Operating Systems list. See <a href="#">“Configuring Operating Systems”</a> in the <i>PTM 2019.5 Administrator Guide</i>.</p>   |
| <p>Connection timeout of 15 seconds exceed while waiting for a response from the server.</p>  |  |
| <p>Error executing remote Linux command--mkdir -p /opt/PlateSpinDiscovery/-- with error: Unable to open channel.</p>  | <p>SSH connection error for a Linux workload.</p>  |
| <p>The discovery failed to execute with an error: Error fetching remote file: [PlateSpinDiscovery_TIQD]result.xml ; Error: SMB SessionError: STATUS_OBJECT_NAME_NOT_FOUND (The object name is not found.)</p> | <p>SMB connection error for a Windows workload.</p>  |
| <p>An error occurred while connecting to the remote machine: ('Invalid response from server'...)</p>  |  |
| <p>Received unexpected status from the server: (3221225646) STATUS_PIPE_BUSY: 0xc00000ae</p>  |  |

**Table 15-2** Common Reasons for a Status of Workload Not Found

| Reason  | Troubleshooting Tips  |
|---|---|
| No response to a network ping.  | Verify network connectivity.  |
| Unable to detect OS type for <IP address>. Verify discovery ports are open. | See <a href="#">Section 1.3, “Requirements for Discovery,” on page 23</a> and <a href="#">Section 1.6.2, “Ports and Protocols: Workload Discovery,” on page 28</a> .    |
| Possibly not a workload.  | Imports by IP address range might include network devices. Verify the IP address against your IP address assignments.   |
| Pre-import checks failed.   | Ensure that a PlateSpin Migrate Connector is installed in the source network. See <a href="#">“PlateSpin Migrate Connector” in the PTM 2019.5 Administrator Guide</a> . |

# 16 Configuring Workload Transformations

After you import workloads and discover information about them, you are ready to configure the target workload and migration settings for each source workload.

- ◆ [Section 16.1, “About the Workload Dialog,” on page 117](#)
- ◆ [Section 16.2, “Viewing the Workloads List,” on page 138](#)
- ◆ [Section 16.3, “Viewing a Workload NIC and Volume Summary,” on page 139](#)
- ◆ [Section 16.4, “Locating Workloads with the Filter and Advanced Search,” on page 139](#)
- ◆ [Section 16.5, “Viewing Workload Transformation Details,” on page 141](#)
- ◆ [Section 16.6, “Editing the Workload Transformation,” on page 141](#)
- ◆ [Section 16.7, “Configuring the Source NIC to Use for Replication,” on page 142](#)
- ◆ [Section 16.8, “Editing a Workload Transformation after Submit,” on page 142](#)
- ◆ [Section 16.9, “Bulk Edit for Multiple Target Workloads,” on page 143](#)
- ◆ [Section 16.10, “Bulk Status Change for Multiple Target Workloads,” on page 150](#)
- ◆ [Section 16.11, “Synchronizing Edits from the Migrate Server,” on page 151](#)
- ◆ [Section 16.12, “Viewing the Transformation History,” on page 151](#)
- ◆ [Section 16.13, “Adding User Notes to the Transformation History,” on page 152](#)
- ◆ [Section 16.14, “Withdrawing a Submitted Workload,” on page 152](#)
- ◆ [Section 16.15, “Deleting a Workload,” on page 154](#)

## 16.1 About the Workload Dialog

You plan each transformation through the Workload dialog. It contains information about the source workload, the target workload, and the transformation status. This dialog enables you to modify the target workload and the transformation state for the workload.

In the Workload dialog, the font colors for the proposed Target values indicate states for the data:

- ◆ **Light Gray:** The Target field values are light gray (dimmed) if the section has not yet been edited. Each Target field value is inherited from its source workload’s imported or discovered value. In the Transformation Plan section, each field value is inherited from its parent batch, wave, or project value.
- ◆ **Gray:** The Target field values are gray if the section has been edited directly and the value matches the displayed Source value. The Target values can be modified if the Edit action is enabled for the section.
- ◆ **Blue italics:** The field value has been modified from its initial imported or discovered value. If the panel in the Workload dialog has not been edited, any changes to the Target default or imported values have been made indirectly as a result of related edits. The source and history of changes to field values are not tracked.

- ♦ **Red:** The section heading is in a red boldface font if errors or warnings exist for any of its fields. The red error condition displays next to the field label. For example, an error exists if a required value is missing.

The dialog enables you to view or modify the following information for the workload transformation:

- ♦ Header
- ♦ Workload IDs and Discovery Address
- ♦ URL for the Workload Dialog
- ♦ Errors and Warnings
- ♦ Status and Retry
- ♦ Migration Sub Status
- ♦ Discovery Status and Rediscovery
- ♦ Last Modified
- ♦ Transformation Plan
- ♦ Location
- ♦ Migration Settings
- ♦ Workload
- ♦ Network Interfaces
- ♦ Storage
- ♦ Testing Network Interfaces
- ♦ Applications
- ♦ Custom Fields
- ♦ Services
- ♦ Transformation History

### 16.1.1 Header

The Workload dialog header provides the following information about the workload:

- ♦ FQDN (fully qualified domain name)
- ♦ Project name
- ♦ Wave name or <wave not assigned>
- ♦ Batch name or <batch not assigned>


### 16.1.2 Workload IDs and Discovery Address

Pause over the Workload icon or other objects in the Workload dialog header area to view the following information for the selected workload:

- ♦ Transformation ID
- ♦ Source Workload ID
- ♦ Target Workload ID

- ♦ Migration Server Workload ID  
This value is known after a PlateSpin Migrate server has been assigned. It is used for matching workloads in the database of the specified PlateSpin Migrate server.
- ♦ Discovery Address  
This is the IP address used for discovery and communications with the workload.

### 16.1.3 URL for the Workload Dialog

Click the Navigation URL icon  in the upper right corner of the Workload dialog to show the URL to the selected workload transformation. You can open the link in a new tab, or copy the URL to the clipboard. You can also email the copied URL to stakeholders to allow them to go directly to the selected page. Log in is required for those users to gain access.

### 16.1.4 Errors and Warnings

If errors or warnings exist, the Workload dialog reports the total number that are associated with the workload transformation. For sections that contain errors or warnings, the section title and the field values of missing or invalid information appear in a red font.



Errors exist



Warnings exist

---

**NOTE:** A **Retry** option is available for failed states that are recoverable conditions.

---

### 16.1.5 Status and Retry

The Status indicates where the workload is in its transformation workflow. [Figure 16-1](#) shows the user responsible for setting the status, the various workload states, and the workflow for the transformation process. The thick lines show the default next state available for each state. See [Table 16-1](#) for a description of each workload state.

The Transformation Workflow diagram represents the overall logical flow of states in a workload transformation. Some states are not available, depending on whether the workload transformation is set to Automated Mode or Manual Mode. For example, after an automated cutover is completed successfully, the migration job is complete and you cannot reopen the same migration job.

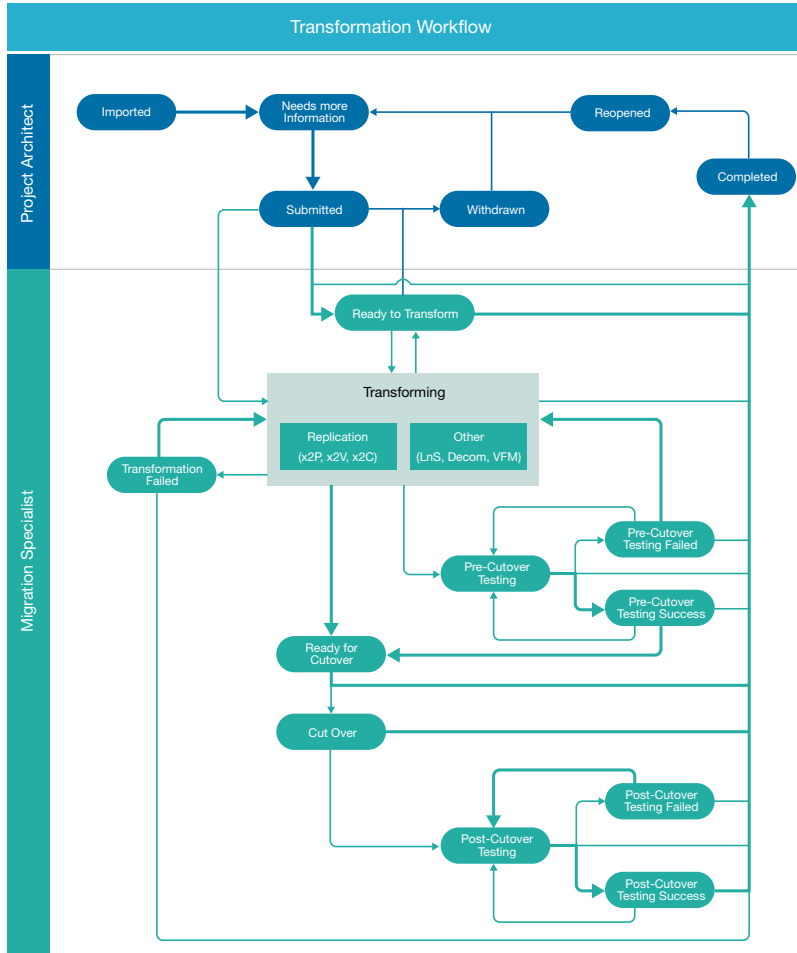
Some states are associated with the start date or cutover date for the workload's assigned batch. The state reports a Warning if that date has passed, but the expected action has not yet occurred.

---

**NOTE:** A **Retry** option is available for failed states that are recoverable conditions.

---

**Figure 16-1** The Transformation Workflow



**Table 16-1** State Descriptions

| State                 | Description   |
|-----------------------|---|
| Imported              | The workload information has been imported as source workload and added as a proposed target workload. You have not yet modified the imported information.  |
| Needs Additional Info | You have modified the imported workload information directly in the Workload dialog or with a Batch Edit action. Some required values might be missing, or there might be errors to resolve. Edits include setting the schedule for the workload, modifying its target workload configuration, or adding required values. |
| Ready to Submit       | All required values are present and there are no errors to resolve. A red Warning notice appears in the Status column if the start date for its assigned batch has passed.  |



| State                             | Description   |
|-----------------------------------|---|
| Submitted, Waiting for Start Date | The workload has been submitted for transformation, and the start date for its assigned batch is a future date. When the start date occurs, the workload's status automatically changes to Ready to Transform. The Migration Specialist can manually change the workload's status from Submitted to Transforming before the start date. |
| Ready to Transform                | The workload is ready for transformation, and the start date for its assigned batch has passed.   |
| Withdrawn                         | In Automated Mode, the submitted workload has been withdrawn because it needs changes for the planned transformation before the transformation process can continue.  |
| Transforming                      | The Migration Specialist has begun the transformation process for the workload, such as replication methods (x2P, x2V, or x2C) or other methods (LnS, Decom, and VFM).  |
| Transformation Failed             | The transformation from source workload to target workload has been attempted and failed.   |
| Ready to Cutover                  | The transformed workload is ready, waiting for the Cutover Date.  |
| Pre-Cutover Testing               | The transformed workload tests are in progress.<br><br>Pre-cutover testing can be selected at any time after the first full replication and before the Cutover Date arrives or Cutover starts.  |
| Pre-Cutover Testing Succeeded     | The transformed workload test succeeded, and the workload is ready for cutover.   |
| Pre-Cutover Testing Failed        | The transformed workload test failed. Repeat the transformation or the re-test the workload.  |
| Cut Over                          | The workload has been cut over to its target network.   |
| Post-Cutover Testing              | After the cutover, tests on the cutover workload are in progress.   |
| Post-Cutover Testing Succeeded    | The tests on the cutover workload succeeded.  |
| Post-Cutover Testing Failed       | The tests on the cutover workload failed. Re-test the workload if needed.   |
| Completed                         | The workload transformation process is completed.   |
| Reopened                          | A completed workload transformation has been reopened because it needs changes for the planned transformation before the transformation process can continue.   |

## 16.1.6 Migration Sub Status

During automated migration, the PlateSpin Migrate server reports migration state events for the workload, referred to as its Migration Sub Status. You can search on Sub Status states in the Advanced Search dialog.

## 16.1.7 Discovery Status and Rediscovery

When a PlateSpin Migrate Connector is available to the project, the header area displays the discovery status of the workload below the Status.

After a successful discovery, a **Rediscovery** option is available. You might initiate rediscovery if you make manual changes to the source workload, such as adding NICs or modifying its assigned datastores.

## 16.1.8 Last Modified

The Last Modified field shows the time stamp of the last modifications made directly in the Workload dialog, or indirectly by actions performed through import, discovery, and changes to the target workload or status.

## 16.1.9 Transformation Plan

The Transformation Plan panel enables you to specify the following information for the workload transformation:

### Project

The parent project for the workload.

### Wave

The parent wave for the specified batch.

### Batch

The parent batch scheduled for this workload.

### Start Date and Time

The planned start date for the workload transformation. The date must fall in the execution window for its parent batch, and occur before the cutover date.

- ♦ **Time:** Specify the time of day to begin workload replication for the migration. The time is based on the time zone of the PTM server you use for planning or tracking workload migrations.

---

**NOTE:** The actual start time might be delayed by a few minutes, based on the PlateSpin Migrate Connector polling interval for the PlateSpin Migrate server. The default interval is 5 minutes (300 seconds).

---

### Cutover Date and Time

The planned cutover date for the workload transformation. The date must fall in the execution window for its parent batch.

- ♦ **Time:** Specify the time of day to begin the cutover execution. The time is based on the time zone of the PTM server you use for planning or tracking workload migrations.

If the Cutover Date is the same as the Start Date, the Cutover Time must be after the Start Time.

---

**NOTE:** The actual start time might be delayed by a few minutes, based on the PlateSpin Migrate Connector polling interval for the PlateSpin Migrate server. The default interval is 5 minutes (300 seconds).

---

### Transformation Method

The transformation method to use for this workload:

- ◆ Automated (default)

---

**NOTE:** Workloads are set to Automated mode by default if the operating system type and version is supported for automated migration to VMware or Azure platforms by PlateSpin Migrate. If automated migration is not possible, the workload is set to Manual instead.

---

- ◆ Decommission
- ◆ Manual
- ◆ Manual (tracking) (for workloads PTM has matched to workload migrations on the project's Migration Server resources)

### Migration Server

The Migration Server resource that will be used to migrate the source workload to the target workload.

---

**NOTE:** Migration Server is set to Auto-Assigned if you specify Automated as the Transformation Method.

---

#### Auto-Assigned

Set Migration Server to auto-assigned to enable the automated assignment of migration jobs to PlateSpin Migrate servers you have configured as Migration Server resources.

The Migrate Connector uses round-robin load-balancing to distribute workload migration jobs evenly across all of the PlateSpin Migrate servers in your project. It detects all currently running Migrate servers for the round-robin. When it receives a new workload migration request, the Connector assigns the workload to the next Migrate server in the sequence with available capacity and available Migrate workload licenses.

After the workload is assigned to a Migrate server, a link to the workload in PlateSpin Migrate is available in the workload's Workload dialog. You can follow the link to go directly to the workload on the assigned Migrate server.

---

**NOTE:** For Windows Cluster migration, the PlateSpin Migrate server must meet the prerequisites described in "[Preparing for Migration of Windows Clusters](#)" in the *PlateSpin Migrate 2019.5 User Guide*. If you use auto-assignment of Migration Server resources, ensure that all Migrate servers for the project satisfy these prerequisites.

---

#### Migration Server Resource

Before you can select a Migration Server, you must first create Migration Server resources for your project in [Resources > Migration Servers](#).

You can save a Migration Server resource in an incomplete state without a URL and credentials. In this case, the Migration Server field displays the Migration Server resource name and the **Not configured** state in the Transformation Plan panel. When you later

deploy the migration server in your environment, you should update the Migration Server resource with its URL and credentials. The resource state is automatically updated for all of its associated workloads.

### **On Hold**

The check box to put the workload in an On Hold state, where the workflow cannot progress. Deselect the check box to remove the hold. Workloads in an On Hold state are dimmed in the Workloads list.

---

**NOTE:** The **On Hold** option in PTM also sets the **Pause Replication Schedule** option in PlateSpin Migrate for automated migration and for tracking of external migrations performed on the Migrate server. The state can be controlled from either product interface by using the appropriate option.

---

## **16.1.10 Location**

The Location panel provides information about the target platform where the target workload will be created:

### **Location: General**

#### **Environment**

The Environment resource assigned to the workload.

#### **VM Name**

The name of the VM used for the workload. The default value is the host name of the source workload.

#### **Platform Type**

The type of platform for the selected Platform resource:

- ◆ Microsoft Azure
- ◆ VMware vCenter Server
- ◆ Amazon Web Services (Manual (tracking) mode only)

When you configure automated migrations to PlateSpin Migrate, the target platform is available only if the discovered operating system type and version is supported for migration by PlateSpin Migrate.

#### **Platform**

The name of the target platform to use, selected from a list of existing platforms.

#### **Site**

A text description of geographic location or facility where the workload network resides. Example: London.

#### **Hardware**

The vendor or model of hardware used by the source workload. Example: Dell PowerEdge or VMware Virtual Platform.

### **Location: VMware vCenter Server Platform**

#### **Cluster**

The VMware cluster to use as the target platform.

**Host**

The Host resource on a specified cluster to use as the host virtualization environment for the target VM.

**Resource Pool**

The Resource Pool resource where the target VM will be created on the VMware host.

**VM Config Datastore**

The Datastore resource that contains the VM configuration file.

**Path on Datastore**

The path to the VM configuration file. Example: /CHASE\_VM/CHASE\_VM.vmx.

**VM vSphere Folder**

The folder name for the VM configuration file.

**VMware Tools**

Indicates whether PlateSpin Migrate will install VMware tools on the target virtual workload running on a VMware host.

Some Linux distributions automatically include OpenVMware tools in the operating system. PTM recognizes these distributions and hides the **Install VMware Tools** option in the setup dialog. OpenVMware tools is automatically noted in the Workload configuration.

**Location: Azure Platform****Location**

The geographic region in the target Azure environment where the workload network resides. Example: Central US.

**Resource Group**

The name of the Azure Resource Group where information about the VM's resources will be stored. You can specify a name or allow it to be automatically created.

**Availability Set**

(Optional, none is selected by default) The name of the Availability Set where the VM will be created. You can specify an Availability Set to use for Test Cutover and Cutover.

---

**NOTE:** If you plan to create the target VM in an Azure Availability Set, use the Azure portal to create a Resource Group for the VM, define the Availability Set in the resource group, then refresh the target platform in PTM to discover the newly created resources. Enable the Use Managed Disks option in the Availability Set definition if you plan to use the Azure Managed Disks service for the VM.

---

**Use Managed Disks**

(Optional, enabled by default) Enable this option to use the Azure Managed Disks service to manage disks for the target VM. You do not specify a storage account or disk path for the disks. You can give custom names to the Managed Disk resources that represent the disks that Azure manages.

**Managed Disk Type**

If you enable Use Managed Disks, you must specify the storage type that Azure will use for the VM disks it manages:

- ◆ Standard HDD

- ◆ Standard SSD
- ◆ Premium SSD

A storage type of Standard HDD allows you to choose a Cloud Instance Size with HDD or SSD storage, whereas Standard SSD and Premium SSD are restricted to Cloud Instance Sizes that support the appropriate level of SSD storage.

#### **Azure Agent**

(Optional, disabled by default) Indicates whether PlateSpin Migrate will install the latest Azure Agent on the target Windows or Linux workload.

If the Azure Agent is installed on the source, the agent will be uninstalled and reinstalled using the latest version of the agent.

#### **Location: Amazon Web Services Platform (for Manual (tracking) mode only)**

For information about setting these values on your PlateSpin Migrate server for migrations to AWS, see “[Migration to Amazon Web Services](#)” in the *PlateSpin Migrate 2019.5 User Guide*.

#### **Location**

The geographic region in the target AWS environment where the workload network resides. Example: US West.

#### **Instance Tags**

An AWS metadata tag that you can use to help manage, search for, and filter resources in the AWS environment.

#### **Tenancy**

Indicates the type of hardware to use for the VM deployment in AWS:

- ◆ Run a shared hardware instance
- ◆ Run a dedicated instance
- ◆ Launch this instance on a dedicated host

#### **Placement Group**

If you set Tenancy to run a shared hardware instance, the VM instance is launched in the specified Placement Group.

#### **IAM Role**

An AWS Identity and Access Management (IAM) user in your AWS account that has an appropriate IAM role for the user to perform migrations into the VPC using the AWS APIs.

#### **Key Pair**

The AWS EC2 Key Pair that you want to use for logging in to your AWS target instance.

#### **CloudWatch Agent**

Indicates whether to PlateSpin Migrate will install CloudWatch Agent on the target VM in AWS.

## 16.1.11 Migration Settings

The Migration Settings panel provides information about the default behaviors for the replication environment.

### Migration Settings: General

General Migration Settings are required for automated migrations to VMware and Azure platforms. They are tracked for migrations to AWS platforms.

#### Disk Copy Method

The method used to create an exact copy of volume data from the source disk to the target disk. Options for the data transfer are:

- ◆ **Block with Driver:** A data transfer method that dynamically installs a special driver on the source workload to facilitate volume data transfer at the block level. It leverages snapshots if they are available. PlateSpin Migrate requires this option for all Linux workloads.

---

**IMPORTANT:** A reboot is required when the driver is installed on the source workload.

---

- ◆ **Block without Driver:** A driverless data transfer method for Windows workloads. It leverages snapshots if they are available, or it uses a driverless synchronization with an MD5-based replication.
- ◆ **File:** A data transfer method for Windows workloads that copies data and replicates changes on a file-by-file basis.

#### Install Driver

If you select Block with Driver as the disk copy method, you can specify when in the migration process to install the driver on the source workload.

---

**NOTE:** Installing the block-based driver requires a reboot of the source workload.

---

- ◆ **Prepare:** Installs the required data transfer software on the source workload and creates a target workload in preparation for the workload replication.
- ◆ **First Replication:** Installs the required data transfer software on the source workload and begins the first full replication of the workload.

#### Compression Level

Specify level of compression to apply to workload data before its transmission for replications to the target workload.

- ◆ **Fast:** Consumes the least CPU resources on the source, but yields a lower compression ratio.
- ◆ **Optimal:** (Recommended) Consumes optimal CPU resources on the source and yields an optimal compression ratio.

---

**NOTE:** For migration to Azure platforms, Optimal compression is enabled by default. You can modify the setting in the Workload dialog.

---

- ◆ **Maximum:** Consumes the most CPU resources on the source, but yields a higher compression ratio.
- ◆ **None:** No compression.

## Daily Incrementals

The check box to enable daily incremental replication to the target workload.

- ♦ **Time:** Specify the time of day to run the incremental replication job. The time is based on the time zone of the PlateSpin Migrate server that you will use to execute the migration. The default run time is 1:00 a.m. in the time zone of the PlateSpin Migrate server.

## Encrypt data

The check box to enable encryption of data for transmission.

## Replication Network

The Network resource assigned to the target host machine during replications.

## MTU

The *Maximum Transmission Unit* setting in bytes that represents the largest packet size that can be used on the replication network. Valid values are 68 to 65535. For example, most Ethernet networks support an MTU setting of 1500 bytes. On a VPN, the MTU value is typically smaller than 1500 bytes.

Specify an MTU setting that matches the smallest MTU setting on the replication network path between the source workload and the target workload. If a packet is larger than the MTU value of an interface, the packet might be split into smaller packets, or it might be dropped. Both packet fragmentation and retransmission introduce latency and congestion that can dramatically increase the replication time. Tuning a workload's MTU value for its replication network helps avoid these conditions, which optimizes the transmission performance and minimizes replication time.

## IP from DHCP

Specify whether to acquire the IP address for the target workload from a DHCP server.

The **Use DHCP to get network address details** setting is enabled by default. Deselect the check box to specify static IP addresses, then specify the network address settings for the replication network.

- ♦ **IP Address:** IPv4 format.
- ♦ **Subnet Mask:** IPv4 format.
- ♦ **Default Gateway:** IPv4 format.
- ♦ **DNS Servers:** IPv4 format. For multiple entries, specify one DNS server per line.

## Migration Settings: Azure Platform

You must specify additional Migration Settings for migrations to Azure platforms.

### Pause for configuration in Migrate

The check box enable the workflow to pause between the migration configuration and the workload prepare process.

### Pause for manual cutover

The check box to pause for manual cutover of the workload when the cutover date is reached. The default setting is **Yes**.

### Replication with test cutover

The check box to enable an incremental replication before executing the test cutover. The default setting is **No**.



**Replication with cutover**

The check box to enable an incremental replication before executing the cutover.

**Shut down source**

The check box to enable the shut down of the source workload during the cutover.

**Shut down target**

The check box to enable the shut down of the target workload during the cutover.

**Resource Group**

The Resource Group to use for the replication network. By default, it is the Replication Group you assigned to the target host machine.

**Subnet**

The Subnet resource assigned to the target host machine during replications.

**Request Public IP**

Indicates whether a Public IP address will be used for the replication environment. If you enable a public IP address, Azure assigns the NIC both a public IP address and a private IP address.

---

**NOTE:** PlateSpin requires a public IP address only if an Azure VPN is not available.

---

You can use private IP addresses for workload migration if you have configured an Azure VPN to connect your premise network with your Azure cloud environment. Otherwise, you must enable a public IP address to be assigned to the replication network, cutover network, and test cutover network. If the VM has multiple NICs, only the primary NIC can have a public IP address. The assigned public IP addresses will be in the address space of the specified network and subnet for the designated NIC in each network.

**Migration Settings: AWS Platform (for Manual (tracking) mode only)**

Additional Migration Settings are tracked for migrations to AWS.

**License Type**

The method used by PlateSpin Migrate to assign an operating system license to the target workload in AWS.

**Replication VPC**

The Virtual Private Cloud resource assigned to the target host machine during replication.

**Subnet**

The Subnet resource in the specified Virtual Private Cloud that is assigned to the target host machine during replications.

**Request Public IP**

Indicates whether a Public IP address will be used for the replication environment in AWS.

**Security Group**

The AWS security group that is configured with the inbound and outbound ports appropriate for the replication environment.

## 16.1.12 Workload

The Workload panel displays the source workload configuration that was imported or re-imported using the Spreadsheet Import feature. Initially, the target workload has the same configuration. You can edit the configuration of the target workload.

### Workload: General

General Workload settings are required for automated migrations to VMware and Azure platforms. They are tracked for migrations to AWS platforms.

#### Host Name

The simple host name (or machine name) for the workload, not its FQDN. Example:  
`sqlserver10`

#### Domain Name

The name of the domain that the target workload will join. Examples: `digitalair.com`, `paris.digitalair.com`

#### Admin Credential

The Credential resource to use to authenticate to a specified source workload.

#### Operating System

The specified value from the OS Types list that represents the operating system discovered on the source workload.

#### Architecture

The processor architecture (64 bit or 32 bit) value is inherited from the specified operating system.

#### Description

(Optional) A textual description of the workload, such as information about migration constraints.

#### Windows Settings

The Windows Settings area is available for Windows workloads.

##### Domain or Workgroup

Specify whether the Windows workload is a member of a domain or a workgroup, then specify the name.

- ◆ **Domain:** Specify its domain name, such as `PARIS` or `paris.digitalair.com`.
- ◆ **Workload:** Specify its workgroup name, such as `WORKGROUP`.

##### Domain Credential

If you specified Domain, select the Credential resource for the domain administrator account needed to join the workload to the existing domain.

### Workload: VMware Platform

You must specify additional Workload settings for migrations to VMware platforms.

#### Amount of RAM

The amount of memory for the workload in MB, GB, TB, PB, EB, ZB, or YB.

#### # Sockets

The number of sockets installed on the workload.

### **# Cores per Socket**

The number of cores in each socket. The total number of cores for the workload is the cores per socket times the number of sockets.

### **Workload: Azure Platform**

You must specify additional Workload settings for migrations to Azure platforms.

#### **Azure Machine Size**

The cloud instance size description of the target Azure VM.

#### **Amount of RAM**

The amount of memory for the workload in MB, GB, TB, PB, EB, ZB, or YB.

#### **# Cores**

The number of cores installed on the workload.

### **Workload: Amazon Web Services Platform (for Manual (tracking) mode only)**

The following additional Workload settings are tracked for migrations to AWS.

#### **Instance Type**

The cloud instance size description of the target AWS VM.

#### **Amount of RAM**

The amount of memory for the workload in MB, GB, TB, PB, EB, ZB, or YB.

#### **# Cores**

The number of cores installed on the workload.

## **16.1.13 Network Interfaces**

The Network Interfaces panel defines information about each NIC on the workload. You cannot delete the source NIC information provided during the import, but you can add, edit, and delete other NICs for the target workload.

You must have at least one NIC for the source workload and one NIC for the target workload. You cannot delete the last remaining NIC in the list. You must create another NIC first, and then delete the unwanted NIC.

### **Network Interfaces: General**

The general Network Interface settings are set for each NIC on the workload. General Network Interface settings are required for automated migrations to VMware and Azure platforms. They are tracked for migrations to AWS platforms.

#### **Interface Name**

The name for the NIC. Example: `eth0`

#### **Network**

The Network resource assigned to the workload. If you have multiple NICs, this setting is required for each NIC.

#### **Connect on boot**

(VMware) The NIC is automatically set to connect to the network on boot.

## MAC Address

MAC address of the source workload NIC in the format of 00-00-00-00-00-0c.

For target workloads, the MAC address is assigned by the target workload. The address is not tracked for planning.

## IP from DHCP

The **Use DHCP to get network address details** setting is enabled by default. Deselect the check box to specify a static IP address, then specify the network address settings for the target network.

- ♦ **IP Address:** IPv4 format.
- ♦ **Subnet Mask:** IPv4 format.
- ♦ **Default Gateway:** IPv4 format.

---

**NOTE:** Only the primary NIC can provide the default gateway address if you use DHCP to get network address details.

---

---

**NOTE:** If the source workload or target workload is located in a different internal (private) network behind a network address translation (NAT) device, it might be unable to communicate with its counterpart to replicate the workload. On the affected workload, ensure that you specify a public IP address for the NIC you use for replication.

---

## IP Address

The IP address for the NIC. Multiple IP addresses per NIC are supported for Windows workloads.

### Network Mask (or Subnet Mask)

The network mask for the NIC.

For cloud platforms, the subnet mask value is auto-populated based on the specified subnet.

### Default Gateway

The IP address of the default gateway. Multiple IP addresses are supported as default gateways for Windows workloads.

For cloud platforms, the default gateway value is auto-populated based on the specified subnet.

## DNS from DHCP

For Windows workloads, select the **Use DHCP to get name servers** check box to acquire the DNS server information from the DHCP server in the associated network. If you specify a static IP address, deselect the check box, then manually specify the DNS server information in the **DNS Servers** field.

For Linux workloads, deselect the **Use DHCP to get name servers** check box, then manually specify the DNS server information in the **DNS Servers** field.

## DNS Servers

Use this option to manually specify DNS server IP addresses. Type the server IP address in IPv4 format. For multiple entries, specify one DNS server per line.

### Use for Replication

On the Network Interfaces panel, specify whether to use the NIC for replication communications. The default value is **Yes**. At least one of the NICs must be enabled for replication. This option is not displayed unless the workload has multiple NICs.

### Network Interfaces: Azure Platforms

You must specify additional Network Interface settings for migrations to Azure platforms.

#### Resource Group

The Azure resource group to use for the NIC, or allow the name to be automatically generated.

#### Subnet

The subnet to use in the specified network.

---

**NOTE:** For Subnets, Azure reserves IP addresses 0 and 255 (first and last) for protocol conventions, and IP addresses 1, 2, and 3 for internal services. They are not configurable.

---

#### Set as primary

The primary NIC for the target VM. The option is available only if multiple NICs are available. The default primary connection is the first NIC in the list.

---

**NOTE:** Only the primary NIC can provide the default gateway address if you use DHCP to get network address details.

---

### Network Interfaces: Amazon Web Services Platforms (for Manual (tracking) mode only)

The following additional Network Interface settings are tracked for migrations to AWS.

#### VPC

The Virtual Private Cloud resource assigned to the workload. If you have multiple NICs, this setting is required for each NIC.

#### Subnet

The subnet to use in the specified virtual private cloud.

#### Security Group

The AWS Security Group to use for the NIC that has the appropriate inbound and outbound ports configured to support migration to the target VPC and subnet.

#### Enable Enhanced Networking

The Enhanced Networking option provides high-performance networking capabilities on the workload by using an ENA adapter.

if the selected AWS cloud instance type supports only an ENA adapter, PlateSpin Migrate selects the **Enable Enhanced Networking** option by default. However, if the selected instance type supports both ENA and Intel adapters, the use is optional.

## 16.1.14 Storage

The Storage panel defines information about the storage mapping strategy and about the mounted volumes on the workload. You cannot modify information for the source workload. To update the source workload disk and volume information, you can rediscover the source workload if you are using discovery, or update the Bulk Import Spreadsheet and import the workload again using the Spreadsheet Import.

### Storage Mapping Strategy

The mapping strategy translates the layout of storage disks and volumes from the source workload to a proposed layout in the destination storage location. In Manual mode, you can keep the resulting proposed layout, or modify the disk details for a custom mapped solution.

- ◆ **Same as source:** Storage objects for the target volumes and disks will be configured in the destination storage location using the same layout, size, and format as the source workload. For the target workload, you can select a datastore and path for target VMware environments, and define a remote path for SAN and NAS devices.

---

**NOTE:** For Linux workloads, boot and root will reside on the same disk on a target workload.

---

- ◆ **Custom:** In Manual Mode, you can add, edit, and remove volume groups, volumes, disks, and partitions. You can also restore the settings to the Same as Source settings for the source volumes and disks.
- ◆ **Custom, one volume per disk:** For Windows dynamic disks, the storage does not follow the Same as Source mapping strategy. Simple Dynamic Volumes and Spanned Dynamic Volumes will reside on the target workload as Simple Basic Volume disks. The target disk is partitioned as GPT if the total combined size of the dynamic volume's member disks exceeds the MBR partition size limit of 2 TB. Other volume types follow the Same as Source storage mapping strategy.

### Volumes Tab

The Volumes tab enables you to view and configure the proposed volume layout on the target workload from a volume perspective. It displays a tree-view list of volumes and volume groups on the target workload.

#### Name

The name of the volume group or its member volumes.

#### File System

The file system format for the partition, such as Ext3, Linux-swap, NTFS, unallocated, extended, and so on.

#### Size

The total amount of space in the units specified that are allocated to the volume group or its child volumes. The unused amount of space available in the volume or volume group displays below the size.

#### Cluster Size

(Windows) For NTFS volumes, specifies the block allocation size. The default is 4 KB.

## Type

The type of storage object and file system for the selected volume.

### Example storage types:

- ◆ Dynamic Mirrored
- ◆ Dynamic RAID 5
- ◆ Dynamic Simple
- ◆ Dynamic Spanned
- ◆ Dynamic Striped
- ◆ Local
- ◆ NAS
- ◆ SAN
- ◆ Swap
- ◆ System
- ◆ Volume

### Example File System Types:

- ◆ NTFS
- ◆ Ext4
- ◆ XFS

## Mount Point

The path on the workload where the volume can be mounted, such as `K:` or `/mnt/data2`. The volume might be mounted or unmounted.

## Datastore

The name of the VM datastore to use for the volume. The remote path to the virtual disk file in the datastore appears under the datastore name.

## Path on Datastore

(VMware) For a datastore, specify the path on the datastore for the volume.

## Remote Path

The remote path for a Storage Area Network (SAN) or Network Attached Storage (NAS).

## Devices

The devices and partitions used by the selected volume group or volume.

## Disks Tab

The Disks tab enables you to view and configure the proposed disk and partition layout on the target workload. It displays a tree-view list of disks and partitions on the target workload.

## Disks

### Name

The name of the parent disk and its child partitions.

**Size**

The total amount of space in the units specified that is allocated to a disk and its partitions. The amount of unallocated available space displays below the size.

Maximum disk size depends on various factors, including the architecture, operating system, file system, virtual or physical hardware, and the target host environment. The most restrictive limit determines the maximum allowed size.

**Volume**

The name of the volume that resides on the child partition.

**Type**

The type of storage object as disk or partition. The Partition type includes the file system format, such as Ext3, Linux-swap, NTFS, unallocated, extended, and so on.

**Datastore (or Storage Account)**

The name of the VM datastore to use for the disk. The path to the virtual disk file in the datastore appears under the datastore name.

For Azure, the storage location for unmanaged disks is a Storage Account resource.

**Disk Details**

Select a partition in the Disks list to view or modify details about its disk and volume for the target workload.

**Type**

The type of storage object (disk or partition).

**Size**

The total amount of space allocated to a disk or partition in the units specified.

**Name**

The name of the volume or volume group, such as `Network_Share_11-T1`.

**Mount Point**

The path on the workload where the volume can be mounted, such as `K:` or `/mnt/data2`. The volume might be mounted or unmounted.

**Volume**

The name of the volume that resides on the partition.

**Unallocated**

The amount of free space available in the disk or partition in the units specified.

**Virtual Disk Details**

Select a partition in the Disks list to view or modify details about its virtual disk and volume for the target workload. Customizing the mapped disk or volume is optional.

**Datastore**

The name of the VMware datastore for the target VM to use.

**Path on Datastore**

The path to the virtual disk file (`.vmdk`) in the selected datastore.



## Disk Provisioning

(VMware) The virtual disk provisioning policy to use for the virtual disk.

- ♦ **Thin Disk:** Creates a disk in a space-efficient sparse disk format that can grow to the size is provisioned at creation time.
- ♦ **Thick Disk:** Creates a virtual disk in a type of thick virtual disk that supports clustering features such as fault tolerance. Space required for the virtual disk is allocated at creation time.

## Azure Managed Disks Details

If you enabled Use Managed Disks for a migration to Azure, only the Disk resource names are displayed. You do not have an option to specify the Datastore (Azure Storage Account) and disk path.

You can optionally provide a custom name for each Managed Disk resource. You cannot rename this resource after it is created. PTM applies a default name for each Managed Disk resource in the following format:

*<parent VM name>-<numeric suffix>*

Names must comply with the naming conventions for resources. Valid characters for the resource name are alphanumeric, underscore (`_`), hyphen (`-`), and period (`.`). The name should start with a letter or number, and end with a letter, number, or underscore. The maximum name length is 80 characters. Managed disk names do not have a `.vhd` extension.

## 16.1.15 Testing Network Interfaces

The Testing Network Interfaces panel defines information about the NIC configuration during cutover testing for the target workload. You can copy or reapply the default settings from Network Interfaces, and then modify the live network settings with settings for the test network. You can also create and delete NICs for testing.

The Testing Network Interfaces panel is available for Transformation Types that support testing. the panel is shown for workloads in Manual mode, as appropriate for tracked external migrations and manual external migrations.

Use this panel to define information about each NIC on the workload for a testing environment. You cannot delete the source NIC information provided during the import, but you can add, edit, and delete other NICs for the target workload.

## 16.1.16 Applications

The Applications panel identifies the applications installed on the workload. You can add or remove applications for the target workload.

## 16.1.17 Custom Fields

The Custom Fields panel enables you to specify values for the Custom Fields 1-8 that are defined for the project. Custom Fields are available only if they are defined for the project and the project is selected in the Global Project Selector when you open the Workload dialog.

## 16.1.18 Services

The Services panel enables you to specify services that should be stopped for cutover and their state on the target workload after cutover.

### Windows Service States

For each service, you can select one of the following post-cutover states for the workload:

- ◆ Manual
- ◆ Automatic
- ◆ Disabled
- ◆ Automatic (Delayed Start)

### Linux Daemon States

For each daemon, you can enable or disable Runlevels 0 through 6 and Boot.

## 16.1.19 Transformation History

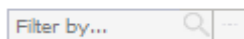
The Transformation History panel displays the most recent workflow state changes, migration sub-state changes, or user-provided notes for the workload. Each state change triggers an entry. You can also enter user notes to be logged, such as manual changes and actions performed for the workload.

The Transformation History can distinguish whether the action was initiated by a User, a Migrate server, or a Connector (if you assign a dedicated User object for the Connector login credentials).

## 16.2 Viewing the Workloads List

The Workloads tab enables you to track key settings and status for each workload. Use the following tips to manipulate the page and view various status and details.

- ◆ Set the Global Project Selector to the project of interest to list only workloads for that project.
- ◆ View the list based on details for the source workload or for the Target workload.
- ◆ Pause over the Status or Sub Status states to view details about the event or error conditions.
- ◆ Use the Filter to perform a simple search on the list. Use the Advanced Search  to search on a variety of workload settings, custom fields, status, and health.



- ◆ Select a Health warning type to quickly list all workloads that are in a specific state. For example, `Not cut over, but cutover date has passed`.
- ◆ Double-click the tab title to force any list to refresh immediately, regardless of its normal polling cycle.
- ◆ Pause over the tab title to view the total number of items in the list and the total number of selected items currently selected in the list.

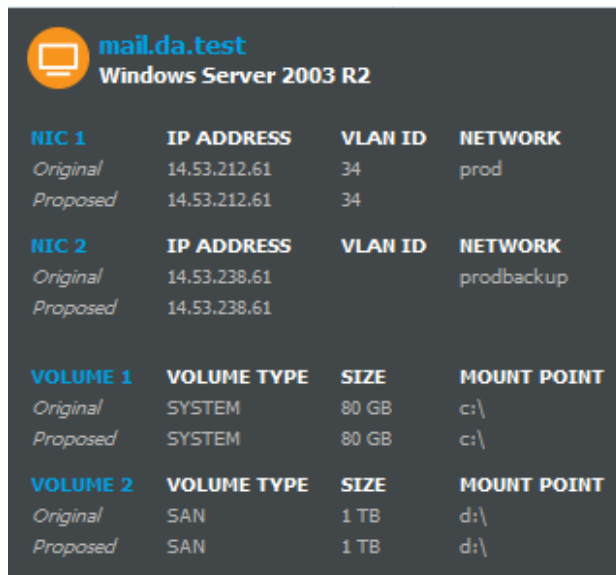
- ♦ A **Retry** option is available when you select a workload in a failed state that is a recoverable condition. Retry actions are not available for manual migrations.
- ♦ A **Rediscover** option is available when you select a workload that was previously successfully discovered.

## 16.3 Viewing a Workload NIC and Volume Summary

The Workload Summary enables you to view key source and target workload information without opening the Edit Workload dialog. The information pops up as a tool-tip when you pause over the workload name.

**To view the workload NIC and disk summary:**

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 2 Use the **Filter** and **Advanced Search** options to locate the workload of interest.
- 3 (Optional) Pause over a workload name to view a summary of its source workload and target workload configurations for NICs and volumes.



| mail.da.test<br>Windows Server 2003 R2 |                    |                |                    |
|--|--------------------|----------------|--------------------|
| <b>NIC 1</b>                           | <b>IP ADDRESS</b>  | <b>VLAN ID</b> | <b>NETWORK</b>     |
| <i>Original</i>                        | 14.53.212.61       | 34             | prod               |
| <i>Proposed</i>                        | 14.53.212.61       | 34             |                    |
| <b>NIC 2</b>                           | <b>IP ADDRESS</b>  | <b>VLAN ID</b> | <b>NETWORK</b>     |
| <i>Original</i>                        | 14.53.238.61       |                | prodbackup         |
| <i>Proposed</i>                        | 14.53.238.61       |                |                    |
| <b>VOLUME 1</b>                        | <b>VOLUME TYPE</b> | <b>SIZE</b>    | <b>MOUNT POINT</b> |
| <i>Original</i>                        | SYSTEM             | 80 GB          | c:\                |
| <i>Proposed</i>                        | SYSTEM             | 80 GB          | c:\                |
| <b>VOLUME 2</b>                        | <b>VOLUME TYPE</b> | <b>SIZE</b>    | <b>MOUNT POINT</b> |
| <i>Original</i>                        | SAN                | 1 TB           | d:\                |
| <i>Proposed</i>                        | SAN                | 1 TB           | d:\                |


- 4 Move the mouse away from the workload name to exit the summary pop-up.


## 16.4 Locating Workloads with the Filter and Advanced Search

The Filter and Advanced Search tools allow you to locate one or more workloads that you want to perform actions on. It is an easy way to select multiple workloads to assign to batches or to modify transformation information.

- 1 In the Web Interface, click the **Global Project Selector**, then select the project of interest.
- 2 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.

- 3 In the **Filter**, type characters to search for values in the searchable columns. The filter applies immediately to the list as you type the characters.

You can click the **Clear Filter**  icon to clear the field and remove the filter.


- 4 Click the **Advanced Search** icon  to narrow the search by specifying your desired search parameters and values.

The Advanced Search dialog is a multiple-option form that allows you to search on any combination of the following parameters for Workloads that make sense for the target of your search:

| Planning  | Platform   | Workload   | Resources   |
|---|--|--|---|
| Project<br>Wave<br>Batch<br>Status<br>Sub Status<br>Health<br>On Hold | Platform<br><br><b>For AWS:</b><br>Region<br>IAM Role<br>Placement Group<br>Security Group<br>Key Pair<br>Encryption Key<br><br><b>For Azure:</b><br>Location<br>Resource Group<br><br><b>For VMware:</b><br>Cluster<br>Cluster Host | Hostname<br>Migrate Server<br>OS Type<br>Application<br>Environment<br>Transform Method<br><br><b>For Azure:</b><br>Azure Machine Size | Total Storage<br>Single Disk Size<br>Total Number of Cores<br>Amount of Memory<br><br><b>For AWS:</b><br>VPC<br>Datastores<br><br><b>For Azure:</b><br>Network<br>Subnet<br>Storage Accounts<br><br><b>For VMware:</b><br>Network<br>Datastores |
| <b>Custom Fields</b>  |  |  |   |
| Field 1<br>Field 5  | Field 2<br>Field 6   | Field 3<br>Field 7   | Field 4<br>Field 8  |

**NOTE:** Custom field labels that you have defined for a project appear in the form if the Global Project Selector is set to a specific project.

Click **Clear** to reset the Advanced Search and try again with different fields.

- 5 After you have narrowed the list to the items of interest, click in the list to exit the Advanced Search dialog.
- 6 Pause over the Workloads tab to see the number of total items in the list.  
  
The Advanced Search icon is blue  if any of the options are active in the search dialog.
- 7 In the filtered Workloads list, view the workloads listed in the search results.
- 8 (Optional) Select multiple items in the list to perform Bulk Edit or Bulk Status Change actions on the selected workloads.
- 9 Pause over the Workloads tab to see the number of total items in the list and the total number of selected items.

## 16.5 Viewing Workload Transformation Details

The Workloads list provides key information and statistics about each workload. The **View** option on the Workloads tab allows users with only the View permissions to view workload transformation details for a selected workload.

### To view workload transformation details:

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 2 In the **Workloads** list, use the Filter and Advanced Search to locate the appropriate workload.
- 3 Select the workload, then click **View** to open the Workload dialog.
- 4 View the workload information.
- 5 Click **Close** when you are done.

## 16.6 Editing the Workload Transformation

The initial workload import creates a source workload and a proposed target workload. You use the Workload dialog for the workload to set the appropriate configuration for the transformation and target workload.

---

**Users Who Can Perform These Tasks:** System Administrator, Project Manager, Project Architect

---

### To configure the transformation and target workload for a single workload:

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 2 Use the **Filter** and **Advanced Search** options to locate the workload of interest.
- 3 (Optional) Pause over a workload **Name** to view a summary of its source workload and target workload configurations.
- 4 Double-click the workload you want to modify to open its Workload dialog. You can alternatively select the workload, and then click **Edit**.
- 5 Modify the workload information on the Workload dialog as appropriate:
  - ◆ Status
  - ◆ Transformation Plan
  - ◆ Migration Settings
  - ◆ Workload
  - ◆ Location
  - ◆ Network Interfaces
  - ◆ Testing Network Interfaces
  - ◆ Storage
  - ◆ Applications
  - ◆ Custom Fields
  - ◆ Transformation History

---

**TIP:** As you work in the various panels in the Workload dialog, you can double-click in the header to refresh the dialog page.

---

- 6 Use the following to save your changes for now, to submit the workload as ready for execution, or to return to a submitted workload to make changes:
  - ♦ Select **Mark In Progress** to keep the workload available for additional changes. This allows errors to exist until you return to make additional modifications.
  - ♦ When you have resolved all errors and provided the appropriate transformation details, click **Submit** to indicate that the workload is ready for transformation.

---

**NOTE:** For automated migration, you cannot submit a workload transformation that has not been successfully discovered. Workload details imported from a Spreadsheet Import are not sufficient for automation.

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## 16.7 Configuring the Source NIC to Use for Replication

If you have multiple NICs for a source workload, you must specify which NIC to use for replication.

**To enable a NIC for Replication:**

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 2 Use the **Filter** and **Advanced Search** options to locate the workload of interest.
- 3 Double-click the workload you want to modify to open its Workload dialog. You can alternatively select the workload, and then click **Edit**.
- 4 Scroll down to view the Network Interfaces panel and locate the NIC you want to use for replication.
- 5 Under the Source workload, click **Enable** to set **Use for Replication** to **Yes**. At least one source NIC must be enabled.
- 6 Click **Close**.

## 16.8 Editing a Workload Transformation after Submit

You can modify the following settings for the workload transformation after you submit the workload without needing to withdraw it:

- ♦ **Transformation Plan**
  - ♦ Wave
  - ♦ Batch
  - ♦ Start Date and Time
  - ♦ Cutover Date and Time
  - ♦ On Hold
- ♦ **Transformation History**
  - ♦ User-provided notes

### To modify the plan or add a note for a single workload:

- 1 In the Web Interface, select the project in the Global Project Selector.
- 2 Select **Planning** in the toolbar, then select the **Workloads** tab.
- 3 Use the **Filter** and **Advanced Search** options to locate the workload of interest.
- 4 Double-click the workload you want to modify to open its Workload dialog. You can alternatively select the workload, and then click **Edit**.
- 5 In the Transformation Plan panel, click **Edit**, then modify the schedule information as needed.
- 6 In the Transformation History panel, click **View**, then add notes as needed.
- 7 Click **Close** to exit the Workload dialog.

### To modify the plan of one or more workloads using Bulk Edit:

- 1 In the Web Interface, select the project in the Global Project Selector.
- 2 Select **Planning** in the toolbar, then select the **Workloads** tab.
- 3 Use the **Filter** and **Advanced Search** options to locate the workloads of interest.
- 4 Select the specific workloads you want to modify.
- 5 Click **Bulk Edit**.
- 6 (Optional) Modify the plan settings as needed:
  - ♦ **Wave**
  - ♦ **Batch**
  - ♦ **Remove from Batch and Wave**
  - ♦ **Start Date**
  - ♦ **Cutover Date**
  - ♦ **On Hold**
- 7 Click **Apply**.
- 8 Review the change confirmation, then click **Proceed**.

Workloads dimmed in an On Hold state are dimmed in the Workloads list.

## 16.9 Bulk Edit for Multiple Target Workloads

The Bulk Edit function is a powerful editor that enables you to apply the same parameter setting to multiple selected workloads at a time. Each parameter is independent, and can be applied separately against a set of selected workloads. Bulk Edit validates each value against the type of workload and other characteristics to ensure that the change is made only if the setting is a valid option for that workload. This safeguard enables you to concurrently edit a set of diverse workloads in a project that have a logical relationship that is meaningful to your network environment.

- ♦ [“About Bulk Edit” on page 144](#)
- ♦ [“Selecting Workloads for Bulk Edit” on page 149](#)
- ♦ [“Applying a Bulk Edit” on page 150](#)

## 16.9.1 About Bulk Edit

The Bulk Edit dialog title area provides information about the number of workloads that you have preselected in the Workloads list before opening the Bulk Edit dialog. A System Administrator and users with Project Manager or Project Architect roles in multiple projects are able to select workloads across projects. Bulk edit allows editing based on the permissions of the roles associated with the logged in user.

The specified changes are performed for each selected workload if they are appropriate for the workload. Some changes might be skipped for a workload if the specified change or value is not valid for that workload. For example, changes for a Datastore apply only to workloads being migrated to a target VMware platform.

Some actions cannot be performed against a selected workload based on the workload state:

- ♦ **Submitted:** Values for workloads in a Submitted or later state are not editable. You must withdraw the workload to return it to an editable state.
- ♦ **Completed:** Values for workloads in a Completed state are not editable. You can reopen the workload to return it to an editable state. If the Completed state was initiated from a parent wave, batch, or project, you must reopen the parents first.
- ♦ **Manual (Tracking):** For workloads in Manual (Tracking) mode, you can edit values only for Wave, Batch, and Notes settings.

The Bulk Edit Results dialog validates the requested changes against each pre-selected workload. It provides information about the number of workloads that will be fully modified, partially modified, or with no changes. The Validation Results tab lists the workloads in each category and provides warnings for changes that might be difficult to undo after they are applied. Use this pre-check to decide whether to proceed with the requested changes on the selected workloads.

[Table 16-2](#) describes values displayed in the Bulk Edit dialog header. It tallies the number of total workloads currently selected and the number of projects represented in that list.

**Table 16-2** Bulk Edit Status about Selected Workloads

| Parameter                      | Description   |
|--------------------------------|---|
| Number of workloads selected   | The number of workloads that you have preselected in the Workloads list before opening the Bulk Edit dialog.  |
| Number of projects represented | A System Administrator and users with Project Manager or Project Architect roles in multiple projects are able to select workloads across projects. |

The Bulk Edit dialog groups parameters in panels similar how they appear in the Workload dialog. Parameters reflect your choices in the dialog, and are shown or hidden as appropriate for the limiting parameters, such as platform type. Selecting a Project or Platform limits the changes to any selected workloads that are in the project or associated with the platform. You can reset a field by clicking its **X**. Reset all fields in a panel by clicking **Clear**.

**NOTE:** For workloads in Manual (tracking) mode, only the Wave and Batch settings can be edited. Other settings are controlled by the PlateSpin Migrate Server that is executing the migrations.



Table 16-3 identifies the parameters available in each panel. Limitations are noted.

**Table 16-3** Bulk Edit Parameters

| Parameter                  | Description   |
|----------------------------|---|
| <b>Transformation Plan</b> |   |
| Project                    | <p>The Project value is informational if you preset the Global Project Selector. All selected workloads belong to that project.</p> <p>If you select any of the project-specific parameters, the Project value represents the project related to your selected value. All remaining project-related parameter values are restricted based on that choice.</p>   |
| Wave                       | This option reflects the parent wave of the target batch and sets the Project value if it is not set.   |
| Batch                      | <p>Set the target batch assignment for the selected workloads. It sets the parent wave and project if they are not set.</p> <p>Each workload inherits the dates from the newly assigned batch. Manual date settings override inheritance. If manual dates fall outside the new execution window, the affected dates display in a red font in the Workloads list and the Workload dialog.</p>  |
| Remove from Batch and Wave | Move selected workloads out of their current assigned batches and waves.  |
| Start Date                 | Set the start date of the transformation execution.   |
| Start Time                 | <p>Set the time of day to begin the transformation execution. Select from a list of times in 15-minute increments. The time is based on the time zone of the PlateSpin Migrate server that you will use to execute the migration.</p> <p><b>NOTE:</b> The actual start time might be delayed by a few minutes, based on the PlateSpin Migrate Connector polling interval for the PlateSpin Migrate server. The default interval is 5 minutes (300 seconds).</p>   |
| Cutover Date               | Set the cutover date for the workload.  |
| Cutover Time               | <p>Set the time of day to begin the cutover execution. Select from a list of times in 15-minute increments. The time is based on the time zone of the PlateSpin Migrate server that you will use to execute the migration.</p> <p>If the Start Date and Cutover Date are the same, the Cutover Time must be after the Start time.</p> <p><b>NOTE:</b> The actual start time might be delayed by a few minutes, based on the PlateSpin Migrate Connector polling interval for the PlateSpin Migrate server. The default interval is 5 minutes (300 seconds).</p> |

| Parameter                 | Description  |
|---------------------------|--|
| Transformation Method     | Specify the transformation method: <ul style="list-style-type: none"> <li>◆ Automated</li> <li>◆ Decommission</li> <li>◆ Manual</li> </ul>   |
| Migration Server          | Change the Migration Server resource: <ul style="list-style-type: none"> <li>◆ From any value to the new specified value.</li> <li>◆ From a specified value to a new specified value.</li> <li>◆ Auto Assign</li> </ul>  |
| On Hold                   | Select True to pause the workload transformation workflow for the selected workloads.  |
| <b>Location</b>           |  |
| Platform                  | Set the Platform to restrict changes to the selected workloads that are associated with that platform. It sets the parent project if it is not set.<br><br><b>NOTE:</b> When you configure automated migrations to PlateSpin Migrate, an error is reported for a workload if the discovered operating system type and version is not supported for migration to the selected platform by PlateSpin Migrate.<br><br>The Location panel shows only the fields appropriate for the platform type of the specified platform. |
| Location                  | (Azure) Select the location from the list available for the selected target Azure platform.  |
| Cluster                   | (VMware) Select the cluster from the list of available clusters for the selected VMware vCenter server.  |
| Cluster Host              | (VMware) Select the host from the list of available hosts for the selected VMware vCenter server.  |
| Unassign Cluster Host     | (VMware) Remove assignment for any selected host.  |
| VM Config Datastore       | (VMware)<br><br>For any Datastore, change the Datastore resource: <ul style="list-style-type: none"> <li>◆ From any value to the specified value.</li> <li>◆ From a specified value to a new specified value.</li> </ul>   |
| <b>Migration Settings</b> |  |
| Disk Copy Method          | Set the disk copy method: block with driver (reboot is required), block without driver, and file.  |
| Replication NIC           | (Azure) Already selected; uses the NIC designated as Primary.<br><br>(VMware) If there are multiple NICs, uses the first NIC in the list.  |

| Parameter             | Description   |
|-----------------------|---|
| Network               | Change the Network resource to use for the Replication: <ul style="list-style-type: none"> <li>◆ From any network to the new specified network.</li> <li>◆ From a specified network to a new specified network.</li> </ul>    |
| Subnet                | (Azure)<br>Change the Subnet resource to use for the Replication: <ul style="list-style-type: none"> <li>◆ From any subnet to the specified value.</li> <li>◆ From a specified subnet to a new specified value.</li> </ul>    |
| Enable DHCP           | Select to enable DHCP for IP address assignment.  |
| Resource Group        | (Azure)<br>Change the Resource Group resource: <ul style="list-style-type: none"> <li>◆ From any resource group to the specified value.</li> <li>◆ From a specified resource group to a new specified value.</li> </ul>       |
| <b>Workload</b>       |   |
| Workgroup/Domain Name | Type the domain workgroup or domain name.   |
| Domain                | Select the check box to indicate that the provided name is a domain.  |
| Domain Credential     | For any Domain Admin Credential, change the Credential resource: <ul style="list-style-type: none"> <li>◆ From any value to the specified value.</li> <li>◆ From a specified value to a new specified value.</li> </ul>       |
| Admin Credential      | For any Admin Credential, change the Credential resource: <ul style="list-style-type: none"> <li>◆ From any value to the specified value.</li> <li>◆ From a specified value to a new specified value.</li> </ul>              |
| Machine Size          | (Azure) Set the VM instance size to use for target VMs in Azure.  |
| Resource Group        | (Azure)<br>For any Resource Group, change the Resource Group resource: <ul style="list-style-type: none"> <li>◆ From any value to the specified value.</li> <li>◆ From a specified value to a new specified value.</li> </ul> |
| Amount of RAM         | (VMware) Set the size of the memory for the target VMs.   |
| # Sockets             | (VMware) Set the number of sockets for the target VMs.  |
| # Cores               | (VMware) Set the number of cores for the target VMs.  |

| Parameter                 | Description   |
|---------------------------|---|
| <b>Network Interfaces</b> |   |
| NIC                       | Set any NIC, or specify the NIC to be modified.<br><br>(Azure) If there are multiple NICs, specify which NIC will be used as the Primary NIC>   |
| Network                   | Change the network: <ul style="list-style-type: none"> <li>◆ From any network to the new specified network.</li> <li>◆ From a specified network to a new specified network.</li> </ul>                                  |
| Subnet                    | (Azure) Change the Subnet resource: <ul style="list-style-type: none"> <li>◆ From any subnet to the specified value.</li> <li>◆ From a specified subnet to a new specified value.</li> </ul>                            |
| Enable DHCP               | Select to enable DHCP for IP address assignment.  |
| Resource Group            | (Azure) Change the Resource Group resource: <ul style="list-style-type: none"> <li>◆ From any resource group to the specified value.</li> <li>◆ From a specified resource group to a new specified value.</li> </ul>    |
| <b>Storage</b>            |   |
| Datastore                 | (VMware) Change the Datastore resource: <ul style="list-style-type: none"> <li>◆ From any datastore to the specified value.</li> <li>◆ From a specified datastore to a new specified value.</li> </ul>                  |
| Storage Accounts          | (Azure) Change the Storage Account resource: <ul style="list-style-type: none"> <li>◆ From any storage account to the specified value.</li> <li>◆ From a specified storage account to a new specified value.</li> </ul> |
| <b>Testing Settings</b>   |   |
| Workgroup/Domain          | Set the Domain or Workgroup where you want to apply changes for the Testing Network.  |
| Domain                    | Select the check box to indicate that the provided name is a domain.  |
| Domain Credential         | For any Domain Credential, change the Credential resource: <ul style="list-style-type: none"> <li>◆ From any value to the specified value.</li> <li>◆ From a specified value to a new specified value.</li> </ul>       |
| Test NIC                  | Set any NIC, or specify the NIC to be modified.<br><br>(Azure) If there are multiple NICs, specify which NIC will be used as the Primary NIC>   |

| Parameter                     | Description  |
|-------------------------------|--|
| Network                       | Change the network: <ul style="list-style-type: none"> <li>◆ From any network to the new specified network.</li> <li>◆ From a specified network to a new specified network.</li> </ul>                       |
| Subnet                        | Change the Subnet resource: <ul style="list-style-type: none"> <li>◆ From any subnet to the specified value.</li> <li>◆ From a specified subnet to a new specified value.</li> </ul>                         |
| Enable DHCP                   | Select to enable DHCP for IP address assignment.   |
| Resource Group                | Change the Resource Group resource: <ul style="list-style-type: none"> <li>◆ From any resource group to the specified value.</li> <li>◆ From a specified resource group to a new specified value.</li> </ul> |
| <b>Custom Fields</b>          |  |
| Custom Fields                 | For each field, set the value to the specified value.<br><b>NOTE:</b> The custom fields display only when a single project is actively selected or specified by the Global Project Selector.                 |
| <b>Applications</b>           |  |
| Add Application               | Set an application to be added to selected workloads.<br>After you select an application, another list displays where you can set another application to be added.   |
| <b>Transformation History</b> |  |
| Add Note                      | Type a note to be added to selected workloads.<br>After you type one note, another Note field displays where you can type another note to be added.  |

## 16.9.2 Selecting Workloads for Bulk Edit

Before you open the Bulk Edit dialog, use the Global Project Selector, Filter, Advanced Search, sort, and multiple select functions to refine the Workloads list and select the workloads for action. You can pre-select any number of workloads for concurrent bulk editing actions.

**To select the workloads for a bulk edit action:**

- 1 (Conditional) To work with workloads for a single project, click the **Project Selector**, then select the project of interest.
- 2 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 3 Use the Filter and Advanced Search options to refine the workloads list.
- 4 Use the multiple-select functions to select one or more workloads that you want to modify in the same way.

- 5 Pause over the Workloads tab to view the number of workloads currently in the list, and the number of workloads that are selected.
- 6 Continue with [Section 16.9.3, “Applying a Bulk Edit,”](#) on page 150.

### 16.9.3 Applying a Bulk Edit

After your selection is ready, use the Bulk Edit dialog to specify values for one or more parameters in the selected workloads.

**To perform a bulk edit:**

- 1 After you select the workloads for action, click **Bulk Edit**.
- 2 Specify the information you want to change for the selected workloads.
- 3 Click **Apply**.
- 4 Review the Bulk Edit Results report to understand the potential outcome and issues.
  - ♦ All
  - ♦ Fully modified
  - ♦ Partially modified
  - ♦ No changes
  - ♦ Warnings
  - ♦ No warnings

You can use the Filter to search for particular workloads or conditions. Click to clear the filter.

- 5 Click **Proceed**, or click **Cancel**.

Workloads placed in an On Hold status are dimmed in the Workloads list.

## 16.10 Bulk Status Change for Multiple Target Workloads

You can use the Bulk Status Change tool to modify the state value for target workloads for multiple workloads at a time. Use the Filter and Advanced Search options to locate and select the workloads of interest. The selected workloads must have the same transformation status.

---

**NOTE:** The Bulk Status Change option is not available if the selected workloads include one or more workloads in Manual (tracking) mode. Their status is controlled by the PlateSpin Migrate Server that is executing the migrations.

---

The Bulk Status Change dialog indicates the number of workloads selected and the number of projects you will affect with the Bulk Status Change. The change applies only to the selected items for which the next phase selected is a valid state change.

**To change the status of one or more workloads:**

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 2 Select one or more workloads that you want to set to the same state.

- 3 If the **Bulk Status Change** action is dimmed, pause over the asterisk to view information about what condition is preventing the action from being available, and then deselect the conflicting workloads.
- 4 Click **Bulk Status Change**.
- 5 Do one of the following actions for the selected workloads:
  - ♦ If the **Submit** option is available, one or more of the selected workloads is eligible to move to a phase of readiness for transformation. Click **Submit** to change the workload status to Ready for Transformation.
  - ♦ Specify the **Next Phase** you want to set for selected workloads, then click **Apply**.

## 16.11 Synchronizing Edits from the Migrate Server

In the PlateSpin Migration Factory environment, a Migration Specialist might make manual changes to the workload migration job on the Migrate server. Events are synchronized to Transformation Manager through the Migrate Connector if the change affects settings that Transformation Manager tracks.

Examples of workload settings that are synchronized include Number of Cores, Cores per Socket, Datastores, static IP for replication network, and so on. Because Transformation Manager does not have Blackout Window or Bandwidth Throttling settings, it does not synchronize changes for them. Also, source credentials set in Migrate are not synchronized. The Migration Specialist might also initiate an action by clicking a command in Migrate. The state change is synchronized, and Transformation Manager displays the changed state.

## 16.12 Viewing the Transformation History

The Transformation History tracks the following:

- ♦ Workflow state changes
- ♦ Migration sub-state changes
- ♦ User-provided notes that capture events that occur outside the monitoring provided by Transformation Manager

On the Workload dialog, the Transformation History panel shows the 10 most recent events or user-provided notes. All events are available in the Transformation History log for the workload.

**To view the transformation history for a workload:**

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 2 Use the **Filter** and **Advanced Search** options to locate the workload of interest.
- 3 Double-click the workload you want to modify to open its Workload dialog. You can alternatively select the workload, and then click **Edit**.
- 4 Scroll down to view the Transformation History panel to view the 10 most recent events and user-provided notes.
- 5 Click **View** to open the Transformation History log.
- 6 Scroll or use the Filter to locate the events of interest.

You can pause over a long user-provided note to view the full message in a tooltip.

- 7 Click **Close** to exit the Transformation History log.
- 8 Click **Close** to exit the Workload dialog.

## 16.13 Adding User Notes to the Transformation History

In the Transformation History, you can add user notes that capture events that occur outside the monitoring provided by Transformation Manager.

**To add user notes to the history:**

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 2 Use the **Filter** and **Advanced Search** options to locate the workload of interest.
- 3 Double-click the workload you want to modify to open its Workload dialog. You can alternatively select the workload, and then click **Edit**.
- 4 Scroll down to view the Transformation History panel, then click **View**.
- 5 Under **Create Note**, type the comments you want to add to the log.

The note length is not limited to the size of the note field. The words scroll to the left as you type.

- 6 Click **Add Note**.

The new note is time-stamped and added to the Transformation History with the status of **User-provided note**. The first two lines of the note display in the Transformation History dialog. For notes longer than two lines, you can pause over the note to view the full message in a tooltip.

- 7 Click **Close** to exit the Transformation History log.

The new note displays as an entry in the most recent events in the Transformation History. The first line of user-provided note displays in the Transformation History panel. For notes longer than one line, you can pause over the note to view the full message in a tooltip.

- 8 Click **Close** to exit the Workload dialog.

## 16.14 Withdrawing a Submitted Workload

After you submit a workload for migration, you can withdraw it at any time before the migration begins. After an automated migration begins, you can withdraw the workload at key points during the migration process.

---

**NOTE:** Do not attempt to Withdraw or Cancel a submitted automated migration while a replication is in progress.

---

When you withdraw a workload from automated migration, you have the option of removing the target VM and cleaning up the workload job from the Migrate server. The behavior depends on where in the workflow the migration is at the time:

- ♦ If the migration is waiting to start, the state returns immediately to **Prepared, waiting**.



- ◆ If the migration has started, you have an option to automatically clean up the VM host and Migrate server:
  - ◆ If you opt to remove the target VM, the clean-up occurs before it the state returns to **Prepared, waiting**. The clean-up can take a while. You cannot modify the workload until the clean-up is completed.
  - ◆ If you opt to not remove the target VM, the state returns immediately to **Prepared, waiting**. The workload job remains on the Migrate server and the target VM remains on the target host.

You should manually clean up the target VM and Migrate server.

**To withdraw a single workload:**

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 2 Use the **Filter** and **Advanced Search** options to locate the workload of interest.
- 3 Double-click the workload you want to modify to open its Workload dialog.  
You can alternatively select the workload, and then click **Edit**.
- 4 In the header area of the Workload dialog, review the current status of the workload.
- 5 At the bottom of the Workload dialog, click **Withdraw**.
- 6 If you are prompted for permission to remove the target VM, do one of the following:
  - ◆ Click **Yes** to initiate and automated clean up the target VM on the VM host and the workload job on the Migrate server.  
Wait for the Withdraw action to complete gracefully for the workload before you attempt to modify its Transformation configuration.
  - ◆ Click **No** if you want to manually clean up the target VM on the VM host and the workload job on the Migrate server.  
See “[Post-Migration Tasks](#)” in the *PlateSpin Migrate 2019.5 User Guide*.

**To withdraw one or more workloads by using Bulk Status Change:**

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 2 Use the **Filter** and **Advanced Search** options to locate one or more workloads of interest.
- 3 Select one or more submitted workloads that you want to withdraw.
- 4 Click **Bulk Status Change**.
- 5 Click **Withdraw**.
- 6 If you are prompted for permission to remove the target VM, do one of the following:
  - ◆ Click **Yes** to initiate and automated clean up the target VM on the VM host and the workload job on the Migrate server for each of the selected workloads.  
Wait for the Withdraw action to complete gracefully for a workload before you attempt to modify its Transformation configuration.
  - ◆ Click **No** if you want to manually clean up the target VM on the VM host and the workload job on the Migrate server for each of the selected workloads.  
See “[Post-Migration Tasks](#)” in the *PlateSpin Migrate 2019.5 User Guide*.

## 16.15 Deleting a Workload

On the Planning > Workloads tab, the Delete option allows a user with Workload management permissions to delete a workload from the project.

Before you execute a workload migration, you might want to delete a workload if the source workload no longer exists or is no longer a candidate for migration. For example, the workload is no longer available if the hardware fails or if you decommission the workload prior to the transformation project. Imported workloads might no longer be migration candidates if you determine that some workloads will remain in the current facility.

However, it is not necessary to delete and re-import a workload if its configuration profile changes after you first import it. You can rediscover the source workload information or use the same FQDN in the Bulk Import spreadsheet to re-import the source workload with the modified data. PTM populates the changes to the proposed workload configuration if you have not yet begun its transformation planning.

### To delete a workload from a project:

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 2 In the **Workloads** list, use the **Filter** and **Advanced Search** options to locate one or more workloads that you want to delete from the project.
- 3 Select the workloads, then click **Delete** in the tab actions bar.
- 4 Click **Yes** to confirm the deletion.

# 17 Configuring Network Interfaces

Use the information in this section to configure target network interfaces when you plan transformations or edit multiple transformations using Bulk Edit.

- ♦ [Section 17.1, “Selecting a Network and Subnet for Each NIC,” on page 155](#)
- ♦ [Section 17.2, “Creating a NIC for the Target VM,” on page 155](#)
- ♦ [Section 17.3, “Deleting a NIC from the Target VM,” on page 156](#)
- ♦ [Section 17.4, “Configuring the Primary NIC for Target VM on Azure,” on page 156](#)
- ♦ [Section 17.5, “Configuring the DHCP Service for Target VMs,” on page 157](#)
- ♦ [Section 17.6, “Configuring the DNS Service for Target VMs,” on page 157](#)
- ♦ [Section 17.7, “Configuring Multiple IP Addresses Per NIC for Target Windows Workloads,” on page 157](#)

## 17.1 Selecting a Network and Subnet for Each NIC

PlateSpin Transformation Manager discovers the available networks and subnets for a target platform. It displays the information based on the type of platform: VMware Cluster on a VMware vCenter Server or the Location on an Azure subscription. You must specify a network and subnet to use for each NIC.

---

**NOTE:** PTM presents the networks and subnets available at the last discovery for the target platform. It does not reserve the resource against other assignments you make for other workloads. Subnet capacity is consumed as you migrate workloads to the target platform.

---

**To select a network and subnet for a target workload:**

- 1 In the Workload dialog, scroll to the Network Interfaces panel, then click **Edit**.
- 2 Expand the Networks list and select a network.  
This selection limits the subnets available in the Subnets list.
- 3 Expand the Subnets list and select a subnet.
- 4 Click **Save** to update the network interface settings.
- 5 Repeat these steps for the Testing Network Interfaces panel, with modifications as appropriate for your test network.

## 17.2 Creating a NIC for the Target VM

You use the Network panel on the Workload dialog to specify a network name, subnet name, and the NICs to use on the target VM.

Constraints:

- ♦ The VM must have at least one NIC.
- ♦ The VM cannot have more NICs than the maximum number allowed by the target VM in its assigned target host.
- ♦ You can add NICs up to the maximum number allowed by the VM.
- ♦ You must remove (delete) the NICs that you do not want to create on the target VM. You can remove all but one NIC.
- ♦ If you modify the target Platform resource, any networks not associated with the replacement host are removed. The displayed NICs are again the same as source.

**To create a NIC:**

- 1 In the Workload dialog, scroll to the Network Interfaces panel, then click **Add**.
- 2 Specify the information for the NIC.
- 3 Click **Save** to update the network interface settings.

## 17.3 Deleting a NIC from the Target VM

The the VM cannot have more NICs than the maximum number allowed by the target VM size and its assigned target host. You use the Network panel on the Workload dialog to specify a network name, subnet name. and the NICs to use on the target VM.

Constraints:

- ♦ The VM must have at least one NIC.
- ♦ The VM cannot have more NICs than the maximum number allowed by the target VM size and its assigned target host.
- ♦ You can add NICs up to the maximum number allowed by the VM.
- ♦ You must remove (delete) the NICs that you do not want to create on the target VM. You can remove all but one NIC.
- ♦ If you modify the target Platform resource, any networks not associated with the replacement host are removed. The displayed NICs are again the same as source.

**To delete a NIC:**

- 1 In the Workload dialog, scroll to the Network Interfaces panel, then click **Edit**.
- 2 Select the NIC, then click **Delete**.
- 3 Click **Save** to update the network interface settings.

## 17.4 Configuring the Primary NIC for Target VM on Azure

For migrations to Azure, one NIC must be configured as the primary NIC for the target VM. If the workload has only a single NIC, it is automatically set as the primary NIC. If a workload has multiple NICs, the first NIC is configured by default as the primary NIC.

**To configure a NIC as the primary NIC:**

- 1 In the Workload dialog, scroll to the Network Interfaces panel, then click **Edit**.
- 2 Select the NIC, then select the **Set as primary** check box.
- 3 Click **Save** to update the network interface settings.

## 17.5 Configuring the DHCP Service for Target VMs

You can use DHCP services to get IP address information for the target workload, or specify a static IP address, subnet mask, and gateway for the VM to use.

The **Use DHCP to get network address details** setting is enabled by default. Deselect the check box to specify a static IP address, then specify the network address settings for the target network.

- ♦ **IP Address:** IPv4 format.
- ♦ **Subnet Mask:** IPv4 format.
- ♦ **Default Gateway:** IPv4 format.

---

**NOTE:** Only the primary NIC can provide the default gateway address if you use DHCP to get network address details.

---

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**NOTE:** If the source workload or target workload is located in a different internal (private) network behind a network address translation (NAT) device, it might be unable to communicate with its counterpart to replicate the workload. On the affected workload, ensure that you specify a public IP address for the NIC you use for replication.

---

## 17.6 Configuring the DNS Service for Target VMs

You can use DHCP services to get the DNS server information for the target workload to use, or specify the IP address of one or multiple DNS servers to use.

For Windows workloads, select the **Use DHCP to get name servers** check box to acquire the DNS server information from the DHCP server in the associated network. If you specify a static IP address, deselect the check box, then manually specify the DNS server information in the **DNS Servers** field.

For Linux workloads, deselect the **Use DHCP to get name servers** check box, then manually specify the DNS server information in the **DNS Servers** field.

## 17.7 Configuring Multiple IP Addresses Per NIC for Target Windows Workloads

For Windows workloads, you can configure multiple static IPv4 addresses per NIC.

**To specify multiple IP addresses for a NIC:**

- 1 In the Workloads list, select a Windows workload, then click **Edit**.
- 2 Specify the target platform to enable the Network Interfaces panel.

- 3 In the Network Interfaces panel, click **Edit** for the NIC.
- 4 Specify the **Network**. For Azure, you must also specify the **Subnet**.
- 5 Deselect the check box for **Use DHCP to get network address details**.
- 6 Specify one or more static IP addresses for the NIC:
  - ◆ (VMware) Specify the IP address and network mask for each static IP address for the selected NIC. The IP addresses must be valid in the assigned network.  
You must specify one or more default gateways as a comma delimited list.
  - ◆ (Azure) Specify one or more static IP addresses for the specified NIC. The IP addresses must be valid in the assigned subnet.  
The subnet mask and default gateway values are auto-populated from the selected subnet.
- 7 Click **Save**, then click **Close** to exit the dialog.
- 8 Click **Save** to save the changes to the Workload dialog.

# 18 Configuring Azure VMs

Use the information in this section to configure Azure services for a target VM.

- ◆ [Section 18.1, “About Azure Storage,” on page 159](#)
- ◆ [Section 18.2, “Configuring Azure Storage Settings,” on page 160](#)
- ◆ [Section 18.3, “Prerequisites for Azure Networks,” on page 161](#)
- ◆ [Section 18.4, “Prerequisites for Using Azure Availability Sets,” on page 161](#)
- ◆ [Section 18.5, “Prerequisites for Installing Azure VM Agent,” on page 162](#)

## 18.1 About Azure Storage

For each target VM, you can configure the VM to use Azure Managed Disks or to use Azure Storage Accounts and unmanaged disks.

- ◆ [Section 18.1.1, “Azure Managed Disks,” on page 159](#)
- ◆ [Section 18.1.2, “Azure Storage Accounts and Unmanaged Disks,” on page 160](#)

### 18.1.1 Azure Managed Disks

Azure Managed Disks is an Azure service that provides replicas of your data to help ensure persistence of your data and high tolerance against failures. Azure automatically creates and manages the placement of the disks in the target Azure location. You do not need to specify a storage account or location in a storage account. The specified **Cloud Instance Size** for the target VM determines how many data disks you can attach to the VM and the type of storage you can use to host the managed disks. The Azure Managed Disks setting applies to all disks for the target VM.

Using Azure Managed Disks is optional. It is enabled by default in keeping with Azure default VM settings.

---

#### NOTE

- ◆ To verify the availability in the target Azure location of Managed Disks service, refer to the [Microsoft Azure Products Available by Region](#).
- ◆ For information about disk types, sizes, and performance characteristics for Azure Managed Disks, refer to [Introduction to Azure Managed Disks](#) in Microsoft Azure Documentation.
- ◆ Azure automatically and transparently provides Azure Storage Service Encryption for all storage, including Azure Managed Disks.
- ◆ PlateSpin Migrate does not support configuration of Azure Disk Encryption for the target workload.

Azure Disk Encryption provides OS-based encryption for OS and data volumes at rest by using BitLocker for Windows VMs or DM-Crypt for Linux VMs. After the cutover is complete, you can use Azure tools to enable Azure Disk Encryption for the cutover workload.

---

When you configure migrations to Azure, specify one of the following storage types for hosting the managed disks for the target VM:

- ◆ Standard HDD (hard disk drives)
- ◆ Standard SSD (solid state drives)
- ◆ Premium SSD

A storage type of Standard HDD allows you to choose Cloud Instance Sizes with HDD or SSD storage, whereas Standard SSD and Premium SSD are restricted to Cloud Instance Sizes that support the appropriate level of SSD storage. For information about disk performance characteristics, refer to [What Disk Types Are Available in Azure?](#) in the Microsoft Azure Documentation.

You can optionally use Azure Managed Disks in combination with a predefined Azure Availability Set that has been configured to use managed disks.

## 18.1.2 Azure Storage Accounts and Unmanaged Disks

If you do not use Managed Disks for a VM, the VM disks are *unmanaged*. The VM disks will use the Azure page blob type of general-purpose storage, which can run on HDD (Standard) or SSD (Premium) storage media. You can use Azure General Purpose Storage V1 or V2, according to your needs.

If you plan to use unmanaged disks, you must create at least one Azure Storage account in the specified Subscription for the target Azure platform. For information about Azure Storage Accounts, refer to [Introduction to Azure Storage](#) in Microsoft Azure documentation.

---

**NOTE:** A Standard Storage Account can be used for Azure VM sizes that use HDD or SSD storage media. A Premium Storage Account can be used only for Azure VM sizes that use SSD storage media.

---

If no Azure Storage Account is associated with a subscription, PlateSpin Migrate sets up a Standard general-purpose storage account to use as the datastore for the target VM. The datastore name is based on the Azure Resource Group for the Subscription.

For information, see [Azure Page Blobs](#) (unmanaged disks) in Microsoft Azure Documentation.

## 18.2 Configuring Azure Storage Settings

For migrations to Azure platforms, the Storage panel in the Workload dialog has different options depending on whether you use the Azure Managed Disks service (default) for the target VM or you use unmanaged disks and specify a storage account and path where you will manage the storage yourself after the migration.

- ◆ **Azure Managed Disks**

Managed disks are resource objects that represent the actual replicated disks being managed. If you enabled **Use Managed Disks**, you do not have an option to specify the Datastore (Azure Storage Account) and disk path.

You can optionally provide a custom name for each Managed Disk resource. You cannot rename this resource after it is created. PTM applies a default name for each Managed Disk resource in the following format:



*<parent VM name>-<numeric suffix>*

Names must comply with the naming conventions for resources. Valid characters for the resource name are alphanumeric, underscore (`_`), hyphen (`-`), and period (`.`). The name should start with a letter or number, and end with a letter, number, or underscore. The maximum name length is 80 characters. Managed disk names do not have a `.vhd` extension.

- ◆ **Unmanaged Disks**

If you disabled **Use Managed Disks**, specify the Storage Account and the Disk Path to use in the storage account. You can optionally provide a custom name for each unmanaged disk. Names must comply with the naming conventions for disks. Disk names have a `.vhd` extension.

## 18.3 Prerequisites for Azure Networks

You must create at least one Virtual Network with a Subnet in the specified Subscription. If you have a site-to-site VPN set up, the subnet must be different than the default Gateway Subnet.

Network resources are never created automatically by PTM or PlateSpin Migrate. Your networks and subnets must be set up manually in advance. For instructions, refer to Azure documentation.

## 18.4 Prerequisites for Using Azure Availability Sets

An Azure Availability Set is an Azure service that provides high availability to two or more member VMs by deploying them in different *fault domains* and *update domains*. Fault domains ensure that the VMs run on different host servers, compute racks, storage units, and network switches. Update domains ensure that maintenance outages for host hardware do not occur at the same time.

---

**NOTE:** VMs must be created in the Availability Set. You cannot add an existing VM to an Availability Set.

---

Using Azure Availability Sets is optional. No availability set is configured by default.

PlateSpin Migrate supports using pre-defined Azure Availability Sets for target VMs. You cannot create Availability Sets in Migrate.

Before you configure workloads for the target VMs that you want to add to an Availability Set:

- ◆ Use the Azure portal to create and define the Availability Set in a resource group for the specified target location.
- ◆ You can use an Availability Set in combination with Azure Managed Disks only if you enable the Use Managed Disks option in the Availability Set definition.

When the first VM is created in the Availability Set, Azure selects the physical hardware that will be used in the target Azure location. Thereafter, Azure limits the cloud instance sizes and networks that can be used for future member VMs accordingly.

---

**NOTE:** If you have multiple VMs configured for the same empty Availability Set, the first cutover VM determines the Azure limits based on the configuration characteristics of that VM. PlateSpin Migrate might prompt you to choose different cloud instance sizes or networks after the Azure limitations are enacted.

---

## 18.5 Prerequisites for Installing Azure VM Agent

PlateSpin Migrate provides the ability to automatically install Microsoft Azure Virtual Machine Agent on target Windows and Linux workloads at cutover and test cutover. The minimum requirements for the source workloads are:

- ◆ **Windows:** Microsoft Azure supports Azure VM Agent only for workloads running Windows Server 2008 R2 and higher.
- ◆ **Linux:** Before you add the source Linux workload to Migrate, ensure that it meets the following requirements:
  - ◆ PlateSpin Migrate requires Python 2.7 or higher to be installed on the source workload.
  - ◆ The source Linux workload must also meet minimum Azure Linux Agent requirements and system dependencies. See *Understanding and Using the Azure Linux Agent* (<https://docs.microsoft.com/en-us/azure/virtual-machines/extensions/agent-linux>) in the Microsoft Azure Documentation.

# 19 Tracking External Workload Migrations

PlateSpin Transformation Manager tracks external migration workflow for imported workloads with matching workload migrations performed on PlateSpin Migrate servers. Transformation Manager reports the status, but it does not automate or control the workflow. The PlateSpin Migrate Connector retrieves state change events as a subscriber of each Migrate server’s event messaging system, and sends state information to the appropriate project and workload.

After you import workloads to PlateSpin Transformation Manager and discover information about them, PlateSpin Migrate Connectors scan PlateSpin Migrate servers to look for matching workloads. When a match is discovered, the PTM workload status is automatically changed from **Automated** to **Manual (tracking)**. The Workload dialog displays information about the migration configuration settings in PlateSpin Migrate.

---

**NOTE:** Transformation Manager ignores migrations on the project’s PlateSpin Migrate servers for workloads that have not been imported to your project. After you import a workload, the Connector seeks a match during subsequent scans of the Migrate servers, then begins tracking states for the matching workload.

---

The tracked status displays in the Status column of the Workloads list and in the header area of the Workload dialog for the workload.

- [Section 19.1, “About Tracking External Migrations,” on page 163](#)
- [Section 19.2, “Planning for Tracking External Migrations,” on page 164](#)
- [Section 19.3, “Checklist for Tracking External Migrations,” on page 165](#)
- [Section 19.4, “Enabling Enhanced Tracking,” on page 166](#)

## 19.1 About Tracking External Migrations

PlateSpin Transformation Manager tracks the status of external migrations for matching workloads on the Migrate server, whether they are initiated through the Migrate Web Interface or the Migrate Web Client. The Migrate REST APIs return more information for migrations configured and executed using the Migrate Web Interface, as identified in [Table 19-1](#).

**Table 19-1** Information Reported by Migrate for External Migrations

| Information            | Migrate Client                                   | Migrate Web Interface                              |
|------------------------|--|--|
| Proposed configuration | Not available to PTM                             | Displayed as read only in the Workload dialog.     |
| State events           | Limited events. See <a href="#">Table 19-2</a> . | Same events reported for PTM automated migrations. |

[Table 19-2](#) describes the status events for migrations in the Migrate Client.

**Table 19-2** States Reported for Migrations Executed in PlateSpin Migrate Client

| Migrate Client Migration Job Status | Description  |
|-------------------------------------|--|
| Added                               | The source workload has been added to Migrate Client.                      |
| In Progress                         | A replication has started.   |
| Replicated                          | A replication has ended.   |
| Copied                              | A replication has ended. The source is up.                                 |
| Completed                           | The workload has been cut over to the target workload. The source is down. |
| Removed                             | The workload has been removed from Migrate Client.                         |
| Stuck                               | A recoverable error occurred.  |
| Error                               | A non-recoverable error occurred.  |

You can import workloads to PTM and the project’s Migrate servers in any order. When you import workloads using the PlateSpin Transformation Manager discovery service, the Connector scans the Migration Server resources to match the workload with external migration jobs you set up using the Migrate Client. It does not match workloads set in Automated Mode.

The Connector checks for matching external workloads on the project’s PlateSpin Migrate servers when the following events occur:

- ◆ When you import workloads to PTM for a project
- ◆ When you modify the Mode from Automated to Manual for an individual workload
- ◆ When you launch or restart the Migrate Connector
- ◆ When you add a Migrate Server as a Migration Server resource for the project
- ◆ When the Connector subscribes to event messages from a new Migration Server resource
- ◆ When the Connector polls for events (every 5 minutes by default)

## 19.2 Planning for Tracking External Migrations

See the following information to understand the requirements for tracking in your PlateSpin Migration Factory environment.

**Table 19-3** Planning Resources for Manual (Tracking) Mode

| Topic                                    | Resource   |
|--|--|
| Manual (tracking) mode                   | See <a href="#">Manual (Tracking)</a> in <a href="#">Table 1-1, “Migration Types,”</a> on page 17. |
| Supported source workloads               | See <a href="#">“Supported Configurations for Source Workload Discovery”</a> on page 19.           |
| Supported target platforms for discovery | See <a href="#">“Supported Configurations for Target Platform Discovery”</a> on page 19.           |

| Topic   | Resource   |
|---|--|
| Supported target platforms for tracking       | See <a href="#">Manual (Tracking)</a> in <a href="#">Table 1-3</a> on <a href="#">page 21</a> .  |
| Requirements for discovery                    | See <a href="#">“Requirements for Discovery”</a> on <a href="#">page 23</a> .                    |
| Requirements for tracking external migrations | See <a href="#">“Requirements for Tracking External Migrations”</a> on <a href="#">page 26</a> . |

## 19.3 Checklist for Tracking External Migrations

PlateSpin Transformation Manager begins tracking an external migration when the PlateSpin Migrate Connector matches an imported workload in Manual mode with a discovered workload on any of the project’s PlateSpin Migrate servers.

Before you begin, ensure that your migration environment meets the [“Requirements for Tracking External Migrations”](#) on [page 26](#).

Tracking capabilities require that you complete the tasks outlined in the checklist in [Table 19-4](#).

**Table 19-4** Checklist for Tracking External Migrations

| Status  | Task   | Notes   |
|---|--|---|
| <b>In your PlateSpin Migration Factory environment:</b> |  |   |
| <input type="checkbox"/>                                | Deploy one or more PlateSpin Migrate servers.  | See the <a href="#">PlateSpin Migrate 2019.5 Installation and Upgrade Guide</a> .   |
| <input type="checkbox"/>                                | For each Migrate server, enable the Event Messaging port (61613) for communication with the PlateSpin Migrate Connector instance associated with the Migrate server. | See <a href="#">“Enabling Event Messaging for PlateSpin Migration Factory”</a> in the <a href="#">PlateSpin Migrate 2019.5 User Guide</a> . |
| <input type="checkbox"/>                                | Ensure that your network environment meets the PTM requirements for networking.  | See <a href="#">Section 1.6, “Network Connectivity and Access Requirements,”</a> on <a href="#">page 26</a> .                               |
| <input type="checkbox"/>                                | Deploy and configure a PlateSpin Migrate Connector for the PTM project in the source network.  | See <a href="#">“PlateSpin Migrate Connector”</a> in the <a href="#">PTM 2019.5 Administrator Guide</a> .                                   |
| <b>In PlateSpin Transformation Manager:</b>             |  |   |
| <input type="checkbox"/>                                | Configure one or more Credential resources to use for access to your PlateSpin Migrate servers.  | See <a href="#">“Creating a Credential”</a> on <a href="#">page 191</a> .   |
| <input type="checkbox"/>                                | Configure your PlateSpin Migrate servers as Migration Server resources in the project, and specify a valid Credential resource.                                      | See <a href="#">“Creating a Migration Server Resource”</a> on <a href="#">page 197</a> .  |

| Status   | Task  | Notes  |
|--|---|--|
| <input type="checkbox"/>                           | Import and discover workloads in PTM that are being managed by using PlateSpin Migrate servers in your migration environment.   | See <a href="#">“Importing and Discovering Workloads” on page 103.</a><br><br>Tracking begins when Migrate Connector matches the imported workload in the PTM project with an external workload on any one of the PlateSpin Migrate servers.                 |
| <input type="checkbox"/>                           | (Optional) To enable enhanced tracking, create a target platform in PTM that contains one or more of the target platforms being used as targets for external migrations performed on PlateSpin Migrate servers. | See <a href="#">“Enabling Enhanced Tracking” on page 166.</a><br><br>Enhanced tracking is available after the platform is discovered and its details are added to PTM.   |
| <b>On the project’s PlateSpin Migrate servers:</b> |   |  |
| <input type="checkbox"/>                           | Prepare your target migration environment.  | See <a href="#">“Preparing Your Migration Environment” in the <i>PlateSpin Migrate 2019.5 User Guide.</i></a>  |
| <input type="checkbox"/>                           | Discover and prepare the workload on any one of the project’s Migrate servers.  | See <a href="#">“Discovering and Preparing Workloads and Targets” in the <i>PlateSpin Migrate 2019.5 User Guide.</i></a><br><br>Tracking begins when Migrate Connector matches the discovered Migrate workload with an imported workload in the PTM project. |
| <input type="checkbox"/>                           | Configure the workload for migration using the Migrate Client or Migrate Web Interface, as appropriate for the target platform.   | See <a href="#">“Configuring Workloads” in the <i>PlateSpin Migrate 2019.5 User Guide.</i></a>   |
| <input type="checkbox"/>                           | Execute the migration using the Migrate Client or Migrate Web Interface, as appropriate.  | See <a href="#">“Executing Migrations” in the <i>PlateSpin Migrate 2019.5 User Guide.</i></a>  |

## 19.4 Enabling Enhanced Tracking

Enhanced details are available for workloads in Manual (tracking) mode if you create a target platform in PlateSpin Transformation Manager. Each platform can contain one or more of the targets defined in your PlateSpin Migrate servers.

Enhanced tracking is supported for the following target platform types:

- ◆ VMware vCenter Server
- ◆ Microsoft Azure
- ◆ Amazon Web Services

PTM automatically searches for a matching platform for the workload.

- ◆ If a match is found, the Workload dialog displays enhanced tracking details. In addition, the associations between the target platform resources and workloads are available for viewing in the Platform dialog.

- ◆ If no match is found and a tracked workload's target platform is supported in PTM, the Workload dialog displays a message about adding the platform in PTM to view additional details.

For information, see [Section 24.3, "Creating a Platform,"](#) on page 222.





# A

## Preparing an Import Spreadsheet

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**Users Who Can Perform This Task:** Project Manager, Project Architect, or any user in the Administrators group

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A large-scale data center transformation or migration project can involve hundreds or thousands of workloads. Importing data from a spreadsheet allows you to leverage data you might already have in an asset database.

The information the you include in your spreadsheet depends on your import goals:

- ♦ **Planning only:** PlateSpin Transformation Manager allows you to plan for a variety of transformation goals, migration tools, and environments. You can import or re-import data for workloads from the same or different spreadsheets to define the source workload.
- ♦ **Automated discovery:** In a PlateSpin Discovery Environment, your import spreadsheet needs to include only the minimal access information for each workload and information about credentials. The import begins an automated discovery to retrieve detailed information for each new workload. Before you import the spreadsheet, ensure that your setup meets the following requirements:
  - ♦ A PlateSpin Migrate Connector instance must be deployed and running in the source network (that is, the network where the source workloads reside).
  - ♦ The Connector instances must be configured to work with your PTM Server.
  - ♦ The Connector instances must be available to your project.

For each source workload, the import automatically creates a source workload object for your project. It also create an initial target workload based on the source workload details.

This section describes the bulk import process, and how to prepare a specially formatted spreadsheet that contains data about the machines to import for a project.

- ♦ [Section A.1, “About Spreadsheet Import,” on page 170](#)
- ♦ [Section A.2, “Spreadsheet Parameters,” on page 172](#)
- ♦ [Section A.3, “Downloading a Sample Import Spreadsheet,” on page 180](#)
- ♦ [Section A.4, “Validating a Spreadsheet,” on page 181](#)
- ♦ [Section A.5, “Downloading the Results Spreadsheet,” on page 181](#)
- ♦ [Section A.6, “Re-Importing Workloads,” on page 182](#)

## A.1 About Spreadsheet Import

PlateSpin Transformation Manager supports the bulk import of multiple machines at a time to your transformation project. *Bulk import* refers to loading data about the machines from a specially formatted Microsoft Excel 97-2003 (.xls) spreadsheet file to a previously defined project.

For each newly imported machine, the import automatically configures its source workload and an initial target workload. The workloads are then available in the Web Interface for further association with the project resources, users, and schedules. After you edit a target workload by using the Workload dialog or the Bulk Edit options, any re-imported workload information applies only to the source workload.

The spreadsheet allows you to import a variety of data about each machine. PlateSpin Transformation Manager requires only the discovery IP address or FQDN (fully qualified domain name) and the type of machine (physical, virtual, or cloud). Predefined and custom parameters allow you to specify more details about the workloads, depending on your needs.

---

**NOTE:** If a PlateSpin Migrate Connector is available to the project, the successful import of workloads initiates an automated discovery process that retrieves details about the source workloads.

---

You use your own spreadsheet software to create the Bulk Import spreadsheet. You can leverage the data in your network inventory records by mapping and exporting data to one or more versions of the Bulk Import spreadsheet.

- ♦ [“Spreadsheet Import Tools” on page 170](#)
- ♦ [“Spreadsheet Import Workflow” on page 171](#)

### A.1.1 Spreadsheet Import Tools

The Spreadsheet Import function in the PlateSpin Transformation Manager Web Interface provides the following tools to help you validate the spreadsheet for import:

- ♦ **Validate:** The Validate tool checks the spreadsheet format to identify the types of data it contains, performs limited checks of values, and identifies errors.

Transformation Manager restricts what values are possible for some parameters, and expects text or numbers for others. It also checks the various parameters to ensure all expected values are present. Otherwise, it accepts the values you input for the parameters. It does not validate the values for a machine against the actual machine in your network environment.

For re-imported machines, the Validate tool also checks the current workflow state for the machine. It ignores rows for machines that have already been submitted for transformation. You can withdraw the machine from transformation to make it eligible again for re-import.

You can re-submit the spreadsheet iteratively until all rows of data are valid, and the spreadsheet is ready for import.

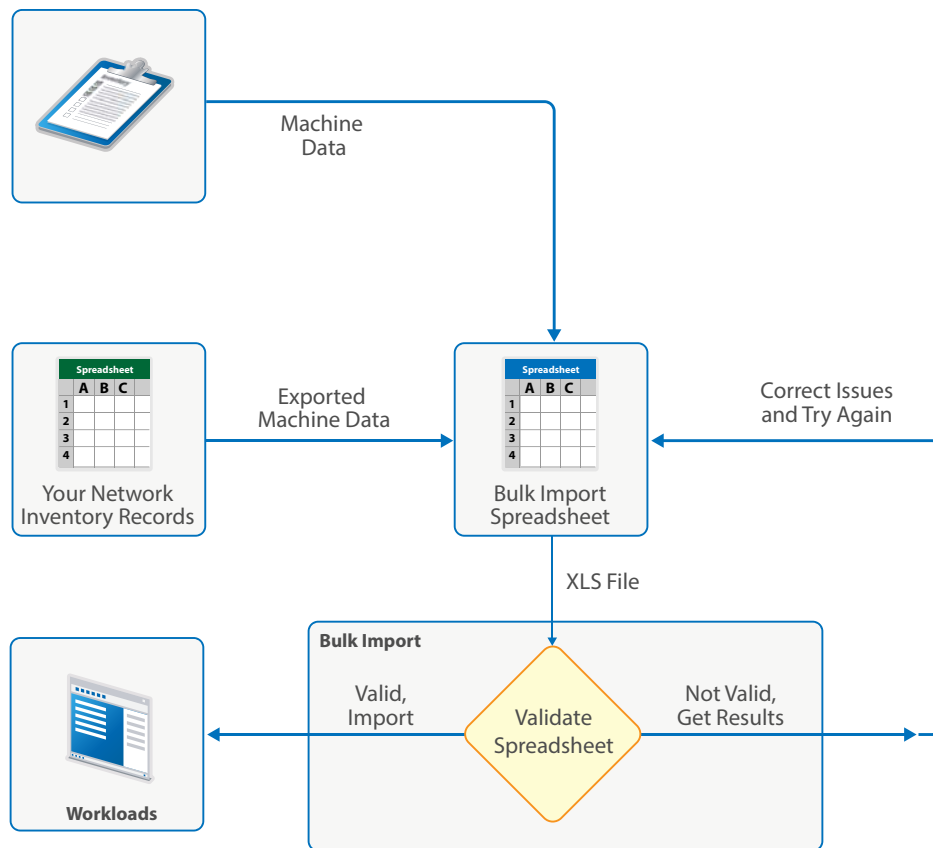
- ♦ **Validation Results:** The Validation Results reporting tool provides the Validation Status for each machine in the spreadsheet. For each invalid row, it identifies the type and location of errors. It also identifies which rows are ignored. You can view results for all rows, valid rows, invalid rows, and ignored rows.

- ◆ **Get Results:** The Get Results tool allows you to download a Results spreadsheet in Microsoft Excel 97-2003 (.xls) format. In addition to the Validation Status for each machine, it adds the following information if the column is present:
  - ◆ Workload ID
  - ◆ NIC UUID
  - ◆ Disk UUID

## A.1.2 Spreadsheet Import Workflow

The Spreadsheet Import workflow, shown in [Figure A-1](#), includes the tasks you perform to prepare the data for import, as well as the tasks required to validate that data before you can import it to your PlateSpin Transformation Manager environment.

*Figure A-1 Spreadsheet Import Workflow*



To import or update data for one or multiple machines in a project:

1. Collect data about the machines for a single transformation project in a spreadsheet, and save it in Microsoft Excel 97-2003 (.xls) format.  
A template for this specially formatted spreadsheet is available in the Spreadsheet Import dialog.
2. Open the Spreadsheet Import dialog.
3. Select the project, then browse and select the spreadsheet you prepared.
4. Validate the spreadsheet.

5. View the validation results by all rows, valid rows, invalid rows, or ignored rows.
6. If rows are invalid, download an annotated Results spreadsheet. PTM adds validation information that can help you to troubleshoot issues.
7. For each invalid row, correct the errors according to the various validation messages, then clear its Validation Status cell.
8. Repeat Step 2 to Step 7 iteratively until all rows are valid.
9. After all rows are valid, import the spreadsheet.  
For each machine with an empty Validation Status cell, PTM does the following:
  - a. Creates or updates the source workload and the target workload (if it is unedited) for the machine.
  - b. (Connector) If a PlateSpin Migrate Connector is enabled and active for the project, automated discovery retrieves additional information about each imported workload if you provide credentials in the spreadsheet. Discovery status is available in the Workloads list.
  - c. Generates the Results spreadsheet and includes the following information, as appropriate:
    - ♦ Machine data
    - ♦ Validation Status of **Imported**
    - ♦ Workload ID of the source workload
    - ♦ NIC UUID for each NIC instance
    - ♦ Disk UUID for each disk instance
10. (Optional) Before you close the Spreadsheet Import dialog, download the Results spreadsheet.
11. (Optional) Re-import data for a machine from the same or different Bulk Import spreadsheet. A re-import can add new data or modify previously submitted data.

## A.2 Spreadsheet Parameters

The Bulk Import spreadsheet contains the following information for one or more workloads in your transformation project:

- ♦ Required workload data
- ♦ Workload credentials
- ♦ Workload details
- ♦ Location
- ♦ Custom fields
- ♦ NICs
- ♦ Disks
- ♦ Applications

You can download a sample spreadsheet from the Spreadsheet Import dialog (**Planning > Workloads > Spreadsheet Import**) in the Web Interface. Pause over the red triangle in a heading cell to display help about the purpose and format of the data in the column and whether it is required as part of the mapping process.

See the following tables for information about the expected values and format for each parameter in the Bulk Import spreadsheet:

- ♦ [Table A-1, “Required Workload Parameters,” on page 173](#)
- ♦ [Table A-2, “Workload Credentials Parameters,” on page 174](#)
- ♦ [Table A-3, “Workload Details Parameters,” on page 175](#)
- ♦ [Table A-4, “Location Parameters,” on page 176](#)
- ♦ [Table A-5, “Custom Field Parameters,” on page 177](#)
- ♦ [Table A-6, “NIC Parameters,” on page 178](#)
- ♦ [Table A-7, “Disk Parameters,” on page 179](#)
- ♦ [Table A-8, “Application Parameter,” on page 180](#)

### Required Workload Parameters

The spreadsheet requires only three columns to set up a workload: FQDN, Type, and Validation Status. See [Table A-1](#). This flexibility requires that you provide a header row with proper column names. These three columns must be present in all re-imports for the workloads. If you also include the Workload ID column, PTM automatically populates the IDs in the Results spreadsheet.

---

**NOTE:** If you prepare a spreadsheet without column headings, all defined columns must be present in the expected order indicated in the sample spreadsheet.

---

*Table A-1 Required Workload Parameters*

| Parameter         | Required/Optional  | Description   |
|-------------------|--|---|
| IP or FQDN        | Required for all imports.  | Specify the IP address or fully qualified domain name for the workload. This parameter might be used to discover and communicate with the workload. You can specify the host name only if you do not need discovery or validation.<br><br>Examples:<br><br>sqlserver5.paris.digitalair.com<br>sqlserver5<br>192.168.1.1<br><br>A workload can have only one instance in a transformation project. |
| Validation Status | Required for all imports. Values are provided by PTM.              | Transformation Manager writes the status for each workload to the Results spreadsheet after validation or after successful import. Clear the field for import.  |
| Workload ID       | Optional; recommended for all imports. Values are provided by PTM. | If this column is present, PTM writes the source workload’s unique workload ID to the Results spreadsheet after a workload is successfully imported to a project.<br><br>Example: 1635326   |

## Workload Credentials

If you use PlateSpin Migrate for workload migrations, you can specify the Credentials resource to use for communications with the Migrate server. If you also use PlateSpin Migrate Connector, PTM uses Credentials resources for workload discovery, host discovery, and migration execution. See [Table A-2](#).

---

**NOTE:** A valid Credentials resource is required for automated discovery. Ensure that you provide the Workload Credential Name of an existing, valid Credentials resource, or provide all three credentials fields to create a new one.

---

After you create a Credentials resource, you cannot modify the user name and password for it by modifying the value in the spreadsheet and re-importing the workload. Use the Edit Credential dialog in the Web Interface to modify the settings for the resource.

**Table A-2** Workload Credentials Parameters

| Parameters                    | Required/Optional                                  | Description   |
|-------------------------------|--|---|
| Workload Credential Name      | Optional   | <p>Specify a name for the credential that is unique within your project. If no matching value is found in the Credentials list, PTM creates a new Credentials resource. Names are case insensitive.</p> <p>If you specify a workload credential user name and password without providing a credential name, PTM uses the FQDN as the credential name.</p>   |
| Workload Credential User Name | Optional (Required for a new Credentials resource) | <p>Specify the logon user name of a domain administrator or local administrator to use for communications with the workload.</p> <p>Provide the user name exactly as it is expected by the workload operating system and environment:</p> <ul style="list-style-type: none"><li>◆ <b>Windows:</b> Case insensitive. Use local or domain administrator credentials. For example:<ul style="list-style-type: none"><li>◆ For domain member machines:<br/>CORPDOM\username</li><li>◆ For workgroup member machines:<br/>WORKGROUP\username</li><li>◆ For a local user account: username</li></ul></li><li>◆ <b>Linux:</b> Case sensitive. Use <code>root</code> or a root-level user name for the workload that has been properly configured to use <code>sudo</code>. See <a href="https://support.microfocus.com/kb/doc.php?id=7920711">KB Article 7920711 (https://support.microfocus.com/kb/doc.php?id=7920711)</a>.</li></ul> |
| Workload Credential Password  | Optional (Required for a new Credentials resource) | <p>Specify the password of the specified user name. You can add or modify the password for the credential later from the Web Interface.</p> <p>The password is case sensitive. Passwords are stored securely and are not visible in the Web interface.</p>  |

## Workload Details

Workload details define the operating system and hardware for the source workload. These details are automatically populated for the target workload. You can later modify the details for the target workload by using the Workload dialog or the Bulk Edit action in the Web Interface. See [Table A-3](#).

You can create source resources for Hosts, Networks, and Datastores by including those columns in the spreadsheet. Include the Environment column to create a resource that can apply to a source workload or target workload.

---

**NOTE:** A source resource name must be unique among source resources of the same type. The Environment resource name must be unique among environment resources for the project.

The resource name must begin with a letter or number. It can contain only letters, numbers, and the following special characters: space, hyphen, underscore, apostrophe, percent, ampersand, comma, and period.

---

**Table A-3** Workload Details Parameters

| Parameters       | Required/Optional | Description  |
|------------------|-------------------|--|
| Operating System | Optional          | <p>Specify an operating system from the Operating Systems list configured in PTM. Names are case sensitive.</p> <p>Examples:</p> <ul style="list-style-type: none"><li>CentOS 6</li><li>Citrix XenServer</li><li>Red Hat Enterprise Linux 7</li><li>Solaris 11</li><li>SUSE Linux Enterprise Server 12</li><li>Windows Server 2003 (x32)</li><li>Windows 2008</li><li>Windows Server 2012 R2</li><li>Windows Server 2016</li><li>VMware ESX</li></ul> <p>PTM includes most operating system types and release versions in the default Operating Systems list. Contact your System Administrator to add custom operating system values to the list.</p> |
| Memory (MB)      | Optional          | <p>Specify the maximum memory available for the workload. Values default to MB if no unit is specified. Valid binary units are B, MB, GB, TB, PB, EB, ZB, and YB.</p> <p>Examples: 2 GB, 512, 8GB</p>  |
| # of Sockets     | Optional          | <p>Specify the number of sockets for VMware and vCloud platforms. Otherwise, do not specify a value.</p> <p>Example: 2</p>   |

| Parameters | Required/Optional | Description   |
|------------|-------------------|---|
| # of Cores | Optional          | Specify the number of cores per socket for VMware and vCloud platforms. Otherwise, specify the total number of cores.<br><br>Example: 8 |

## Location

Location information can describe the logical, virtual, physical locations of the workload. See [Table A-4](#).

**Table A-4** Location Parameters

| Parameter      | Required/Optional | Description   |
|----------------|-------------------|---|
| Environment    | Optional          | Specify the name of the Environment resource for this workload. Values are case sensitive. If no matching value is found, PTM creates a new Environment resource for the project.<br><br>Examples: staging, preproduction, and production<br><br><b>NOTE:</b> The Environment resource name must be unique among environment resources for the project, but it can apply to multiple workloads. |
| VM Name        | Optional          | For a virtual workload, specify the VM name known to its virtualization host server.<br><br>Examples: vm-erm2, vm-msx-mailbox, vm-msx-web   |
| Site           | Optional          | Specify the geographical or logical location of the host machine.<br><br>Examples: Paris, Metro General Hospital, South Campus  |
| Hardware Type  | Optional          | Specify the hardware for the workload's host machine (that is, the physical machine or a VM's virtualization host machine).<br><br>Examples: Dell PowerEdge, Lenovo X, IBM BladeCenter  |
| Enclosure      | Optional          | Specify the enclosure for the host machine.<br><br>Examples: AA-21, C205-R5, IL6-C5-R3  |
| Enclosure Slot | Optional          | Specify the slot number in the specified enclosure.<br><br>Examples: U19, B07   |



| Parameter             | Required/Optional | Description  |
|-----------------------|-------------------|--|
| Is Domain?            | Optional          | (OS: Windows family) Boolean value must be either TRUE or FALSE.<br><br>Specify TRUE if the Windows workload is a member of a domain.<br><br>Specify FALSE if the Windows workload is a member of a workgroup. |
| Domain/Workgroup Name | Optional          | Specify the name of the domain or workgroup for the Windows workload, as appropriate.<br><br>Domain name examples: CORPDOM, PARIS, or paris.digitalair.com<br><br>Workgroup name example: WORKGROUP            |

### Custom Fields

The Spreadsheet Import expects the headings of the **Custom X** columns to match the custom field names you have previously defined for the project. Each project can have up to 7 user-defined fields that apply project-wide. See [Table A-5](#).

You can associate logical names and purpose with the custom fields for each project. For example, if you want to identify the workload with its IT application administrator, you might define a **Field 1** name of **Contact** for the project. In the spreadsheet, you use **Contact** instead of **Custom 1** as the column heading. Specify values for the field as appropriate for your project, such as a contact person's name, user name, or email address.

**Table A-5** Custom Field Parameters

| Parameters | Required/Optional | Description   |
|------------|-------------------|---|
| Custom 1   | Optional          | Specify the project's Field 1 name as the column heading. For each workload, specify the value based on the project's Field 1 definition. |
| Custom 2   | Optional          | Specify the project's Field 2 name as the column heading. For each workload, specify the value based on the project's Field 2 definition. |
| Custom 3   | Optional          | Specify the project's Field 3 name as the column heading. For each workload, specify the value based on the project's Field 3 definition. |
| Custom 4   | Optional          | Specify the project's Field 4 name as the column heading. For each workload, specify the value based on the project's Field 4 definition. |
| Custom 5   | Optional          | Specify the project's Field 5 name as the column heading. For each workload, specify the value based on the project's Field 5 definition. |

| Parameters | Required/Optional | Description   |
|------------|-------------------|---|
| Custom 6   | Optional          | Specify the project's Field 6 name as the column heading. For each workload, specify the value based on the project's Field 6 definition. |
| Custom 7   | Optional          | Specify the project's Field 7 name as the column heading. For each workload, specify the value based on the project's Field 7 definition. |
| Custom 8   | Optional          | Specify the project's Field 8 name as the column heading. For each workload, specify the value based on the project's Field 8 definition. |

## NICs

You can identify one or more NICs for a workload. You can specify any one of the available NIC input parameters to set up a NIC. See [Table A-6](#). If you also include the **NIC1 UUID** column, PTM automatically populates the UUIDs in the Results spreadsheet. You can set up multiple NICs by adding additional NIC# column instances.

**Table A-6** NIC Parameters

| Parameters          | Required/Optional   | Description  |
|---------------------|---|--|
| NIC1 UUID           | Optional;<br>recommended for<br>NIC. Values are<br>provided by PTM. | The UUID is a set of hexadecimal numbers that uniquely identify the NIC in the project. If this column is present, PTM writes a unique ID for each NIC to the Results spreadsheet after a workload is successfully imported to a project.<br><br>On a re-import, PTM keeps the same ID, and replaces the NIC's configuration information for the source workload.<br><br>Example: b916afef-ccfc-4501-aa4c-a4658cd9845d |
| NIC1 Interface Name | Optional  | Specify a unique interface name on the workload.<br><br>Examples: eth0, eth1   |
| NIC1 IP DHCP        | Optional  | Specify whether a DHCP server provides IP addresses for the NIC.<br><br>Boolean value must be either TRUE or FALSE.  |
| NIC1 IP Address     | Optional  | Specify an address for the NIC in IPv4 format.<br><br>Example: 10.10.10.40<br><br>For Windows workloads, you can specify multiple IP addresses per NIC as a comma-delimited list.<br><br>Example: 10.10.10.40, 10.10.10.41, 10.10.10.42  |
| NIC1 MAC            | Optional  | Specify the MAC address for the source workload NIC in the MM:MM:MM:SS:SS:SS format.<br><br>Example: 01:23:45:67:89:ab   |

| Parameters          | Required/Optional | Description  |
|---------------------|-------------------|--|
| NIC1 Network Mask   | Optional          | Specify the network mask in IPv4 format.<br><br>Example: 255 . 255 . 252 . 0   |
| NIC1 Gateway        | Optional          | Specify the default gateway address in IPv4 format. Multiple entries are not supported.  |
| NIC1 DNS DHCP       | Optional          | Specify whether DNS DHCP is available for the NIC.<br><br>Boolean value must be either <code>TRUE</code> or <code>FALSE</code> . |
| NIC1 DNS Servers    | Optional          | Specify one or more addresses in IPv4 format. For multiple entries, place each value on a separate line.                         |
| NIC1 Search Domains | Optional          | Specify one or more search domains. For multiple entries, place each value on a separate line.                                   |

**Create additional NIC# sections as appropriate, then continue to the next component section.**

A workload can have multiple network cards, each of which has a unique network configuration. The first defined network card is designated as NIC1, the second as NIC2, and so on.

## Disks

You can identify one or more disks for a workload. See [Table A-7](#). A disk requires only the **Disk1 Vol Type** and **Disk1 Size** columns. If you also include the **Disk1 UUID** column, PTM automatically populates the UUIDs in the Results spreadsheet. You can set up multiple disks by adding additional **Disk#** column instances with the minimum of **Disk# Vol Type** and **Disk# Size** columns.

**Table A-7** Disk Parameters

| Parameters        | Required/Optional   | Description   |
|-------------------|---|---|
| Disk1 UUID        | Optional;<br>recommended for<br>Disks. Values are<br>provided by PTM. | The UUID is a set of hexadecimal numbers that uniquely identify the disk in the project. If this column is present, PTM writes a unique ID for each disk to the Results spreadsheet after a workload is successfully imported to a project.<br><br>On a re-import, PTM keeps the same ID, and replaces the disk's configuration information for the source workload.<br><br>Example: 866b4209-4779-48f8-a81d-e8aa04c63d55 |
| Disk1 Vol Name    | Optional  | Specify the unique volume name on the workload.   |
| Disk1 Vol Type    | Optional; required for<br>Disk  | Acceptable values are <code>System</code> , <code>Local</code> , <code>NAS</code> , or <code>SAN</code> .   |
| Disk1 Mount Point | Optional  | Specify the path from the root of the volume.   |
| Disk1 Remote Path | Optional  | (Volume Type: <code>SAN</code> or <code>NAS</code> ) Specify the remote path for the volume.<br><br>Example: <code>\\vol1\mnt</code>  |

| Parameters | Required/Optional           | Description  |
|------------|-----------------------------|--|
| Disk1 Size | Optional; required for Disk | Specify the total size of the disk. Values default to MB if no unit is specified. Valid binary units are B, MB, GB, TB, PB, EB, ZB, and YB.<br><br><b>NOTE:</b> Volumes and volume groups should have at least 10 percent unallocated space available.<br><br>Examples: 2TB,500 GB, 102400 |
| Disk1 Used | Optional                    | Specify the space used on the disk. Values default to MB if no unit is specified. Valid binary units are B, MB, GB, TB, PB, EB, ZB, and YB.<br><br>Examples: 1.22TB,162 GB, 51200  |

**Create additional Disk# sections as appropriate, then continue to the next component section.**

A workload can have multiple disks, each of which has its own configuration. The first defined disk is designated as `Disk1`, the second as `Disk2`, and so on.

### Applications

You can identify one or more applications for a workload. See [Table A-8](#). Add an **Application#** column instance for each application you want to track for the workload.

*Table A-8 Application Parameter*

| Parameter         | Required | Description  |
|-------------------|----------|--|
| Application1 Name | Optional | Only the name of the application is needed. The application must be available to the workload. Values are case sensitive. If no matching value is found, PTM creates a new Application resource for the project.<br><br>Example: <code>Paris-Project2-Exchange</code><br><br><b>NOTE:</b> An Application name must be unique among Applications for the project, but it can apply to multiple workloads. |

**Create additional Application# sections as appropriate.**

A workload can have multiple applications or services associated with it. The first defined application is designated with a column heading of `Application1 Name`, the second column heading as `Application2 Name`, and so on.

## A.3 Downloading a Sample Import Spreadsheet

To download a sample spreadsheet:

- 1 Log in to the Web Interface as the Project Manager user, or as any system user.
- 2 Select **Planning > Workloads > Spreadsheet Import** to open the Spreadsheet Import dialog.

- 3 Click **Get sample spreadsheet**, then save the file to your local machine.

The spreadsheet is in `.xls` file format.

## A.4 Validating a Spreadsheet

Before you submit the Bulk Import spreadsheet, clear the contents in the Validation Status cell for each machine that you want to validate for import (or re-import).

The Validate tool displays the following states for machines and adds the information to the Validation Status column of the Results spreadsheet:

- ◆ **Ready for Import:** The row contains valid information.

The Validate tool found no errors in the data submitted for the machine. All values are valid options and in the expected format. All required and dependent values are present.

- ◆ **Invalid:** The row contains invalid information.

The Validate tool found one or more errors in the data submitted for this machine. The cell also includes messages about the type and location of the errors.

- ◆ **Imported:** The row was successfully imported or re-imported.

On import, PTM creates (or modifies) the source and target workload configurations for the workload in the specified project. If you have edited the target workload by using the Web Interface, a re-import modifies data only for the source workload.

- ◆ **Ignored:** The row was previously imported for a workload that has already been submitted for transformation.

You can use the Workload dialog to withdraw the machine from transformation to make it eligible again for re-import.

## A.5 Downloading the Results Spreadsheet

After you perform a validation or an import of the Bulk Import spreadsheet, the **Get Results** option becomes available on the Spreadsheet Import dialog.

- 1 On the Spreadsheet Import dialog, click **Get Results**, then save the file to your local machine.

The spreadsheet is in `.xls` file format.

After a validation, the Results spreadsheet reports the import readiness of each workload.

After a successful import, the Results spreadsheet contains the exact results of the current state of the import process, including:

- ◆ The deletion of blank rows
- ◆ More verbose results of the validation status
- ◆ The Workload ID assigned to each workload (if the **Workload ID** column is present in the input Bulk Import spreadsheet)

- ♦ The UUID assigned to each NIC (if the **NIC# UUID** column is present in the input Bulk Import spreadsheet)
- ♦ The UUID assigned to each disk (if the **Disk# UUID** column is present in the input Bulk Import spreadsheet)

## A.6 Re-Importing Workloads

You can re-import workloads multiple times to separately set up the various categories of data. This partial import capability allows you to import a workload's full details from multiple sources, each with its own import spreadsheet. Each re-import adds details for the source workload and for the target workload.

For example, you can import the minimal data to create the workload. Subsequent re-imports can use separate spreadsheets to add workload details, location, NICs, disks, applications, and custom fields. Alternatively, you can continue to work in the same spreadsheet, adding the appropriate columns for each re-import at the end of the spreadsheet.

---

**NOTE:** After you edit the target workload by using the Web Interface, the target workload is no longer updated by any subsequent re-imports.

---

If you attempt to re-import a workload that is in a workflow state of Submitted or a later phase, then the Validation Status returns a message:

```
Cannot re-import workload after transformation has been submitted.
```

The import ignores workloads in the Submitted or later state, and continues unless there are invalid rows. Rows that are in the ignored state appear in the Ignored Rows tab of the Validation Results.

# V Resources

For each project, the Project Manager can define resources that are available for planning transformations. Resources include credentials, migration servers, and environments.

- ♦ [Chapter 20, “Overview of Resources,” on page 185](#)
- ♦ [Chapter 21, “Managing Credentials Resources,” on page 187](#)
- ♦ [Chapter 22, “Managing Migration Server Resources,” on page 195](#)
- ♦ [Chapter 23, “Managing Environment Resources,” on page 201](#)





# 20 Overview of Resources

For each project, the Project Manager can define resources that are available for planning transformations. Resources include credentials, migration servers, and environments.

- ♦ [Section 20.1, “About Resources,” on page 185](#)
- ♦ [Section 20.2, “Prerequisites for Resources,” on page 185](#)

## 20.1 About Resources

Use the Resources feature to create, manage, and delete information about resources for your project:

- ♦ **Credentials:** A Credential resource contains the authentication and access information for a source workload, target platform, or migration server.

PTM stores credential information securely in the PlateSpin Database and transmits it over secure connections when it is needed for discovery and migration. Any project user can apply a Credential resource as appropriate without needing to know the actual values.

- ♦ **Migration Servers:** A Migration Server resource contains the access information for a PlateSpin Migrate server or other server to be used for workload migration.

Each Migration Server resource works with a user-specified PlateSpin Migrate Connector that serves the source network for workloads to be migrated with that resource.

- ♦ **Environments:** An Environment resource represents a physical or logical description of your IT environment, such as production, development, and test environments.

## 20.2 Prerequisites for Resources

When you create a resource, you must associate it with a specific transformation project. Before you can add resources for a project, you must create the parent organization and the project to ensure that they are available when you create the resources for a project.



# 21 Managing Credentials Resources

Credentials resources provide the authentication and access information that are needed to log in as an administrator user to the following components of your migration environment:

- ◆ Workloads
- ◆ Platforms
- ◆ Migration servers

You can use the Credentials page to create, manage, view, and delete the Credentials resources in your transformation project. You can also create a Credential resource from any dialog that requires a Credential.

- ◆ [Section 21.1, “About Credentials Resources,” on page 187](#)
- ◆ [Section 21.2, “Viewing Credentials,” on page 190](#)
- ◆ [Section 21.3, “Creating a Credential,” on page 191](#)
- ◆ [Section 21.4, “Associating Credentials with Workloads, Platforms, or Migration Servers,” on page 191](#)
- ◆ [Section 21.5, “Editing a Credential,” on page 193](#)
- ◆ [Section 21.6, “Deleting a Credential,” on page 193](#)

## 21.1 About Credentials Resources

Credentials resources facilitate authentication for the associated components. The credential access information and password are stored securely in the PlateSpin Transformation Manager database. They are transmitted over secure connections when PTM uses them for discovery or migration activities. Passwords are obscured in the interface.

---

**NOTE:** Credentials resource settings are not integrated with your directory password management system. If the password changes in your network environment or for accounts in cloud provider locations, you must manually update the password stored for the related Credential resource in Transformation Manager.

---

The Credentials resource enables you to track the following information for authentication credentials:

### **Name**

A name for the Credentials resource that is unique to your transformation project.

The name must begin with a letter or number. It can contain only letters, numbers, and the following special characters: space, hyphen, underscore, apostrophe, percent, ampersand, comma, and period.

### **Organization**

The parent organization for the project.

## Project

The parent project for the credential.

## Description

(Optional) A brief description of the credential. This text appears by default in the Credentials list.

## Credential Type

The intended usage of the credential:

- ◆ [Amazon Web Services](#)
- ◆ [Linux Administrator](#)
- ◆ [Microsoft Azure](#)
- ◆ [Migration Server](#)
- ◆ [VMware vCenter Cluster](#)
- ◆ [Windows Administrator](#)
- ◆ [Windows Domain](#)

After you specify the Credential Type, the following credentials require additional information:

### Amazon Web Services

An Amazon Web Services credential requires two unique identifiers for login:

#### Access Key ID

The Access Key ID of the AWS account you will use for target VMs in the AWS cloud infrastructure. For example: AKIAIOSFODNN7EXAMPLE.

#### Secure Access Key

The Secure Access Key that enables PlateSpin Migrate to use the AWS APIs when it replicates or migrates workloads on your behalf to VMs in the AWS cloud infrastructure. For example: wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY.

---

**NOTE:** As a security best practice, we recommend that administrators regularly rotate access keys for AWS Identity and Access Management (IAM) users. Before you rotate keys, ensure that no migration workflow is in progress. See “[Rotating Access Keys](#)” in the *AWS Identity and Access Management User Guide*.

---

### Linux Administrator

#### Username

The logon user name of Linux administrator to use for communications with the workload.

The user name is case sensitive. For the local user account, use `root` or a root-level user name for the workload that has been properly configured to use `sudo`. See [KB Article 7920711 \(https://support.microfocus.com/kb/doc.php?id=7920711\)](https://support.microfocus.com/kb/doc.php?id=7920711).

#### Password

The password for the specified Linux user name.

### Microsoft Azure

A Microsoft Azure credential requires the following identifiers for login:

**Subscription ID**

The Subscription ID of the Azure account you will use for target VMs in the cloud infrastructure.

**Application ID**

The Application ID that enables PlateSpin Migrate to use the Azure APIs when it replicates or migrates workloads on your behalf to VMs in the Azure cloud infrastructure.

**Username**

The Azure account user name for the specified Subscription ID.

**Password**

The password for the specified Azure user name.

---

**NOTE:** Migrations fail if the user password expires or you modify the password in Azure. Ensure that you update the password stored for the username in the Credential resource each time after you update it in Azure.

---

**Migration Server****Username**

The logon user name of a domain administrator or local administrator to use for communications with the server that hosts the migration software (such as PlateSpin Migrate).

Provide the user name exactly as it is expected by the intended operating system or authentication system.

**Password**

The password for the specified user name.

**VMware vCenter Server****Username**

The logon user name to use for communications with the VMware vCenter server.

Provide the user name exactly as it is expected by the intended operating system or authentication system. For example: administrator@vcl.example.com

**Password**

The password for the specified user name.

**Windows Administrator****Username**

The logon user name of a domain administrator or local administrator to use for communications with the workload.

Windows user names are case insensitive. Provide the user name exactly as it is expected by the intended operating system or authentication system. For example:

- ◆ For domain member: CORPDOM\username
- ◆ For workgroup member: WORKGROUP\username
- ◆ For a local user account: username

**Password**

The password for the specified Windows user name.

## Windows Domain

### Username

The logon user name of a domain administrator or workgroup administrator to use for communications with the workload.

Windows user names are case insensitive. Provide the user name exactly as it is expected by the intended operating system or authentication system. For example:

- ◆ For domain member: CORPDOM\username
- ◆ For workgroup member: WORKGROUP\username

### Password

The password for the specified Windows user name.

## 21.2 Viewing Credentials

The Credential password is always obscured from viewing and access.

- 1 In the Web Interface toolbar, select **Resources**, then select the **Credentials** tab.

You can also view Credentials resources for a single project in the **Associations** area of the Edit Project dialog. Select **Planning > Projects**, double-click the project. In the Edit Project dialog under **Associations**, select the **Resources** tab, then select **Credentials**.

- 2 On the **Credentials** tab, view the list of resources.
- 3 Select a Credentials resource, then click **View** (or double-click the resource) to view the following settings for the resource:
  - ◆ Name
  - ◆ Organization
  - ◆ Project
  - ◆ Description
  - ◆ Credential Type
  - ◆ Credential login information, which is specific to the Credential Type.
- 4 (Optional) View credentials for a specific project by using the Global Project Selector.
- 5 (Optional) Filter entries in the Credentials list using the **Search** field to show only the resource pools of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 6 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 21.3 Creating a Credential

You can use the Credentials page to create Credentials resources for the transformation environment of a project. You can also launch the Create Credentials dialog from any dialog that requires a Credential, such as Create Platform, Create Migration Server, and Import Workloads.

- 1 Do one of the following:
  - ♦ In the Web Interface toolbar, select **Resources**, then select the **Credentials** tab.
  - ♦ In the **Credential** field, open the Credential menu.
- 2 Click **Create** to open the Create Credential dialog.
- 3 Specify the following information for the Credentials resource:
  - ♦ Name
  - ♦ Organization
  - ♦ Project
  - ♦ Description
  - ♦ Credential Type
  - ♦ Credential login information, which is specific to the Credential Type.
- 4 Click **Save** to create the Credentials resource.
- 5 Click **Close** to exit the dialog.

## 21.4 Associating Credentials with Workloads, Platforms, or Migration Servers

After you create Credentials resources for a project, you can associate them with workloads, platforms, or migration servers, as appropriate.

- ♦ [“Associating Credentials and Workloads” on page 191](#)
- ♦ [“Associating Credentials and Platforms” on page 192](#)
- ♦ [“Associating Credentials and Migration Servers” on page 192](#)

### 21.4.1 Associating Credentials and Workloads

After you create Credentials resources for a project, you can associate them with workloads.

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 2 In the **Workloads** list, use the Filter and Advanced Search to locate the appropriate workload.
- 3 Select the workload, then click **Edit**. You can alternatively double-click the workload of interest.
- 4 On the Workload dialog, scroll to the **Workload** panel, then click **Edit**.
- 5 From the **Admin Credentials** list, select the Credentials resource that you want to assign to the target workload.

Each Credential resource shows the credential name with its associated user name in parenthesis.

- 6 (Windows workloads) In a Domain, select **Domain** under **Windows Settings**, specify the domain name, then select the Credentials resource to use for the domain in the **Domain Credential** list.
- 7 (Optional) Modify other Workload information as appropriate.
- 8 Click **Save**, then click **Close**.
- 9 Click **Close** to exit the Workload dialog.

## 21.4.2 Associating Credentials and Platforms

After you create Credentials resources for a project, you can associate them with platforms.

- 1 In the Web Interface toolbar, select **Resources**.
- 2 Select the **Platforms** tab.
- 3 Select the platform, then click **Edit**. You can alternatively double-click the platform of interest.
- 4 From the **Credential** list, select the Credentials resource that you want to assign to the target platform.  
Each Credential resource shows the credential name with its associated user name in parenthesis.
- 5 (Optional) Modify other Platform information as appropriate.
- 6 Click **Save**.
- 7 Click **Close** to exit the dialog.

## 21.4.3 Associating Credentials and Migration Servers

After you create Credentials resources for a project, you can associate them with Migration Server resources.

- 1 In the Web Interface toolbar, select **Resources**.
- 2 Select the **Migration Servers** tab.
- 3 Select the migration server, then click **Edit**. You can alternatively double-click the migration server of interest.
- 4 From the **Credential** list, select the Credentials resource that you want to assign to the target migration server.  
Each Credential resource shows the credential name with its associated user name in parenthesis.
- 5 (Optional) Modify other Migration Server information as appropriate.
- 6 Click **Save**.
- 7 Click **Close** to exit the dialog.



## 21.5 Editing a Credential

You can use the Credentials page to edit a Credentials resource in a project. For example, you might need to modify the user name and password assigned to the credential, or change the password for the existing user name.

- 1 In the Web Interface toolbar, select **Resources**.
- 2 Select the **Credentials** tab.
- 3 In the **Credentials** list, select the credential, then click **Edit** (or double-click the credential) to open the Edit Credential dialog.
- 4 Modify any of the following information for the Credentials resource:
  - ♦ Name
  - ♦ Organization
  - ♦ Project
  - ♦ Description
  - ♦ Credential Type
  - ♦ Credential login information, which is specific to the Credential Type
- 5 Click **Save** to update the Credentials resource.
- 6 Click **Close** to exit the dialog.

## 21.6 Deleting a Credential

You can use the Credentials page to delete a Credentials resource in a project.

---

**NOTE:** If you delete a resource, it automatically removes the associations for the resource, including those assigned to workloads that are in progress and completed. If the same associations apply, consider whether it is more appropriate to edit the resource name and its user name and password.

---

- 1 In the Web Interface toolbar, select **Resources**.
- 2 Select the **Credentials** tab.
- 3 View the list of Credentials resources.
- 4 Select the appropriate credential, click **Delete**, then click **Yes** to confirm the deletion.
- 5 Click **Close** to exit the dialog.



# 22 Managing Migration Server Resources

Migration Server resources enable you to associate the servers that host the migration tools used by migration specialists to transform workloads. For example, a migration server might host the migration tool [PlateSpin Migrate](https://www.microfocus.com/products/platespin/migrate/) (<https://www.microfocus.com/products/platespin/migrate/>). You can use the Migration Servers page to create, manage, and delete the Migration Server resources for the target workloads in your transformation project.

- ◆ [Section 22.1, “About Migration Server Resources,” on page 195](#)
- ◆ [Section 22.2, “Viewing Migration Server Resources,” on page 196](#)
- ◆ [Section 22.3, “Creating a Migration Server Resource,” on page 197](#)
- ◆ [Section 22.4, “Associating a Connector with a Migration Server Resource,” on page 198](#)
- ◆ [Section 22.5, “Associating Migration Servers and Target Workloads,” on page 198](#)
- ◆ [Section 22.6, “Editing a Migration Server,” on page 199](#)
- ◆ [Section 22.7, “Deleting a Migration Server,” on page 199](#)

## 22.1 About Migration Server Resources

The Migration Server resource enables you to track the following information for a migration server that resides in your transformation project:

### Name

A name for the migration server that is unique to your transformation project. The name must begin with a letter or number. It can contain only letters, numbers, and the following special characters: space, hyphen, underscore, apostrophe, percent, ampersand, comma, and period.

### Organization

The name of the parent organization for the project.

### Project

The name of the parent project for the migration server.

### Description

(Optional) A brief description of the migration server. This text appears by default in the Migration Servers list.

### Migration Server Type

Select one of the following:

- ◆ **PlateSpin Migrate:** Select this option to identify the migration server as a PlateSpin Migrate Server, and to allow integration with your PlateSpin Migrate Server.
- ◆ **Others:** Select this option to identify that the migration server runs any other type of migration software. PTM does not provide integration.

## Server URL

The URL of the login page for the migration tool hosted on the migration server. The URL must conform to all syntax rules and can be up to 1024 characters. For example:

```
https://psmigrate.example.com/Migrate
```

After you provide credentials, a link icon appears next to the Server URL. Click the icon to access the Migrate server through your local proxy server. Ctrl+Click the icon to access the Migrate server if there is no proxy server in your environment.

## Credential

Expand the Credential list, then locate and select the Credentials resource to use to log in to the migration server's web-based management tool. You can scroll the list or type a sequence of characters in the Filter to locate the Credentials resource of interest. You can alternatively create a new credential.

Migration Server resources can be saved in an incomplete state. The Migration Server field displays the value **Not Configured** in the Workload dialog. When you later deploy the server, you can update the Migration Server resource. The status is updated automatically for all of its associated workloads.

## Connector

Expand the Connector list to select the PlateSpin Migrate Connector in the source network that this Migrate server will use to execute automated migrations or to track external migrations. The Connector list presents only Connectors that are available to all projects or are assigned to this specific project. A Connector association is required before the Migrate server can be used for migration. Each Migration Server resource is associated to only one Connector instance.

---

**NOTE:** A Migrate Connector can be associated with multiple Migration Server resources. The resources can be in the same or different projects, depending on the Connector configuration to serve all projects or a single project.

---

## Associations

The Workload associations are populated as you begin to plan workload transformations. You can view or delete workload associations.

## 22.2 Viewing Migration Server Resources

- 1 In the Web Interface toolbar, select **Resources**, then select the **Migration Servers** tab.

You can also view migration servers for a single project in the **Associations** area of the Edit Project dialog. Select **Planning > Projects**, double-click the project. In the Edit Project dialog under **Associations**, select the **Resources** tab, then select **Migration Servers**.

- 2 On the **Migration Servers** tab, view the list of resources.
- 3 Select a Migration Server resource, then click **View** (or double-click the resource) to view the following settings for the resource:
  - ◆ Name
  - ◆ Organization
  - ◆ Project
  - ◆ Description

- ◆ Migration Server Type
  - ◆ Server URL
  - ◆ Credential
  - ◆ Connector
- 4 (Optional) Select the project in the **Global Project Selector** to list only the Migration Server resources for a single project.
  - 5 (Optional) Filter entries in the Migration Servers list using the **Search** field to show only the migration servers of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
  - 6 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 22.3 Creating a Migration Server Resource

You can use the Migration Servers page to create Migration Server resources for the target transformation environment of a project.

- 1 In the Web Interface toolbar, select **Resources**.
- 2 Select the **Migration Servers** tab.
- 3 Click **Create** to open the Create Migration Server dialog.
- 4 Specify the following information for the Migration Server resource:
  - ◆ Name
  - ◆ Organization
  - ◆ Project
  - ◆ Description
  - ◆ Migration Server Type
  - ◆ Server URL
  - ◆ Credential
  - ◆ Connector
- 5 If necessary, you can create a new credential to use for the Migration Server resource.
  - 5a On the Credential drop-down list, click **Create**.
  - 5b Specify the authentication information for the Migration Server Credential Type.
  - 5c Click **Save** to create the Credential resource and add it in the Create Migration Server dialog.
- 6 Click **Save** to create the Migration Server resource.
- 7 Click **Close** to exit the dialog.

## 22.4 Associating a Connector with a Migration Server Resource

A Migration Server can be associated with a single Migrate Connector. A Connector can be associated with multiple Migration Server resources from the same or different project.

**To associate a Migrate Connector with a Migration Server:**

- 1 Log in to the Web Interface as a user with Project Manager or Project Administrator permissions.
- 2 In the Web Interface toolbar, select **Resources**.
- 3 Select the **Migration Servers** tab.
- 4 In the Migration Servers list, do either of the following:
  - ♦ Click **Create** to create a new Migration Server resource, select the appropriate **Connector** as part of the resource configuration, then click **Save**. Close the Migration Server Create dialog.
  - ♦ Select an existing Migration Server resource and click **Edit** ((or double-click the resource), select the appropriate **Connector**, then click **Save**. Close the Migration Server Edit dialog.

## 22.5 Associating Migration Servers and Target Workloads

After you create Migration Server resources for a project, you can associate them with workloads. You can specify the Migration Server resource for each workload, or allow the PlateSpin Migrate Connector to load-balance the migration jobs across all of the project's available Migration Server resources of type PlateSpin Migrate.

With automated migration, imported workloads are automatically set to Automated Migration. You can set individual workloads separately. Automated Migration is disabled for a workload if the transformation method is not supported by automated migration.

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Workloads** tab.
- 3 Select the workload, then click **Edit**. You can alternatively double-click the workload of interest.
- 4 On the Workload dialog in the **Transformation Plan** panel, click **Edit**.
- 5 Do one of the following:
  - ♦ **Migration Server:** From the **Migration Server** list, select the Migration Server resource that you want to assign to the target workload.
  - ♦ **Automated Migration:** Select the Automated Migration check box to enable automatic assignment from among the available Migration Server resources that are of type PlateSpin Migrate.
- 6 (Optional) Modify other Transformation Plan information as appropriate.
- 7 Click **Save**, and then click **Close**.
- 8 Click **Close** to exit the Workload dialog.

## 22.6 Editing a Migration Server

You can use the Migration Servers page to edit a Migration Server resource for the target transformation environment of a project.

- 1 In the Web Interface toolbar, select **Resources**.
- 2 Select the **Migration Servers** tab.
- 3 In the **Migration Servers** list, select the migration server, then click **Edit** (or double-click the migration server) to open the Edit Migration Server dialog.
- 4 Modify any of the following information for the Migration Server resource:
  - ◆ Name
  - ◆ Organization
  - ◆ Project
  - ◆ Description
  - ◆ Migration Server Type
  - ◆ Server URL
  - ◆ Credential
  - ◆ Connector
- 5 Click **Save** to update the Migration Server resource.
- 6 Click **Close** to exit the dialog.

## 22.7 Deleting a Migration Server

You can use the Migration Servers page to delete a Migration Server resource for the target transformation environment of a project.

---

**NOTE:** If you delete a resource, it automatically removes the associations for the resource, including those assigned to workloads that are in progress and completed. If the same associations apply, consider whether it is more appropriate to edit the resource name and settings.

---

- 1 In the Web Interface toolbar, select **Resources**.
- 2 Select the **Migration Servers** tab.
- 3 View the list of Migration Server resources.
- 4 Select the appropriate migration server, click **Delete**, then click **Yes** to confirm the deletion.





# 23 Managing Environment Resources

Environment resources enable you to associate physical or logical environments for workloads in your network. Examples include development, quality assurance, staging, preproduction, and production. You can use the Environments page to create, manage, and delete environments for the target workloads in your transformation project. You can define Environment resources for the source workloads in the machine information for a bulk import. Environment resources can apply to source and target workloads.

- ◆ [Section 23.1, “About Environment Resources,” on page 201](#)
- ◆ [Section 23.2, “Viewing Environments,” on page 202](#)
- ◆ [Section 23.3, “Creating a Source Environment,” on page 202](#)
- ◆ [Section 23.4, “Creating an Environment,” on page 202](#)
- ◆ [Section 23.5, “Associating Environments and Target Workloads,” on page 203](#)
- ◆ [Section 23.6, “Editing an Environment,” on page 203](#)
- ◆ [Section 23.7, “Deleting an Environment,” on page 203](#)

## 23.1 About Environment Resources

The Environment resource enables you to track the following information for a logical environment where one or more workloads reside in your transformation project:

### **Name**

A friendly name for the environment that is unique to your transformation project. The name must begin with a letter or number. It can contain only letters, numbers, and the following special characters: space, hyphen, underscore, apostrophe, percent, ampersand, comma, and period.

### **Organization**

The name of the parent organization for the project.

### **Project**

The name of the parent project for the environment resource.

### **Description**

(Optional) A brief description of the environment. This text appears by default in the Environments list.

### **Associations**

The Workload associations are populated as you begin to plan workload transformations.

## 23.2 Viewing Environments

- 1 In the Web Interface toolbar, select **Resources**, then select the **Environments** tab.  
You can also view environments for a single project in the **Associations** area of the Edit Project dialog. Select **Planning > Projects**, double-click the project, then under **Associations**, select the **Environments** tab.
- 2 On the **Environments** tab, view the list of resources.
- 3 Select an Environment resource, then click **View** (or double-click the resource) to view the following settings for the resource:
  - ◆ Name
  - ◆ Organization
  - ◆ Project
  - ◆ Description
- 4 (Optional) Filter entries in the Environments list using the **Search** field to show only the environments of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 5 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 23.3 Creating a Source Environment

You can create an Environment resource during a Spreadsheet Import by specifying the **Environment** in the machine definition in the Bulk Import spreadsheet. The name is case sensitive. If no match is found, PTM creates a new Environment resource for the project. On import, it automatically associates the Environment resource with the source workload.

## 23.4 Creating an Environment

You can use the Environments page to create Environment resources for a project.

- 1 In the Web Interface toolbar, select **Resources**.
- 2 Select the **Environments** tab.
- 3 Click **Create** to open the Create Environment dialog.
- 4 Specify the following information for the Environment resource:
  - ◆ Name
  - ◆ Organization
  - ◆ Project
  - ◆ Description
- 5 Click **Save** to create the Environment resource.
- 6 Click **Close** to exit the dialog.

## 23.5 Associating Environments and Target Workloads

After you create Environment resources for a project, you can associate them with workloads.

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Workloads** tab.
- 3 Select the workload, then click **Edit**. You can alternatively double-click the workload of interest.
- 4 On the Workload dialog in the **Location** panel, click **Edit**.
- 5 From the **Environment** list, select the Environment resource that you want to assign to the target workload.
- 6 (Optional) Modify other Location information as appropriate.
- 7 Click **Save**, and then click **Close**.
- 8 Click **Close** to exit the Workload dialog.

## 23.6 Editing an Environment

You can use the Environments page to edit an Environment resource for a project.

- 1 In the Web Interface toolbar, select **Resources**.
- 2 Select the **Environments** tab.
- 3 In the **Environments** list, select the environment, then click **Edit** (or double-click the environment) to open the Edit Environment dialog.
- 4 Modify any of the following information for the Environment resource:
  - ♦ Name
  - ♦ Organization
  - ♦ Project
  - ♦ Description
- 5 Click **Save** to update the Environment resource.
- 6 Click **Close** to exit the dialog.

## 23.7 Deleting an Environment

You can use the Environments page to delete an Environment resource for a project.

---

**NOTE:** If you delete a resource, it automatically removes the associations for the resource, including those assigned to workloads that are in progress and completed. If the same associations apply, consider whether it is more appropriate to edit the resource name and settings.

---

- 1 In the Web Interface toolbar, select **Resources**.
- 2 Select the **Environments** tab.
- 3 Click **Target** to view the list of Environment resources.
- 4 Select the appropriate environment, click **Delete**, then click **Yes** to confirm the deletion.



# VI Target Platforms

Target platforms host the virtual machines for migrated workloads in your transformation project. PlateSpin Transformation Manager discovers resources available for the platform, such as networks and storage.

- ◆ [Chapter 24, “Managing Target Platforms,”](#) on page 207



# 24 Managing Target Platforms

A Platform defines a target virtualization environment or cloud environment and its associated resources. You can use the Platforms page to create, edit, view, and remove platforms in your transformation project.

---

**NOTE:** Migration of workloads to a platform is limited by the configurations supported by the virtualization host or cloud provider.

---

- ◆ [Section 24.1, “About Platforms,” on page 207](#)
- ◆ [Section 24.2, “Viewing Platforms,” on page 218](#)
- ◆ [Section 24.3, “Creating a Platform,” on page 222](#)
- ◆ [Section 24.4, “Retrying Platform Discovery,” on page 223](#)
- ◆ [Section 24.5, “Rediscovering Platforms,” on page 224](#)
- ◆ [Section 24.6, “Editing Platforms,” on page 224](#)
- ◆ [Section 24.7, “Associating Platforms and Target Workloads,” on page 224](#)
- ◆ [Section 24.8, “Deleting a Platform,” on page 225](#)
- ◆ [Section 24.9, “Deleting Workload Associations for a Platform,” on page 225](#)

## 24.1 About Platforms

A Target Platform defines a specific virtualization host or cloud infrastructure and its associated resources. PlateSpin Transformation Manager discovers the platform’s available resources and displays them under Associations.

PTM discovers resources for VMware vCenter Servers by using a PlateSpin Migrate Connector in the target network. PlateSpin Migrate Connector must be configured to use the PTM Server and the project.

PTM discovers resources for Microsoft Azure and Amazon Web Services by using HTTPS connections with the target cloud. An Internet connection is required.

- ◆ [“Platform Properties” on page 208](#)
- ◆ [“Platform Associations” on page 212](#)
- ◆ [“Discovery Process for Platforms” on page 217](#)
- ◆ [“Troubleshooting Platform Discovery Failures” on page 217](#)

## 24.1.1 Platform Properties

Platforms are the target environment for migrated workloads. Planning properties define the target characteristics and status of the platform within PTM. The platform-specific properties define the account information and default settings that PTM uses to access the target platform.

- ◆ [Properties: General](#)
- ◆ [Properties: VMware vCenter Server Platforms](#)
- ◆ [Properties: Microsoft Azure Platforms](#)
- ◆ [Properties: Amazon Web Services Platforms](#)

### Properties: General

#### Properties: General

Each Platform provides the following PTM planning information about the target platform.

#### Status

The discovery status for the target platform and the date and time stamp when its resources were last discovered.

#### Rediscover

Click **Rediscover** to initiate rediscovery of the resources for the platform.

#### Retry

Click **Retry** to connect to the target location and retrieve information about the resources for the platform. This option is available if resources have not yet been discovered for the target platform.

#### Name

The friendly name for the platform that is unique to your transformation project. The name must begin with a letter or number. It can contain only letters, numbers, and the following special characters: space ( ), hyphen (-), underscore (\_), apostrophe ('), percent (%), ampersand (&), comma (,), and period (.).

#### Organization

The parent organization for the project.

#### Project

The parent project for the platform.

#### Description

(Optional) Specify a brief description of the platform. This text appears by default in the Platforms list.

#### Platform Type

Specify the type of platform to create. The type determines the characteristics and restrictions on the workload that can be migrated to the target platform.

After you specify the platform type, you must specify additional options.

- ◆ [Properties: VMware vCenter Server Platforms](#)
- ◆ [Properties: Microsoft Azure Platforms](#)
- ◆ [Properties: Amazon Web Services Platforms](#)



## Properties: VMware vCenter Server Platforms

### Platform Type: VMware vCenter Server

#### Credential

The name of the VMware vCenter Server Credential resource to use for accessing the platform environment.

---

**NOTE:** After it is set, you cannot change the Credential resource. If a change of login credentials is necessary, you must modify the values in the assigned Credential resource.

---

#### IP or FQDN

Specify the IPv4 address or FQDN (Fully Qualified Domain Name) of the VMware vCenter Server that manages your VMware clusters. Examples: 10.10.10.101, sydney.vcenter1.example.com

#### Site

(Optional) Specify a textual description of the facility or location where the platform environment resides. If a match is not found, Transformation Manager adds a new Site type in the database. Examples: HQ data center, West campus, Sydney.

#### Migrate Agent

(Optional) Select the **Install agent on source workload** check box if you want PTM to automatically install the PlateSpin Migrate Agent on the source workloads that you configure for this platform. Migrate Agent is typically used when no VPN connection is available between the source workload and target platform.

The date of the installation is determined by the PTM global setting for **Configuration > Migrate Connector > Add Workload to Migrate** setting. A user with PTM Administrator privileges can modify this setting. See “[Add Workload to Migrate](#)” in the *PTM 2019.5 Administrator Guide*.

For information about using Migrate Agent on Windows and Linux workloads, see “[Migrate Agent Utility](#)” in the *PlateSpin Migrate 2019.5 User Guide*.

#### Associations

After a successful platform discovery, the Associations panel shows information about discovered resources and assigned workloads.

- ◆ Clusters
- ◆ Hosts
- ◆ Networks
- ◆ Datastores
- ◆ Resource Pools
- ◆ Workloads

## Properties: Microsoft Azure Platforms

### Platform Type: Microsoft Azure

#### Cloud Instance

Specifies the target Azure IaaS environment (or *service endpoint types*) for migrations, such as the global cloud or a sovereign cloud where you can set up virtual machines. Options include:

Azure Global (default)  
Azure China  
Azure Germany  
Azure US Government

#### Credential

The name of the Microsoft Azure Credential resource to use for accessing the platform environment.

---

**NOTE:** After it is set, you cannot change the Credential resource. If a change of login credentials is necessary, you must modify the values in the assigned Credential resource.

---

#### PS PRE Image

The PlateSpin Replication Environment (PRE) image used by the platform. The administrator of your Azure cloud account sets up the PRE image in the Azure Marketplace.

#### Migrate Agent

Select the **Install agent on source workload** check box if you want PTM to install the PlateSpin Migrate Agent on the source workloads that you configure for this platform. Migrate Agent is typically used when no VPN connection is available between the source workload and target platform.

The date of the installation is determined by the PTM global setting for **Configuration > Migrate Connector > Add Workload to Migrate** setting.

For information about using Migrate Agent on Windows and Linux workloads, see “[Migrate Agent Utility](#)” in the *PlateSpin Migrate 2019.5 User Guide*.

#### Associations

After a successful platform discovery, the Associations panel shows information about discovered resources and assigned workloads.

- ◆ Locations
- ◆ Networks
  - ◆ Virtual Networks
  - ◆ Subnets
- ◆ Storage Accounts
- ◆ Resource Groups
- ◆ Availability Sets
- ◆ Workloads

## Properties: Amazon Web Services Platforms

### Platform Type: Amazon Web Services

---

**NOTE:** PTM supports AWS platforms for external migrations for workloads in Manual (tracking) mode. It does not support automated migrations to AWS platforms.

---

#### Cloud Instance

Specifies the target AWS EC2 environment (or *service endpoint types*) for migrations, such as the global cloud or a sovereign cloud where you can set up virtual machines. Options include:

AWS Global (default)

AWS Government

#### Credential

The name of the Amazon Web Services Credential resource to use for accessing the platform environment.

---

**NOTE:** After it is set, you cannot change the Credential resource. If a change of login credentials is necessary, you must modify the values in the assigned Credential resource.

---

#### Migrate Agent

Select the **Install agent on source workload** check box if you want PTM to install the PlateSpin Migrate Agent on the source workloads that you configure for this platform.

---

**NOTE:** PTM does not currently support automated migrations to AWS. It ignores this setting.

---

#### Associations

After a successful platform discovery, the Associations panel shows information about discovered resources and assigned workloads.

- ◆ Regions
- ◆ Virtual Private Clouds
  - ◆ VPCs
  - ◆ Subnets
- ◆ Datastores
- ◆ Security Groups
- ◆ Placement Groups
- ◆ Key Pairs
- ◆ Encryption Keys
- ◆ IAM Roles
- ◆ Workloads

## 24.1.2 Platform Associations

The Platform enables you to track associated resources for platforms. The associations vary by platform type. Workload associations are populated as you plan target workloads for transformations.

The platform's resources are initially discovered when you create the platform. Rediscovery occurs whenever you modify a platform or select the **Rediscover** option. Automatic rediscovery occurs for all platforms every six hours. (The run interval and schedule for rediscovery are not configurable.) You can select **Rediscover** to update the resources on demand at any time. For each discovered resource, you can add a description, but you cannot modify its reported properties.

The Platform dialog and each of its Resources' dialog lists associated workloads as you configure them for migration to the target platform. You can quickly see which workloads are using any resource. PTM does not reserve resources nor give priority to their consumption. Viewing the planned resource usage can help you assess resource availability and future demands for them.

Each tab offers an Exclude action that you can use to hide a resource in planning dialogs so that it cannot be used for migrated workloads. Excluding a parent resource automatically excludes its children. Excluded resources are dimmed in the resource list.

For each target platform type, see the following for information about its associated resources and the information about them:

- ◆ [Associations: VMware Resources](#)
- ◆ [Associations: Azure Resources](#)
- ◆ [Associations: AWS Resources](#)

### Associations: VMware Resources

The following associations tabs are available for the VMware vCenter Server Platform. Use the Cluster filter on a tab to view resources available in all clusters or for a specified cluster. You can also filter using the Search field.

#### Clusters

A list of VMware Clusters managed by the VMware vCenter Server.

- ◆ Name
- ◆ Hosts (the number of member nodes). View the Hosts tab for information about each member node.
- ◆ Processors (the number of processors)
- ◆ Total Memory
- ◆ Datastores (the number of shared datastores in the cluster). View the Datastores tab for information about each available datastore.
- ◆ Total Storage
- ◆ Automation Level

#### Hosts

A list of member nodes of the VMware Clusters managed by the VMware vCenter Server.

- ◆ Name

- ◆ Hardware Type
- ◆ Cluster
- ◆ Memory
- ◆ Cores
- ◆ NICs
- ◆ vMotion

### **Networks**

A list of the virtual networks defined for the cluster host.

- ◆ Name
- ◆ Cluster
- ◆ Hosts
- ◆ VMs

### **Datstores**

A list of datstores associated with VMware Clusters managed by the VMware vCenter Server.

- ◆ Name
- ◆ Cluster
- ◆ Hosts
- ◆ Type
- ◆ Capacity
- ◆ VMs
- ◆ Status

### **Resource Pools**

A list of resource pools associated with VMware Clusters managed by the VMware vCenter Server.

- ◆ Name
- ◆ Cluster
- ◆ CPU Allocation
- ◆ CPU Usage
- ◆ Memory Allocation
- ◆ Guest Memory Usage
- ◆ Host Memory Usage

### **Workloads**

A list of workloads associated with VMware Clusters managed by the VMware vCenter Server.

- ◆ Name
- ◆ Cluster
- ◆ Batch

- ◆ Transformation
- ◆ Status

## Associations: Azure Resources

The following associations are available for the Microsoft Azure Platform. Use the Location filter on a tab to view resources available for a specified location. You can also filter using the Search field.

### Locations

A list of the geographic regions available to the specified platform. Cloud locations are retrieved from Azure based on the account in the specified Credentials resource.

- ◆ Location Name
- ◆ Instances

### Networks

A list of the virtual networks and their subnets defined in the cloud environment for the cloud account.

- ◆ Virtual Networks
  - ◆ Name
  - ◆ Location
  - ◆ Address Space
- ◆ Subnets
  - ◆ Name
  - ◆ Location
  - ◆ Network
  - ◆ Address Space

### Storage Accounts

A list of Azure Storage Accounts associated with the platform. Storage Accounts are used for *unmanaged* disks in Azure. You must specify a Storage Account and Disk Path to use for disks on VMs that do not use the Azure Managed Disks service.

- ◆ Name
- ◆ Location
- ◆ Replication
- ◆ Performance
- ◆ Status
- ◆ Encryption

### Resource Groups

A list of resource groups associated with the platform.

- ◆ Name
- ◆ Location

- ◆ Deployments
- ◆ Items

### Availability Sets

A list of availability sets associated with the platform.

- ◆ Name
- ◆ Location
- ◆ Resource Group
- ◆ Network
- ◆ # Fault Domains
- ◆ # Update Domains
- ◆ Managed Disks
- ◆ In Use

### Workloads

A list of workloads associated with VMs in platform.

- ◆ Name
- ◆ Location
- ◆ Batch
- ◆ Transformation
- ◆ Status

## Associations: AWS Resources

---

**NOTE:** PTM supports AWS platforms for external migrations for workloads in Manual (tracking) mode. It does not support automated migrations to AWS platforms.

---

The following associations are available for the Amazon Web Services Platform. Use the Region filter on a tab to view resources available for a specified region. You can also filter using the Search field.

### Regions

A list of the geographic regions available to the specified platform. Cloud regions are retrieved from AWS based on the account in the specified Credentials resource.

- ◆ Region Name
- ◆ Availability Zones
- ◆ Instances

### Virtual Private Clouds

A list of the virtual networks and their subnets defined in the cloud environment for the cloud account.

- ◆ VPCs
  - ◆ Name
  - ◆ Region

- ◆ Address Space
- ◆ Tenancy
- ◆ Subnets
  - ◆ Name
  - ◆ Region
  - ◆ VPC
  - ◆ Address Space

### **Datstores**

The Datstores list shows the type of disks that AWS supports for the account. See [Amazon EBS Volume Types \(https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSVolumeTypes.html\)](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSVolumeTypes.html) in the AWS Documentation.

A list of datstores associated with the platform.

- ◆ Name
- ◆ Region Name

### **Security Groups**

A list of security groups associated with the platform.

- ◆ Name
- ◆ Region Name
- ◆ Inbound Ports
- ◆ Outbound Ports

In the Security Groups list, pause over a security group to view the **Security Group Rules** infotip, which displays the following information for each rule for the security group: Type, Protocol, Port Range, and Source information.

### **Placement Groups**

A list of placement groups associated with the platform.

- ◆ Name
- ◆ Region Name
- ◆ Strategy (for shared tenancy)
- ◆ State

Placement Groups are available for use in AWS if you set the Tenancy to run your VM instance as a shared instance.

### **Key Pairs**

AWS EC2 Key Pairs are used for logging in to your AWS target instance.

A list of key pairs associated with the platform.

- ◆ Name
- ◆ Region Name
- ◆ Fingerprint



### **Encryption Keys**

An encryption key enables encryption of AWS target instance disks.

A list of encryption keys associated with the platform.

- ◆ Name
- ◆ Region Name
- ◆ Status

### **IAM Roles**

AWS Identity and Access Management (IAM) roles with sufficient permissions to perform migrations into the VPC using the AWS APIs.

A list of IAM Roles associated with the platform.

- ◆ Name
- ◆ Policies

### **Workloads**

For enhanced tracking, PTM matches imported workloads to workloads on Migrate Servers associated to the project. The matched workloads appear on the Workloads tab in Manual (tracking) mode.

A list of workloads associated with VMs in platform.

- ◆ Name
- ◆ Region
- ◆ Batch
- ◆ Transformation
- ◆ Status

## **24.1.3 Discovery Process for Platforms**

The automated discovery process for target platforms performs the following actions:

1. The Create Platform dialog creates a new Platform object.
2. Auto-discovery begins for the platform, using the provided Credentials resources to log in to the platform.
3. PTM creates new resources for each newly discovered resource in the platform.
4. On successful platform discovery, the Platforms list or Edit Platform dialog displays the platform information and associated resources.

## **24.1.4 Troubleshooting Platform Discovery Failures**

Platform discovery fails for any of the following conditions:

- ◆ A Migrate Connector is not available.
- ◆ The target platform type is not supported for automated discovery.
- ◆ The Credentials resource is not provided.
- ◆ The Credentials resource has an invalid value for the user name and password.

- ◆ The platform is not running at the time of discovery.
- ◆ Network connectivity fails between the PTM Server and the Migrate Connector, or between the Migrate Connector and the target platform.

After you resolve Migrate Connector, network, or credentials issues, you can retry discovery for supported platforms.

## 24.2 Viewing Platforms

You can view the platform information about the target platforms.

- 1 In the Web Interface, select **Resources** in the toolbar, then select the **Platforms** tab.

You can also view platforms for a single project in the **Associations** area of the Edit Project dialog. Select **Planning > Projects**, double-click the project, then under **Associations**, select the **Platforms** tab.

- 2 Select a Platform, then click **View** (or double-click the resource) to view the settings for a resource.

### Platform Type: VMware vCenter Cluster

#### Platform Properties

- ◆ [Status](#)
- ◆ [Name](#)
- ◆ [Organization](#)
- ◆ [Project](#)
- ◆ [Description](#)
- ◆ [Platform Type: VMware vCenter Server](#)
- ◆ [Credential](#)
- ◆ [IP or FQDN](#)
- ◆ [Site](#)
- ◆ [Migrate Agent](#)

#### Platform Associations

- ◆ [Clusters](#)
- ◆ [Hosts](#)
- ◆ [Networks](#)
- ◆ [Datastores](#)
- ◆ [Resource Pools](#)
- ◆ [Workloads](#)

### Platform Type: Microsoft Azure

#### Platform Properties

- ◆ [Status](#)
- ◆ [Name](#)
- ◆ [Organization](#)

- ◆ Project
- ◆ Description
- ◆ Platform Type: Microsoft Azure
- ◆ Cloud Instance
- ◆ Credential
- ◆ PS PRE Image
- ◆ Migrate Agent

**Platform Associations**

- ◆ Locations
- ◆ Networks (Networks and Subnets)
- ◆ Storage Accounts
- ◆ Resource Groups
- ◆ Availability Sets
- ◆ Workloads

**Platform Type: Amazon Web Services**

**Platform Properties**

- ◆ Status
- ◆ Name
- ◆ Organization
- ◆ Project
- ◆ Description
- ◆ Platform Type: Amazon Web Services
- ◆ Cloud Instance
- ◆ Credential
- ◆ Migrate Agent

**Platform Associations**

- ◆ Regions
- ◆ Virtual Private Clouds (VPCs and Subnets)
- ◆ Datastores
- ◆ Security Groups
- ◆ Placement Groups
- ◆ Key Pairs
- ◆ Encryption Keys
- ◆ IAM Roles
- ◆ Workloads

**3** (Optional) Use the filter to view resources for a target of interest.

**4** (Optional) Use the Search field to show only the platforms of interest.

Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.

- 5 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 24.2.1 Viewing vCenter Server Platforms

You can view the platform information about the target platforms.

- 1 In the Web Interface, select **Resources** in the toolbar, then select the **Platforms** tab.

You can also view platforms for a single project in the **Associations** area of the Edit Project dialog. Select **Planning > Projects**, double-click the project, then under **Associations**, select the **Platforms** tab.

- 2 Select a Platform, then click **View** (or double-click the resource) to view the settings for a resource.

### Platform Type: VMware vCenter Server

#### Platform Properties

- ◆ [Status](#)
- ◆ [Name](#)
- ◆ [Organization](#)
- ◆ [Project](#)
- ◆ [Description](#)
- ◆ [Platform Type: VMware vCenter Server](#)
- ◆ [Credential](#)
- ◆ [IP or FQDN](#)
- ◆ [Site](#)
- ◆ [Migrate Agent](#)

#### Platform Associations

- ◆ [Clusters](#)
- ◆ [Hosts](#)
- ◆ [Networks](#)
- ◆ [Datastores](#)
- ◆ [Resource Pools](#)
- ◆ [Workloads](#)

- 3 (Optional) Use the Cluster filter to view resources for a single cluster.
- 4 (Optional) Use the Search field to show only the platforms of interest.

Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.

- 5 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 24.2.2 Viewing Azure Platforms

You can view the platform information about the target platforms.

- 1 In the Web Interface, select **Resources** in the toolbar, then select the **Platforms** tab.

You can also view platforms for a single project in the **Associations** area of the Edit Project dialog. Select **Planning > Projects**, double-click the project, then under **Associations**, select the **Platforms** tab.

- 2 Select a Platform, then click **View** (or double-click the resource) to view the settings for a resource.

### Platform Type: Microsoft Azure

#### Platform Properties

- ◆ [Status](#)
- ◆ [Name](#)
- ◆ [Organization](#)
- ◆ [Project](#)
- ◆ [Description](#)
- ◆ [Platform Type: Microsoft Azure](#)
- ◆ [Cloud Instance](#)
- ◆ [Credential](#)
- ◆ [PS PRE Image](#)
- ◆ [Migrate Agent](#)

#### Platform Associations

- ◆ [Locations](#)
- ◆ [Networks \(Networks and Subnets\)](#)
- ◆ [Storages Accounts](#)
- ◆ [Resource Groups](#)
- ◆ [Availability Sets](#)
- ◆ [Workloads](#)

- 3 (Optional) Use the Location filter to view resources for a single location.

- 4 (Optional) Use the Search field to show only the platforms of interest.

Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.

- 5 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 24.2.3 Viewing AWS Platforms

You can view the platform information about the target platforms.

- 1 In the Web Interface, select **Resources** in the toolbar, then select the **Platforms** tab.

You can also view platforms for a single project in the **Associations** area of the Edit Project dialog. Select **Planning > Projects**, double-click the project, then under **Associations**, select the **Platforms** tab.

- 2 Select a Platform, then click **View** (or double-click the resource) to view the settings for a resource.

#### **Platform Type: Amazon Web Services**

##### **Platform Properties**

- ◆ [Status](#)
- ◆ [Name](#)
- ◆ [Organization](#)
- ◆ [Project](#)
- ◆ [Description](#)
- ◆ [Platform Type: Amazon Web Services](#)
- ◆ [Cloud Instance](#)
- ◆ [Credential](#)
- ◆ [Migrate Agent](#)

##### **Platform Associations**

- ◆ [Regions](#)
- ◆ [Virtual Private Clouds \(VPCs and Subnets\)](#)
- ◆ [Datastores](#)
- ◆ [Security Groups](#)
- ◆ [Placement Groups](#)
- ◆ [Key Pairs](#)
- ◆ [Encryption Keys](#)
- ◆ [IAM Roles](#)
- ◆ [Workloads](#)

- 3 (Optional) Use the Region filter to view resources for a region.

- 4 (Optional) Use the Search field to show only the resources of interest.

Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.

- 5 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## **24.3 Creating a Platform**

You can use the Platforms page to add target platforms for a project. PTM automatically discovers and adds the resources for the platform.

- 1 In the Web Interface toolbar, select **Platforms**.
- 2 Click **Create** to open the Create Platform dialog.

- 3 Specify the properties for the Platform.  
See [Section 24.1.1, “Platform Properties,” on page 208.](#)
- 4 If necessary, you can create a new credential to use for the target platform.
  - 4a On the Credential drop-down list, click **Create**.
  - 4b Specify the authentication information for the Credential Type, based on the specified Platform Type.
  - 4c Click **Save** to create the Credential resource and add it in the Create Platform dialog.
- 5 Click **Save** to create the Platform.

After a successful platform discovery, the Associations panel shows information about discovered resources and assigned workloads.

See “Associations” in [Section 24.1.1, “Platform Properties,” on page 208.](#)
- 6 (Optional) Visit the resource tabs to visually verify information about the newly discovered resources for the platform.
- 7 Click **Close** to exit the dialog.

## 24.4 Retrying Platform Discovery

You might want to retry discovery for a platform if the initial discovery fails or if you modify the platform resources.

### To retry discovery for one or more hosts:

- 1 In the Web Interface, select **Resources** in the toolbar, then select the **Platforms** tab.
- 2 Use the Advanced Search to select one or more platforms where the initial discovery failed. In the **Sub Status** list, select **Target platform discovery failed**.
- 3 Click in the Platforms list to exit the Advanced Search.
- 4 For each platform, pause over the **Target platform discovery failed** status to view details about the reason the discovery failed.
- 5 Select one or multiple platforms in the refined list.
- 6 In the actions above the list, click **Retry** to initiate discovery for each of the selected platforms.

### To retry discovery for a single platform:

- 1 In the Web Interface, select **Resources** in the toolbar, then select the **Platforms** tab.
- 2 Use the Filter and Advanced Search to locate and select the platform, then click **Edit**.
- 3 Pause over **Retry** in the header area for information about why the initial discovery failed.
- 4 Click **Retry** to initiate discovery.

## 24.5 Rediscovering Platforms

You might want to rediscover a platform if you modify the platform, modify the network, add or remove datastores, or add or remove resource pools. Rediscovery automatically adds any new Host, Network, Datastore, and Resource Pool resources; however, it does not remove the old resources.

**To rediscover one or more platforms:**

- 1 In the Web Interface, select to **Resources > Platforms**.
- 2 Select one or multiple platforms in the Platforms list.
- 3 In the actions above the list, click **Rediscover** to initiate rediscovery for each of the selected platforms.

**To rediscover a single platform:**

- 1 In the Web Interface, select to **Resources > Platforms**.
- 2 In the Platforms lists, select the platform, then click **Edit**.
- 3 In the header area, note the Sub Status **Discovered**.
- 4 Click **Rediscover** to initiate rediscovery.

## 24.6 Editing Platforms

You can use the Platforms page to edit a Platform for the target transformation environment of a project.

- 1 In the Web Interface toolbar, select **Resources**.
- 2 Select the **Platforms** tab, then click **Target**.
- 3 In the **Platforms** list, select the platform, then click **Edit** (or double-click the platform) to open the Edit Platform dialog.
- 4 Modify the settings for the platform.
- 5 Click **Rediscover** to discover the latest resources for the platform.
- 6 Click **Save** to update the Platform.
- 7 Click **Close** to exit the dialog.

## 24.7 Associating Platforms and Target Workloads

After you discover resources for a target platform in a project, you can associate platforms with workloads.

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 2 Select the workload that will be transformed to a virtual workload, then click **Edit**. You can alternatively double-click the workload of interest.



- 3 Verify that the transformation target workload is a virtual machine.
  - 3a On the Workload dialog in the Transformation Plan panel, click **Edit**.
  - 3b In the Transformation Method list, select the appropriate method.
  - 3c Click **Save**, and then click **Close**.
- 4 On the Workload dialog in the **Location** panel, click **Edit**.
- 5 From the **Platform** list, select the Platform that you want to assign to the target workload.
- 6 (Optional) Modify other Location information as appropriate.
- 7 Click **Save**, and then click **Close**.
- 8 Click **Close** to exit the Workload dialog.

## 24.8 Deleting a Platform

You can use the Platforms page to delete a Platform for target transformation environment of a project. The deleted resource is automatically removed from each of its assigned workloads.

---

**NOTE:** If you delete a resource, it automatically removes the associations for the resource, including those assigned to workloads that are in progress and completed. If the same associations apply, consider whether it is more appropriate to edit the resource name and settings.

---

- 1 In the Web Interface toolbar, select **Resources**.
- 2 Select the **Platforms** tab.
- 3 Delete a target Platform:
  - 3a On the **Platforms** tab, click **Target** to view the list of Platforms.
  - 3b Select the appropriate platform, click **Delete**, then click **Yes** to confirm the deletion.

## 24.9 Deleting Workload Associations for a Platform

PlateSpin Transformation Manager automatically displays a list of workloads associated with a Platform. It also displays the workloads associated on the dialogs for each of the platform's associated resources. You cannot delete a workload association by using the Workloads tab on a resource dialog.

To disassociate a workload from the Platform and its child resources, you can modify the Target Platform setting on the workload's Workload dialog, or use Bulk Edit to modify the Platform setting for multiple workloads.



# VII VMware Platform Resources

For each target platform, PlateSpin Transformation Manager discovers resources available for the platform, such as networks and storage.

- ◆ [Chapter 25, “VMware vCenter Clusters,” on page 229](#)
- ◆ [Chapter 26, “VMware vCenter Cluster Hosts,” on page 233](#)
- ◆ [Chapter 27, “VMware Network Resources,” on page 237](#)
- ◆ [Chapter 28, “Datastores,” on page 243](#)
- ◆ [Chapter 29, “VMware Resource Pools,” on page 249](#)



# 25 VMware vCenter Clusters

Platform resources represent the VMware vCenter virtualization environment for the workload VMs. Information for a VMware vCenter Cluster platform is compiled through discovery. You can include or exclude each discovered Cluster resource for the Platform. Excluding a cluster automatically excludes its member Host resources.

- ♦ [Section 25.1, “About VMware Clusters,” on page 229](#)
- ♦ [Section 25.2, “Associating VMware Clusters with Target Workloads,” on page 230](#)
- ♦ [Section 25.3, “Creating a VMware Cluster,” on page 231](#)
- ♦ [Section 25.4, “Viewing VMware vCenter Clusters,” on page 231](#)
- ♦ [Section 25.5, “Excluding or Including a VMware Cluster Resource,” on page 231](#)
- ♦ [Section 25.6, “Editing a VMware Cluster Description,” on page 232](#)
- ♦ [Section 25.7, “Deleting a VMware Cluster,” on page 232](#)

## 25.1 About VMware Clusters

The VMware Platform resource enables you to track the following information for a server that hosts the hypervisor for multiple virtual workloads:

### **Name**

Specify a name for the host that is unique to your transformation project. The name must begin with a letter or number. It can contain only letters, numbers, and the following special characters: space, hyphen, underscore, apostrophe, percent, ampersand, comma, and period.

### **Description**

(Optional) Specify a brief description of the host. This text appears by default in the Hosts list.

### **Platform**

The name of the parent platform.

### **Hosts**

The number of member hosts that are active in the VMware cluster.

### **Processors**

The number of processors available across member hosts.

### **Total Memory**

Total amount of memory available to the cluster.

### **Datstores**

Number of shared datstores available to the cluster.

**Total Storage**

Amount of shared storage available to the cluster.

**Automation Level**

An indication that resources are managed through the parent vCenter Server.

## 25.2 Associating VMware Clusters with Target Workloads

After you discover target VMware vCenter Server platforms for a project, you can associate its VMware clusters with workloads.

**To associate a workload with a VMware vCenter Server platform and cluster:**

- 1 In the Workload dialog, select the workload that will be transformed to a virtual workload, then click **Edit**. You can alternatively double-click the workload of interest.
- 2 On the Workload dialog in the **Location** panel, click **Edit**.
- 3 From the **Platform** list, select the VMware vCenter Server Platform that you want to assign to the target workload.
- 4 From the **Cluster** list, select the cluster to use for the target workload.
- 5 (Optional) Modify other Location information as appropriate.
- 6 Click **Save**, and then click **Close**.
- 7 Click **Close** to exit the Workload dialog.

For enhanced tracking, PTM automatically matches the platform to the target platforms for workloads in Manual (tracking) mode. You can view a list of these workloads in the Edit Platform dialog. You can also view a list of workloads associated with each Cluster resource.

**To view workloads in Manual (tracking) mode associated with the VMware vCenter Server platform:**

- 1 In the Web Interface toolbar, select **Platforms**, select the VMware vCenter Server platform, then click **Edit**.
- 2 On the Edit Platform dialog under Associations, select the Workloads tab.
- 3 View the workloads that are currently being tracked for this platform.

**To view workloads in Manual (tracking) mode associated with a VMware vCenter Cluster resource:**

- 1 In the Web Interface toolbar, select **Platforms**, select the VMware vCenter Server platform, then click **Edit**.
- 2 On the Edit Platform dialog under Associations, select the Clusters tab, then double-click the Cluster resource.
- 3 In the Edit Cluster dialog under Associations, select the Workloads tab.
- 4 View the workloads that are currently being tracked for this Cluster resource.

## 25.3 Creating a VMware Cluster

PlateSpin Transformation Manager discovers the VMware clusters and their member hosts as associated resources of a VMware vCenter Platform. You cannot create them from within PTM. If you modify clusters or their member hosts for vCenter platforms in your production environment, you can rediscover the platform to update its associated resources.

## 25.4 Viewing VMware vCenter Clusters

You can view the information about target VMware vCenter clusters and their member nodes.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the VMware vCenter Server platform, then click **Edit**.
- 3 Under Associations, select the **Clusters** tab to view the list of clusters.
- 4 Under Associations, select the **Hosts** tab to view the list of member nodes for clusters.
- 5 Select a resource, then click **View** (or double-click the resource) to view the following settings for the resource:
  - ◆ Name
  - ◆ Platform
  - ◆ Description
  - ◆ Associations: Workloads
- 6 (Optional) Filter entries in the Hosts list using the Search field to show only the hosts of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 7 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 25.5 Excluding or Including a VMware Cluster Resource

Discovered cluster resources for a target VMware vCenter Server are automatically included in the list of resources available for migration. You can use the Exclude action on the Clusters tab in the Platform dialog to hide specified clusters and their member hosts in migration configuration menus. The excluded resource and its child resources are dimmed in the Platform Associations list. Excluded resources do not appear in other dialogs for planning.

---

**NOTE:** You should set up exclusions before users begin configuring migrations to the target platform. Transformation Manager automatically removes previously configured associations for the excluded resource, including those assigned to workloads that are in progress and completed.

---

**To exclude a Cluster or Host resource for a target VMware platform:**

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Clusters tab.
- 3 Select the appropriate cluster, click **Exclude**.

- 4 If workloads are associated with the cluster, you are prompted to confirm the exclusion. Click **Yes** to continue, or click **No** to cancel.

This action also excludes the member hosts of the cluster.

You can use Include to enable an excluded VMware cluster. Including the previously excluded resource does not reinstate any prior associations it had before you excluded it.

**To include an excluded Cluster resource for a target VMware platform:**

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Clusters tab.
- 3 Select the excluded cluster, then click **Include**.

This action also includes the member hosts of the cluster.

## 25.6 Editing a VMware Cluster Description

You can use the Edit Cluster dialog to edit the description for the target cluster.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the Clusters tab, then click **Edit** (or double-click the cluster) to open the Edit Cluster dialog.
- 4 Modify the **Description** for the Cluster resource.
- 5 Click **Save** to update the Cluster resource.
- 6 Click **Close** to exit the dialog.

## 25.7 Deleting a VMware Cluster

PlateSpin Transformation Manager discovers VMware Clusters and their member hosts as associated resources of a VMware vCenter Server Platform. You cannot delete them from within PTM. However, you can use the Exclude action to make the resources unavailable for migration or enhanced tracking. Excluded resources do not appear in other dialogs for planning.

If you modify clusters or hosts for vCenter platforms in your production environment, you can rediscover the platform to update its associated resources.



# 26 VMware vCenter Cluster Hosts

Platform resources represent the VMware vCenter virtualization environment for the workload VMs. Cluster hosts are discovered as members of VMware clusters. Host information for a VMware vCenter Cluster platform is compiled through discovery. You can include or exclude each discovered Host for the Platform.

- ♦ [Section 26.1, “About VMware Cluster Hosts,” on page 233](#)
- ♦ [Section 26.2, “Creating a VMware Cluster Host,” on page 234](#)
- ♦ [Section 26.3, “Viewing VMware vCenter Cluster Hosts,” on page 234](#)
- ♦ [Section 26.4, “Editing Target Cluster Host Description,” on page 234](#)
- ♦ [Section 26.5, “Excluding or Including a VMware Host Resource,” on page 235](#)
- ♦ [Section 26.6, “Deleting a VMware Cluster Host,” on page 235](#)

## 26.1 About VMware Cluster Hosts

The VMware Platform resource enables you to track the following information for a server that hosts the hypervisor for multiple virtual workloads:

### **Name**

Specify a name for the host that is unique to your transformation project. The name must begin with a letter or number. It can contain only letters, numbers, and the following special characters: space, hyphen, underscore, apostrophe, percent, ampersand, comma, and period.

### **Description**

(Optional) Specify a brief description of the host. This text appears by default in the Hosts list.

### **Platform**

The name of the parent platform.

### **Cluster**

The name of the parent cluster for the host.

### **Memory**

Amount of memory on the cluster host.

### **Cores**

Number of cores on the cluster host.

### **NICs**

Number of NICs on the cluster host.

### **vMotion**

An indication of whether the host participates in vMotion management in VMware.

## 26.2 Creating a VMware Cluster Host

PlateSpin Transformation Manager discovers the member hosts in VMware clusters as associated resources of a VMware vCenter Platform. You cannot create them from within PTM. If you modify hosts for vCenter platforms in your production environment, you can rediscover the platform to update its associated resources.

## 26.3 Viewing VMware vCenter Cluster Hosts

You can view the information about target VMware vCenter clusters and their member nodes.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the VMware vCenter Server platform, then click **Edit**.
- 3 Under Associations, select the **Hosts** tab to view the list of member nodes for clusters managed by the vCenter Server platform.
- 4 Select a Cluster of interest, then select the Host resource and click **View** (or double-click the resource) to view the following settings for the resource:
  - ◆ Name
  - ◆ Platform
  - ◆ Description
  - ◆ Associations: Workloads
- 5 (Optional) Filter entries in the Hosts list using the Search field to show only the hosts of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 6 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 26.4 Editing Target Cluster Host Description

You can use the Hosts page to edit the description for the target cluster host.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the Hosts tab, then click **Edit** (or double-click the cluster host) to open the Edit Cluster Host dialog.
- 4 Modify the **Description** for the Cluster Host resource.
- 5 Click **Save** to update the Cluster Host resource.
- 6 Click **Close** to exit the dialog.

## 26.5 Excluding or Including a VMware Host Resource

Discovered host resources for a target VMware vCenter Server are available in the list of resources available for migration. You can use the Exclude action on the Hosts tab in the Platform dialog to hide specified hosts in migration configuration menus. The excluded resource appears dimmed in the Platform Associations list. Excluded resources do not appear in other dialogs for planning.

---

**NOTE:** You should set up exclusions before users begin configuring migrations to the target platform. Transformation Manager automatically removes previously configured associations for the excluded resource, including those assigned to workloads that are in progress and completed.

---

### To exclude an individual Host resource for a target VMware platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Hosts tab.
- 3 Select the appropriate host, click **Exclude**, then click **Yes** to confirm the exclusion.

You can use Include to enable an excluded host. Including the previously excluded resource does not reinstate any prior associations it had before you excluded it.

### To include an individual excluded Host resource for a target VMware platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Hosts tab.
- 3 Select the excluded host, then click **Include**.

## 26.6 Deleting a VMware Cluster Host

PlateSpin Transformation Manager discovers the member hosts in VMware clusters as associated resources of a VMware vCenter Platform. You cannot delete them from within PTM. However, you can use the Exclude action to make the resources unavailable for migrations. Excluded resources do not appear in other dialogs for planning.

If you modify hosts for vCenter platforms in your production environment, you can rediscover the platform to update its associated resources.



# 27 VMware Network Resources

Network resources represent networks on the target platform that are available for planning workload transformations. Network information for a platform is compiled through discovery. You can include or exclude each discovered Network resource for the Platform resource.

- ♦ [Section 27.1, “About Network Resources,” on page 237](#)
- ♦ [Section 27.2, “Viewing Networks,” on page 239](#)
- ♦ [Section 27.3, “Excluding or Including a Network Resource,” on page 240](#)
- ♦ [Section 27.4, “Associating VMware Networks with Target Workloads,” on page 240](#)
- ♦ [Section 27.5, “Viewing Workloads Associated With a VMware Network,” on page 241](#)
- ♦ [Section 27.6, “Editing a VMware Network Description,” on page 242](#)
- ♦ [Section 27.7, “Deleting a VMware Network,” on page 242](#)

## 27.1 About Network Resources

PlateSpin Transformation Manager discovers available networks for the target platform. It provides the following information for each network:

### Edit Network Dialog

The Edit Network dialog displays the following information for a specified network:

#### Platform

The parent target platform for the network.

#### Name

The name of the network in the target platform environment.

#### Description

(Optional) Specify a brief description of the network. This text appears by default in the Networks list.

#### Associations: Workloads

A list of the workloads that have been configured to use the VPC in Manual (tracking) mode.

### VMware Platforms List

For VMware platforms, the following network information is available:

#### Name

The name of the network in the target platform environment.

#### Cluster

(VMware) The name of the parent cluster where the network is available.

#### Hosts

(VMware) The name of the member hosts in the cluster that have access to the network.

## VMs

(VMware) The number of VMs in the cluster that use the network.

## Azure Platforms List

For Azure Cloud platforms, the following information is available for each virtual network:

### Name

The name of the network in the target platform environment.

### Location

The parent location for the network in the Azure Cloud for the target platform. For example: Central US, West US, or North Europe.

### Address Space

The available IPv4 address space for the network, expressed in CIDR notation.

### Subnets

The subnets available in the network. Select Subnets, then choose the virtual network to view a list of its member subnets and information about them.

## AWS Platforms List

For AWS platforms, the following network information is available for AWS Virtual Private Clouds.

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**NOTE:** PTM supports AWS platforms for external migrations for workloads in Manual (tracking) mode. It does not support automated migrations to AWS platforms.

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### Name

The name of the network in the target platform environment.

### Region

The parent region for the network in the AWS Cloud for the target platform. For example: Central US, West US, or North Europe.

### Address Space

The available IPv4 address space for the network, expressed in CIDR notation.

### Tenancy

The available IPv4 address space for the network, expressed in CIDR notation.

Tenancy Indicates the type of hardware to use for the target VMs:

- ◆ Shared hardware (default)
- ◆ Dedicated hardware
- ◆ Dedicated host (a specific host or auto-placement)

### Subnets

The subnets available in the network. Select Subnets, then choose the virtual network to view a list of its member subnets and information about them.

## 27.2 Viewing Networks

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the **Networks** tab, then select **Virtual Networks**.
- 4 On the **Networks** tab, the list of networks is limited to those associated with the selected platform.

### Networks List for Azure Platforms

- ◆ Name - network name
- ◆ Location - Azure location where the Azure platform resides, such as West US
- ◆ Address space - IPv4 address space allocated to the network in CIDR notation, such as 10.0.0.0/16.

### Networks List for VMware Platforms

- ◆ Name - network name
- ◆ Cluster - name of the VMware cluster that hosts the platform
- ◆ Hosts - list of hosts that use the network
- ◆ VMs - number of VMs on the host

### Virtual Private Clouds List for AWS Platforms

- ◆ Name - network name
- ◆ Region - AWS region where the AWS platform resides, such as West US
- ◆ Address space - IPv4 address space allocated to the network in CIDR notation, such as 10.0.0.0/16.
- ◆ Tenancy - Indicates the type of hardware to use for the target VMs:
  - ◆ Shared hardware (default)
  - ◆ Dedicated hardware
  - ◆ Dedicated host (a specific host or auto-placement)

- 5 Filter the list to view the networks for a particular location:
  - ◆ (VMware) Select a Cluster of interest to filter the list to Networks for the specified cluster.
  - ◆ (Azure) Select a Location of interest to filter the list to Networks for the specified location.
  - ◆ (AWS) Select a Region of interest to filter the list to Networks for the specified region.
- 6 (Cloud) Filter the list to view the Subnets:
  - ◆ (Azure) Select the Virtual Network of interest.
  - ◆ (AWS) Select the VPC of interest.
- 7 Select a Network resource, then click **View** (or double-click the resource) to view the following settings for the resource:
  - ◆ Name
  - ◆ Platform
  - ◆ Description (can be modified)
  - ◆ Associations: Workloads

- 8 (Cloud) Select a Subnet resource, then click **View** (or double-click the resource) to view the following settings for the resource:
  - ◆ Name
  - ◆ Platform
  - ◆ Description (can be modified)
  - ◆ Associations: Workloads
- 9 (Optional) Select a Network resource, then click **Exclude** to make the resource unavailable for target VMs you allocate to the platform.
- 10 (Optional) Filter entries in the Networks list using the **Search** field to show only the networks of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 11 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 27.3 Excluding or Including a Network Resource

Discovered Network resources are automatically included in the list of resources available for a Platform resource. You can use the Networks page to exclude a Network resource for use by migrations to the target platform. The excluded Network resource appears dimmed in the Networks list. Excluded resources do not appear in other dialogs for planning.

---

**NOTE:** Transformation Manager automatically removes its associations, including those assigned to workloads that are in progress and completed.

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### To exclude a Network resource for a target platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the **Networks** tab, then select **Virtual Networks**.
- 3 Select the appropriate network, click **Exclude**, then click **Yes** to confirm the exclusion.

You can use Include to enable an excluded network. Including the Network resource does not reinstate any prior associations the Network had before you excluded it.

### To include an excluded Network resource for a target platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the **Networks** tab.
- 3 Select the excluded network, then click **Include**.

## 27.4 Associating VMware Networks with Target Workloads

After you discover target Network resources for a project, you can associate them with workloads.

### To associate a workload with a network:

- 1 In the Web Interface toolbar, select **Planning**.



- 2 Select the **Workloads** tab.
- 3 Select the workload, then click **Edit**. You can alternatively double-click the workload of interest.
- 4 On the Workload dialog in the **Network Interfaces** panel, click **Edit**.
- 5 From the **Network** list, select the Network resource that you want to assign to the target workload.
- 6 (Optional) Modify other network interface information as appropriate.
- 7 Click **Save**, and then click **Close**.
- 8 Click **Close** to exit the Workload dialog.

For enhanced tracking, PTM automatically matches the platform to the target platforms for workloads in Manual (tracking) mode. You can view a list of these workloads in the Edit Platform dialog. You can also view a list of workloads associated with each Network (or Virtual Private Cloud) resource.

**To view workloads in Manual (tracking) mode associated with the platform:**

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 On the Edit Platform dialog under Associations, select the Workloads tab.
- 3 View the workloads that are currently being tracked for this platform.

**To view workloads in Manual (tracking) mode associated with a Network (or VPC) resource:**

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 On the Edit Platform dialog, under Associations, select the Networks tab (or Virtual Private Clouds tab), click **Virtual Networks**, then double-click the Network (or VPC) resource.
- 3 In the Edit Network (or VPC) dialog under Associations, select the Workloads tab.
- 4 View the workloads that are currently being tracked for this Network (or VPC) resource.

## 27.5 Viewing Workloads Associated With a VMware Network

You can use the VMware Platform dialog to view a list of workloads that are currently associated with a VMware Network resource in their transformation plans.

- 1 In the Web Interface toolbar, select **Platforms**, then select the VMware platform and click **Edit**.
- 2 On the Networks tab, select a Network resource, then click **Edit** (or double-click the resource).
- 3 View the list of target workloads currently using the network for one or more of their NICs.
- 4 (Optional) Filter entries in the Workloads list using the **Search** field to show only the workloads of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 5 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 27.6 Editing a VMware Network Description

You can use the Networks page to edit the description of a Network resource for the target platform.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the **Networks** tab.
- 4 In the **Networks** list, select the network, then click **Edit** (or double-click the network) to open the Edit Network dialog.
- 5 Modify the **Description** for the Network resource.
- 6 Click **Save** to update the Network resource.
- 7 Click **Close** to exit the dialog.

## 27.7 Deleting a VMware Network

PlateSpin Transformation Manager discovers Network resources as associated resources of a VMware vCenter Server Platform resource. You cannot delete them manually. If you modify networks for platforms in your vCenter environment, you can rediscover the platform to update its associated resources.

# 28 Datastores

Datastore resources allow you to track information about the datastores for virtual workloads. In a virtualization environment, the datastore represents a storage location for virtual machine files and virtual disk files.

Datastore information is compiled through discovery. You can include or exclude each discovered storage resource for the Platform resource.

- ◆ [Section 28.1, “About Datastore Resources,” on page 243](#)
- ◆ [Section 28.2, “Creating a Datastore,” on page 245](#)
- ◆ [Section 28.3, “Viewing Datastores,” on page 245](#)
- ◆ [Section 28.4, “Associating VMware Datastores and Target Workloads,” on page 246](#)
- ◆ [Section 28.5, “Setting a Path on the Datastore,” on page 246](#)
- ◆ [Section 28.6, “Viewing Workloads Associated With a Datastore,” on page 247](#)
- ◆ [Section 28.7, “Excluding or Including a Datastore Resource,” on page 247](#)
- ◆ [Section 28.8, “Editing a Datastore Description,” on page 248](#)
- ◆ [Section 28.9, “Deleting a Target Datastore,” on page 248](#)

## 28.1 About Datastore Resources

PlateSpin Transformation Manager discovers available datastore resources for the target platform. It provides the following information for a datastore used by the one or more workloads in your transformation project:

### Edit Datastore Dialog

For a VMware Platform or an AWS Platform, the Edit Datastore dialog displays the following information for a specified storage account:

#### Name

The name of the datastore in the target platform environment.

#### Platform

The parent target platform for the datastore.

#### Description

(Optional) Specify a brief description of the Datastore. This text appears by default in the Datastores list.

#### Associations: Workloads

A list of the workloads that have been configured to use the datastore.

### VMware Platform List

For VMware platforms, the following information is available:

**Name**

The name of the datastore in the target platform environment.

**Cluster**

(VMware) The name of the parent cluster where the datastore is available.

**Hosts**

(VMware) The name of the member hosts in the cluster that have access to the datastore.

**Type**

The type of datastore: VMFS or NFS.

**Capacity**

The maximum storage space for the datastore and the amount of space in use as of the last successful discovery for the target platform.

---

**NOTE:** In the Workload dialog, when you assign datastores to a target workload, PTM displays the capacity and free space for the datastore based on the most recent discovery information. However, the potential usage by the assignment you make is not reserved for the migration against other assignments you might make for the datastore during planning.

---

**VMs**

(VMware) The number of VMs in the cluster that use the datastore.

**Status**

Indicates whether the datastore is online or offline.

**Azure Platforms List**

For Azure Cloud platforms, the following information is available for the Storage Accounts:

**Name**

The name of the datastore in the target platform environment.

**Location**

The parent location for the datastore in the Azure Cloud for the target platform. For example: Central US, West US, or North Europe.

**Replication**

Information about the Azure storage replication service associated with the datastore, such as the following:

- ◆ Locally redundant storage (LRS)
- ◆ Premium locally redundant storage (Premium\_LRS)
- ◆ Geo-redundant storage (GRS)
- ◆ Read-access geo-redundant storage (RA\_GRS)
- ◆ Zone-redundant storage (ZRS)

For information, see [Azure Storage Replication](#) in the Microsoft Azure Documentation.

**Performance**

Indicates the performance characteristics of the Azure datastore.

### Status

Indicates whether the datastore is available as of the last successful discovery for the target platform.

### Encryption

Indicates whether Azure Storage Service encryption for data at rest is enabled for the datastore.

For information, see [Azure Storage Service Encryption for Data at Rest](#) in the Microsoft Azure Documentation.

### AWS Platforms List

For AWS Cloud platforms, the following information is available for the datastore:

#### Name

The name of the datastore in the target platform environment.

#### Region Name

The parent region for the datastore in the AWS Cloud for the target platform.

## 28.2 Creating a Datastore

Datastores are automatically discovered when you discover a target platform. The platform resources are rediscovered every 6 hours or on demand. If you added or modified datastores for the platform, use the Rediscover action to discover the new or modified datastore information and add it to the Associations for the platform.

## 28.3 Viewing Datastores

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select a VMware Cluster platform, then click **Edit** to view its associated Datastore resources.
- 3 On the **Datastores** tab, view the list of datastore resources.
- 4 Select a Datastore resource, then click **View** (or double-click the resource) to view the following settings for the resource:
  - ◆ Name
  - ◆ Platform
  - ◆ Description
  - ◆ Associations: Workloads
- 5 (Optional) Filter entries in the Datastores list using the **Search** field to show only the datastores of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 6 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 28.4 Associating VMware Datastores and Target Workloads

After you discover Datastore resources for a target VMware platform, you can associate them with target workloads. You can use the same datastore or different datastores for the system and data volumes and the VM Config Datastore.

**To set the target VMware Datastore resource for a storage volume:**

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Workloads** tab.
- 3 Select the workload, then click **Edit**. You can alternatively double-click the workload of interest.
- 4 In the Location panel for the Workload dialog, ensure that you have selected a VMware target.
- 5 In the **Storage** panel, click **Edit**.
- 6 On the Volumes tab, select the volume.
- 7 From the **Datastore** list, select the Datastore resource that you want to assign to the target workload.
- 8 (Optional) Modify other disk and volume interface information as appropriate.
- 9 Click **Save**, and then click **Close**.
- 10 Click **Close** to exit the Workload dialog.

**To set the Datastore resource for a virtual workload's VM Config Datastore:**

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Workloads** tab.
- 3 Select the workload, then click **Edit**. You can alternatively double-click the workload of interest.
- 4 On the Workload dialog in the **Location** panel, click **Edit**.
- 5 From the **VM Config Datastore** list, select the Datastore resource that you want to assign to the target workload.
- 6 Click **Save**, and then click **Close**.
- 7 Click **Close** to exit the Workload dialog.

## 28.5 Setting a Path on the Datastore

In the Workload dialog, you can specify a path for storage on a target Datastore resource.

- 1 In the Workloads list, double-click a workload that you are migrating to a target VMware platform to open the Workload dialog.
- 2 In the Storage panel, click **Edit** next to the volume of interest to open the Edit Storage Volumes dialog.
- 3 On the Volumes tab, type the path in the **Path on Datastore** field.
- 4 Click **Save**.
- 5 Click **Close** to exit the dialog.

## 28.6 Viewing Workloads Associated With a Datastore

You can use the Platform dialog to view a list of workloads that are currently associated with a Datastore resource in their transformation plans.

- 1 In the Web Interface toolbar, select **Platforms**, then select the platform and click **Edit**.
- 2 On the Datastores tab, select a Datastore resource, then click **Edit** (or double-click the resource).
- 3 View the list of target workloads currently using the datastore for one or more of their volumes.
- 4 (Optional) Filter entries in the Workloads list using the **Search** field to show only the workloads of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 5 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 28.7 Excluding or Including a Datastore Resource

Discovered Datastore resources are automatically included in the list of resources available for a Platform resource.

You can use the Datastores page to exclude a Datastore resource for use by migrations to the target platform. The excluded Datastore resource appears dimmed in the Datastores list. Excluded resources do not appear in other dialogs for planning.

---

**NOTE:** When you exclude a Datastore resource, PTM automatically removes its associations, including those assigned to workloads that are in progress and completed.

---

### To exclude a Datastore resource for a target platform:

- 1 In the Web Interface toolbar, select **Platforms**.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the **Datastores** tab.
- 4 Select the appropriate datastore, click **Exclude**, then click **Yes** to confirm the exclusion.

You can use Include to enable an excluded Datastore resource.

---

**NOTE:** Including the Datastore resource does not reinstate any prior associations the Datastore had before you excluded it.

---

### To include an excluded Datastore resource for a target platform:

- 1 In the Web Interface toolbar, select **Platforms**.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the **Datastores** tab.
- 4 Select the excluded datastore, then click **Include**.

## 28.8 Editing a Datastore Description

You can use the Datastores page to add a description for the Datastore resource for the target platform.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the target platform, then select the **Datastores** tab under Associations.
- 3 In the **Datastores** list, select the resource, then click **Edit** (or double-click the datastore) to open the Edit Datastore dialog.
- 4 Modify the **Description** for the resource.
- 5 Click **Save** to update the Datastore resource.
- 6 Click **Close** to exit the dialog.

## 28.9 Deleting a Target Datastore

PlateSpin Transformation Manager discovers Datastore resources as associated resources of a Platform resource. You cannot delete them manually. If you modify datastores for platforms in your target environment, you can rediscover the platform to update its associated resources.



# 29 VMware Resource Pools

Resource Pool resources represent the resource pools that are used by VMs on a target VMware Cluster platform. Resource Pool information for a platform is compiled through discovery. You can include or exclude each discovered Resource Pool resource for the Platform resource.

- ♦ [Section 29.1, “About Resource Pool Resources,” on page 249](#)
- ♦ [Section 29.2, “Viewing Resource Pools,” on page 250](#)
- ♦ [Section 29.3, “Excluding or Including a Resource Pool Resource,” on page 250](#)
- ♦ [Section 29.4, “Editing a Resource Pool Description,” on page 251](#)
- ♦ [Section 29.5, “Associating Resource Pools with Workloads,” on page 251](#)
- ♦ [Section 29.6, “Deleting a Resource Pool,” on page 251](#)

## 29.1 About Resource Pool Resources

PlateSpin Transformation Manager discovers available resource pools for the target VMware platform. It provides the following information for each resource pool:

### **Platform**

The parent target platform for the resource pool.

### **Name**

The name of the resource pool in the target VMware platform environment.

### **Description**

(Optional) Specify a brief description of the resource pool. This text appears by default in the Resource Pools list.

### **Cluster**

(VMware) The name of the parent cluster where the resource pool is available.

### **CPU Allocation**

Total amount of CPU allocated to the resource pool as of the last successful discovery for the target platform.

### **CPU Usage**

Amount of MHz usage as of the last successful discovery for the target platform.

### **Memory Allocation**

Total amount of memory allocated to the resource pool as of the last successful discovery for the target platform.

### **Guest Memory Usage**

Amount of memory in use by active guest VMs in the cluster as of the last successful discovery for the target platform.

## Host Memory Usage

Amount of memory in use by active member hosts in the cluster as of the last successful discovery for the target platform.

## 29.2 Viewing Resource Pools

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select a VMware Cluster platform, then click **Edit** to view its associated Resource Pool resources.
- 3 On the **Resource Pools** tab, view the list of resources.
- 4 Select a Resource Pool resource, then click **View** (or double-click the resource) to view the following settings for the resource:
  - ◆ Name
  - ◆ Platform
  - ◆ Description
  - ◆ Associations: Workloads
- 5 (Optional) Filter entries in the Resource Pools list using the **Search** field to show only the resource pools of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 6 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 29.3 Excluding or Including a Resource Pool Resource

Discovered Resource Pool resources are automatically included in the list of resources available for a Platform resource. You can use the Resource Pools page to exclude a Resource Pool resource for use by migrations to the target platform. The excluded Resource Pool resource appears dimmed in the Resource Pool list. Excluded resources do not appear in other dialogs for planning.

---

**NOTE:** Transformation Manager automatically removes its associations, including those assigned to workloads that are in progress and completed.

---

### To exclude a Resource Pool resource for a target platform:

- 1 In the Web Interface toolbar, select **Platforms**.
- 2 Select the VMware vCenter platform, then click **Edit**.
- 3 Under Associations, select the **Resource Pool** tab.
- 4 Select the appropriate resource pool, click **Exclude**, then click **Yes** to confirm the exclusion.

You can use **Include** to enable an excluded Resource Pool resource. Including the Resource Pool resource does not reinstate any prior associations the Resource pool had before you excluded it.

### To include an excluded Resource Pool resource for a target platform:

- 1 In the Web Interface toolbar, select **Platforms**.
- 2 Select the VMware vCenter platform, then click **Edit**.

- 3 Under Associations, select the **Resource Pools** tab.
- 4 Select the excluded resource pool, then click **Include**.

## 29.4 Editing a Resource Pool Description

You can use the Resource Pools page to add a description for the Resource Pool resource for the target platform.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the VMware vCenter platform, then select the **Resource Pools** tab under Associations.
- 3 In the **Resource Pools** list, select the resource, then click **Edit** (or double-click the resource pool) to open the Edit Resource Pool dialog.
- 4 Modify the **Description** for the resource.
- 5 Click **Save** to create the Resource Pool resource.
- 6 Click **Close** to exit the dialog.

## 29.5 Associating Resource Pools with Workloads

After you discover Resource Pools resources for a target platform, you can associate them with virtual workloads on VMware virtualization host servers.

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Workloads** tab.
- 3 Select the workload, then click **Edit**. You can alternatively double-click the workload of interest.
- 4 On the Workload dialog in the **Location** panel, click **Edit**.
- 5 From the **Resource Pool** list, select the Resource Pool resource that you want to assign to the target workload.
- 6 (Optional) Modify other Location information as appropriate.
- 7 Click **Save**, and then click **Close**.
- 8 Click **Close** to exit the Workload dialog.

## 29.6 Deleting a Resource Pool

PlateSpin Transformation Manager discovers Resource Pool resources as associated resources of a Platform resource. You cannot delete them manually. If you modify resource pools for platforms in your production environment, you can rediscover the platform to update its associated resources.



# VIII

## Azure Platform Resources

For each Microsoft Azure target platform, PlateSpin Transformation Manager discovers resources available for the platform, such as locations, networks, and storage.

- ◆ [Chapter 30, “Azure Locations,” on page 255](#)
- ◆ [Chapter 31, “Azure Virtual Networks,” on page 259](#)
- ◆ [Chapter 32, “Azure Network Subnets,” on page 265](#)
- ◆ [Chapter 33, “Azure Storage Accounts,” on page 269](#)
- ◆ [Chapter 34, “Azure Resource Groups,” on page 275](#)
- ◆ [Chapter 35, “Azure Availability Sets,” on page 279](#)



# 30 Azure Locations

Location information for an Azure Cloud platform is compiled through discovery. You can include or exclude each discovered Location resource for the Platform resource.

- ♦ [Section 30.1, “About Azure Cloud Locations,” on page 255](#)
- ♦ [Section 30.2, “Associating Azure Locations with Target Workloads,” on page 255](#)
- ♦ [Section 30.3, “Excluding or Including an Azure Location,” on page 256](#)
- ♦ [Section 30.4, “Editing an Azure Location Description,” on page 256](#)
- ♦ [Section 30.5, “Deleting an Azure Location,” on page 257](#)

## 30.1 About Azure Cloud Locations

PlateSpin Transformation Manager discovers available cloud locations for the target Azure Cloud platform. Locations vary according to the Azure Cloud selected for the platform. The permissions of the Azure subscription might also influence the locations available for the platform.

## 30.2 Associating Azure Locations with Target Workloads

After you discover target Azure platforms for a project, you can associate them with workloads.

**To associate a workload with an Azure platform and location:**

- 1 In the Workload dialog, select the workload that will be transformed to a virtual workload, then click **Edit**. You can alternatively double-click the workload of interest.
- 2 On the Workload dialog in the **Location** panel, click **Edit**.
- 3 From the **Platform** list, select the Azure Platform that you want to assign to the target workload.
- 4 From the **Location** list, select the location to use for the target workload.
- 5 (Optional) Modify other Location information as appropriate.
- 6 Click **Save**, and then click **Close**.
- 7 Click **Close** to exit the Workload dialog.

For enhanced tracking, PTM automatically matches the platform to the target platforms for workloads in Manual (tracking) mode. You can view a list of these workloads in the Edit Platform dialog. You can also view a list of workloads associated with each Location resource.

**To view workloads in Manual (tracking) mode associated with the Azure platform:**

- 1 In the Web Interface toolbar, select **Platforms**, select the Azure platform, then click **Edit**.
- 2 On the Edit Platform dialog under Associations, select the Workloads tab.
- 3 View the workloads that are currently being tracked for this platform.

**To view workloads in Manual (tracking) mode associated with an Azure Location resource:**

- 1 In the Web Interface toolbar, select **Platforms**, select the Azure platform, then click **Edit**.
- 2 On the Edit Platform dialog under Associations, select the Locations tab, then double-click the Location resource.
- 3 In the Edit Location dialog under Associations, select the Workloads tab.
- 4 View the workloads that are currently being tracked for this Location resource.

## 30.3 Excluding or Including an Azure Location

Discovered Location resources for a target Azure platform are automatically included in the list of resources available for migrations. You can use the Exclude action on the Locations tab in the Platform dialog to hide specified locations in migration configuration menus. The excluded resource appears dimmed in the Platform Associations list. Excluded resources do not appear in other dialogs for planning.

---

**NOTE:** You should set up exclusions before users begin configuring migrations to the target platform. Transformation Manager automatically removes previously configured associations for the excluded resource, including those assigned to workloads that are in progress and completed.

---

**To exclude a Location resource for a target Azure platform:**

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Locations tab.
- 3 Select the appropriate location, click **Exclude**.
- 4 If workloads are associated with the location, you are prompted to confirm the exclusion. Click **Yes** to continue, or click **No** to cancel.

You can use the Include action to enable an excluded location. Including the previously excluded resource does not reinstate any prior associations it had before you excluded it.

**To include an excluded Location for a target Azure platform:**

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Location tab.
- 3 Select the excluded location, then click **Include**.

## 30.4 Editing an Azure Location Description

You can use the Edit Locations dialog to edit the description of a Location resource for the target Azure platform.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the Locations tab, then click **Edit** (or double-click the location) to open the Edit Location dialog.
- 4 Modify the **Description** for the Location resource.



- 5 Click **Save** to update the Location resource.
- 6 Click **Close** to exit the dialog.

## 30.5 Deleting an Azure Location

PlateSpin Transformation Manager discovers the available locations for your Azure platform as associated resources of the platform. You cannot delete them from within PTM. However, you can use the Exclude action to make the resources unavailable for migration or enhanced tracking. Excluded resources do not appear in other dialogs for planning.

If locations are added or removed from availability for your Azure account, you can rediscover the platform to update its associated resources.



# 31 Azure Virtual Networks

Network resources represent networks on the target platform that are available for planning workload transformations. Network information for a platform is compiled through discovery. You can include or exclude each discovered Network resource for the Platform resource.

- ♦ [Section 31.1, “About Azure Virtual Network Resources,” on page 259](#)
- ♦ [Section 31.2, “Viewing Azure Networks,” on page 260](#)
- ♦ [Section 31.3, “Excluding or Including a Network Resource,” on page 260](#)
- ♦ [Section 31.4, “Associating Azure Virtual Networks with Target Workloads,” on page 261](#)
- ♦ [Section 31.5, “Viewing Workloads Associated With a Virtual Network,” on page 262](#)
- ♦ [Section 31.6, “Editing a Target Network Description,” on page 262](#)
- ♦ [Section 31.7, “Deleting a Network,” on page 263](#)

## 31.1 About Azure Virtual Network Resources

PlateSpin Transformation Manager discovers available Network resources for the target Azure Platform.

### Virtual Networks List

For an Azure Platform, the Networks tab displays the following information for each discovered virtual network:

#### Name

The name of the virtual network in the target platform environment.

#### Location

The parent location for the network in the Azure Cloud for the target platform. For example: Central US, West US, or North Europe.

#### Address Space

The available IPv4 address space for the network, expressed in CIDR notation.

#### Subnets

The subnets available in the network. Select **Subnets**, then choose the virtual network to view a list of its member subnets and information about them.

See [Chapter 32, “Azure Network Subnets,” on page 265](#).

### Edit Network Dialog

For an Azure Platform, the Edit Network dialog displays the following information for a specified virtual network:

#### Platform

The parent target platform for the network.

**Name**

The name of the network in the target platform environment.

**Description**

(Optional) Specify a brief description of the network. This text appears by default in the Virtual Networks list.

**Associations: Workloads**

A list of the workloads that have been configured to use the virtual network.

## 31.2 Viewing Azure Networks

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the **Networks** tab, then select **Virtual Networks**.
- 4 On the **Networks** tab, the list of networks is limited to those associated with the selected platform.

**Networks List for Azure Platforms**

- ◆ Name - virtual network name
  - ◆ Location - Azure location where the Azure platform resides, such as West US
  - ◆ Address space - IPv4 address space allocated to the network in CIDR notation, such as 10.0.0.0/16.
- 5 Select a Network resource, then click **View** (or double-click the resource) to view the following settings for the resource:

**Edit Network dialog for Azure Platforms**

- ◆ Name
  - ◆ Platform
  - ◆ Description (can be modified)
  - ◆ Associations: Workloads
- 6 (Optional) Select a Network resource, then click **Exclude** to make the resource unavailable for target VMs you allocate to the platform.
  - 7 (Optional) Filter entries in the Networks list using the **Search** field to show only the networks of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
  - 8 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 31.3 Excluding or Including a Network Resource

Discovered Virtual Network resources are automatically included in the list of resources available for an Azure Platform resource.

You can use the Networks page to exclude a Virtual Network resource for use by migrations to the target platform. The excluded Network resource appears dimmed in the Virtual Networks list. Excluded resources do not appear in other dialogs for planning.

---

**NOTE:** Transformation Manager automatically removes its associations, including those assigned to workloads that are in progress and completed.

---

**To exclude a Virtual Network resource for an Azure platform:**

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the **Networks** tab, then select **Virtual Networks**.
- 3 Select the appropriate network, click **Exclude**, then click **Yes** to confirm the exclusion.

You can use Include to enable an excluded virtual network.

---

**NOTE:** Including the Virtual Network resource does not reinstate any prior associations the Network had before you excluded it.

---

**To include an excluded Virtual Network resource for an Azure platform:**

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the **Networks** tab.
- 3 Select the excluded network in the Virtual Networks list, then click **Include**.

## 31.4 Associating Azure Virtual Networks with Target Workloads

After you discover target Network resources for a project, you can associate them with workloads.

**To associate a workload with an Azure virtual network:**

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Workloads** tab.
- 3 Select the workload, then click **Edit**. You can alternatively double-click the workload of interest.
- 4 On the Workload dialog in the **Network Interfaces** panel, click **Edit**.
- 5 From the **Network** list, select the Network resource that you want to assign to the target workload.
- 6 (Optional) Modify other network interface information as appropriate.
- 7 Click **Save**, and then click **Close**.
- 8 Click **Close** to exit the Workload dialog.

For enhanced tracking, PTM automatically matches the platform to the target platforms for workloads in Manual (tracking) mode. You can view a list of these workloads in the Edit Platform dialog. You can also view a list of workloads associated with each Network resource.

**To view workloads in Manual (tracking) mode associated with the platform:**

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 On the Edit Platform dialog under Associations, select the Workloads tab.
- 3 View the workloads that are currently being tracked for this platform.

**To view workloads in Manual (tracking) mode associated with a Network resource:**

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 On the Edit Platform dialog, under Associations, select the Networks tab, click **Virtual Networks**, then double-click the Network resource.
- 3 In the Edit Network dialog under Associations, select the Workloads tab.
- 4 View the workloads that are currently being tracked for this Network resource.

## 31.5 Viewing Workloads Associated With a Virtual Network

You can use the Azure Platform dialog to view a list of workloads that are currently associated with a Virtual Network resource in their transformation plans.

- 1 In the Web Interface toolbar, select **Platforms**, then select the Azure platform and click **Edit**.
- 2 On the Networks tab, select a Virtual Network resource, then click **Edit** (or double-click the resource).
- 3 View the list of target workloads currently using the virtual network for one or more of their NICs.
- 4 (Optional) Filter entries in the Workloads list using the **Search** field to show only the workloads of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 5 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 31.6 Editing a Target Network Description

You can use the Networks page to edit the description of a Network resource for the target platform.

---

**NOTE:** AWS networks are referred to as Virtual Private Clouds.

---

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the **Networks** tab, then select **Virtual Networks**.
- 4 In the **Networks** list, select the network, then click **Edit** (or double-click the network) to open the Edit Network dialog.
- 5 Modify the **Description** for the Network resource.
- 6 Click **Save** to update the Network resource.
- 7 Click **Close** to exit the dialog.

## 31.7 Deleting a Network

PlateSpin Transformation Manager discovers Network resources as associated resources of a Platform resource. You cannot delete them manually. If you modify networks for platforms in your production environment, you can rediscover the platform to update its associated resources.





# 32 Azure Network Subnets

Subnet resources represent the subnets for cloud-based virtual networks on a target cloud platform. Use the cloud vendor portal to segment your virtual network into one or multiple subnets and allocate a portion of the virtual network's address space to each of its subnets. Subnet information for a platform is compiled through discovery. You can include or exclude each discovered Subnet resource for the Platform resource.

---

**NOTE:** PlateSpin Transformation Manager does not currently support planning for AWS. For AWS Subnets, you can perform only those management actions appropriate for Manual (tracking) mode.

---

- ◆ [Section 32.1, "About Subnet Resources," on page 265](#)
- ◆ [Section 32.2, "Viewing Subnets," on page 266](#)
- ◆ [Section 32.3, "Excluding or Including a Subnet Resource," on page 266](#)
- ◆ [Section 32.4, "Associating Subnets and Target Workloads," on page 267](#)
- ◆ [Section 32.5, "Viewing Workloads Associated With a Subnet," on page 268](#)
- ◆ [Section 32.6, "Editing a Subnet Description," on page 268](#)
- ◆ [Section 32.7, "Deleting a Subnet," on page 268](#)

## 32.1 About Subnet Resources

PlateSpin Transformation Manager discovers the subnets available for virtual networks in a target cloud platform. It provides the following information for each subnet:

### Platform

The parent target platform of the subnet.

### Name

The name of the subnet in the target platform environment.

### Location

The parent location of the subnet in the Azure Cloud for the target platform. For example: Central US, West US, or North Europe.

### Network

The name and CIDR address space of the parent virtual network that contains the subnet.

### Address Space

The available IPv4 address space for the subnet, expressed in CIDR notation. The second line provides information about the number of addresses available and used as of the last successful discovery of the target platform.

---

**NOTE:** Azure reserves five IP addresses in each subnet for protocol conformance and Azure services. For information, see [Azure Virtual Network FAQs](#) in Microsoft Azure Documentation.

---

#### Description

(Optional) Specify a brief description of the network. This text appears by default in the Subnets list.

## 32.2 Viewing Subnets

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the **Networks** tab (or Virtual Private Clouds tab), then click **Subnets**.
- 4 Select a Subnet resource, then click **View** (or double-click the resource) to view the following settings for the resource:
  - ◆ Name
  - ◆ Platform
  - ◆ Description
  - ◆ Associations: Workloads
- 5 (Optional) Filter entries in the Subnets list using the **Search** field to show only the subnets of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 6 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 32.3 Excluding or Including a Subnet Resource

Discovered Subnet resources are automatically included in the list of resources available for a Platform resource. You can use the Subnet page to exclude a Subnet resource for use by migrations to the target platform. The excluded Subnet resource appears dimmed in the Subnets list. Excluded resources do not appear in other dialogs for planning.

---

**NOTE:** Transformation Manager automatically removes its associations, including those assigned to workloads that are in progress and completed.

---

#### To exclude a Subnet resource for a target platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the **Networks** tab (or Virtual Private Clouds tab), then click **Subnets**.
- 3 Select the appropriate subnet, click **Exclude**.
- 4 If workloads are associated with the subnet, you are prompted to confirm the exclusion. Click **Yes** to continue, or click **No** to cancel.

You can use Include to enable an excluded subnet. Including the Subnet does not reinstate any prior associations the Subnet had before you excluded it.

**To include an excluded Subnet resource for a target platform:**

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the **Networks** tab (or Virtual Private Clouds tab), then click **Subnets**.
- 3 Select the excluded subnet, then click **Include**.

## 32.4 Associating Subnets and Target Workloads

After you discover target Subnet resources for a platform, you can associate them with workloads.

**To associate a workload with a subnet:**

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Workloads** tab.
- 3 Select the workload, then click **Edit**. You can alternatively double-click the workload of interest.
- 4 On the Workload dialog in the **Network Interfaces** panel, click **Edit**.
- 5 From the **Subnets** list, select the Subnet resource that you want to assign to the target workload.
- 6 (Optional) Modify other network interface information as appropriate.
- 7 Click **Save**, and then click **Close**.
- 8 Click **Close** to exit the Workload dialog.

For enhanced tracking, PTM automatically matches the platform to the target platforms for workloads in Manual (tracking) mode. You can view a list of these workloads in the Edit Platform dialog. You can also view a list of workloads associated with each Subnet resource.

**To view workloads in Manual (tracking) mode associated with the platform:**

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 On the Edit Platform dialog under Associations, select the Workloads tab.
- 3 View the workloads that are currently being tracked for this platform.

**To view workloads in Manual (tracking) mode associated with a Subnet resource:**

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 On the Edit Platform dialog, under Associations, select the Networks tab (or Virtual Private Clouds tab), click **Subnets**, then double-click the Subnet resource.
- 3 In the Edit Subnet dialog under Associations, select the Workloads tab.
- 4 View the workloads that are currently being tracked for this Subnet resource.

## 32.5 Viewing Workloads Associated With a Subnet

You can use the Azure Platform dialog to view a list of workloads that are currently associated with a Subnet resource in their transformation plans.

- 1 In the Web Interface toolbar, select **Platforms**, then select the Azure platform and click **Edit**.
- 2 On the Networks tab, select **Subnets**, select a Subnet resource, then click **Edit** (or double-click the resource).
- 3 View the list of target workloads currently using the subnet for one or more of their NICs.
- 4 (Optional) Filter entries in the Workloads list using the **Search** field to show only the workloads of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 5 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 32.6 Editing a Subnet Description

You can use the Subnets page to add a description for the Subnet resource for the target platform.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the target platform, then select the **Networks** tab (or Virtual Private Networks tab) under Associations, then select **Subnets**.
- 3 In the **Subnets** list, select the resource, then click **Edit** (or double-click the network) to open the Edit Subnet dialog.
- 4 Modify the **Description** for the resource.
- 5 Click **Save** to update the Subnet resource.
- 6 Click **Close** to exit the dialog.

## 32.7 Deleting a Subnet

PlateSpin Transformation Manager discovers Subnet resources as associated resources of a Platform resource. You cannot delete them manually. If you modify subnets for platforms in your production environment, you can rediscover the platform to update its associated resources.

# 33 Azure Storage Accounts

Azure Storage Account resources allow you to track information about the storage used for target virtual machines. Storage Accounts are required only for target VMs that do not use the Azure Managed Disk service. For each unmanaged disk, you must specify a storage account and disk path.

Storage account information is compiled through discovery. You can include or exclude each discovered Storage Account resource for the Azure Platform resource.

- ◆ [Section 33.1, “About Storage Account Resources,” on page 269](#)
- ◆ [Section 33.2, “Creating a Storage Account,” on page 270](#)
- ◆ [Section 33.3, “Associating Storage Accounts and Target Workloads,” on page 270](#)
- ◆ [Section 33.4, “Setting a Path on the Storage Account,” on page 271](#)
- ◆ [Section 33.5, “Excluding or Including a Storage Account Resource,” on page 271](#)
- ◆ [Section 33.6, “Viewing Workloads Associated With a Storage Account,” on page 272](#)
- ◆ [Section 33.7, “Editing a Storage Account Description,” on page 272](#)
- ◆ [Section 33.8, “Deleting a Target Storage Account,” on page 273](#)

## 33.1 About Storage Account Resources

PlateSpin Transformation Manager discovers available Storage Account resources for the target Azure Platform.

### Storage Accounts List

For an Azure Platform, the Storage Accounts tab displays the following information for each discovered storage account:

#### Location

The parent location for the storage account in the Azure Cloud for the target platform. For example: Central US, West US, or North Europe.

#### Replication

Information about the Azure storage replication service associated with the storage account, such as the following:

- ◆ Locally redundant storage (LRS)
- ◆ Premium locally redundant storage (Premium\_LRS)
- ◆ Geo-redundant storage (GRS)
- ◆ Read-access geo-redundant storage (RA\_GRS)
- ◆ Zone-redundant storage (ZRS)

For information, see [Azure Storage Replication](#) in the Microsoft Azure Documentation.

#### Performance

Indicates the performance characteristics of the Azure storage account.

### Status

Indicates whether the storage account is available as of the last successful discovery for the target platform.

### Encryption

Indicates whether Azure Storage Service encryption for data at rest is enabled for the storage account.

For information, see [Azure Storage Service Encryption for Data at Rest](#) in the Microsoft Azure Documentation.

### Edit Storage Account Dialog

For an Azure Platform, the Edit Storage Account dialog displays the following information for a specified storage account:

#### Name

The name of the storage account in the target platform environment.

#### Platform

The parent target platform for the storage account.

#### Description

(Optional) Specify a brief description of the Storage Account. This text appears by default in the Storage Accounts list.

#### Associations: Workloads

A list of the workloads that have been configured to use the storage account.

## 33.2 Creating a Storage Account

You create Azure Storage Accounts in the target Azure subscription by using the Azure Portal.

---

**NOTE:** Storage Accounts are required only for target VMs that do not use the Azure Managed Disks service.

---

Storage Accounts are automatically discovered when you discover a target Azure platform. The platform resources are rediscovered every 6 hours or on demand. If you add or modify storage accounts for the platform, use the Rediscover action to discover the new or modified storage account information and add it to the Associations for the platform.

## 33.3 Associating Storage Accounts and Target Workloads

For migrations to Azure, you specify Storage Accounts for target VMs that do not use the Azure Managed Disks service. After you discover Storage Account resources for the target platform, you can associate them with target workloads. You can use the same storage account or different storage account for the system and data volumes.

### To set the Storage Account resource for a volume:

- 1 In the Web Interface toolbar, select **Planning**.
- 2 Select the **Workloads** tab.

- 3 Select the workload, then click **Edit**. You can alternatively double-click the workload of interest.
- 4 Ensure that the workload is configured to use Azure and that the target VM is not configured to use Azure Managed Disks.
- 5 On the Workload dialog in the **Storage** panel, click **Edit**.
- 6 On the Volumes tab, select the volume.
- 7 From the **Storage Accounts** list, select the Storage Account resource that you want to assign to the target workload.
- 8 Specify the Disk Path to use in the storage account for the selected volume.
- 9 (Optional) Modify other disk and volume interface information as appropriate.
- 10 Click **Save**, and then click **Close**.
- 11 Click **Close** to exit the Workload dialog.

## 33.4 Setting a Path on the Storage Account

In the Workload dialog, you can specify a path for storage on a target Storage Account resource.

- 1 In the Workloads list, double-click a workload that you are migrating to a target Azure platform to open the Workload dialog.
- 2 In the Storage panel, click **Edit** next to the volume of interest to open the Edit Storage Volumes dialog.
- 3 On the Volumes tab, type the path in the **Path on Storage Account** field.
- 4 Click **Save**.
- 5 Click **Close** to exit the dialog.

## 33.5 Excluding or Including a Storage Account Resource

Discovered Storage Account resources are automatically included in the list of resources available for an Azure Platform resource.

You can use the Storage Accounts page to exclude a Storage Account resource for use by migrations to the target platform. The excluded Storage Account resource appears dimmed in the Storage Accounts list. Excluded resources do not appear in other dialogs for planning.

---

**NOTE:** When you exclude the resource, PTM automatically removes its associations, including those assigned to workloads that are in progress and completed.

---

**To exclude a Storage Account resource for a target platform:**

- 1 In the Web Interface toolbar, select **Platforms**.
- 2 Select the Azure platform, then click **Edit**.
- 3 Under Associations, select the Storage Accounts tab.
- 4 Select the appropriate storage account, click **Exclude**, then click **Yes** to confirm the exclusion.

You can use Include to enable an excluded Storage Account resource.

---

**NOTE:** Including the Storage Account resource does not reinstate any prior associations the storage account had before you excluded it.

---

**To include an excluded Storage Account resource for a target platform:**

- 1 In the Web Interface toolbar, select **Platforms**.
- 2 Select the Azure platform, then click **Edit**.
- 3 Under Associations, select the **Storage Accounts** tab.
- 4 Select the excluded storage account, then click **Include**.

## 33.6 Viewing Workloads Associated With a Storage Account

You can use the Azure Platform dialog to view a list of workloads that are currently associated with a Storage Account resource in their transformation plans.

---

**NOTE:** Storage accounts are used only by workload migrations to Azure that do not use the Azure Managed Disks service for the target VM.

---

- 1 In the Web Interface toolbar, select **Platforms**, then select the Azure platform and click **Edit**.
- 2 On the Storage Accounts tab, select a Storage Account resource, then click **Edit** (or double-click the resource).
- 3 View the list of target workloads currently using the storage account for one or more of their disks.
- 4 (Optional) Filter entries in the Workloads list using the **Search** field to show only the workloads of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 5 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 33.7 Editing a Storage Account Description

You can use the Storage Account page to add a description for the Storage Account resource for the target Azure platform.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the target platform, then select the **Storage Accounts** tab under **Associations**.
- 3 In the **Storage Accounts** list, select the resource, then click **Edit** (or double-click the storage account) to open the Edit Datastore dialog.
- 4 Modify the **Description** for the resource.
- 5 Click **Save** to update the Storage Account resource.
- 6 Click **Close** to exit the dialog.



## 33.8 Deleting a Target Storage Account

PlateSpin Transformation Manager discovers Azure Storage Account resources as associated resources of an Azure Platform resource. You cannot delete them manually. If you modify or delete a Storage Account for platforms in your Azure environment, you can rediscover the platform to update its associated resources.



# 34 Azure Resource Groups

Azure Resource Group information for a platform is compiled through discovery. Azure Resource Groups provide a way to combine related services into a platform, around which administrators can define a uniform set of usage and security policies. You can include or exclude each discovered Resource Group resource for the Platform resource.

- ◆ [Section 34.1, “About Resource Group Resources,” on page 275](#)
- ◆ [Section 34.2, “Excluding or Including a Resource Group Resource,” on page 276](#)
- ◆ [Section 34.3, “Viewing Workloads Associated With a Resource Group,” on page 276](#)
- ◆ [Section 34.4, “Editing a Resource Group Description,” on page 277](#)
- ◆ [Section 34.5, “Deleting a Resource Group,” on page 277](#)

## 34.1 About Resource Group Resources

PlateSpin Transformation Manager discovers available resource groups for the target Azure Cloud platform. It provides the following information for each resource group:

### Resource Groups List

For an Azure Platform, the Resource Groups tab displays the following information for each discovered resource group:

#### Location

The parent location for the resource group in the Azure Cloud for the target platform. For example: Central US, West US, or North Europe.

#### Deployments

Information about the resources deployed in the Azure resource group.

#### Items

The number of resource items in the resource group.

### Edit Resource Group Dialog

For an Azure Platform, the Edit Resource Group dialog displays the following information for a specified resource group:

#### Platform

The parent target platform for the resource group.

#### Name

The name of the resource group in the target Azure platform environment.

#### Description

(Optional) Specify a brief description of the resource group. This text appears by default in the Resource Groups list.

### Associations: Workloads

A list of the workloads that have been configured to use the resource group.

## 34.2 Excluding or Including a Resource Group Resource

Discovered Resource Group resources are automatically included in the list of resources available for an Azure Platform resource. You can use the Resource Groups page to exclude a Resource Group resource for use by migrations to the target platform. The excluded Resource Group resource appears dimmed in the Resource Groups list. Excluded resources do not appear in other dialogs for planning.

---

**NOTE:** Transformation Manager automatically removes its associations, including those assigned to workloads that are in progress and completed.

---

### To exclude a Resource Group resource for a target platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the **Resource Groups** tab.
- 3 Select the appropriate resource group, click **Exclude**, then click **Yes** to confirm the exclusion.

You can use Include to enable an excluded resource group. Including the Resource Group resource does not reinstate any prior associations the Resource Group had before you excluded it.

### To include an excluded Resource Group resource for a target platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the **Resource Groups** tab.
- 3 Select the excluded resource group, then click **Include**.

## 34.3 Viewing Workloads Associated With a Resource Group

You can use the Azure Platform dialog to view a list of workloads that are currently associated with a Resource Group resource in their transformation plans. Resource Group resources might be used for VMs, disks, or NICs.

- 1 In the Web Interface toolbar, select **Platforms**, then select the Azure platform and click **Edit**.
- 2 On the Resource Groups tab, select a Resource Group resource, then click **Edit** (or double-click the resource).
- 3 View the list of target workloads currently using the Resource Group.
- 4 (Optional) Filter entries in the Workloads list using the **Search** field to show only the workloads of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 5 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 34.4 Editing a Resource Group Description

You can use the Resource Groups page to edit the description of a Resource Group resource for the target Azure platform.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the Resource Groups tab, then click **Edit** (or double-click the resource group) to open the Edit Resource group dialog.
- 4 Modify the **Description** for the Resource Group resource.
- 5 Click **Save** to update the Resource Group resource.
- 6 Click **Close** to exit the dialog.

## 34.5 Deleting a Resource Group

PlateSpin Transformation Manager discovers Resource Group resources as associated resources of an Azure Platform resource. You cannot delete them manually. If you modify resource groups for platforms in your production environment, you can rediscover the platform to update its associated resources.



# 35 Azure Availability Sets

An Azure Availability Set is an Azure service that provides high availability to two or more member VMs by deploying them in different *fault domains* and *update domains*. Fault domains ensure that the VMs run on different host servers, compute racks, storage units, and network switches. Update domains ensure that maintenance outages for host hardware do not occur at the same time.

Azure Availability Set information for a platform is compiled through discovery. You can include or exclude each discovered Availability Set resource for the Platform resource.

- ◆ [Section 35.1, “About Availability Set Resources,” on page 279](#)
- ◆ [Section 35.2, “Viewing Workloads Associated With an Availability Set,” on page 280](#)
- ◆ [Section 35.3, “Excluding or Including an Availability Set Resource,” on page 280](#)
- ◆ [Section 35.4, “Editing an Availability Set Description,” on page 281](#)
- ◆ [Section 35.5, “Deleting an Availability Set,” on page 281](#)

## 35.1 About Availability Set Resources

PlateSpin Transformation Manager discovers Availability Sets in the specified Azure subscription for the target Azure Cloud platform. PTM provides the following information for each Availability Set:

### Availability Sets List

#### Location

The parent location for the availability set in the Azure Cloud for the target platform. For example: Central US, West US, or North Europe.

#### Resource Group

The parent VM resource group that contains the Availability Set resource and its member VMs.

#### Network

The Azure network assigned to the availability set. The same network will be assigned to all VMs that you create in the availability set.

#### # Fault Domains

The number of fault domains defined for the availability set.

#### # Update Domains

The number of update domains defined for the availability set.

#### Managed Disks

This setting indicates whether Azure Managed Disks are required to be used for VMs that are added to the availability set.

#### In Use

This setting indicates whether at least one VM has been added to the availability set.

---

**NOTE:** Azure allocates the availability set to hardware in the target region when you create the first VM. The physical hardware underlying the availability set restricts subsequent VMs to the same network and storage type that are used by the first VM.

---

### Edit Availability Set Dialog

#### Platform

The parent target platform for the availability set.

#### Name

The name of the availability set in the target Azure platform environment.

#### Description

(Optional) Specify a brief description of the resource group. This text appears by default in the second line of the Name field in the Availability Set list.

#### Associations: Workloads

A list of the workloads that have been configured to use the availability set.

## 35.2 Viewing Workloads Associated With an Availability Set

You can use the Azure Platform dialog to view a list of workloads that are currently associated with an Availability Set resource in their transformation plans.

- 1 In the Web Interface toolbar, select **Platforms**, then select the Azure platform and click **Edit**.
- 2 On the Availability Sets tab, select an Availability Set resource, then click **Edit** (or double-click the resource).
- 3 View the list of target workloads currently using the Availability Set.
- 4 (Optional) Filter entries in the Workloads list using the **Search** field to show only the workloads of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 5 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 35.3 Excluding or Including an Availability Set Resource

Discovered Availability Set resources are automatically included in the list of resources available for an Azure Platform resource.

You can use the **Exclude** option on the Availability Sets page to exclude an Availability Set resource for use by migrations to the target platform. The excluded Availability Set resource appears dimmed in the Availability Sets list. Excluded resources do not appear in other dialogs for planning.

---

**NOTE:** Transformation Manager automatically removes its associations, including those assigned to workloads that are in progress and completed.

---

### To exclude an Availability Set resource for a target platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the Azure platform, then click **Edit**.



- 2 Under Associations, select the **Availability Sets** tab.
- 3 Select the appropriate availability set, click **Exclude**, then click **Yes** to confirm the exclusion.

You can use the **Include** option to enable an excluded Availability Set resource. Including the Availability Set resource does not reinstate any prior associations the availability set had before you excluded it.

**To include an excluded Availability Set resource for a target platform:**

- 1 In the Web Interface toolbar, select **Platforms**, select the Azure platform, then click **Edit**.
- 2 Under Associations, select the **Availability Sets** tab.
- 3 Select the excluded availability set, then click **Include**.

## 35.4 Editing an Availability Set Description

You can use the Availability Sets page to edit the description of an Availability Set resource for the target Azure platform.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the Availability Sets tab, select the set of interest, then click **Edit** (or double-click the availability set) to open the Edit Availability Set dialog.
- 4 Modify the **Description** for the Availability Set resource.
- 5 Click **Save** to update the Availability Set resource.
- 6 Click **Close** to exit the dialog.

## 35.5 Deleting an Availability Set

PlateSpin Transformation Manager discovers Availability Set resources as associated resources of an Azure Platform resource. You cannot delete them manually. If you modify availability sets for platforms in your Azure environment, you can rediscover the platform to update its associated resources.



# IX AWS Platform Resources

For each target Amazon Web Services (AWS) platform, PlateSpin Transformation Manager discovers resources available for the platform, such as virtual private network, storage, and security resources.

- ◆ [Chapter 36, “AWS Regions,” on page 285](#)
- ◆ [Chapter 37, “AWS Virtual Private Clouds,” on page 287](#)
- ◆ [Chapter 38, “AWS VPC Subnets,” on page 291](#)
- ◆ [Chapter 39, “AWS Datastores,” on page 295](#)
- ◆ [Chapter 40, “AWS Security Groups,” on page 299](#)
- ◆ [Chapter 41, “AWS Placement Groups,” on page 303](#)
- ◆ [Chapter 42, “AWS Key Pairs,” on page 307](#)
- ◆ [Chapter 43, “AWS Encryption Keys,” on page 309](#)
- ◆ [Chapter 44, “AWS IAM Roles,” on page 311](#)



# 36 AWS Regions

Region information for an Amazon Web Services Cloud platform is compiled through discovery. You can include or exclude each discovered Region resource for the Platform resource.

---

**NOTE:** PTM supports AWS platforms for external migrations for workloads in Manual (tracking) mode. It does not support automated migrations to AWS platforms.

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- ◆ [Section 36.1, “About AWS Regions,” on page 285](#)
- ◆ [Section 36.2, “Associating AWS Regions with Target Workloads,” on page 285](#)
- ◆ [Section 36.3, “Editing an AWS Region Description,” on page 286](#)
- ◆ [Section 36.4, “Deleting an AWS Region,” on page 286](#)

## 36.1 About AWS Regions

PlateSpin Transformation Manager discovers available cloud regions for the target AWS Cloud platform. Regions vary according to the AWS Cloud selected for the platform. The permissions of the AWS subscription might also influence the regions available for the platform.

## 36.2 Associating AWS Regions with Target Workloads

For enhanced tracking, PTM automatically matches the platform to the target platforms for workloads in Manual (tracking) mode. You can view a list of these workloads in the Edit Platform dialog. You can also view a list of workloads associated with each Region resource.

**To view workloads in Manual (tracking) mode associated with the AWS platform:**

- 1 In the Web Interface toolbar, select **Platforms**, select the AWS platform, then click **Edit**.
- 2 On the Edit Platform dialog under Associations, select the Workloads tab.
- 3 View the workloads that are currently being tracked for this platform.

**To view workloads in Manual (tracking) mode associated with an AWS Region resource:**

- 1 In the Web Interface toolbar, select **Platforms**, select the AWS platform, then click **Edit**.
- 2 On the Edit Platform dialog under Associations, select the Regions tab, then double-click the Region resource.
- 3 In the Edit Region dialog under Associations, select the Workloads tab.
- 4 View the workloads that are currently being tracked for this Region resource.

## 36.3 Editing an AWS Region Description

You can use the Edit Region dialog to edit the description of a Region resource for the target AWS platform.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the Regions tab, then click **Edit** (or double-click the region) to open the Edit Region dialog.
- 4 Modify the **Description** for the Region resource.
- 5 Click **Save** to update the Region resource.
- 6 Click **Close** to exit the dialog.

## 36.4 Deleting an AWS Region

PlateSpin Transformation Manager discovers the available regions for your AWS platform as associated resources of the platform. You cannot delete them from within PTM. However, you can use the Exclude action to make the resources unavailable for migration or enhanced tracking. Excluded resources do not appear in other dialogs for planning.

If regions are added or removed from availability for your AWS account, you can rediscover the platform to update its associated resources.

# 37 AWS Virtual Private Clouds

Virtual Private Cloud (VPC) information for an Amazon Web Services Cloud platform is compiled through discovery. You can include or exclude each discovered VPC resource for the Platform resource.

---

**NOTE:** PTM supports AWS platforms for external migrations for workloads in Manual (tracking) mode. It does not support automated migrations to AWS platforms.

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- ◆ [Section 37.1, “About AWS Virtual Private Clouds,” on page 287](#)
- ◆ [Section 37.2, “Viewing AWS VPCs,” on page 288](#)
- ◆ [Section 37.3, “Associating AWS VPCs with Target Workloads,” on page 289](#)
- ◆ [Section 37.4, “Viewing Workloads Associated With a VPC or Subnet,” on page 289](#)
- ◆ [Section 37.5, “Editing an AWS VPC Description,” on page 290](#)
- ◆ [Section 37.6, “Deleting an AWS Virtual Private Cloud,” on page 290](#)

## 37.1 About AWS Virtual Private Clouds

PlateSpin Transformation Manager discovers available virtual private clouds for the target AWS Cloud platform. VPCs vary according to the AWS Cloud selected for the platform. The permissions of the AWS account might also influence the virtual private clouds available for the platform.

### VPCs List

For an AWS Platform, the Virtual Private Cloud tab displays the following information for each discovered VPC:

#### Region

The parent region for the network in the AWS Cloud for the target platform. For example: Central US, West US, or North Europe.

#### Address Space

The available IPv4 address space for the network, expressed in CIDR notation.

#### Tenancy

The available IPv4 address space for the network, expressed in CIDR notation.

Tenancy Indicates the type of hardware to use for the target VMs:

- ◆ Shared hardware (default)
- ◆ Dedicated hardware
- ◆ Dedicated host (a specific host or auto-placement)

#### Subnets

The subnets available in the network. Select Subnets, then choose the VPC to view a list of its member subnets and information about them.

## Edit VPC Dialog

For an AWS Platform, the Edit VPC dialog displays the following information for a specified virtual private cloud:

### Platform

The parent target platform for the VPC.

### Name

The name of the VPC in the target platform environment.

### Description

(Optional) Specify a brief description of the VPC. This text appears by default in the VPCs list.

### Associations: Workloads

A list of the workloads that have been configured to use the VPC in Manual (tracking) mode.

## 37.2 Viewing AWS VPCs

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the **Virtual Private Clouds** tab, then select **VPCs**.
- 4 On the **Virtual Private Clouds** tab, the list of VPCs is limited to those associated with the selected platform.

### Virtual Private Clouds List for AWS Platforms

- ◆ Name - network name
  - ◆ Region - AWS region where the AWS platform resides, such as `West US`
  - ◆ Address space - IPv4 address space allocated to the network in CIDR notation, such as `10.0.0.0/16`.
  - ◆ Tenancy - Indicates the type of hardware to use for the target VMs:
    - ◆ Shared hardware (default)
    - ◆ Dedicated hardware
    - ◆ Dedicated host (a specific host or auto-placement)
- 5 Select a VPC resource, then click **View** (or double-click the resource) to view the following settings for the resource:

### View VPC dialog for AWS Platforms

- ◆ Name
- ◆ Platform
- ◆ Description (can be modified)
- ◆ Associations: Workloads



- 6 (Optional) Filter entries in the VPCs list using the **Search** field to show only the VPCs of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 7 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 37.3 Associating AWS VPCs with Target Workloads

For enhanced tracking, PTM automatically matches the platform to the target platforms for workloads in Manual (tracking) mode. You can view a list of workloads associated with each Virtual Private Cloud resource.

**To view workloads in Manual (tracking) mode associated with an AWS Virtual Private Cloud resource:**

- 1 In the Web Interface toolbar, select **Platforms**, select the AWS platform, then click **Edit**.
- 2 On the Edit Platform dialog under Associations, select the Virtual Private Clouds tab, then double-click the Virtual Private Cloud resource.
- 3 In the Edit Virtual Private Cloud dialog under Associations, select the Workloads tab.
- 4 View the workloads that are currently being tracked for this Virtual Private Cloud resource.

## 37.4 Viewing Workloads Associated With a VPC or Subnet

You can use the AWS Platform dialog to view a list of workloads that are currently associated with a Virtual Private Cloud (VPC) resource or a VPC Subnet in their transformation plans.

- 1 In the Web Interface toolbar, select **Platforms**, then select the AWS platform and click **Edit**.
- 2 On the Virtual Private Clouds tab, select the VPC or VPC Subnet of interest:
  - ♦ Select a VPC resource, then click **Edit** (or double-click the resource).
  - ♦ Select **Subnets** and select a VPC Subnet resource, then click **Edit** (or double-click the resource).
- 3 View the list of target workloads currently using the selected VPC or VPC Subnet for one or more of their NICs.
- 4 (Optional) Filter entries in the Workloads list using the **Search** field to show only the workloads of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 5 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 37.5 Editing an AWS VPC Description

You can use the Edit Virtual Private Cloud dialog to edit the description of a Virtual Private Cloud resource for the target AWS platform.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the Virtual Private Clouds tab, then click **Edit** (or double-click the virtual private cloud) to open the Edit Virtual Private Cloud dialog.
- 4 Modify the **Description** for the Virtual Private Cloud resource.
- 5 Click **Save** to update the Virtual Private Cloud resource.
- 6 Click **Close** to exit the dialog.

## 37.6 Deleting an AWS Virtual Private Cloud

PlateSpin Transformation Manager discovers the available virtual private clouds for your AWS platform as associated resources of the platform. You cannot delete them from within PTM. However, you can use the Exclude action to make the resources unavailable for migration or enhanced tracking. Excluded resources do not appear in other dialogs for planning.

If virtual private clouds are added or removed from availability for your AWS account, you can rediscover the platform to update its associated resources.

# 38 AWS VPC Subnets

For Amazon Web Services platforms, Subnet resources represent the subnets for virtual private clouds on a target AWS platform. Use the cloud vendor portal to segment your virtual network into one or multiple subnets and allocate a portion of the virtual network's address space to each of its subnets. Subnet information for a platform is compiled through discovery.

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**NOTE:** PlateSpin Transformation Manager does not currently support planning for AWS. For AWS Subnets, you can perform only those management actions appropriate for Manual (tracking) mode.

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- ♦ [Section 38.1, "About VPC Subnet Resources," on page 291](#)
- ♦ [Section 38.2, "Viewing VPC Subnets," on page 292](#)
- ♦ [Section 38.3, "Associating VPC Subnets and Target Workloads," on page 292](#)
- ♦ [Section 38.4, "Editing a VPC Subnet Description," on page 292](#)
- ♦ [Section 38.5, "Deleting a VPC Subnet," on page 293](#)

## 38.1 About VPC Subnet Resources

PlateSpin Transformation Manager discovers the subnets available for virtual private clouds in a target cloud platform. It provides the following information for each subnet:

### Platform

The parent target platform of the subnet.

### Name

The name of the subnet in the target platform environment.

### Region

The parent region of the subnet in the AWS Cloud for the target platform. For example: Central US, West US, or North Europe.

### Virtual Private Cloud

The name and CIDR address space of the parent virtual private cloud that contains the subnet.

### Address Space

The available IPv4 address space for the subnet, expressed in CIDR notation. The second line provides information about the number of addresses available and used as of the last successful discovery of the target platform.

### Description

(Optional) Specify a brief description of the network. This text appears by default in the Subnets list.

## 38.2 Viewing VPC Subnets

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the Virtual Private Clouds, then click **Subnets**.
- 4 Select a Subnet resource, then click **View** (or double-click the resource) to view the following settings for the resource:
  - ◆ Name
  - ◆ Platform
  - ◆ Description
  - ◆ Associations: Workloads
- 5 (Optional) Filter entries in the Subnets list using the **Search** field to show only the subnets of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 6 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 38.3 Associating VPC Subnets and Target Workloads

For enhanced tracking, PTM automatically matches the platform to the target platforms for workloads in Manual (tracking) mode. You can view a list of workloads associated with each Subnet resource.

**To view workloads in Manual (tracking) mode associated with a VPC Subnet resource:**

- 1 In the Web Interface toolbar, select **Platforms**, select the AWS platform, then click **Edit**.
- 2 On the Edit Platform dialog, under Associations, select the Virtual Private Clouds tab, click **Subnets**, then double-click the Subnet resource.
- 3 In the Edit Subnet dialog under Associations, select the Workloads tab.
- 4 View the workloads that are currently being tracked for this Subnet resource.

## 38.4 Editing a VPC Subnet Description

You can use the Subnets page to add a description for the Subnet resource for the target platform.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the target platform, then select the **Networks** tab (or Virtual Private Networks tab) under Associations, then select **Subnets**.
- 3 In the **Subnets** list, select the resource, then click **Edit** (or double-click the network) to open the Edit Subnet dialog.
- 4 Modify the **Description** for the resource.
- 5 Click **Save** to update the Subnet resource.
- 6 Click **Close** to exit the dialog.

## 38.5 Deleting a VPC Subnet

PlateSpin Transformation Manager discovers VPC Subnet resources as associated resources of an AWS Platform resource. You cannot delete them manually. If you modify subnets for a virtual private cloud in your AWS environment, you can rediscover the platform to update its associated resources.



# 39 AWS Datastores

Datastore resources allow you to track information about the datastores for virtual workloads. In a virtualization environment, the datastore represents a storage location for virtual machine files and virtual disk files.

Datastore information is compiled through discovery. You can include or exclude each discovered storage resource for the Platform resource.

- ◆ [Section 39.1, “About AWS Datastore Resources,” on page 295](#)
- ◆ [Section 39.2, “Viewing AWS Datastores,” on page 296](#)
- ◆ [Section 39.3, “Creating a Datastore,” on page 296](#)
- ◆ [Section 39.4, “Associating AWS Datastores and Target Workloads,” on page 296](#)
- ◆ [Section 39.5, “Editing an AWS Datastore Description,” on page 297](#)
- ◆ [Section 39.6, “Deleting an AWS Datastore,” on page 297](#)

## 39.1 About AWS Datastore Resources

PlateSpin Transformation Manager discovers available datastore resources for the target platform. It provides the following information for a datastore used by the one or more workloads in your transformation project:

### Edit Datastore Dialog

For an AWS Platform, the Edit Datastore dialog displays the following information for a specified storage account:

#### Name

The name of the datastore in the target platform environment.

#### Platform

The parent target platform for the datastore.

#### Description

(Optional) Specify a brief description of the Datastore. This text appears by default in the Datastores list.

#### Associations: Workloads

A list of the workloads that have been configured to use the datastore.

### AWS Platforms List

For AWS Cloud platforms, the following information is available for the datastore:

#### Name

The name of the datastore in the target platform environment.

#### Region Name

The parent region for the datastore in the AWS Cloud for the target platform.

## 39.2 Viewing AWS Datastores

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select an AWS platform, then click **Edit** to view its associated resources.
- 3 On the **Datastores** tab, view the list of datastore resources.
- 4 Select a Datastore resource, then click **View** (or double-click the resource) to view the following settings for the resource:
  - ◆ Name
  - ◆ Platform
  - ◆ Description
  - ◆ Associations: Workloads
- 5 (Optional) Filter entries in the Datastores list using the **Search** field to show only the datastores of interest. Type a sequence of characters in the **Search** area to initiate filtering. The filter applies as you type. You can filter on information in any one of the columns at a time.
- 6 (Optional) Sort entries by the values in a column. Pause over the column to expose the menu option, click it, then select **Sort Ascending** or **Sort Descending**.

## 39.3 Creating a Datastore

Datastores are automatically discovered when you discover a target AWS platform. The platform resources are rediscovered every 6 hours or on demand. If you added or modified datastores for the platform, use the Rediscover action to discover the new or modified datastore information and add it to the Associations for the platform.

## 39.4 Associating AWS Datastores and Target Workloads

For enhanced tracking, PTM automatically matches the platform to the target platforms for workloads in Manual (tracking) mode. You can view a list of workloads associated with each Subnet resource.

**To view workloads in Manual (tracking) mode associated with a Subnet resource:**

- 1 In the Web Interface toolbar, select **Platforms**, select the AWS platform, then click **Edit**.
- 2 On the Edit Platform dialog, under Associations, select the Virtual Private Clouds tab, click **Subnets**, then double-click the Subnet resource.
- 3 In the Edit Subnet dialog under Associations, select the Workloads tab.
- 4 View the workloads that are currently being tracked for this Subnet resource.



## 39.5 Editing an AWS Datastore Description

You can use the Datastores page to add a description for the Datastore resource for the target platform.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the target platform, then select the **Datastores** tab under Associations.
- 3 In the **Datastores** list, select the resource, then click **Edit** (or double-click the network) to open the Edit Datastore dialog.
- 4 Modify the **Description** for the resource.
- 5 Click **Save** to update the Datastore resource.
- 6 Click **Close** to exit the dialog.

## 39.6 Deleting an AWS Datastore

PlateSpin Transformation Manager discovers Datastore resources as associated resources of a Platform resource. You cannot delete them manually. If you modify datastores for platforms in your production environment, you can rediscover the platform to update its associated resources.



# 40 AWS Security Groups

Security Groups information for an Amazon Web Services Cloud platform is compiled through discovery. You can include or exclude each discovered Security Group resource for the Platform resource.

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**NOTE:** PTM supports AWS platforms for external migrations for workloads in Manual (tracking) mode. It does not support automated migrations to AWS platforms.

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- ♦ [Section 40.1, “About AWS Security Groups,” on page 299](#)
- ♦ [Section 40.2, “Associating AWS Security Groups with Target Workloads,” on page 300](#)
- ♦ [Section 40.3, “Editing an AWS Security Group Description,” on page 301](#)
- ♦ [Section 40.4, “Deleting an AWS Security Group,” on page 301](#)

## 40.1 About AWS Security Groups

PlateSpin Transformation Manager discovers available cloud security groups for the target AWS Cloud platform. The permissions of the AWS subscription might also influence the security groups available for the platform.

### Security Groups List

For an AWS Platform, the Security Groups tab displays the following information for each discovered Security Group resource:

#### Name

The name of the resource in the target environment.

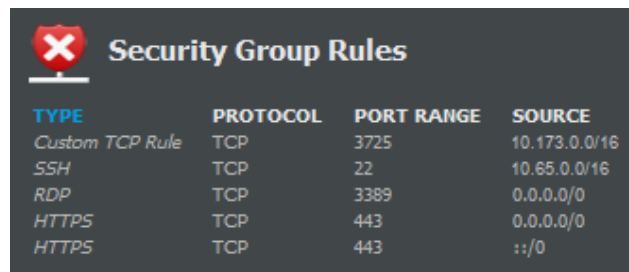
#### Region Name

The AWS Region where the Security Group can be used.

#### Inbound Ports

Pause above the inbound ports to view information about the rules for the port in an infotip window.

*Figure 40-1 Inbound Security Group Rules Example*

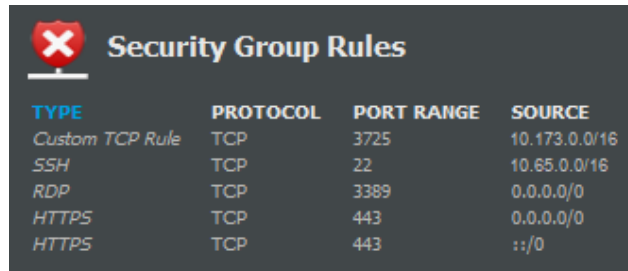


| TYPE            | PROTOCOL | PORT RANGE | SOURCE        |
|-----------------|----------|------------|---------------|
| Custom TCP Rule | TCP      | 3725       | 10.173.0.0/16 |
| SSH             | TCP      | 22         | 10.65.0.0/16  |
| RDP             | TCP      | 3389       | 0.0.0.0/0     |
| HTTPS           | TCP      | 443        | 0.0.0.0/0     |
| HTTPS           | TCP      | 443        | ::/0          |

## Outbound Ports

Pause above the inbound ports to view information about the rules for the port in an infotip window.

**Figure 40-2** Outbound Security Group Rules Example



| TYPE            | PROTOCOL | PORT RANGE | SOURCE        |
|-----------------|----------|------------|---------------|
| Custom TCP Rule | TCP      | 3725       | 10.173.0.0/16 |
| SSH             | TCP      | 22         | 10.65.0.0/16  |
| RDP             | TCP      | 3389       | 0.0.0.0/0     |
| HTTPS           | TCP      | 443        | 0.0.0.0/0     |
| HTTPS           | TCP      | 443        | ::/0          |

## Edit Placement Groups Dialog

For an AWS Platform, the Edit Security Group dialog displays the following information for a specified resource:

### Platform

The parent target platform for the Security Group.

### Name

The name of the Security Group in the target platform environment.

### Description

(Optional) Specify a brief description of the Security Group. This text appears by default in the Security Groups list.

### Associations: Workloads

A list of the workloads that have been configured to use the Security Group in Manual (tracking) mode.

## 40.2 Associating AWS Security Groups with Target Workloads

For enhanced tracking, PTM automatically matches the platform to the target platforms for workloads in Manual (tracking) mode. You can view a list of workloads associated with each Security Group resource.

**To view workloads in Manual (tracking) mode associated with an AWS Security Group resource:**

- 1 In the Web Interface toolbar, select **Platforms**, select the AWS platform, then click **Edit**.
- 2 On the Edit Platform dialog under Associations, select the Security Groups tab, then double-click the Security Group resource.
- 3 In the Edit Security Group dialog under Associations, select the Workloads tab.
- 4 View the workloads that are currently being tracked for this Security Group resource.

## 40.3 Editing an AWS Security Group Description

You can use the Edit Security Group dialog to edit the description of a Security Group resource for the target AWS platform.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the Security Groups tab, then click **Edit** (or double-click the security group) to open the Edit Security Group dialog.
- 4 Modify the **Description** for the Security Group resource.
- 5 Click **Save** to update the Security Group resource.
- 6 Click **Close** to exit the dialog.

## 40.4 Deleting an AWS Security Group

PlateSpin Transformation Manager discovers the available security groups for your AWS platform as associated resources of the platform. You cannot delete them from within PTM. However, you can use the Exclude action to make the resources unavailable for migration or enhanced tracking. Excluded resources do not appear in other dialogs for planning.

If security groups are added or removed from availability for your AWS account, you can rediscover the platform to update its associated resources.



# 41 AWS Placement Groups

Placement Group information for an Amazon Web Services Cloud platform is compiled through discovery. You can include or exclude each discovered Placement Group resource for the Platform resource.

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**NOTE:** PTM supports AWS platforms for external migrations for workloads in Manual (tracking) mode. It does not support automated migrations to AWS platforms.

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- ◆ [Section 41.1, “About AWS Placement Groups,” on page 303](#)
- ◆ [Section 41.2, “Associating AWS Placement Groups with Target Workloads,” on page 304](#)
- ◆ [Section 41.3, “Editing an AWS Placement Group Description,” on page 304](#)
- ◆ [Section 41.4, “Deleting an AWS Placement Group,” on page 305](#)

## 41.1 About AWS Placement Groups

PlateSpin Transformation Manager discovers available cloud placement groups for the target AWS Cloud platform. Placement Groups vary according to the AWS Cloud selected for the platform. The permissions of the AWS subscription might also influence the placement groups available for the platform.

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**NOTE:** AWS uses a Placement Group to apply a strategy for sharing if the workload Tenancy is set to Shared hardware. The cloud instance selected for the target workload is compatible with this strategy.

---

### Placement Groups List

For an AWS Platform, the Placement Groups tab displays the following information for each discovered Placement Group resource:

**Name**

The name of the resource in the target environment.

**Region Name**

The AWS Region where the Placement Group can be used.

**Strategy**

The AWS strategy for the Placement Group, such as Cluster, Spread, or Partition. The strategy of the placement group determines how the instances are organized within the group. See [Placement Groups](#) in the AWS EC2 Documentation.

**State**

The AWS status of the Placement Group (available or not) at the last refresh of the target resource information.

### Edit Placement Groups Dialog

For an AWS Platform, the Edit Placement Group dialog displays the following information for a specified resource:

#### Platform

The parent target platform for the Placement Group.

#### Name

The name of the Placement Group in the target platform environment.

#### Description

(Optional) Specify a brief description of the Placement Group. This text appears by default in the Placement Groups list.

#### Associations: Workloads

A list of the workloads that have been configured to use the Placement Group in Manual (tracking) mode.

## 41.2 Associating AWS Placement Groups with Target Workloads

For enhanced tracking, PTM automatically matches the platform to the target platforms for workloads in Manual (tracking) mode. You can view a list of workloads associated with each Placement Group resource.

**To view workloads in Manual (tracking) mode associated with an AWS Placement Group resource:**

- 1 In the Web Interface toolbar, select **Platforms**, select the AWS platform, then click **Edit**.
- 2 On the Edit Platform dialog under Associations, select the Placement Groups tab, then double-click the Placement Group resource.
- 3 In the Edit Placement Group dialog under Associations, select the Workloads tab.
- 4 View the workloads that are currently being tracked for this Placement Group resource.

## 41.3 Editing an AWS Placement Group Description

You can use the Edit Placement Group dialog to edit the description of a Placement Group resource for the target AWS platform.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the Placement Groups tab, then click **Edit** (or double-click the placement group) to open the Edit Placement Group dialog.
- 4 Modify the **Description** for the Placement Group resource.
- 5 Click **Save** to update the Placement Group resource.
- 6 Click **Close** to exit the dialog.



## 41.4 Deleting an AWS Placement Group

PlateSpin Transformation Manager discovers the available placement groups for your AWS platform as associated resources of the platform. You cannot delete them from within PTM. However, you can use the Exclude action to make the resources unavailable for migration or enhanced tracking. Excluded resources do not appear in other dialogs for planning.

If placement groups are added or removed from availability for your AWS account, you can rediscover the platform to update its associated resources.



# 42 AWS Key Pairs

Key Pair information for an Amazon Web Services Cloud platform is compiled through discovery. You can include or exclude each discovered Key Pair resource for the Platform resource.

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**NOTE:** PTM supports AWS platforms for external migrations for workloads in Manual (tracking) mode. It does not support automated migrations to AWS platforms.

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- ◆ [Section 42.1, “About AWS Key Pairs,” on page 307](#)
- ◆ [Section 42.2, “Associating AWS Key Pairs with Target Workloads,” on page 308](#)
- ◆ [Section 42.3, “Editing an AWS Key Pair Description,” on page 308](#)
- ◆ [Section 42.4, “Deleting an AWS Key Pair,” on page 308](#)

## 42.1 About AWS Key Pairs

PlateSpin Transformation Manager discovers available cloud key pairs for the target AWS Cloud platform. Key Pairs vary according to the AWS Cloud selected for the platform. The permissions of the AWS subscription might also influence the key pairs available for the platform.

### Key Pairs List

For an AWS Platform, the Key Pairs tab displays the following information for each discovered Key Pair resource:

**Name**

The name of the resource in the target environment.

**Region Name**

The AWS Region where the Key Pair can be used.

**Fingerprint**

The AWS fingerprint generated from the Key Pair.

### Edit Key Pairs Dialog

For an AWS Platform, the Edit Key Pair dialog displays the following information for a specified resource:

**Platform**

The parent target platform for the Key Pair.

**Name**

The name of the Key Pair in the target platform environment.

**Description**

(Optional) Specify a brief description of the Key Pair. This text appears by default in the Key Pairs list.

### Associations: Workloads

A list of the workloads that have been configured to use the Key Pair in Manual (tracking) mode.

## 42.2 Associating AWS Key Pairs with Target Workloads

For enhanced tracking, PTM automatically matches the platform to the target platforms for workloads in Manual (tracking) mode. You can view a list of workloads associated with each Key Pair resource.

**To view workloads in Manual (tracking) mode associated with an AWS Key Pair resource:**

- 1 In the Web Interface toolbar, select **Platforms**, select the AWS platform, then click **Edit**.
- 2 On the Edit Platform dialog under Associations, select the Key Pairs tab, then double-click the Key Pair resource.
- 3 In the Edit Key Pair dialog under Associations, select the Workloads tab.
- 4 View the workloads that are currently being tracked for this Key Pair resource.

## 42.3 Editing an AWS Key Pair Description

You can use the Edit Key Pair dialog to edit the description of a Key Pair resource for the target AWS platform.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the Key Pairs tab, then click **Edit** (or double-click the key pair) to open the Edit Key Pair dialog.
- 4 Modify the **Description** for the Key Pair resource.
- 5 Click **Save** to update the Key Pair resource.
- 6 Click **Close** to exit the dialog.

## 42.4 Deleting an AWS Key Pair

PlateSpin Transformation Manager discovers the available key pairs for your AWS platform as associated resources of the platform. You cannot delete them from within PTM. However, you can use the Exclude action to make the resources unavailable for migration or enhanced tracking. Excluded resources do not appear in other dialogs for planning.

If key pairs are added or removed from availability for your AWS account, you can rediscover the platform to update its associated resources.

# 43 AWS Encryption Keys

Encryption Key information for an Amazon Web Services Cloud platform is compiled through discovery. You can include or exclude each discovered Encryption Key resource for the Platform resource.

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**NOTE:** PTM supports AWS platforms for external migrations for workloads in Manual (tracking) mode. It does not support automated migrations to AWS platforms.

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- ♦ [Section 43.1, “About AWS Encryption Keys,” on page 309](#)
- ♦ [Section 43.2, “Associating AWS Encryption Keys with Target Workloads,” on page 310](#)
- ♦ [Section 43.3, “Editing an AWS Encryption Key Description,” on page 310](#)
- ♦ [Section 43.4, “Deleting an AWS Encryption Key,” on page 310](#)

## 43.1 About AWS Encryption Keys

PlateSpin Transformation Manager discovers available cloud encryption keys for the target AWS Cloud platform. Encryption Keys vary according to the AWS Cloud selected for the platform. The permissions of the AWS subscription might also influence the encryption keys available for the platform.

### Encryption Keys List

For an AWS Platform, the Encryption Keys tab displays the following information for each discovered Encryption Key resource:

**Name**

The name of the resource in the target environment.

**Region Name**

The AWS Region where the Encryption Key can be used.

**Status**

The AWS status of the Encryption Key, such as Enabled or Pending Import.

### Edit Encryption Keys Dialog

For an AWS Platform, the Edit Encryption Key dialog displays the following information for a specified resource:

**Platform**

The parent target platform for the Encryption Key.

**Name**

The name of the Encryption Key in the target platform environment.

**Description**

(Optional) Specify a brief description of the Encryption Key. This text appears by default in the Encryption Keys list.

### Associations: Workloads

A list of the workloads that have been configured to use the Encryption Key in Manual (tracking) mode.

## 43.2 Associating AWS Encryption Keys with Target Workloads

For enhanced tracking, PTM automatically matches the platform to the target platforms for workloads in Manual (tracking) mode. You can view a list of workloads associated with each Encryption Key resource.

**To view workloads in Manual (tracking) mode associated with an AWS Encryption Key resource:**

- 1 In the Web Interface toolbar, select **Platforms**, select the AWS platform, then click **Edit**.
- 2 On the Edit Platform dialog under Associations, select the Encryption Keys tab, then double-click the Encryption Key resource.
- 3 In the Edit Encryption Key dialog under Associations, select the Workloads tab.
- 4 View the workloads that are currently being tracked for this Encryption Key resource.

## 43.3 Editing an AWS Encryption Key Description

You can use the Edit Encryption Key dialog to edit the description of a Encryption Key resource for the target AWS platform.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the Encryption Keys tab, then click **Edit** (or double-click the encryption key) to open the Edit Encryption Key dialog.
- 4 Modify the **Description** for the Encryption Key resource.
- 5 Click **Save** to update the Encryption Key resource.
- 6 Click **Close** to exit the dialog.

## 43.4 Deleting an AWS Encryption Key

PlateSpin Transformation Manager discovers the available encryption keys for your AWS platform as associated resources of the platform. You cannot delete them from within PTM. However, you can use the Exclude action to make the resources unavailable for migration or enhanced tracking. Excluded resources do not appear in other dialogs for planning.

If encryption keys are added or removed from availability for your AWS account, you can rediscover the platform to update its associated resources.

# 44 AWS IAM Roles

IAM Role information for an Amazon Web Services Cloud platform is compiled through discovery. You can include or exclude each discovered IAM Role resource for the Platform resource.

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**NOTE:** PTM supports AWS platforms for external migrations for workloads in Manual (tracking) mode. It does not support automated migrations to AWS platforms.

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- ◆ [Section 44.1, “About AWS IAM Roles,” on page 311](#)
- ◆ [Section 44.2, “Associating AWS IAM Roles with Target Workloads,” on page 312](#)
- ◆ [Section 44.3, “Editing an AWS IAM Role Description,” on page 312](#)
- ◆ [Section 44.4, “Deleting an AWS IAM Role,” on page 312](#)

## 44.1 About AWS IAM Roles

PlateSpin Transformation Manager discovers available cloud IAM roles for the target AWS Cloud platform. IAM Roles vary according to the AWS Cloud selected for the platform. The permissions of the AWS subscription might also influence the IAM roles available for the platform.

### IAM Roles List

For an AWS Platform, the IAM Roles tab displays the following information for each discovered IAM Role:

#### Name

The name of the resource in the target environment.

#### Policy

The IAM policies associated with the IAM Role resource.

### Edit IAM Role Dialog

For an AWS Platform, the Edit IAM Role dialog displays the following information for a specified resource:

#### Platform

The parent target platform for the IAM Role.

#### Name

The name of the IAM Role in the target platform environment.

#### Description

(Optional) Specify a brief description of the IAM Role. This text appears by default in the IAM Roles list.

#### Associations: Workloads

A list of the workloads that have been configured to use the IAM Role in Manual (tracking) mode.

## 44.2 Associating AWS IAM Roles with Target Workloads

For enhanced tracking, PTM automatically matches the platform to the target platforms for workloads in Manual (tracking) mode. You can view a list of workloads associated with each IAM Role resource.

**To view workloads in Manual (tracking) mode associated with an AWS IAM Role resource:**

- 1 In the Web Interface toolbar, select **Platforms**, select the AWS platform, then click **Edit**.
- 2 On the Edit Platform dialog under Associations, select the IAM Roles tab, then double-click the IAM Role resource.
- 3 In the Edit IAM Role dialog under Associations, select the Workloads tab.
- 4 View the workloads that are currently being tracked for this IAM Role resource.

## 44.3 Editing an AWS IAM Role Description

You can use the Edit IAM Role dialog to edit the description of a IAM Role resource for the target AWS platform.

- 1 In the Web Interface toolbar, select the **Platforms** tab.
- 2 Select the platform, then click **Edit**.
- 3 Under Associations, select the IAM Roles tab, then click **Edit** (or double-click the IAM role) to open the Edit IAM Role dialog.
- 4 Modify the **Description** for the IAM Role resource.
- 5 Click **Save** to update the IAM Role resource.
- 6 Click **Close** to exit the dialog.

## 44.4 Deleting an AWS IAM Role

PlateSpin Transformation Manager discovers the available IAM roles for your AWS platform as associated resources of the platform. You cannot delete them from within PTM. However, you can use the Exclude action to make the resources unavailable for migration or enhanced tracking. Excluded resources do not appear in other dialogs for planning.

If IAM roles are added or removed from availability for your AWS account, you can rediscover the platform to update its associated resources.