



PlateSpin® Transformation Manager 2019.2 User Guide

March 2019

Legal Notice

For information about legal notices, trademarks, disclaimers, warranties, export and other use restrictions, U.S. Government rights, patent policy, and FIPS compliance, see <https://www.microfocus.com/about/legal/>.

© Copyright 2016 – 2019 Micro Focus or one of its affiliates.

Contents

About This Book	13
Part I Getting Started	15
1 Planning for PlateSpin Transformation Manager	17
1.1 Supported Migration Types	17
1.2 Supported Configurations	19
1.2.1 Supported Configurations for Source Workload Discovery	19
1.2.2 Supported Configurations for Target Platform Discovery	19
1.2.3 Supported Configurations for Migration	20
1.3 Requirements for Discovery	23
1.3.1 PlateSpin Migrate Connector Requirements for Discovery	23
1.3.2 Workload Discovery	23
1.3.3 Platform Resources Discovery	24
1.4 Requirements for Automated Migration	24
1.4.1 Transformation Manager Requirements	24
1.4.2 Migrate Connector Requirements	25
1.4.3 PlateSpin Migrate Requirements	25
1.4.4 Target Platform Requirements	26
1.5 Requirements for Tracking External Migrations	26
1.6 Network Connectivity and Access Requirements	26
1.6.1 Ports and Protocols: Event Messaging	27
1.6.2 Ports and Protocols: Workload Discovery	28
1.6.3 Ports and Protocols: Target Platform Resource Discovery	28
1.6.4 Ports and Protocols: Workload Migration	29
1.7 Antivirus Setup for Discovery	30
2 Using the Web Interface	31
2.1 Prerequisites for Using the Web Interface	31
2.1.1 User Account with Role-Based Access	31
2.1.2 Port Requirements	32
2.1.3 Supported Browsers for the Web Interface	32
2.1.4 Session Timeout	33
2.2 Accessing the Web Interface	33
2.3 Changing a User Password	33
2.4 Web Interface Toolbar	33
2.5 Global Project Selector	36
2.6 Bulk Actions	37
2.6.1 Spreadsheet Import	38
2.6.2 Import	38
2.6.3 Import Progress	38
2.6.4 Bulk Edit	38
2.6.5 Bulk Status Change	38
2.7 Show Links for Navigation URLs	39
2.8 Bookmarks	39

2.9	Object IDs	41
2.10	Custom Display for Lists	41
2.10.1	Refresh List Items	41
2.10.2	Number of Items in a List	41
2.10.3	Show More Data in a Cell	42
2.10.4	Sort Data	42
2.10.5	Show/Hide Columns in a List	42
2.11	Custom Filter or Search for Lists	43
2.11.1	Filter Data in a List	43
2.11.2	Advanced Search of Data	43
2.12	Scrolling Up and Down in Lists	45
2.13	Multiple Item Selection in Lists	45
2.13.1	Selecting Consecutive Items	46
2.13.2	Selecting Non-Consecutive Items	46
2.13.3	Selecting All Items	46
3	Getting Started Checklist	47
	Part II Dashboard	51
4	Workload Status	53
4.1	Workload Status	53
5	What's Happening	55
5.1	What's Happening Overview	55
6	Bookmarks	57
6.1	Bookmarks Overview	57
6.2	About Bookmarks	58
6.3	Creating Bookmarks	59
6.4	Viewing Bookmarks	60
6.5	Opening Bookmarks	60
6.6	Searching for Bookmarks	61
6.7	Deleting Bookmarks	61
7	Recently Viewed	63
7.1	Recently Viewed Overview	63
8	Workload Status	65
8.1	Viewing Workload Status Counts by Project, Wave, or Batch	65
8.2	Viewing Workload Health and Status	66

Part III Projects	69
9 Overview of Project Planning	71
9.1 About Planning Objects	71
9.1.1 Organizations	72
9.1.2 Projects	72
9.1.3 Waves	72
9.1.4 Batches	73
9.1.5 Applications.	73
9.1.6 Workloads	73
9.2 About Project Roles	74
9.3 About Project Dates	74
10 Managing Projects	77
10.1 About Projects	77
10.2 Prerequisites for Projects	79
10.3 Viewing a Project	80
10.4 Creating a Project	80
10.5 Editing a Project	81
10.6 Configuring Custom Field Names for a Project	81
10.7 Configuring Project Associations	82
10.8 Closing or Reopening a Project	83
10.9 Deleting a Project	83
11 Managing Waves	85
11.1 About Waves	85
11.2 Prerequisites for Waves.	86
11.3 Viewing Waves.	86
11.4 Creating a Wave	86
11.5 Editing a Wave	87
11.6 Configuring Wave Associations.	87
11.7 Deleting a Wave	88
12 Managing Batches	89
12.1 About Batches	89
12.2 Prerequisites for Batches	90
12.3 Viewing a Batch	90
12.4 Creating a Batch	91
12.5 Editing a Batch	92
12.6 Modifying the Owner of a Batch	92
12.7 Moving a Batch to a Different Wave	93
12.8 Configuring Batch Associations	93
12.9 Deleting a Batch	94
13 Managing Applications	95
13.1 About Applications	95

13.2	Prerequisites for Applications	95
13.3	Viewing Applications	96
13.4	Creating Applications	96
13.5	Creating Applications during Spreadsheet Import	96
13.6	Editing Applications	96
13.7	Associating Applications and Workloads	97
13.8	Deleting an Application	97
Part IV Workloads		99
14 Overview of Workloads		101
14.1	Workload Types	101
14.2	Workload Transformation Modes	101
14.3	OS Types	102
14.4	Custom Fields	102
15 Importing and Discovering Workloads		103
15.1	About Source Workload Details	103
15.2	About Workload Discovery	104
15.2.1	Discovery Requirements for Source Workloads	104
15.2.2	Import and Discovery Process	105
15.3	Viewing Workloads	105
15.4	Importing Workloads with a Spreadsheet	105
15.5	Importing Workloads with the Import Dialog	106
15.5.1	About Import	107
15.5.2	Importing a Single Workload by IP Address or FQDN	107
15.5.3	Importing Multiple Workloads in an IP Address Range	108
15.6	Importing Workloads Using the PTM REST API	109
15.6.1	Generating a Custom PTM Client from the PTM REST API	109
15.6.2	Using a Custom Client to Import Workloads	111
15.7	Viewing Import Progress	112
15.8	Retrying Workload Discovery	113
15.9	Rediscovering Workloads	113
15.10	Troubleshooting Discovery Failures	114
16 Configuring Workload Transformations		117
16.1	About the Workload Dialog	117
16.1.1	Header	118
16.1.2	Workload IDs and Discovery Address	118
16.1.3	URL for the Workload Dialog	119
16.1.4	Errors and Warnings	119
16.1.5	Status and Retry	119
16.1.6	Migration Sub Status	121
16.1.7	Discovery Status and Rediscovery	122
16.1.8	Last Modified	122
16.1.9	Transformation Plan	122
16.1.10	Location	124
16.1.11	Migration Settings	125
16.1.12	Workload	127

16.1.13	Network Interfaces	129
16.1.14	Storage	131
16.1.15	Testing Network Interfaces	134
16.1.16	Applications	134
16.1.17	Custom Fields	134
16.1.18	Services	135
16.1.19	Transformation History	135
16.2	Viewing the Workloads List	135
16.3	Viewing a Workload NIC and Volume Summary	136
16.4	Locating Workloads with the Filter and Advanced Search	136
16.5	Viewing Workload Transformation Details	138
16.6	Editing the Workload Transformation	138
16.7	Configuring the Source NIC to Use for Replication	139
16.8	Editing a Workload Transformation after Submit	139
16.9	Bulk Edit for Multiple Target Workloads	140
16.9.1	About Bulk Edit	141
16.9.2	Selecting Workloads for Bulk Edit	146
16.9.3	Applying a Bulk Edit	147
16.10	Bulk Status Change for Multiple Target Workloads	147
16.11	Synchronizing Edits from the Migrate Server	148
16.12	Viewing the Transformation History	148
16.13	Adding User Notes to the Transformation History	149
16.14	Withdrawing a Submitted Workload	149
16.15	Deleting a Workload	151
17	Tracking External Workload Migrations	153
17.1	About Tracking External Migrations	153
17.2	Planning for Tracking External Migrations	154
17.3	Checklist for Tracking External Migrations	155
17.4	Enabling Enhanced Tracking	156
A	Preparing an Import Spreadsheet	159
A.1	About Spreadsheet Import	160
A.1.1	Spreadsheet Import Tools	160
A.1.2	Spreadsheet Import Workflow	161
A.2	Spreadsheet Parameters	162
A.3	Downloading a Sample Import Spreadsheet	170
A.4	Validating a Spreadsheet	171
A.5	Downloading the Results Spreadsheet	171
A.6	Re-Importing Workloads	172
Part V	Resources	173
18	Overview of Resources	175
18.1	About Resources	175
18.2	Prerequisites for Resources	175

19 Managing Credentials Resources	177
19.1 About Credentials Resources	177
19.2 Viewing Credentials	180
19.3 Creating a Credential	181
19.4 Associating Credentials with Workloads, Platforms, or Migration Servers	181
19.4.1 Associating Credentials and Workloads	181
19.4.2 Associating Credentials and Platforms	182
19.4.3 Associating Credentials and Migration Servers	182
19.5 Editing a Credential	183
19.6 Deleting a Credential	183
20 Managing Migration Server Resources	185
20.1 About Migration Server Resources	185
20.2 Viewing Migration Server Resources	186
20.3 Creating a Migration Server Resource	187
20.4 Associating a Connector with a Migration Server Resource	188
20.5 Associating Migration Servers and Target Workloads	188
20.6 Editing a Migration Server	189
20.7 Deleting a Migration Server	189
21 Managing Environment Resources	191
21.1 About Environment Resources	191
21.2 Viewing Environments	192
21.3 Creating a Source Environment	192
21.4 Creating an Environment	192
21.5 Associating Environments and Target Workloads	193
21.6 Editing an Environment	193
21.7 Deleting an Environment	193
Part VI Target Platforms	195
22 Managing Target Platforms	197
22.1 About Platforms	197
22.1.1 Platform Properties	198
22.1.2 Platform Associations	201
22.1.3 Discovery Process for Platforms	206
22.1.4 Troubleshooting Platform Discovery Failures	206
22.2 Viewing Platforms	207
22.3 Viewing vCenter Server Platforms	209
22.4 Viewing Azure Platforms	210
22.5 Viewing AWS Platforms	210
22.6 Creating a Platform	211
22.7 Retrying Platform Discovery	212
22.8 Rediscovering Platforms	213
22.9 Editing Platforms	213
22.10 Associating Platforms and Target Workloads	213
22.11 Deleting a Platform	214

22.12	Deleting Workload Associations for a Platform	214
23	VMware vCenter Clusters	215
23.1	About VMware Clusters	215
23.2	Associating VMware Clusters with Target Workloads	216
23.3	Creating a VMware Cluster	217
23.4	Viewing VMware vCenter Clusters	217
23.5	Excluding or Including a VMware Cluster Resource	217
23.6	Editing a VMware Cluster Description	218
23.7	Deleting a VMware Cluster	218
24	VMware vCenter Cluster Hosts	219
24.1	About VMware Cluster Hosts	219
24.2	Creating a VMware Cluster Host	220
24.3	Viewing VMware vCenter Cluster Hosts	220
24.4	Editing Target Cluster Host Description	220
24.5	Excluding or Including a VMware Host Resource	220
24.6	Deleting a VMware Cluster Host	221
25	Azure Locations	223
25.1	About Azure Cloud Locations	223
25.2	Associating Azure Locations with Target Workloads	223
25.3	Excluding or Including an Azure Location	224
25.4	Editing an Azure Location Description	224
25.5	Deleting an Azure Location	225
26	AWS Regions	227
26.1	About AWS Regions	227
26.2	Associating AWS Regions with Target Workloads	227
26.3	Excluding or Including an AWS Region	228
26.4	Editing an AWS Region Description	228
26.5	Deleting an AWS Region	228
Part VII	Platform Resources	231
27	Networks	233
27.1	About Network Resources	233
27.2	Viewing Networks	234
27.3	Excluding or Including a Network Resource	235
27.4	Associating Networks and Target Workloads	236
27.5	Editing a Target Network Description	237
27.6	Deleting a Network	237
27.7	Selecting a Network and Subnet for Each NIC	237
27.8	Creating a NIC for the Target VM	238
27.9	Deleting a NIC from the Target VM	238

27.10	Configuring the Primary NIC for Target VM on Azure	239
27.11	Configuring the DHCP Service for Target VMs	239
27.12	Configuring the DNS Service for Target VMs	239
28	Network Subnets	241
28.1	About Subnet Resources	241
28.2	Viewing Subnets	242
28.3	Excluding or Including a Subnet Resource	242
28.4	Associating Subnets and Target Workloads	243
28.5	Edit Subnet Description	244
28.6	Deleting a Subnet	244
29	AWS Virtual Private Clouds	245
29.1	About AWS Virtual Private Clouds	245
29.2	Associating AWS VPCs with Target Workloads	246
29.3	Excluding or Including an AWS Virtual Private Cloud	246
29.4	Editing an AWS VPC Description	247
29.5	Deleting an AWS Virtual Private Cloud	247
30	Datstores	249
30.1	About Datastore Resources	249
30.2	Viewing Datstores	251
30.3	Setting a Path on the Datastore	251
30.4	Creating a Datastore	251
30.5	Associating Datstores and Target Workloads	252
30.6	Excluding or Including a Datastore Resource	252
30.7	Editing a Datastore Description	253
30.8	Deleting a Target Datastore	253
31	VMware Resource Pools	255
31.1	About Resource Pool Resources	255
31.2	Viewing Resource Pools	256
31.3	Excluding or Including a Resource Pool Resource	256
31.4	Editing a Resource Pool Description	257
31.5	Associating Resource Pools with Workloads	257
31.6	Deleting a Resource Pool	257
32	Azure Resource Groups	259
32.1	About Resource Group Resources	259
32.2	Excluding or Including a Resource Group Resource	259
32.3	Editing a Resource Group Description	260
32.4	Deleting a Resource Group	260
33	AWS Security Groups	261
33.1	About AWS Security Groups	261

33.2	Associating AWS Security Groups with Target Workloads	262
33.3	Excluding or Including an AWS Security Group	262
33.4	Editing an AWS Security Group Description	263
33.5	Deleting an AWS Security Group	263
34	AWS Placement Groups	265
34.1	About AWS Placement Groups	265
34.2	Associating AWS Placement Groups with Target Workloads	265
34.3	Excluding or Including an AWS Placement Group	266
34.4	Editing an AWS Placement Group Description	267
34.5	Deleting an AWS Placement Group	267
35	AWS Key Pairs	269
35.1	About AWS Key Pairs	269
35.2	Associating AWS Key Pairs with Target Workloads	269
35.3	Excluding or Including an AWS Key Pair	270
35.4	Editing an AWS Key Pair Description	270
35.5	Deleting an AWS Key Pair	271
36	AWS Encryption Keys	273
36.1	About AWS Encryption Keys	273
36.2	Associating AWS Encryption Keys with Target Workloads	273
36.3	Excluding or Including an AWS Encryption Key	274
36.4	Editing an AWS Encryption Key Description	274
36.5	Deleting an AWS Encryption Key	275
37	AWS IAM Roles	277
37.1	About AWS IAM Roles	277
37.2	Associating AWS IAM Roles with Target Workloads	277
37.3	Excluding or Including an AWS IAM Role	278
37.4	Editing an AWS IAM Role Description	278
37.5	Deleting an AWS IAM Role	279

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 173
- ♦ Part VI, “Target Platforms,” on page 195
- ♦ Part VII, “Platform Resources,” on page 231

Intended 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 2019.2 Documentation website](https://www.microfocus.com/documentation/platespin/platespin-transformation-manager-2019-2/) (<https://www.microfocus.com/documentation/platespin/platespin-transformation-manager-2019-2/>).

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/>
- ♦ **Micro Focus Communities:** <https://www.microfocus.com/communities/>
- ♦ **PlateSpin Idea Exchange:** 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 2019.2 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
Automated	
Automated migration requires the deployment of PlateSpin Migration Factory components in your migration environment. 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. PlateSpin Migrate Connector subscribes to event messages for your Migrate servers. 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. Migrate Connector detects and synchronizes any changes you make to the configuration from PlateSpin Migrate. Migrate Connector listens for status events. PTM displays the status and progresses the workflow as appropriate. You can also add notes in the Transformation History.

Migration Type	
Planning Actions	Migration Actions
Manual (Tracking)	
<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 projec’s Custom fields for a tracked workload.</p> <p>You can also add notes in the Transformation History.</p>
Manual	
<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>
Decommission	
<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 2019.2 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 2019.2 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 2019.2 User Guide*.

Table 1-2 *Supported Platforms for Discovery*

Platform	Remarks
VMware vCenter Servers	Supported VMware environments: <ul style="list-style-type: none">♦ On premises♦ VMware Cloud (VMC) in AWS 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"> ◆ Azure Global (default) ◆ Azure China ◆ Azure Germany ◆ Azure U.S. Government 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"> ◆ AWS Global (default) ◆ Azure GovCloud 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
Automated Migration		
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 2019.2 User Guide</i>:</p> <ul style="list-style-type: none"> ◆ VMware vCenter Clusters: “Supported Source Workloads For Migration to Non-Cloud Platforms”, as limited by caveats for migration to VMware vCenter Cluster target platforms. ◆ Microsoft Azure: “Supported Source Workloads for Migration to Cloud Platforms”, as limited by caveats for migration to Azure cloud environments. <p>NOTE: 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 2019.2 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 2019.2 User Guide</i> .
Manual (Tracking)		
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 2019.2 User Guide</i>:</p> <ul style="list-style-type: none"> ◆ “Supported Source Workloads For Migration to Non-Cloud Platforms” ◆ “Supported Source Workloads for Migration to Cloud Platforms”, <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 2019.2 User Guide</i>:</p> <ul style="list-style-type: none"> ◆ “Supported Target Virtualization Platforms” ◆ “Supported Target Cloud Platforms” <p>NOTE: 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 Section 17.1, “About Tracking External Migrations,” on page 153.</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 2019.2 User Guide</i>:</p> <ul style="list-style-type: none"> ◆ “VMware vCenter” ◆ “Microsoft Azure” ◆ “Amazon Web Services (AWS)”
Manual		
Source workloads	Any Windows and Linux operating system in the PTM Operating Systems list	See “ Configuring Operating Systems ” in the <i>PTM 2019.2 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.
Decommission		
Source workloads	Any Windows and Linux operating system in the PTM Operating Systems list.	See “ Configuring Operating Systems ” in the <i>PTM 2019.2 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 2019.2 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 2019.2 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 2019.2 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 2019.2 Administrator Guide*.
- ◆ Deploy one or more PlateSpin Migrate servers in your environment. See the *PlateSpin Migrate 2019.2 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 2019.2 User Guide*.
- ◆ Add workloads to PlateSpin Migrate and configure them for migration. See the *PlateSpin Migrate 2019.2 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 17-4, “Checklist for Tracking External Migrations,”](#) on page 155.

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 2019.2 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) (not secure)	This port is open by default on the PTM Appliance VM. 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"> ◆ ICMP, incoming ◆ SMB (TCP 445 or 139) 	<ul style="list-style-type: none"> ◆ Microsoft .NET Framework 2.0 SP2, 3.5 SP1 or 4.0 ◆ Credentials with Domain Admin or built-in Administrator privileges
Linux workloads	<ul style="list-style-type: none"> ◆ ICMP, incoming ◆ SSH (TCP 22, incoming) 	Root-level access. For information on using an account other than <code>root</code> , see KB Article 7920711 (https://support.microfocus.com/kb/doc.php?id=7920711) .

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

See [“Prerequisites for Migration to Microsoft Azure”](#) in the *PlateSpin Migrate 2019.2 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 2019.2 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 2019.2 Administrator Guide*.

A Project Manager can also create users and assign them to roles in their project. See [“Roles”](#) in the *PTM 2019.2 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 2019.2 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

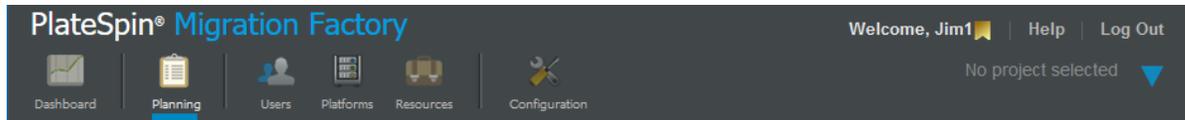


Table 2-3 Toolbar Options

Icon	Option	Description
	Dashboard	<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>NOTE: Information is restricted based on the permissions associated with the user's assigned role.</p> <p>Workload Status</p> <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"> ◆ Total Workloads ◆ Imported ◆ On Hold* ◆ Defining ◆ Submitted ◆ In Progress ◆ Completed ◆ Warning* <p>* Workloads that are On Hold or have a Warning are counted in one of transformation categories, and are also tallied separately.</p>
	What's Happening	<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>
	Bookmarks	<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
	Recently Viewed	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"> ◆ Projects <p>The PTM System Administrator (or Administrator user) creates the project and assigns a user to the Project Manager role.</p> ◆ Waves ◆ Batches ◆ Applications ◆ Workloads
	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"> ◆ Organizations ◆ Users <ul style="list-style-type: none"> ◆ User accounts ◆ User role assignments ◆ Groups <ul style="list-style-type: none"> ◆ Group accounts ◆ Group role assignments <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"> ◆ Credentials ◆ Migration Servers ◆ Environments

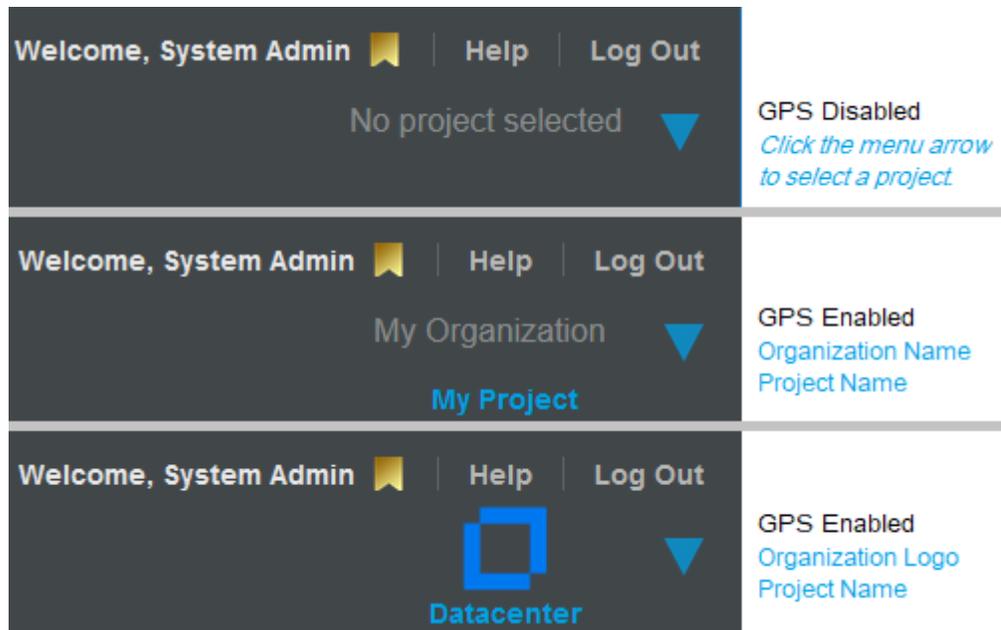
Icon	Option	Description
	Configuration	<p>The Configuration tab enables the PTM System Administrator (or member of the Administrators group) to manage the following application features:</p> <ul style="list-style-type: none"> ◆ Connectors ◆ Migrate Connector ◆ Operating Systems
	Global Project Selector	<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"> ◆ 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 . <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"> ◆ Click the Bookmark icon  to display the quick-access Bookmarks list. <p>-OR-</p> <ul style="list-style-type: none"> ◆ Click Dashboard, then scroll down to view the Bookmarks panel.
Edit	<p>You cannot edit a bookmark.</p>
Open	<p>To follow a bookmark from the Bookmarks quick access:</p> <ul style="list-style-type: none"> ◆ Click the bookmark name to go to the bookmarked page. <p>To follow a bookmark from the Bookmarks panel in the Dashboard:</p> <ul style="list-style-type: none"> ◆ In the Bookmarks list, select the bookmark, then click Open to go to the bookmarked page. <p>The bookmarked page or dialog opens in the current web browser tab.</p>
Search	<p>Above the Bookmarks list, enter text in the Search 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 Delete.</p>
Clear	<p>On the Bookmarks panel, use Clear 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.

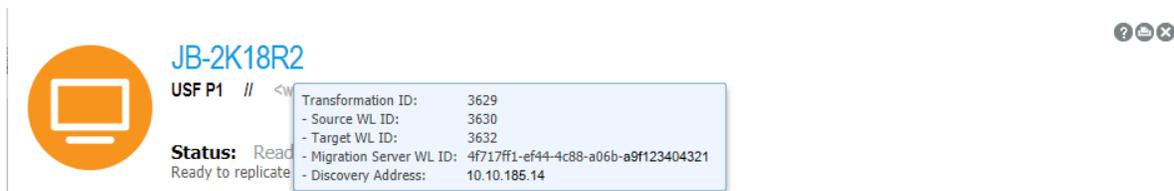
For example, you need the project ID to configure a PlateSpin Migrate Connector for dedicated use by a single project.

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	Platform	Hostname	For AWS:
Wave	For AWS:	Migrate Server	VPC
Batch	Region	OS Type	Datastores
Status	For Azure:	Application	For Azure:
Sub Status	Location	Environment	Network
Health	Resource Group	Transform Method	Subnet
On Hold	For VMware:	For Azure:	Storage Accounts
	Cluster	Azure Machine Size	For VMware:
	Cluster Hosts		Network
			Datastores
			Total Storage
			Single Disk Size
			Total Number of Cores
			Amount of Memory
Custom Fields			
Field 1	Field 2	Field 3	Field 4
Field 5	Field 6	Field 7	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>Accessing the Web Interface (page 33)</p> <p>Changing a User Password (page 33)</p>
<input type="checkbox"/>	<p>2. Familiarize yourself with the Web Interface.</p>	<p>Web Interface Toolbar (page 33)</p> <p>Global Project Selector (page 36)</p> <p>Bulk Actions (page 37)</p> <p>Show Links for Navigation URLs (page 39)</p> <p>Bookmarks (page 39)</p> <p>Custom Display for Lists (page 41)</p> <p>Multiple Item Selection in Lists (page 45)</p>
<input type="checkbox"/>	<p>3. Create an organization.</p>	<p>See “Managing Organizations” in the <i>PTM 2019.2 Administrator Guide</i>.</p>
<input type="checkbox"/>	<p>4. Create a transformation project.</p>	<p>See “Managing Projects” in the <i>PTM 2019.2 Administrator Guide</i>.</p>
<input type="checkbox"/>	<p>5. Create one or more Waves for the project.</p>	<p>About Waves (page 85)</p> <p>Creating a Wave (page 86)</p>
<input type="checkbox"/>	<p>6. For each Wave, create one or more Batches.</p>	<p>About Batches (page 89)</p> <p>Creating a Batch (page 91)</p>
<input type="checkbox"/>	<p>7. Create user accounts for your project, and assign each user to project roles as appropriate.</p>	<p>See “Managing Users” in the <i>PTM 2019.2 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.	Preparing an Import Spreadsheet (page 159) Importing Workloads with a Spreadsheet (page 105) Importing Workloads with the Import Dialog (page 106)
<input type="checkbox"/>	9. Create applications that are available to target workloads as you define transformations.	About Applications (page 95) Creating Applications (page 96) Table A-8, “Application Parameter,” on page 170
<input type="checkbox"/>	10. Create target platforms to discover resources that are available to target workloads as you define transformations.	Platforms <ul style="list-style-type: none"> ◆ VMware Clusters <ul style="list-style-type: none"> ◆ Hosts ◆ Networks ◆ Datastores ◆ Resource Pools ◆ Azure Cloud <ul style="list-style-type: none"> ◆ Networks and Subnets ◆ Datastores ◆ Resource Groups
<input type="checkbox"/>	11. Create resources that are available to target platforms and workloads as you define transformations.	Resources (page 173) <ul style="list-style-type: none"> ◆ Credentials ◆ Migration Servers ◆ Environments
<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.	Overview of Workloads (page 101) Editing the Workload Transformation (page 138) Bulk Edit for Multiple Target Workloads (page 140)
<input type="checkbox"/>	13. As a Project Architect, submit one or more workloads for transformation.	Status and Retry (page 119) Figure 16-1, “The Transformation Workflow,” on page 120 Bulk Status Change for Multiple Target Workloads (page 147)
<input type="checkbox"/>	14. (Automated Migration) As a Migration Specialist, monitor the workload transformations.	Requirements for Automated Migration (page 24) Status and Retry (page 119)

Status	Task	For information, see
<input type="checkbox"/>	15. (Manual Migration) As a Migration Specialist, execute the workload transformations, and update their transformation status in PTM.	Status and Retry (page 119) Figure 16-1, “The Transformation Workflow,” on page 120 Bulk Status Change for Multiple Target Workloads (page 147)
<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.	Tracking External Workload Migrations (page 153)
<input type="checkbox"/>	17. Monitor the project status by viewing core metrics and related reports in the real-time visual dashboard.	Workload Status (page 53) Viewing Workload Status Counts by Project, Wave, or Batch (page 65) What’s Happening (page 55) Bookmarks (page 57) Recently Viewed (page 63)



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

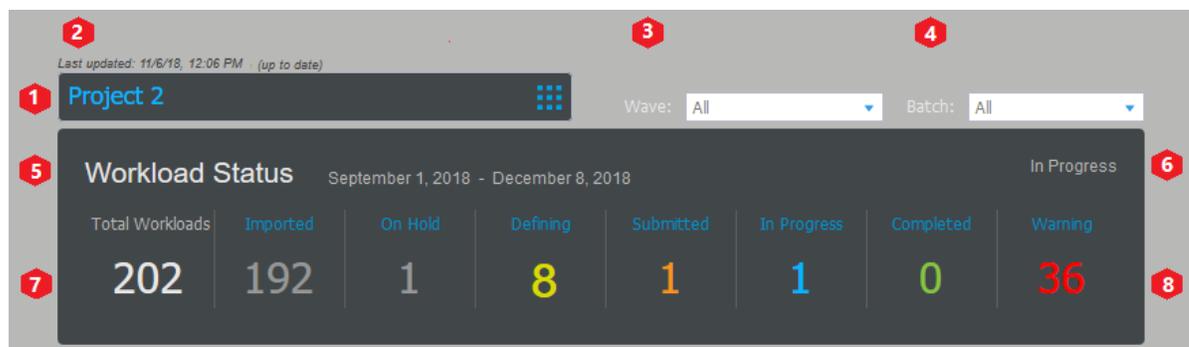


Table 4-1 Dashboard Information

Key	Metric	Description
1	Project	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. If you have a role on a single project, the Project field and Global Project Selector settings are static.

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"> ◆ Total Workloads ◆ Imported ◆ On Hold* ◆ Defining ◆ Submitted ◆ In Progress ◆ Completed ◆ Warning* <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"> ◆ 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. <p>You can alternatively use the Health > All Warning States option on the Advanced Search dialog to see all workloads in the Warning state.</p>

5 What's Happening

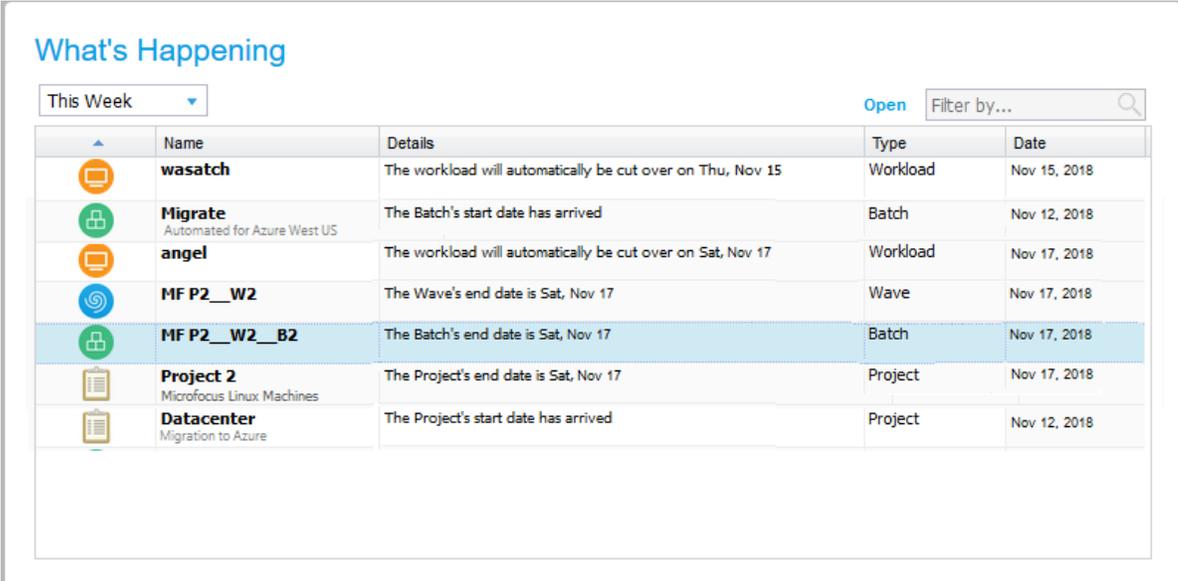
The What's Happening panel reports events in a specified period with links directly to their related tasks.

- ♦ [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



The screenshot shows the 'What's Happening' panel with a dropdown menu set to 'This Week'. The panel contains a table with columns for Name, Details, Type, and Date. The table lists several events, including workload cutovers, migration batches, and project end dates. The event 'MF P2_W2_B2' is highlighted in blue.

	Name	Details	Type	Date
	wasatch	The workload will automatically be cut over on Thu, Nov 15	Workload	Nov 15, 2018
	Migrate <small>Automated for Azure West US</small>	The Batch's start date has arrived	Batch	Nov 12, 2018
	angel	The workload will automatically be cut over on Sat, Nov 17	Workload	Nov 17, 2018
	MF P2_W2	The Wave's end date is Sat, Nov 17	Wave	Nov 17, 2018
	MF P2_W2_B2	The Batch's end date is Sat, Nov 17	Batch	Nov 17, 2018
	Project 2 <small>Microfocus Linux Machines</small>	The Project's end date is Sat, Nov 17	Project	Nov 17, 2018
	Datacenter <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"> ◆ Today ◆ Yesterday ◆ Tomorrow ◆ This week (default) ◆ Last week ◆ Next week ◆ This month ◆ Last month ◆ Next month ◆ Custom <p>Select Custom, then click the Calendar 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>NOTE: Dates are based on the time zone of the PlateSpin Transformation Manager server.</p>
Open	Select an object, then click Open to go to the related page or dialog.
View URL	Pause over the Name of the object to view the page-specific part of the URL in a tooltip.
Filter	Type characters in the Search 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 Open to open the page in the current browser tab with the saved filters and selections applied.
Delete	Select one or more bookmarks, then click Delete to remove the selected bookmarks from your personal bookmarks. The removal is permanent.
Clear	Click Clear to delete all bookmarks in the list. Filter the list to include only the bookmarks you want to delete, then click Clear . Refresh the page to display the remaining bookmarks.
View URL	Pause over the Name of the bookmark to view the page-specific part of the URL in a tooltip.

Options	Action
Filter	Type characters in the Search 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

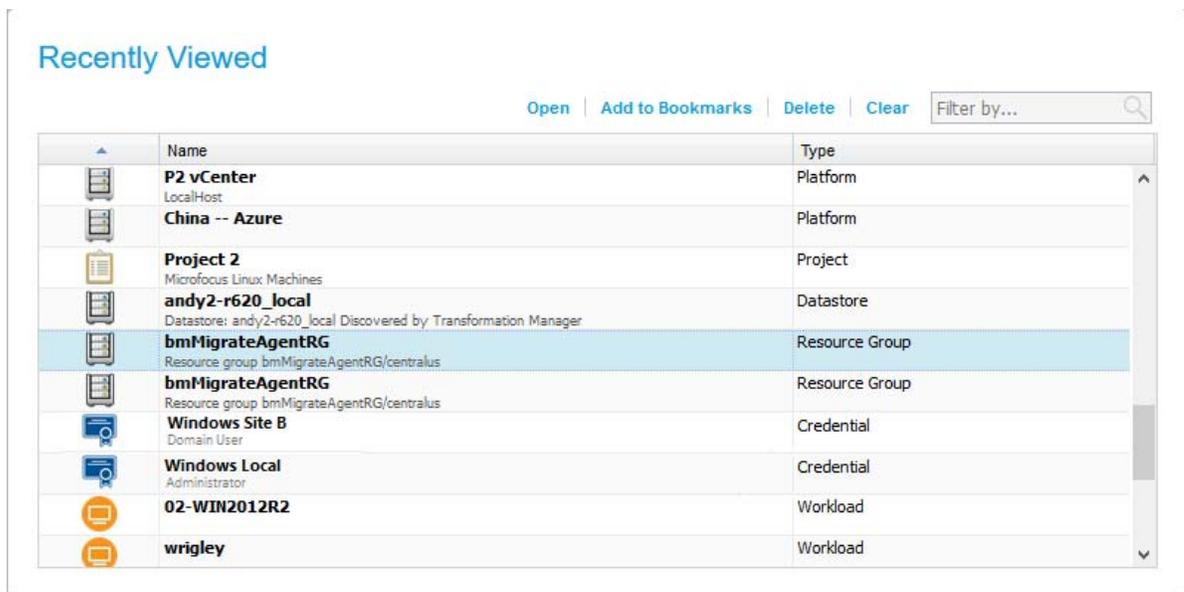


Table 7-1 Actions for Recently Viewed

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

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

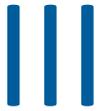
8.2 Viewing Workload Health and Status

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

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



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

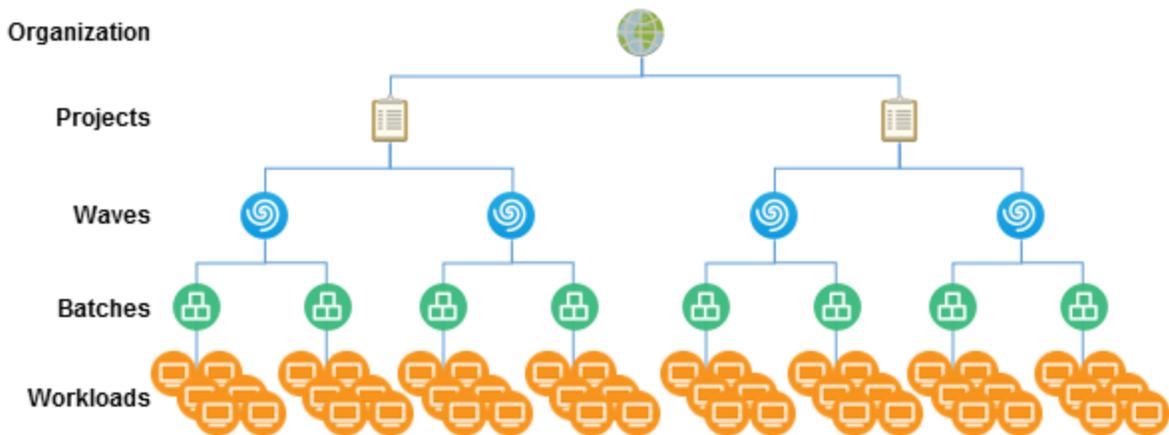
9.1 About Planning Objects

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



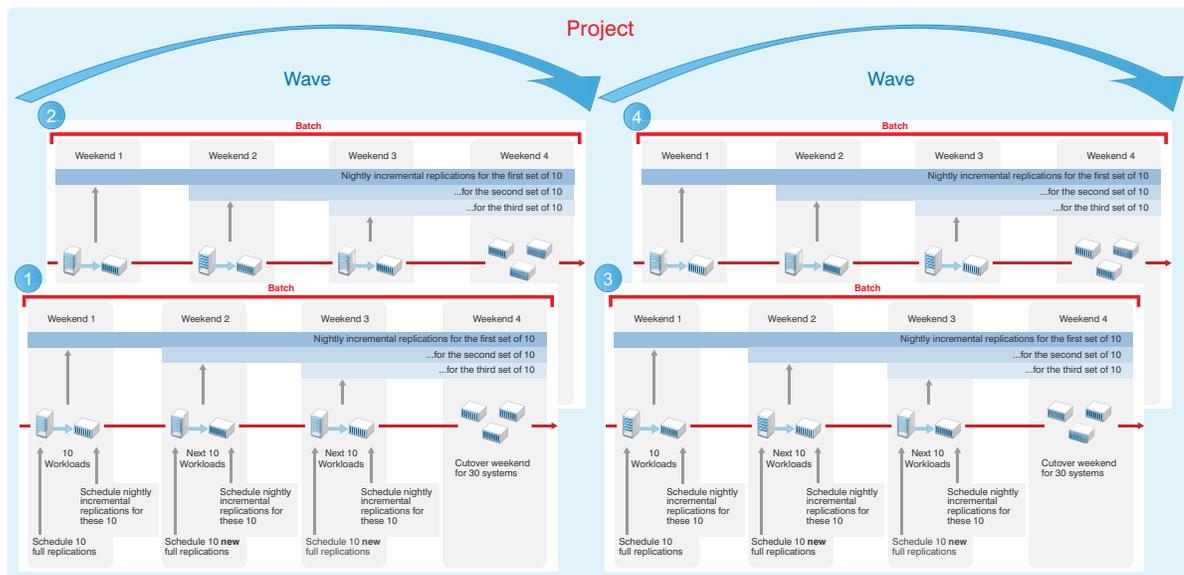
Each organization in PlateSpin Transformation Manager can have one or more projects. The scope and purpose for each project depends on your business needs and migration goals. PTM provides logical secure segregation of data for each project.

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

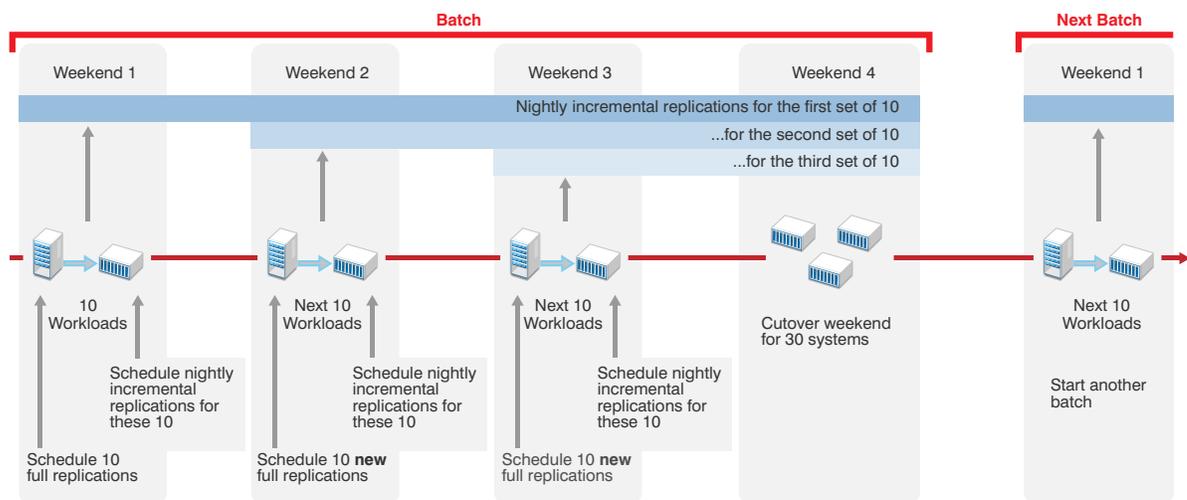


9.1.4 Batches



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.

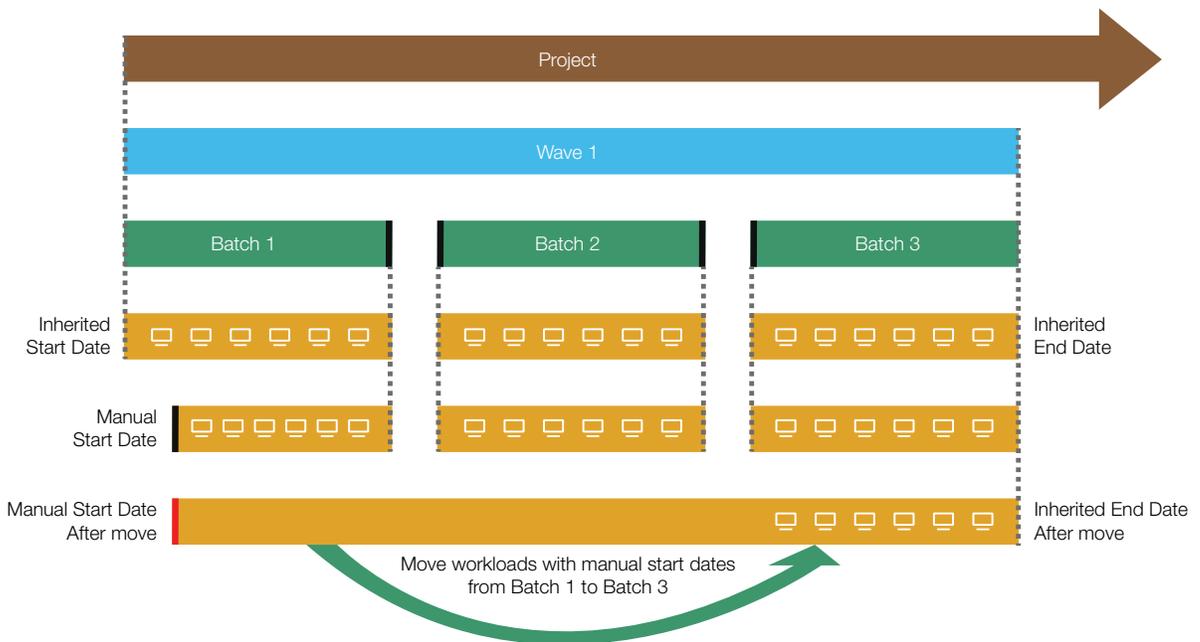
Dates for waves and batches can be set manually or inherited from their parent objects. Dates of child objects must fall within the execution window of its parent object.

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"> ◆ The object's start date occurs before the parent's start date. ◆ The object's end or cutover date occurs after the parent's end or cutover date.

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. Only defined custom fields are available in the Workload dialog.

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 2019.2 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 2019.2 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 2019.2 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 170](#).

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, “Tracking External Workload Migrations,” on page 153](#)
- ♦ [Appendix A, “Preparing an Import Spreadsheet,” on page 159](#)

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

Manual migration supports scheduling and tracking of external migration efforts for supported source workloads. The Workload dialog displays the source workload configuration plus the project, wave, batch, and schedule information. You can also view 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 2019.2**

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.

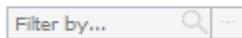
- 1 Select your project in the **Project Selector**.

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.

- 4 If necessary, you can create up to four new Credential resources to use for the import.
 - 4a On the Credential drop-down list, click **Create**.
 - 4b Select the **Credential Type**: Linux Administrator, Windows Administrator, or Windows Domain.
 - 4c Specify the authentication information.
 - 4d Click **Save** to create the Credential resource and add it in the Import Workloads dialog.
- 5 Click **Import**.
- 6 Click **Close** to return to the Workloads list.
- 7 In the Workloads list, monitor the discovery status for the workload.
- 8 (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:

- 1 In the Web Interface, select **Planning** in the toolbar, then select the **Workloads** tab.
- 2 Select **Import**.
- 3 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.
- 4 Click **Import**.
- 5 Click **Close** to return to the Workloads list.

- 6 In the Workloads list, monitor the discovery process for each workload in the range.
- 7 (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 Transformation Manager REST API

applications Show/Hide List Operations Expand Operations

GET	/applications/{appid}	Get a specific application by id
GET	/applications	Get a list of applications

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.

```

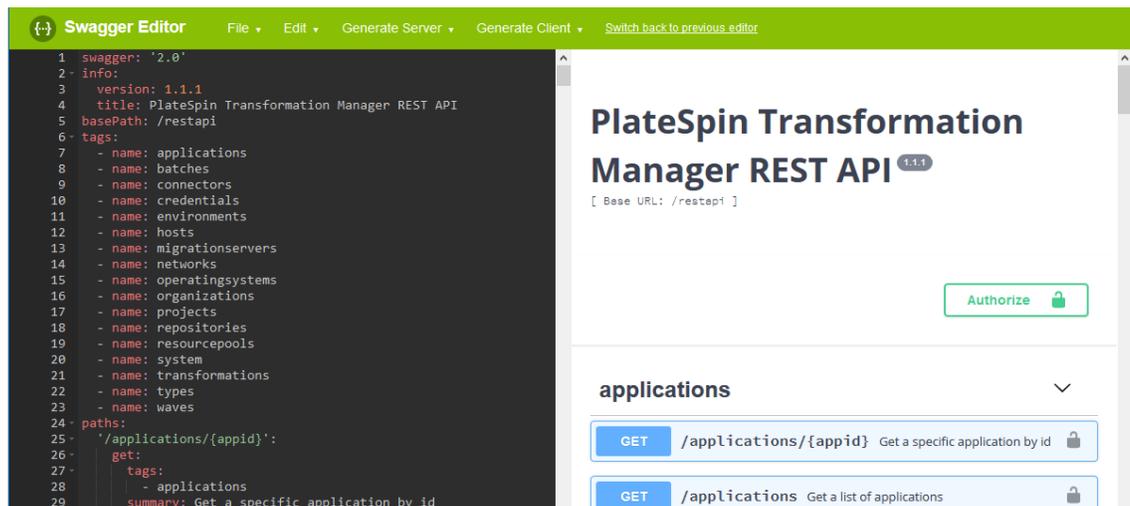
JSON  Raw Data  Headers
Save  Copy  Pretty Print

{
  "swagger": "2.0",
  "info": {
    "version": "1.1.1",
    "title": "PlateSpin Transformation Manager REST API"
  },
  "basePath": "/restapi",
  "tags": [
    {
      "name": "applications"
    }
  ],

```

- 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 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
 - ◆ Ignored
- 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 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.
Failed to create directory: /opt / PlateSpinDiscovery/ on host <IP address>. Error: mkdir: cannot create directory '/opt / PlateSpinDiscovery/': Read-only file system.	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. Ensure that the antivirus on the source workload is configured to permit discovery actions. See Section 1.7, "Antivirus Setup for Discovery," on page 30.

Reason	Troubleshooting Tips
Likely a duplicate of a workload currently being discovered. This workload might be deleted after discovery completes.	PTM tries to identify and delete duplicate workloads if import is attempted in the same project. You can manually delete known duplicates.
Migration of detected Linux OS type not supported.	PTM discovery compares discovered Linux OS types to the PTM Operating Systems list. See “Configuring Operating Systems” in the <i>PTM 2019.2 Administrator Guide</i> .
Connection timeout of 15 seconds exceed while waiting for a response from the server.	
Error executing remote Linux command--:mkdir -p /opt/PlateSpinDiscovery/-- with error: Unable to open channel.	SSH connection error for a Linux workload.
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.)	SMB connection error for a Windows workload.
An error occurred while connecting to the remote machine: ('Invalid response from server'...)	
Received unexpected status from the server: (3221225646) STATUS_PIPE_BUSY: 0xc00000ae	

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 Section 1.3, “Requirements for Discovery,” on page 23 and Section 1.6.2, “Ports and Protocols: Workload Discovery,” on page 28.
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 “PlateSpin Migrate Connector” in the <i>PTM 2019.2 Administrator Guide</i> .

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 135](#)
- ◆ [Section 16.3, “Viewing a Workload NIC and Volume Summary,” on page 136](#)
- ◆ [Section 16.4, “Locating Workloads with the Filter and Advanced Search,” on page 136](#)
- ◆ [Section 16.5, “Viewing Workload Transformation Details,” on page 138](#)
- ◆ [Section 16.6, “Editing the Workload Transformation,” on page 138](#)
- ◆ [Section 16.7, “Configuring the Source NIC to Use for Replication,” on page 139](#)
- ◆ [Section 16.8, “Editing a Workload Transformation after Submit,” on page 139](#)
- ◆ [Section 16.9, “Bulk Edit for Multiple Target Workloads,” on page 140](#)
- ◆ [Section 16.10, “Bulk Status Change for Multiple Target Workloads,” on page 147](#)
- ◆ [Section 16.11, “Synchronizing Edits from the Migrate Server,” on page 148](#)
- ◆ [Section 16.12, “Viewing the Transformation History,” on page 148](#)
- ◆ [Section 16.13, “Adding User Notes to the Transformation History,” on page 149](#)
- ◆ [Section 16.14, “Withdrawing a Submitted Workload,” on page 149](#)
- ◆ [Section 16.15, “Deleting a Workload,” on page 151](#)

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 directly. 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 imported or discovered value.

If the section in the Workload dialog has not been edited directly, any changes to the Target default or imported values have been made indirectly. Otherwise, the changes might have been made directly or indirectly. 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 Planning 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

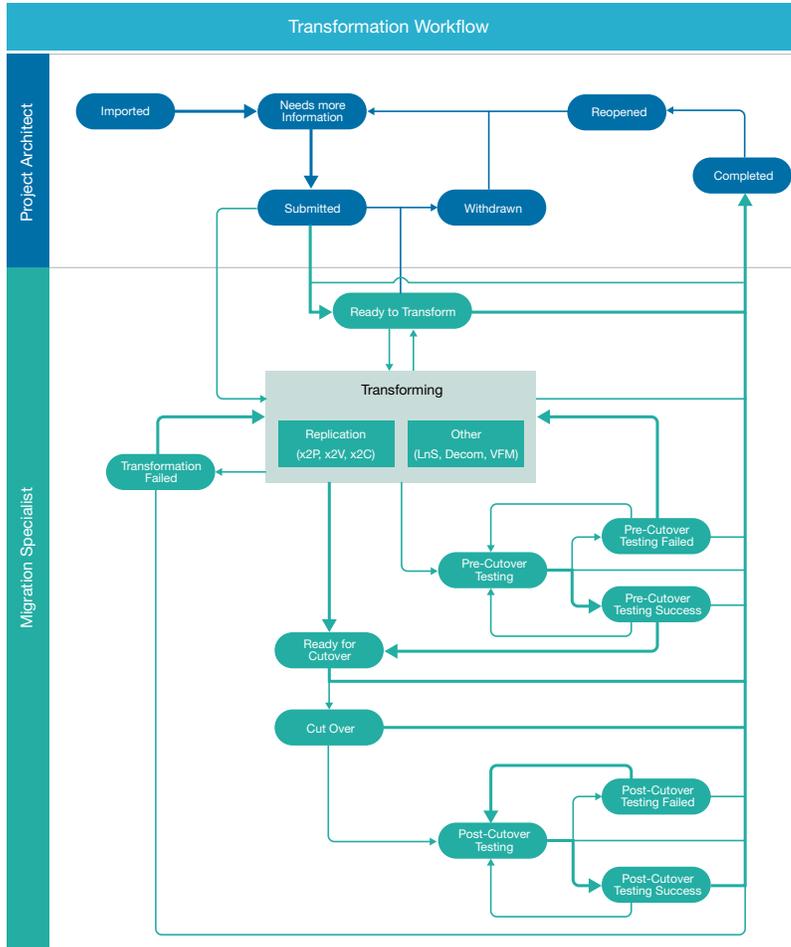


Table 16-1 State Descriptions

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. 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 PlateSpin Migrate server that you will use to execute the migration.

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 PlateSpin Migrate server that you will use to execute the migration.

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)
- ◆ Decommission
- ◆ Manual (for planning or external migration tracking)

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 2019.2 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

Select 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 where the target workload resides in the network:

Location

Environment

The Environment resource assigned to the workload.

Platform

Select the target platform to use from a list of existing platforms.

Platform Type

The type of platform for the selected Platform resource:

- ◆ Microsoft Azure
- ◆ VMware vCenter Server

Location

(Type: Cloud) The geographic cloud region where the workload network resides. Example: Central US.

Site

(Type: Virtual) The geographic location or facility where the workload network resides. Example: London.

Cluster

(Type: Virtual) The VMware cluster to use as the target platform.

Host

(Type: Virtual) The Host resource to use for the target host.

Hardware

The vendor or model of hardware used by the workload. Example: Dell PowerEdge

Azure Settings (Type: Cloud)

VM Name

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

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.

Azure Agent

Specify whether to install the latest Azure Agent on the target Windows workload. If the check box is selected (enabled), PlateSpin Migrate installs the agent on the target workload.

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

NOTE: The Install Azure Agent option is disabled and not available for Linux workloads.

vCenter Settings (Type: Virtual)

VM Name

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

Resource Pool

Select 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

Specify whether to 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.

16.1.11 Migration Settings

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

General Settings

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

Select 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

Select the check box to enable encryption of data for transmission.

Pause for configuration in Migrate

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

Pause for manual cutover

Select 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

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

Replication with cutover

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

Shut down source after cutover

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

Replication Network

Use DHCP to get network address details

This 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.

Network

Select the Network resource assigned to the target host machine.

Subnet (Type: Azure)

Select the Network resource assigned to the target host machine.

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.

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 Details

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

(Optional) Select the Credential resource to use to authenticate to a specified source workload.

Operating System

The specified value from the OS Types list.

Architecture

This value is inherited from the specified operating system.

Description

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

Workload Resources (Azure)

Azure Machine Size

The instance size description of the target Azure VM.

Your VM disks will use the Azure page blob type of general-purpose storage, which can run on Standard (HDD) or Premium (SSD) storage media. A Standard Storage Account can be used for Azure VM sizes that use Standard or Premium storage media. A Premium Storage Account can be used only for Azure VM sizes that use Premium 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.

If you want full control over your Azure Storage Accounts, configure a Standard or a Premium general-purpose storage account for each Azure Subscription before you begin migrating workloads to Azure. Your storage account is shown as a datastore for the target Azure Subscription in the Migrate Web Interface. For information about Azure Storage Accounts, refer to [Azure documentation](#).

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 Resources (VMware)

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.

Windows Settings

The Windows Settings area is available for Windows virtual 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.

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.

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.

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.

Interface Name

The name for the NIC. Example: `eth0`

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.

Set as primary

(Azure) Specify 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.

Request public IP

(Azure) Select the check box to request a public IP for the primary NIC.

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.

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

If you enable a public IP address for the primary NIC, Azure assigns the NIC both a public IP address and a private IP address.

Resource Group

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

Network

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

Subnet

(Azure) Specify the subnet to use in the specified network.

Use DHCP to get network address details

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.

Use DHCP to get name servers

For Windows workloads, select this 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 this check box, then manually specify the DNS server information in the **DNS Servers** field.

- ◆ **DNS Servers:** Type the server IP address in IPv4 format. For multiple entries, specify one DNS server per line.

Connect on boot

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

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.

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 Planning 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 Planning 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

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

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.

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.

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 Planning 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.

For information about setting network options, see [Section 16.1.13, “Network Interfaces,” on page 129](#).

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

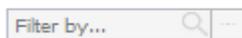
The Transformation History panel displays the most recent workflow state changes, migration sub-state changes, or user-provided notes for the workload. Each state change triggers an entry. You can also enter user notes to be logged, such as manual changes and actions performed for the workload.

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.

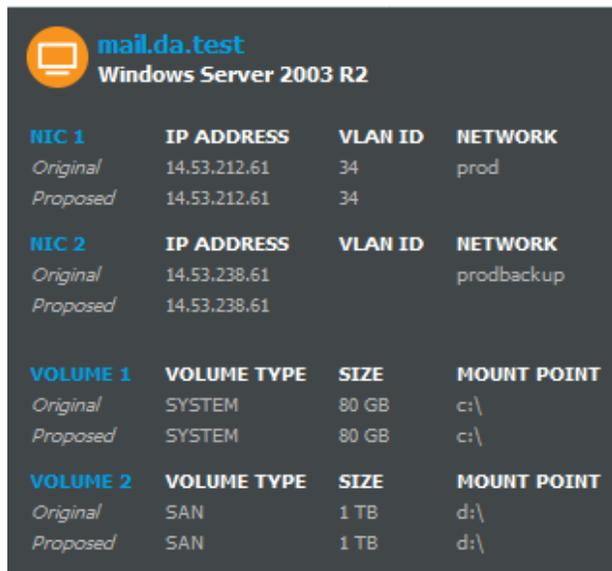
- ♦ A **Retry** option is available when you select a workload in a failed state that is a recoverable condition. Retry actions are not available for manual migrations.
- ♦ A **Rediscover** option is available when you select a workload that was previously successfully discovered.

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 Windows Server 2003 R2			
NIC 1	IP ADDRESS	VLAN ID	NETWORK
<i>Original</i>	14.53.212.61	34	prod
<i>Proposed</i>	14.53.212.61	34	
NIC 2	IP ADDRESS	VLAN ID	NETWORK
<i>Original</i>	14.53.238.61		prodbackup
<i>Proposed</i>	14.53.238.61		
VOLUME 1	VOLUME TYPE	SIZE	MOUNT POINT
<i>Original</i>	SYSTEM	80 GB	c:\
<i>Proposed</i>	SYSTEM	80 GB	c:\
VOLUME 2	VOLUME TYPE	SIZE	MOUNT POINT
<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	Platform	Hostname	For AWS:
Wave		Migrate Server	VPC
Batch	For AWS:	OS Type	Datastores
Status	Region	Application	
Sub Status	For Azure:	Environment	For Azure:
Health	Location	Transform Method	Network
On Hold	Resource Group		Subnet
		For Azure:	Storage Accounts
	For VMware:	Azure Machine Size	
	Cluster		For VMware:
	Cluster Hosts		Network
			Datastores
			Total Storage
			Single Disk Size
			Total Number of Cores
			Amount of Memory
Custom Fields			
Field 1	Field 2	Field 3	Field 4
Field 5	Field 6	Field 7	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

For information about the various parameters for the workload, see [Section 16.1, “About the Workload Dialog,”](#) on page 117.

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.

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 141](#)
- ♦ [“Selecting Workloads for Bulk Edit” on page 146](#)
- ♦ [“Applying a Bulk Edit” on page 147](#)

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 are 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
Transformation Plan	
Project	The Project value is informational if you preset the Global Project Selector. All selected workloads belong to that project. 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.
Wave	This option reflects the parent wave of the target batch and sets the Project value if it is not set.
Batch	Set the target batch assignment for the selected workloads. It sets the parent wave and project if they are not set. 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.
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	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. 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	Set the cutover date for the workload.

Parameter	Description
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>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).</p>
Transformation Method	<p>Specify the transformation method:</p> <ul style="list-style-type: none"> ◆ Automated ◆ Decommission ◆ Manual
Migration Server	<p>Change the Migration Server resource:</p> <ul style="list-style-type: none"> ◆ From any value to the new specified value. ◆ From a specified value to a new specified value. ◆ Auto Assign
On Hold	<p>Select True to pause the workload transformation workflow for the selected workloads.</p>
Location	
Platform	<p>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.</p> <p>The Location panel shows only the fields appropriate for the platform type of the specified platform.</p>
Location	<p>(Azure) Select the location from the list available for the selected target Azure platform.</p>
Cluster	<p>(VMware) Select the cluster from the list of available clusters for the selected VMware vCenter server.</p>
Cluster Host	<p>(VMware) Select the host from the list of available hosts for the selected VMware vCenter server.</p>
Unassign Cluster Host	<p>(VMware) Remove assignment for any selected host.</p>
VM Config Datastore	<p>(VMware)</p> <p>For any Datastore, change the Datastore resource:</p> <ul style="list-style-type: none"> ◆ From any value to the specified value. ◆ From a specified value to a new specified value.

Parameter	Description
Migration Settings	
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. (VMware) If there are multiple NICs, uses the first NIC in the list.
Network	Change the Network resource to use for the Replication: <ul style="list-style-type: none"> ◆ From any network to the new specified network. ◆ From a specified network to a new specified network.
Subnet	(Azure) Change the Subnet resource to use for the Replication: <ul style="list-style-type: none"> ◆ From any subnet to the specified value. ◆ From a specified subnet to a new specified value.
Enable DHCP	Select to enable DHCP for IP address assignment.
Resource Group	(Azure) Change the Resource Group resource: <ul style="list-style-type: none"> ◆ From any resource group to the specified value. ◆ From a specified resource group to a new specified value.
Workload	
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"> ◆ From any value to the specified value. ◆ From a specified value to a new specified value.
Admin Credential	For any Admin Credential, change the Credential resource: <ul style="list-style-type: none"> ◆ From any value to the specified value. ◆ From a specified value to a new specified value.
Machine Size	(Azure) Set the VM instance size to use for target VMs in Azure.
Resource Group	(Azure) For any Resource Group, change the Resource Group resource: <ul style="list-style-type: none"> ◆ From any value to the specified value. ◆ From a specified value to a new specified value.
Amount of RAM	(VMware) Set the size of the memory for the target VMs.

Parameter	Description
# Sockets	(VMware) Set the number of sockets for the target VMs.
# Cores	(VMware) Set the number of cores for the target VMs.
Network Interfaces	
NIC	Set any NIC, or specify the NIC to be modified. (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"> ◆ From any network to the new specified network. ◆ From a specified network to a new specified network.
Subnet	(Azure) Change the Subnet resource: <ul style="list-style-type: none"> ◆ From any subnet to the specified value. ◆ From a specified subnet to a new specified value.
Enable DHCP	Select to enable DHCP for IP address assignment.
Resource Group	(Azure) Change the Resource Group resource: <ul style="list-style-type: none"> ◆ From any resource group to the specified value. ◆ From a specified resource group to a new specified value.
Storage	
Datastore	(VMware) Change the Datastore resource: <ul style="list-style-type: none"> ◆ From any datastore to the specified value. ◆ From a specified datastore to a new specified value.
Storage Accounts	(Azure) Change the Storage Account resource: <ul style="list-style-type: none"> ◆ From any storage account to the specified value. ◆ From a specified storage account to a new specified value.
Testing Settings	
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"> ◆ From any value to the specified value. ◆ From a specified value to a new specified value.
Test NIC	Set any NIC, or specify the NIC to be modified. (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"> ◆ From any network to the new specified network. ◆ From a specified network to a new specified network.
Subnet	Change the Subnet resource: <ul style="list-style-type: none"> ◆ From any subnet to the specified value. ◆ From a specified subnet to a new specified value.
Enable DHCP	Select to enable DHCP for IP address assignment.
Resource Group	Change the Resource Group resource: <ul style="list-style-type: none"> ◆ From any resource group to the specified value. ◆ From a specified resource group to a new specified value.
Custom Fields	
Custom Fields	For each field, set the value to the specified value. NOTE: The custom fields display only when a single project is actively selected or specified by the Global Project Selector.
Applications	
Add Application	Set an application to be added to selected workloads. After you select an application, another list displays where you can set another application to be added.
Transformation History	
Add Note	Type a note to be added to selected workloads. 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 147](#).

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 2019.2 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 2019.2 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 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 17.1, “About Tracking External Migrations,” on page 153](#)
- [Section 17.2, “Planning for Tracking External Migrations,” on page 154](#)
- [Section 17.3, “Checklist for Tracking External Migrations,” on page 155](#)
- [Section 17.4, “Enabling Enhanced Tracking,” on page 156](#)

17.1 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 17-1](#).

Table 17-1 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 Table 17-2 .	Same events reported for PTM automated migrations.

[Table 17-2](#) describes the status events for migrations in the Migrate Client.

Table 17-2 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 set to Planning Mode
- ◆ When you modify the Mode from Automated to Planning 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)

17.2 Planning for Tracking External Migrations

See the following information to understand the requirements for tracking in your PlateSpin Migration Factory environment.

Table 17-3 Planning Resources for Manual (Tracking) Mode

Topic	Resource
Manual (tracking) mode	See Manual (Tracking) in Table 1-1, “Migration Types,” on page 17.
Supported source workloads	See “Supported Configurations for Source Workload Discovery” on page 19.
Supported target platforms for discovery	See “Supported Configurations for Target Platform Discovery” on page 19.

Topic	Resource
Supported target platforms for tracking	See Manual (Tracking) in Table 1-3 on page 21 .
Requirements for discovery	See “Requirements for Discovery” on page 23 .
Requirements for tracking external migrations	See “Requirements for Tracking External Migrations” on page 26 .

17.3 Checklist for Tracking External Migrations

PlateSpin Transformation Manager begins tracking an external migration when the PlateSpin Migrate Connector matches an imported workload in Planning 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 17-4](#).

Table 17-4 Checklist for Tracking External Migrations

Status	Task	Notes
In your PlateSpin Migration Factory environment:		
<input type="checkbox"/>	Deploy one or more PlateSpin Migrate servers.	See the PlateSpin Migrate 2019.2 Installation and Upgrade Guide .
<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 “Enabling Event Messaging for PlateSpin Migration Factory” in the PlateSpin Migrate 2019.2 User Guide .
<input type="checkbox"/>	Ensure that your network environment meets the PTM requirements for networking.	See Section 1.6, “Network Connectivity and Access Requirements,” on page 26 .
<input type="checkbox"/>	Deploy and configure a PlateSpin Migrate Connector for the PTM project in the source network.	See “Installing PlateSpin Migrate Connector” in the PTM 2019.2 Administrator Guide . See “Configuring a Connector Instance for PTM” in the PTM 2019.2 Administrator Guide .
In PlateSpin Transformation Manager:		
<input type="checkbox"/>	Configure one or more Credential resources to use for access to your PlateSpin Migrate servers.	See “Creating a Credential” on page 181 .
<input type="checkbox"/>	Configure your PlateSpin Migrate servers as Migration Server resources in the project, and specify a valid Credential resource.	See “Creating a Migration Server Resource” on page 187 .

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 “Importing and Discovering Workloads” on page 103. 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 “Enabling Enhanced Tracking” on page 156. Enhanced tracking is available after the platform is discovered and its details are added to PTM.
On the project’s PlateSpin Migrate servers:		
<input type="checkbox"/>	Prepare your target migration environment.	See “Preparing Your Migration Environment” “Preparing Your Migration Environment” in the <i>PlateSpin Migrate 2019.2 User Guide</i> .
<input type="checkbox"/>	Discover and prepare the workload on any one of the project’s Migrate servers.	See “Discovering and Preparing Workloads and Targets” in the <i>PlateSpin Migrate 2019.2 User Guide</i> . 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 “Configuring Workloads” in the <i>PlateSpin Migrate 2019.2 User Guide</i> .
<input type="checkbox"/>	Execute the migration using the Migrate Client or Migrate Web Interface, as appropriate.	See “Executing Migrations” in the <i>PlateSpin Migrate 2019.2 User Guide</i> .

17.4 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 22.6, "Creating a Platform,"](#) on page 211.

A

Preparing an Import Spreadsheet

Users Who Can Perform This Task: Project Manager, Project Architect, or any user in the Administrators group

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 160](#)
- ♦ [Section A.2, “Spreadsheet Parameters,” on page 162](#)
- ♦ [Section A.3, “Downloading a Sample Import Spreadsheet,” on page 170](#)
- ♦ [Section A.4, “Validating a Spreadsheet,” on page 171](#)
- ♦ [Section A.5, “Downloading the Results Spreadsheet,” on page 171](#)
- ♦ [Section A.6, “Re-Importing Workloads,” on page 172](#)

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 160](#)
- ◆ [“Spreadsheet Import Workflow” on page 161](#)

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.

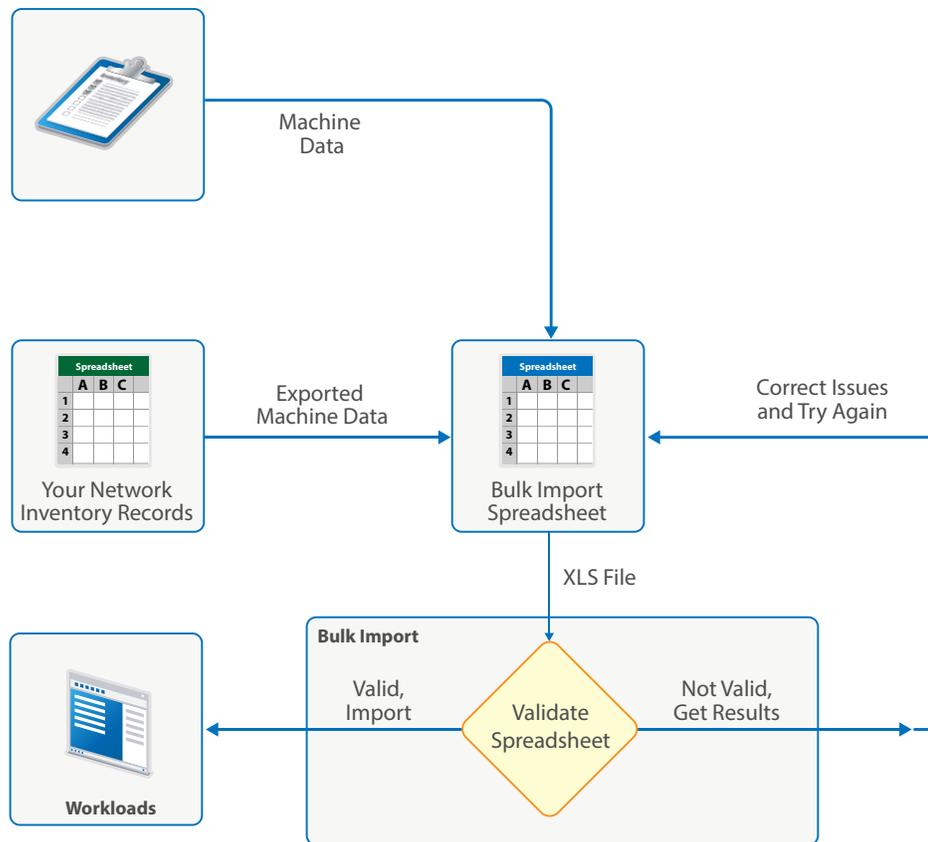
- ◆ **Validation Results:** The Validation Results reporting tool provides the Validation Status for each machine in the spreadsheet. For each invalid row, it identifies the type and location of errors. It also identifies which rows are ignored. You can view results for all rows, valid rows, invalid 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 163](#)
- ♦ [Table A-2, “Workload Credentials Parameters,” on page 164](#)
- ♦ [Table A-3, “Workload Details Parameters,” on page 165](#)
- ♦ [Table A-4, “Location Parameters,” on page 166](#)
- ♦ [Table A-5, “Custom Field Parameters,” on page 167](#)
- ♦ [Table A-6, “NIC Parameters,” on page 168](#)
- ♦ [Table A-7, “Disk Parameters,” on page 169](#)
- ♦ [Table A-8, “Application Parameter,” on page 170](#)

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. Examples: sqlserver5.paris.digitalair.com sqlserver5 192.168.1.1 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. 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">◆ Windows: Case insensitive. Use local or domain administrator credentials. For example:<ul style="list-style-type: none">◆ For domain member machines: CORPDOM\username◆ For workgroup member machines: WORKGROUP\username◆ For a local user account: username◆ Linux: 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 KB Article 7920711 (https://support.microfocus.com/kb/doc.php?id=7920711).
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">CentOS 6Citrix XenServerRed Hat Enterprise Linux 7Solaris 11SUSE Linux Enterprise Server 12Windows Server 2003 (x32)Windows 2008Windows Server 2012 R2Windows Server 2016VMware ESX <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. 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. Examples: staging, preproduction, and production NOTE: 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. Examples: vm-erm2, vm-msx-mailbox, vm-msx-web
Site	Optional	Specify the geographical or logical location of the host machine. 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). Examples: Dell PowerEdge, Lenovo X, IBM BladeCenter
Enclosure	Optional	Specify the enclosure for the host machine. Examples: AA-21, C205-R5, IL6-C5-R3
Enclosure Slot	Optional	Specify the slot number in the specified enclosure. Examples: U19, B07

Parameter	Required/Optional	Description
Is Domain?	Optional	(OS: Windows family) Boolean value must be either TRUE or FALSE. Specify TRUE if the Windows workload is a member of a domain. 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. Domain name examples: CORPDOM, PARIS, or paris.digitalair.com 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; recommended for NIC. Values are 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, On a re-import, PTM keeps the same ID, and replaces the NIC's configuration information for the source workload. Example: b916afef-ccfc-4501-aa4c-a4658cd9845d
NIC1 Interface Name	Optional	Specify a unique interface name on the workload. Examples: eth0, eth1
NIC1 IP DHCP	Optional	Specify whether a DHCP server provides IP addresses for the NIC. Boolean value must be either TRUE or FALSE.
NIC1 IP Address	Optional	Specify an address for the NIC in IPv4 format. Example: 10.10.10.40
NIC1 MAC	Optional	Specify the MAC address for the source workload NIC in the MM:MM:MM:SS:SS:SS format. Example: 01:23:45:67:89:ab
NIC1 Network Mask	Optional	Specify the network mask in IPv4 format. Example: 255.255.252.0

Parameters	Required/Optional	Description
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. 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; recommended for Disks. Values are 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. On a re-import, PTM keeps the same ID, and replaces the disk's configuration information for the source workload. Example: 866b4209-4779-48f8-a81d-e8aa04c63d55
Disk1 Vol Name	Optional	Specify the unique volume name on the workload.
Disk1 Vol Type	Optional; required for 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. 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. NOTE: Volumes and volume groups should have at least 10 percent unallocated space available. 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. 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. Example: <code>Paris-Project2-Exchange</code> NOTE: 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 18, “Overview of Resources,” on page 175](#)
- ♦ [Chapter 19, “Managing Credentials Resources,” on page 177](#)
- ♦ [Chapter 20, “Managing Migration Server Resources,” on page 185](#)
- ♦ [Chapter 21, “Managing Environment Resources,” on page 191](#)

18 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 18.1, “About Resources,” on page 175](#)
- ♦ [Section 18.2, “Prerequisites for Resources,” on page 175](#)

18.1 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.

18.2 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.

19 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 19.1, “About Credentials Resources,” on page 177](#)
- ◆ [Section 19.2, “Viewing Credentials,” on page 180](#)
- ◆ [Section 19.3, “Creating a Credential,” on page 181](#)
- ◆ [Section 19.4, “Associating Credentials with Workloads, Platforms, or Migration Servers,” on page 181](#)
- ◆ [Section 19.5, “Editing a Credential,” on page 183](#)
- ◆ [Section 19.6, “Deleting a Credential,” on page 183](#)

19.1 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.

19.2 Viewing Credentials

All roles for a project can view the Credentials resource information. However, the 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**.

19.3 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.

19.4 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 181](#)
- ♦ [“Associating Credentials and Platforms” on page 182](#)
- ♦ [“Associating Credentials and Migration Servers” on page 182](#)

19.4.1 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.

19.4.2 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.

19.4.3 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.

19.5 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.

19.6 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.

20 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 20.1, “About Migration Server Resources,” on page 185](#)
- ◆ [Section 20.2, “Viewing Migration Server Resources,” on page 186](#)
- ◆ [Section 20.3, “Creating a Migration Server Resource,” on page 187](#)
- ◆ [Section 20.4, “Associating a Connector with a Migration Server Resource,” on page 188](#)
- ◆ [Section 20.5, “Associating Migration Servers and Target Workloads,” on page 188](#)
- ◆ [Section 20.6, “Editing a Migration Server,” on page 189](#)
- ◆ [Section 20.7, “Deleting a Migration Server,” on page 189](#)

20.1 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
```

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.

20.2 Viewing Migration Server Resources

All roles for a project can view the migration server information.

- 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**.

20.3 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.

20.4 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.

20.5 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.

20.6 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.

20.7 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.

21 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 21.1, “About Environment Resources,” on page 191](#)
- ◆ [Section 21.2, “Viewing Environments,” on page 192](#)
- ◆ [Section 21.3, “Creating a Source Environment,” on page 192](#)
- ◆ [Section 21.4, “Creating an Environment,” on page 192](#)
- ◆ [Section 21.5, “Associating Environments and Target Workloads,” on page 193](#)
- ◆ [Section 21.6, “Editing an Environment,” on page 193](#)
- ◆ [Section 21.7, “Deleting an Environment,” on page 193](#)

21.1 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.

21.2 Viewing Environments

All roles for a project can view the environment information.

- 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**.

21.3 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.

21.4 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.

21.5 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.

21.6 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.

21.7 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 22, “Managing Target Platforms,” on page 197](#)
- ◆ [Chapter 23, “VMware vCenter Clusters,” on page 215](#)
- ◆ [Chapter 24, “VMware vCenter Cluster Hosts,” on page 219](#)
- ◆ [Chapter 25, “Azure Locations,” on page 223](#)
- ◆ [Chapter 26, “AWS Regions,” on page 227](#)

22 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 delete 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 22.1, “About Platforms,” on page 197](#)
- ◆ [Section 22.2, “Viewing Platforms,” on page 207](#)
- ◆ [Section 22.3, “Viewing vCenter Server Platforms,” on page 209](#)
- ◆ [Section 22.4, “Viewing Azure Platforms,” on page 210](#)
- ◆ [Section 22.5, “Viewing AWS Platforms,” on page 210](#)
- ◆ [Section 22.6, “Creating a Platform,” on page 211](#)
- ◆ [Section 22.7, “Retrying Platform Discovery,” on page 212](#)
- ◆ [Section 22.8, “Rediscovering Platforms,” on page 213](#)
- ◆ [Section 22.9, “Editing Platforms,” on page 213](#)
- ◆ [Section 22.10, “Associating Platforms and Target Workloads,” on page 213](#)
- ◆ [Section 22.11, “Deleting a Platform,” on page 214](#)
- ◆ [Section 22.12, “Deleting Workload Associations for a Platform,” on page 214](#)

22.1 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. PTM discovers resources for Microsoft Azure by using HTTPS connections with the target Azure Cloud.

NOTE: Target platform discovery for VMware platforms is available only when a PlateSpin Migrate Connector is available to the project and the target platform is supported for automated migrations.

Platform properties and associated resources vary based on the platform type. You can optionally exclude discovered resources for a target platform from being used during planning.

- ◆ [“Platform Properties” on page 198](#)
- ◆ [“Platform Associations” on page 201](#)

- ♦ [“Discovery Process for Platforms” on page 206](#)
- ♦ [“Troubleshooting Platform Discovery Failures” on page 206](#)

22.1.1 Platform Properties

Each Platform provides the following 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. Options include:

- ♦ Amazon Web Services
- ♦ Microsoft Azure
- ♦ VMware vCenter Server

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.

Cluster

(VMware Host, Optional) The name of the VMware Cluster.

IP or FQDN

Specify the IPv4 address or FQDN 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

Select the **Install agent on source workload** check box if you want PTM to install the Migrate Agent on the source workloads. When it is installed, PTM controls replication and migration using Migrate Agent.

Associations

After a successful platform discovery, the Associations panel shows information about discovered resources and assigned workloads.

- ◆ Clusters
- ◆ Hosts
- ◆ Networks
- ◆ Datastores
- ◆ Resource Pools
- ◆ Workloads

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 Migrate Agent on the source workloads. When it is installed, PTM controls replication and migration using Migrate Agent.

Associations

After a successful platform discovery, the Associations panel shows information about discovered resources and assigned workloads.

- ◆ Locations
- ◆ Networks
 - ◆ Virtual Networks
 - ◆ Subnets
- ◆ Datastores
- ◆ Resource Groups
- ◆ Workloads

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 US 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 Migrate Agent on the source workloads. When it is installed, PTM controls replication and migration using Migrate Agent.

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

22.1.2 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.

- ◆ [“VMware vCenter Server” on page 201](#)
- ◆ [“Microsoft Azure” on page 203](#)
- ◆ [“Amazon Web Services” on page 204](#)

VMware vCenter Server

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
- ◆ Host

Networks

A list of the virtual networks defined for the cluster host.

- ◆ Name
- ◆ Cluster
- ◆ Host Name
- ◆ Hosts
- ◆ VMs

Datastores

A list of datastores associated with VMware Clusters managed by the VMware vCenter Server.

- ◆ Name
- ◆ Host
- ◆ Type
- ◆ Capacity
- ◆ VMs
- ◆ Status

Resource Pools

A list of resource pools associated with VMware Clusters managed by the VMware vCenter Server.

- ◆ Name
- ◆ 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
- ◆ Batch
- ◆ Transformation
- ◆ Status

Microsoft Azure

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

Datastores

A list of datastores associated with the platform.

- ◆ Name
- ◆ Location
- ◆ Replication
- ◆ Performance
- ◆ Status
- ◆ Encryption

Resource Groups

A list of resource groups associated with the platform.

- ◆ Name

- ◆ Location
- ◆ Deployments
- ◆ Items

Workloads

A list of workloads associated with VMs in platform.

- ◆ Name
- ◆ Batch
- ◆ Transformation
- ◆ Status

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.

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** tooltip, 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

22.1.3 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.

22.1.4 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.

22.2 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](#)
- ◆ [Cluster](#)
- ◆ [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
- ◆ Datastores
- ◆ Resource Groups
- ◆ 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
- ◆ 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**.

22.3 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](#)
- ◆ [Cluster](#)
- ◆ [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**.

22.4 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](#)
- ◆ [Datastores](#)
- ◆ [Resource Groups](#)
- ◆ [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**.

22.5 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](#)
- ◆ [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**.

22.6 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 22.1.1, “Platform Properties,” on page 198.](#)
- 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 22.1.1, “Platform Properties,” on page 198.](#)
- 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.

22.7 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.

22.8 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.

22.9 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.

22.10 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.

22.11 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.

22.12 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.

23 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 23.1, “About VMware Clusters,” on page 215](#)
- ♦ [Section 23.2, “Associating VMware Clusters with Target Workloads,” on page 216](#)
- ♦ [Section 23.3, “Creating a VMware Cluster,” on page 217](#)
- ♦ [Section 23.4, “Viewing VMware vCenter Clusters,” on page 217](#)
- ♦ [Section 23.5, “Excluding or Including a VMware Cluster Resource,” on page 217](#)
- ♦ [Section 23.6, “Editing a VMware Cluster Description,” on page 218](#)
- ♦ [Section 23.7, “Deleting a VMware Cluster,” on page 218](#)

23.1 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.

Datastores

Number of shared datastores 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.

23.2 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.

23.3 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.

23.4 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:
 - ◆ Status
 - ◆ Name
 - ◆ Organization
 - ◆ Project
 - ◆ Description
- 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**.

23.5 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.

23.6 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.

23.7 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.

24 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 24.1, “About VMware Cluster Hosts,” on page 219](#)
- ♦ [Section 24.2, “Creating a VMware Cluster Host,” on page 220](#)
- ♦ [Section 24.3, “Viewing VMware vCenter Cluster Hosts,” on page 220](#)
- ♦ [Section 24.4, “Editing Target Cluster Host Description,” on page 220](#)
- ♦ [Section 24.5, “Excluding or Including a VMware Host Resource,” on page 220](#)
- ♦ [Section 24.6, “Deleting a VMware Cluster Host,” on page 221](#)

24.1 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.

24.2 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.

24.3 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 (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.
- 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**.

24.4 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.

24.5 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**.

24.6 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.

25 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 25.1, “About Azure Cloud Locations,” on page 223](#)
- ♦ [Section 25.2, “Associating Azure Locations with Target Workloads,” on page 223](#)
- ♦ [Section 25.3, “Excluding or Including an Azure Location,” on page 224](#)
- ♦ [Section 25.4, “Editing an Azure Location Description,” on page 224](#)
- ♦ [Section 25.5, “Deleting an Azure Location,” on page 225](#)

25.1 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.

25.2 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.

25.3 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**.

25.4 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.

25.5 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.

26 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.

- ♦ [Section 26.1, “About AWS Regions,” on page 227](#)
- ♦ [Section 26.2, “Associating AWS Regions with Target Workloads,” on page 227](#)
- ♦ [Section 26.3, “Excluding or Including an AWS Region,” on page 228](#)
- ♦ [Section 26.4, “Editing an AWS Region Description,” on page 228](#)
- ♦ [Section 26.5, “Deleting an AWS Region,” on page 228](#)

26.1 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.

26.2 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.

26.3 Excluding or Including an AWS Region

Discovered Region resources for a target AWS platform are automatically included in the list of resources available for migrations. You can use the Exclude action on the Regions tab in the Platform dialog to hide specified regions in migration menus. The excluded resource appears dimmed in the Platform Associations list. Excluded resources do not appear in other dialogs for planning.

NOTE: For enhanced tracking, workload associations to an excluded region are not available for the Region resource.

To exclude a Region resource for a target AWS platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Regions tab.
- 3 Select the appropriate region, click **Exclude**.
- 4 If workloads are associated with the region, 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 region. Including the previously excluded resource does not reinstate any prior associations it had before you excluded it.

To include an excluded Region resource for a target AWS platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Regions tab.
- 3 Select the excluded region, then click **Include**.

26.4 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.

26.5 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.

VII Platform Resources

For each target platform, PlateSpin Transformation Manager discovers resources available for the platform, such as networks and storage.

- ◆ [Chapter 27, “Networks,” on page 233](#)
- ◆ [Chapter 28, “Network Subnets,” on page 241](#)
- ◆ [Chapter 29, “AWS Virtual Private Clouds,” on page 245](#)
- ◆ [Chapter 30, “Datastores,” on page 249](#)
- ◆ [Chapter 31, “VMware Resource Pools,” on page 255](#)
- ◆ [Chapter 32, “Azure Resource Groups,” on page 259](#)
- ◆ [Chapter 33, “AWS Security Groups,” on page 261](#)
- ◆ [Chapter 34, “AWS Placement Groups,” on page 265](#)
- ◆ [Chapter 35, “AWS Key Pairs,” on page 269](#)
- ◆ [Chapter 36, “AWS Encryption Keys,” on page 273](#)
- ◆ [Chapter 37, “AWS IAM Roles,” on page 277](#)

27 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 27.1, “About Network Resources,” on page 233](#)
- ♦ [Section 27.2, “Viewing Networks,” on page 234](#)
- ♦ [Section 27.3, “Excluding or Including a Network Resource,” on page 235](#)
- ♦ [Section 27.4, “Associating Networks and Target Workloads,” on page 236](#)
- ♦ [Section 27.5, “Editing a Target Network Description,” on page 237](#)
- ♦ [Section 27.6, “Deleting a Network,” on page 237](#)
- ♦ [Section 27.7, “Selecting a Network and Subnet for Each NIC,” on page 237](#)
- ♦ [Section 27.8, “Creating a NIC for the Target VM,” on page 238](#)
- ♦ [Section 27.9, “Deleting a NIC from the Target VM,” on page 238](#)
- ♦ [Section 27.10, “Configuring the Primary NIC for Target VM on Azure,” on page 239](#)
- ♦ [Section 27.11, “Configuring the DHCP Service for Target VMs,” on page 239](#)
- ♦ [Section 27.12, “Configuring the DNS Service for Target VMs,” on page 239](#)

27.1 About Network Resources

PlateSpin Transformation Manager discovers available networks for the target platform. It provides the following information for each 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.

Azure Platforms

For Azure Cloud platforms, the following network information is available:

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.

VMware Platforms

For VMware platforms, the following network information is available:

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.

AWS Platforms

For AWS platforms, the following network information is available for AWS Virtual Private Clouds.

NOTE: PTM supports AWS platforms for external migrations for workloads in Manual (tracking) mode. It does not support automated migrations to AWS platforms.

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

All roles for a project can view the network information.

- 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
- ◆ Resource Group - Name of the resource group that contains the network
- ◆ 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
- ◆ Host Name - IPv4 address of the host, such as 10.10.187.55
- ◆ Hosts - number of hosts in 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 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)
- 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**.

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.

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 Networks and Target Workloads

After you create 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 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.

27.6 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.

27.7 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.

27.8 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.

27.9 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.

27.10 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.

27.11 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.

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.

27.12 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 this 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 this check box, then manually specify the DNS server information in the **DNS Servers** field.

- ◆ **DNS Servers:** Type the server IP address in IPv4 format. For multiple entries, specify one DNS server per line.

28 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 28.1, "About Subnet Resources," on page 241](#)
- ♦ [Section 28.2, "Viewing Subnets," on page 242](#)
- ♦ [Section 28.3, "Excluding or Including a Subnet Resource," on page 242](#)
- ♦ [Section 28.4, "Associating Subnets and Target Workloads," on page 243](#)
- ♦ [Section 28.5, "Edit Subnet Description," on page 244](#)
- ♦ [Section 28.6, "Deleting a Subnet," on page 244](#)

28.1 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 (Azure)

The parent location of the subnet in the Azure Cloud for the target platform. For example: Central US, West US, or North Europe.

Region (AWS)

The parent region of the subnet in the AWS Cloud for the target platform. For example: Central US, West US, or North Europe.

Network (or Virtual Private Cloud)

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.

28.2 Viewing Subnets

All roles for a project can view the subnet information.

- 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 Networks 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
- 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**.

28.3 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**.

28.4 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.

28.5 Edit 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.

28.6 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.

29 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.

- ♦ [Section 29.1, “About AWS Virtual Private Clouds,” on page 245](#)
- ♦ [Section 29.2, “Associating AWS VPCs with Target Workloads,” on page 246](#)
- ♦ [Section 29.3, “Excluding or Including an AWS Virtual Private Cloud,” on page 246](#)
- ♦ [Section 29.4, “Editing an AWS VPC Description,” on page 247](#)
- ♦ [Section 29.5, “Deleting an AWS Virtual Private Cloud,” on page 247](#)

29.1 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 subscription might also influence the virtual private clouds available for the platform.

PTM provides the following information for each 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 network. This text appears by default in the Virtual Private Clouds list.

AWS Platforms

For AWS platforms, the following network information is available for AWS Virtual Private Clouds.

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.

29.2 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 these workloads in the Edit Platform dialog. You can also view a list of workloads associated with each Virtual Private Cloud 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 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.

29.3 Excluding or Including an AWS Virtual Private Cloud

Discovered Virtual Private Cloud resources for a target AWS platform are automatically included in the list of resources available for migrations. You can use the Exclude action on the Virtual Private Clouds tab in the Platform dialog to hide specified virtual private clouds in migration menus. The excluded resource appears dimmed in the Platform Associations list. Excluded resources do not appear in other dialogs for planning.

NOTE: For enhanced tracking, workload associations to an excluded virtual private cloud are not available for the Virtual Private Cloud resource.

To exclude a VPC resource for a target AWS platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Virtual Private Clouds tab.

- 3 Select the appropriate virtual private cloud, click **Exclude**.
- 4 If workloads are associated with the virtual private cloud, 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 virtual private cloud. Including the previously excluded resource does not reinstate any prior associations it had before you excluded it.

To include an excluded VPC resource for a target AWS platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Virtual Private Clouds tab.
- 3 Select the excluded virtual private cloud, then click **Include**.

29.4 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.

29.5 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.

30 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 30.1, “About Datastore Resources,” on page 249](#)
- ◆ [Section 30.2, “Viewing Datastores,” on page 251](#)
- ◆ [Section 30.3, “Setting a Path on the Datastore,” on page 251](#)
- ◆ [Section 30.4, “Creating a Datastore,” on page 251](#)
- ◆ [Section 30.5, “Associating Datastores and Target Workloads,” on page 252](#)
- ◆ [Section 30.6, “Excluding or Including a Datastore Resource,” on page 252](#)
- ◆ [Section 30.7, “Editing a Datastore Description,” on page 253](#)
- ◆ [Section 30.8, “Deleting a Target Datastore,” on page 253](#)

30.1 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:

Platform

The parent target platform for the datastore.

Name

The name of the datastore in the target platform environment.

Description

(Optional) Specify a brief description of the datastore. This text appears by default in the Datastores list.

Azure Platforms

For Azure Cloud platforms, the following network information is available:

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.

VMware Platforms

For VMware platforms, the following datastore information is available:

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.

30.2 Viewing Datastores

All roles for a project can view the datastore information.

- 1 In the Web Interface toolbar, select **Resources**, then select the **Datastores** tab.
You can also view datastores 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 **Datastores** tab.
- 2 On the **Datastores** tab, do either of the following to view a list of resources:
 - ♦ Click the **Source** link to view datastore information that you imported for source workloads using Spreadsheet Import.
 - ♦ Click the **Target** link to view datastore information for the target transformation environment.
- 3 Select a Datastore 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 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.
- 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**.

30.3 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 Storage panel the Workload dialog, 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.

30.4 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.

30.5 Associating Datastores and Target Workloads

After you create target Datastore resources for a project, you can associate them with virtual 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 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 On the Workload dialog in the **Storage** panel, click **Edit**.
- 5 On the Volumes tab, select the volume.
- 6 From the **Datastore** list, select the Datastore resource that you want to assign to the target workload.
- 7 (Optional) Modify other disk and volume interface information as appropriate.
- 8 Click **Save**, and then click **Close**.
- 9 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.

30.6 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: 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**.

30.7 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 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.

30.8 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 production environment, you can rediscover the platform to update its associated resources.

31 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 31.1, “About Resource Pool Resources,” on page 255](#)
- ♦ [Section 31.2, “Viewing Resource Pools,” on page 256](#)
- ♦ [Section 31.3, “Excluding or Including a Resource Pool Resource,” on page 256](#)
- ♦ [Section 31.4, “Editing a Resource Pool Description,” on page 257](#)
- ♦ [Section 31.5, “Associating Resource Pools with Workloads,” on page 257](#)
- ♦ [Section 31.6, “Deleting a Resource Pool,” on page 257](#)

31.1 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.

31.2 Viewing Resource Pools

All roles for a project can view the resource pool information.

- 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
 - ◆ Organization
 - ◆ Project
 - ◆ Description
- 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**.

31.3 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**.

31.4 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 network) 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.

31.5 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.

31.6 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.

32 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 32.1, “About Resource Group Resources,” on page 259](#)
- ♦ [Section 32.2, “Excluding or Including a Resource Group Resource,” on page 259](#)
- ♦ [Section 32.3, “Editing a Resource Group Description,” on page 260](#)
- ♦ [Section 32.4, “Deleting a Resource Group,” on page 260](#)

32.1 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:

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.

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.

32.2 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**.

32.3 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.

32.4 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.

33 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.

NOTE: PTM supports AWS platforms for external migrations for workloads in Manual (tracking) mode. It does not support automated migrations to AWS platforms.

- ◆ [Section 33.1, “About AWS Security Groups,” on page 261](#)
- ◆ [Section 33.2, “Associating AWS Security Groups with Target Workloads,” on page 262](#)
- ◆ [Section 33.3, “Excluding or Including an AWS Security Group,” on page 262](#)
- ◆ [Section 33.4, “Editing an AWS Security Group Description,” on page 263](#)
- ◆ [Section 33.5, “Deleting an AWS Security Group,” on page 263](#)

33.1 About AWS Security Groups

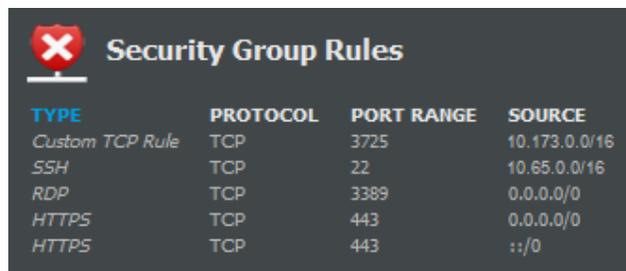
PlateSpin Transformation Manager discovers available cloud security groups for the target AWS Cloud platform. The permissions of the AWS subscription might also influence the security groups available for the platform.

The Security Groups tab for an AWS Platform includes the following information:

- ◆ Name
- ◆ Region Name
- ◆ Inbound Ports

Pause above the inbound ports to view information about the rules for the port in an infotip window.

Figure 33-1 Inbound Security Group Rules Example

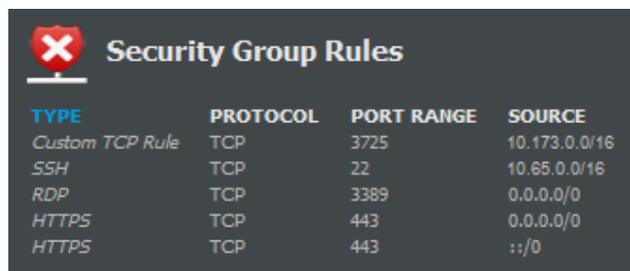


TYPE	PROTOCOL	PORT RANGE	SOURCE
Custom TCP Rule	TCP	3725	10.173.0.0/16
SSH	TCP	22	10.65.0.0/16
RDP	TCP	3389	0.0.0.0/0
HTTPS	TCP	443	0.0.0.0/0
HTTPS	TCP	443	::/0

- ◆ Outbound Ports

Pause above the inbound ports to view information about the rules for the port in an infotip window.

Figure 33-2 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

33.2 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 these workloads in the Edit Platform dialog. You can also view a list of workloads associated with each Security Group 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 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.

33.3 Excluding or Including an AWS Security Group

Discovered Security Group resources for a target AWS platform are automatically included in the list of resources available for migrations. You can use the Exclude action on the Security Groups tab in the Platform dialog to hide specified security groups in migration menus. The excluded resource appears dimmed in the Platform Associations list. Excluded resources do not appear in other dialogs for planning.

NOTE: For enhanced tracking, workload associations to an excluded security group are not available for the Security Group resource.

To exclude a Security Group resource for a target AWS platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Security Groups tab.

- 3 Select the appropriate security group, click **Exclude**.
- 4 If workloads are associated with the security group, 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 security group. Including the previously excluded resource does not reinstate any prior associations it had before you excluded it.

To include an excluded Security Group resource for a target AWS platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Security Groups tab.
- 3 Select the excluded security group, then click **Include**.

33.4 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.

33.5 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.

34 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.

NOTE: PTM supports AWS platforms for external migrations for workloads in Manual (tracking) mode. It does not support automated migrations to AWS platforms.

- ◆ [Section 34.1, “About AWS Placement Groups,” on page 265](#)
- ◆ [Section 34.2, “Associating AWS Placement Groups with Target Workloads,” on page 265](#)
- ◆ [Section 34.3, “Excluding or Including an AWS Placement Group,” on page 266](#)
- ◆ [Section 34.4, “Editing an AWS Placement Group Description,” on page 267](#)
- ◆ [Section 34.5, “Deleting an AWS Placement Group,” on page 267](#)

34.1 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.

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.

The Placement Groups tab for an AWS Platform includes the following information:

- ◆ Name
- ◆ Region Name
- ◆ Strategy
 - ◆ Cluster
 - ◆ Spread
- ◆ State

34.2 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 these workloads in the Edit Platform dialog. You can also view a list of workloads associated with each Placement Group 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 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.

34.3 Excluding or Including an AWS Placement Group

Discovered Placement Group resources for a target AWS platform are automatically included in the list of resources available for migrations. You can use the Exclude action on the Placement Groups tab in the Platform dialog to hide specified placement groups in migration menus. The excluded resource appears dimmed in the Platform Associations list. Excluded resources do not appear in other dialogs for planning.

NOTE: For enhanced tracking, workload associations to an excluded placement group are not available for the Placement Group resource.

To exclude a Placement Group resource for a target AWS platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Placement Groups tab.
- 3 Select the appropriate placement group, click **Exclude**.
- 4 If workloads are associated with the placement group, 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 placement group. Including the previously excluded resource does not reinstate any prior associations it had before you excluded it.

To include an excluded Placement Group resource for a target AWS platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Placement Groups tab.
- 3 Select the excluded placement group, then click **Include**.

34.4 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.

34.5 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.

35 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.

NOTE: PTM supports AWS platforms for external migrations for workloads in Manual (tracking) mode. It does not support automated migrations to AWS platforms.

- ◆ [Section 35.1, “About AWS Key Pairs,” on page 269](#)
- ◆ [Section 35.2, “Associating AWS Key Pairs with Target Workloads,” on page 269](#)
- ◆ [Section 35.3, “Excluding or Including an AWS Key Pair,” on page 270](#)
- ◆ [Section 35.4, “Editing an AWS Key Pair Description,” on page 270](#)
- ◆ [Section 35.5, “Deleting an AWS Key Pair,” on page 271](#)

35.1 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.

The Key Pairs tab for an AWS Platform includes the following information:

- ◆ Name
- ◆ Region Name
- ◆ Fingerprint

35.2 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 these workloads in the Edit Platform dialog. You can also view a list of workloads associated with each Key Pair 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 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.

35.3 Excluding or Including an AWS Key Pair

Discovered Key Pair resources for a target AWS platform are automatically included in the list of resources available for migrations. You can use the Exclude action on the Key Pairs tab in the Platform dialog to hide specified key pairs in migration menus. The excluded resource appears dimmed in the Platform Associations list. Excluded resources do not appear in other dialogs for planning.

NOTE: For enhanced tracking, workload associations to an excluded key pair are not available for the Key Pair resource.

To exclude a Key Pair resource for a target AWS platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Key Pairs tab.
- 3 Select the appropriate key pair, click **Exclude**.
- 4 If workloads are associated with the key pair, 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 key pair. Including the previously excluded resource does not reinstate any prior associations it had before you excluded it.

To include an excluded Key Pair resource for a target AWS platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Key Pairs tab.
- 3 Select the excluded key pair, then click **Include**.

35.4 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.

35.5 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.

36 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.

NOTE: PTM supports AWS platforms for external migrations for workloads in Manual (tracking) mode. It does not support automated migrations to AWS platforms.

- ♦ [Section 36.1, “About AWS Encryption Keys,” on page 273](#)
- ♦ [Section 36.2, “Associating AWS Encryption Keys with Target Workloads,” on page 273](#)
- ♦ [Section 36.3, “Excluding or Including an AWS Encryption Key,” on page 274](#)
- ♦ [Section 36.4, “Editing an AWS Encryption Key Description,” on page 274](#)
- ♦ [Section 36.5, “Deleting an AWS Encryption Key,” on page 275](#)

36.1 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.

The Encryption Keys tab for an AWS Platform includes the following information:

- ♦ Name
- ♦ Region Name
- ♦ Status

36.2 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 these workloads in the Edit Platform dialog. You can also view a list of workloads associated with each Encryption Key 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 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.

36.3 Excluding or Including an AWS Encryption Key

Discovered Encryption Key resources for a target AWS platform are automatically included in the list of resources available for migrations. You can use the Exclude action on the Encryption Keys tab in the Platform dialog to hide specified encryption keys in migration menus. The excluded resource appears dimmed in the Platform Associations list. Excluded resources do not appear in other dialogs for planning.

NOTE: For enhanced tracking, workload associations to an excluded encryption key are not available for the Encryption Key resource.

To exclude a Encryption Key resource for a target AWS platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Encryption Keys tab.
- 3 Select the appropriate encryption key, click **Exclude**.
- 4 If workloads are associated with the encryption key, 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 encryption key. Including the previously excluded resource does not reinstate any prior associations it had before you excluded it.

To include an excluded Encryption Key resource for a target AWS platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the Encryption Keys tab.
- 3 Select the excluded encryption key, then click **Include**.

36.4 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.

36.5 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.

37 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.

NOTE: PTM supports AWS platforms for external migrations for workloads in Manual (tracking) mode. It does not support automated migrations to AWS platforms.

- ◆ [Section 37.1, “About AWS IAM Roles,” on page 277](#)
- ◆ [Section 37.2, “Associating AWS IAM Roles with Target Workloads,” on page 277](#)
- ◆ [Section 37.3, “Excluding or Including an AWS IAM Role,” on page 278](#)
- ◆ [Section 37.4, “Editing an AWS IAM Role Description,” on page 278](#)
- ◆ [Section 37.5, “Deleting an AWS IAM Role,” on page 279](#)

37.1 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.

The IAM Roles tab for an AWS Platform includes the following information:

- ◆ Name
- ◆ Policies

37.2 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 these workloads in the Edit Platform dialog. You can also view a list of workloads associated with each IAM Role 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 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.

37.3 Excluding or Including an AWS IAM Role

Discovered IAM Role resources for a target AWS platform are automatically included in the list of resources available for migrations. You can use the Exclude action on the IAM Roles tab in the Platform dialog to hide specified IAM roles in migration menus. The excluded resource appears dimmed in the Platform Associations list. Excluded resources do not appear in other dialogs for planning.

NOTE: For enhanced tracking, workload associations to an excluded IAM role are not available for the IAM Role resource.

To exclude a IAM Role resource for a target AWS platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the IAM Roles tab.
- 3 Select the appropriate IAM role, click **Exclude**.
- 4 If workloads are associated with the IAM role, 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 IAM role. Including the previously excluded resource does not reinstate any prior associations it had before you excluded it.

To include an excluded IAM Role resource for a target AWS platform:

- 1 In the Web Interface toolbar, select **Platforms**, select the platform, then click **Edit**.
- 2 Under Associations, select the IAM Roles tab.
- 3 Select the excluded IAM role, then click **Include**.

37.4 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.

37.5 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.

