

PlateSpin® Migrate Connector for PlateSpin Transformation Manager Quick Start

June 2018

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 © 2017 NetIQ Corporation, a Micro Focus company. All Rights Reserved.

Contents

About This Book	5
1 Connector Overview	7
1.1 PlateSpin Migration Factory Environment	7
1.2 PlateSpin Discovery Environment	10
1.3 Key Features	10
2 Installing, Upgrading, or Uninstalling PlateSpin Migrate Connector	13
2.1 Before You Install PlateSpin Migrate Connector 1.1	13
2.1.1 Requirements for PlateSpin Migrate Connector 1.1	13
2.1.2 Downloading PlateSpin Migrate Connector 1.1	14
2.2 Before You Install or Upgrade to PlateSpin Migrate Connector 1.1.1	15
2.2.1 Requirements for Migrate Connector 1.1.1	15
2.2.2 Downloading PlateSpin Migrate Connector 1.1.1	16
2.3 Installing PlateSpin Migrate Connector	17
2.4 Upgrading PlateSpin Migrate Connector from 1.1 to 1.1.1	18
2.4.1 Upgrading Migrate Connector on the PTM Appliance	18
2.4.2 Upgrading Migrate Connector on a Connector Host	19
2.5 Uninstalling the Connector	19
3 Configuring PlateSpin Migrate Connector	21
3.1 Deployment Requirements	21
3.1.1 PlateSpin Products	21
3.1.2 Project Assignment	22
3.1.3 Network Connectivity and Access Requirements	22
3.1.4 Security Guidelines	25
3.2 Configuring a Project Assignment for a Connector Instance	27
3.3 Configuring Global Settings for Connectors	29
3.3.1 About Global Options for Connectors	29
3.3.2 Viewing Global Migrate Connector Settings	31
3.3.3 Configuring Global Settings for Migrate Connector	32
3.4 Configuring Connection Information for PlateSpin Migrate Servers	32
3.5 Starting, Restarting, or Stopping the Connector Service	32
3.6 Setting the Connector Service Startup as Automatic or Manual on the Appliance	33
3.7 Configuring Proxy Client Settings	34
3.7.1 Configuring Proxy Client Settings for the PTM Appliance	34
3.7.2 Configuring Proxy Client Settings for Migrate Connector Hosts	36
4 Monitoring Connectors	39
4.1 About the Connectors List	39
4.2 Viewing Migrate Connector Assignments	39
4.3 Viewing Migrate Connector Connection Status	40
4.4 Deleting a Connector Instance	40
4.5 Troubleshooting Migrate Connector Connections	41

A	Troubleshooting the Connector	43
A.1	Troubleshooting Transformation Workflow Errors	43
A.2	Viewing Connector Logs	43
A.3	Downloading Connector Log Files on the Appliance	43
B	Documentation Updates	45
B.1	June 2018	45
B.2	May 2018	45

About This Book

This quick start guide provides information about installing and configuring the PlateSpin Migrate Connector for PlateSpin Transformation Manager. The Connector integrates workload information, migration settings, and migration status between PlateSpin Transformation Manager server and one or more PlateSpin Migrate servers. It provides information about installing and configuring Migrate Connector instances.

- ♦ Chapter 1, “Connector Overview,” on page 7
- ♦ Chapter 2, “Installing, Upgrading, or Uninstalling PlateSpin Migrate Connector,” on page 13
- ♦ Chapter 3, “Configuring PlateSpin Migrate Connector,” on page 21
- ♦ Chapter 4, “Monitoring Connectors,” on page 39
- ♦ Appendix A, “Troubleshooting the Connector,” on page 43
- ♦ Appendix B, “Documentation Updates,” on page 45

Intended Audience

This document is intended for IT administrators who will deploy and configure PlateSpin Migrate Connector to work with PlateSpin Transformation Manager. A basic knowledge of the Linux operating system is assumed.

Additional Documentation

For the most recent version of this guide and other PlateSpin Transformation Manager documentation resources, visit the [PlateSpin Transformation Manager 1.1 SP1 Documentation website \(https://www.netiq.com/documentation/platespin-transformation-manager-1-1/\)](https://www.netiq.com/documentation/platespin-transformation-manager-1-1/).

In addition to English, some documentation is available shortly after general availability in the Japanese national language.

Contact Information

We want to hear your comments and suggestions about this book and the other documentation included with this product. You can use the [comment on this topic](#) link at the bottom of any page of the online documentation, or send an email to Documentation-Feedback@netiq.com.

For specific product issues, contact Micro Focus Customer Care at <https://www.microfocus.com/support-and-services/>.

1 Connector Overview

The PlateSpin Migrate Connector for PlateSpin Transformation Manager integrates with a single PlateSpin Transformation Manager server and one or more PlateSpin Migrate servers to track and automate the execution of server migrations in your data center. The Connector can load-balance automated workload migrations across multiple PlateSpin Migrate servers. Each Connector monitors migration events across its project's Migrate servers for the imported workloads, and reports the migration workflow status to the appropriate workload in Transformation Manager.

- ♦ [Section 1.1, “PlateSpin Migration Factory Environment,” on page 7](#)
- ♦ [Section 1.2, “PlateSpin Discovery Environment,” on page 10](#)
- ♦ [Section 1.3, “Key Features,” on page 10](#)

1.1 PlateSpin Migration Factory Environment

The PlateSpin Migration Factory environment enables you to automate many tasks for workload migration by combining PlateSpin Transformation Manager with PlateSpin Migrate Connector and one or more PlateSpin Migrate servers. You can plan and execute automated migrations of workloads to target VMs on VMware Cluster hosts.

The transformation workflow and schedule determine when migration tasks are executed. Transformation Manager can pause automation to allow the Migration Specialist to manually perform some tasks. Migration Specialists can monitor the workload migrations and respond to exceptions, which enables them to handle more migrations in less time.

PlateSpin Migrate Connector integrates activities between Transformation Manager and Migrate servers. It load-balances the migration jobs across large farms of PlateSpin Migrate servers in the project. The Connector listens for migration events from Transformation Manager and delivers information to the appropriate Migrate servers. The Connector listens for migration status events from the various PlateSpin Migrate servers and delivers event information only to the appropriate project and workload.

Figure 1-1 illustrates the deployment environment for automated PlateSpin migration. See Table 1-1 for a description of how automated migration works in a PlateSpin Migration Factory environment.

Figure 1-1 *PlateSpin Migration Factory environment*

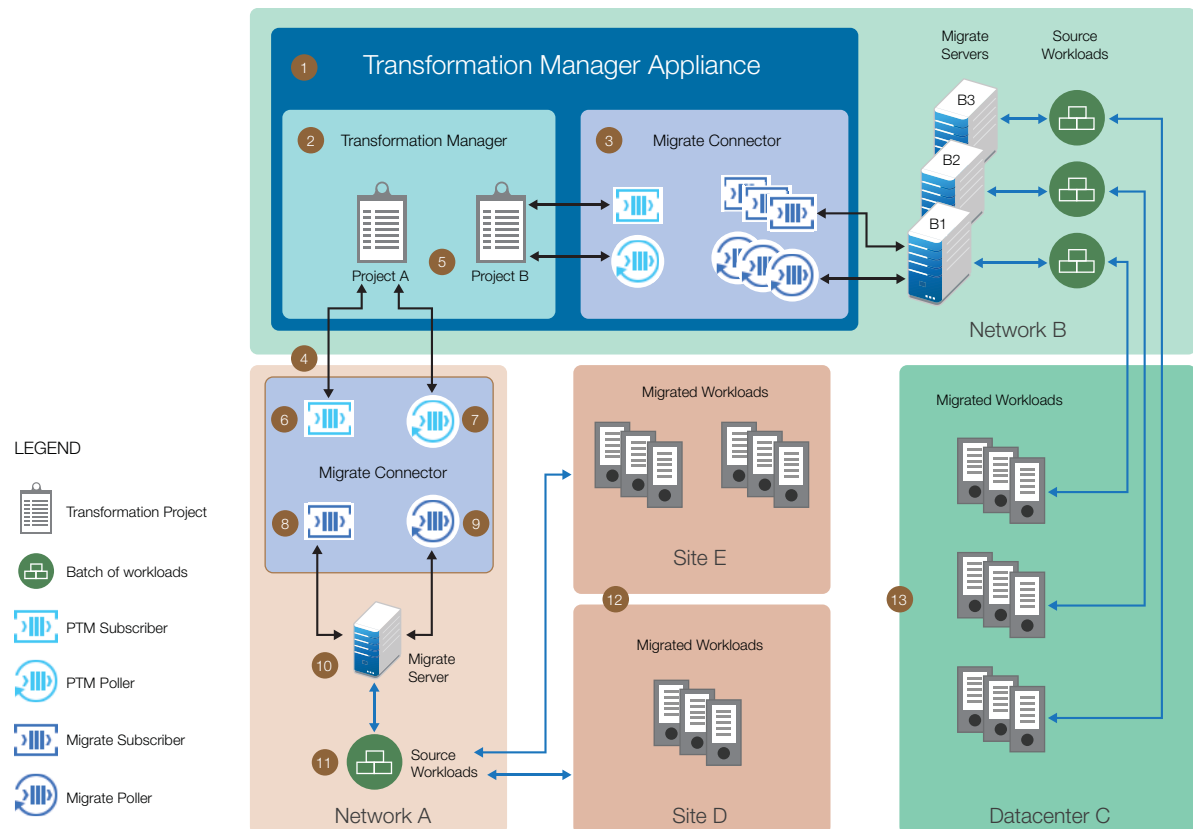


Table 1-1 *How Automated Migration Works in a PlateSpin Migration Factory Environment*

PlateSpin Migration Factory environment	Description
1. PlateSpin Transformation Manager Appliance	The appliance VM hosts the Transformation Manager Server (PTM Server) and an instance of the Migrate Connector.
2. PlateSpin Transformation Manager Server	A single PTM Server manages one or more Migrate Connector instances.
3. PlateSpin Migrate Connector instance deployed on the appliance	The Migrate Connector instance on the Appliance is preconfigured to work with the PTM Server. This instance can integrate events for one or more Migrate servers in the same network as the Appliance.
4. PlateSpin Migrate Connector instance deployed in other networks	For multiple projects, you need a dedicated Migrate Connector instance for each project in the same network as the PlateSpin Migrate servers and the source workloads to be migrated. Install additional Connector instances on your servers running SUSE Linux Enterprise Server.

PlateSpin Migration Factory environment	Description
5. Transformation projects	With multiple projects, each Migrate Connector instance works with a single assigned project. The Connector ensures the privacy and security of each project's data in a multi-tenant environment.
6. PlateSpin Transformation Manager Subscriber	Each Connector has one PTM Subscriber. The subscriber listens for events pushed from its assigned PTM Server. The subscriber listens only for events for the assigned project.
7. PlateSpin Transformation Manager Poller	Each Connector has one PTM Poller. The poller periodically polls its assigned PTM Server to check that it has received all events since the last poll. The poller checks only for events for the assigned project.
8. PlateSpin Migrate Subscriber	Each Connector uses a separate Migrate Subscriber for each Migrate server assigned to its project. Each subscriber listens for events pushed dynamically from its Migrate server. The subscribers listen only for events for workloads that have been imported to the assigned project.
9. PlateSpin Migrate Poller	Each Connector uses a separate Migrate Poller for each Migrate server assigned to its projects. Each poller periodically polls its Migrate server to check that it has received all events since the last poll. The pollers check only for events for workloads that have been imported to the assigned project.
10. PlateSpin Migrate servers	For a project, you create a Migration Server resource for each PlateSpin Migrate server that you will use to execute workload migrations. When migration jobs begin, the Connector initiates a subscriber and poller for the specified Migrate server and starts listening and polling for migration state events.
11. Source workloads	<p>For a project, you import basic information about the source workloads that you plan to migrate, then an automated discovery process adds the details, or <i>inventory</i>, for each workload.</p> <p>For automated migrations, you can manually assign a specific Migration Server resource to a source workload, or you can allow the Connector to automatically assign a Migration Server resource. Auto-assignment ensures that workload migrations are load-balanced across all of the assigned Migrate servers.</p> <p>After you submit a workload, the migration workflow progresses according to the workload's transformation plan through the Migrate server.</p>

PlateSpin Migration Factory environment	Description
12. Workloads migrated to hosts in different sites	<p>Each workload's transformation plan defines the proposed workload and its target VMware cluster and network. You organize the workload migrations into waves and batches, and schedule them according to your business needs.</p> <p>In this example, you plan to migrate workloads to multiple sites in the same or different network. Workloads in a batch have the same destination site. The Migration Specialist at each site manages the migrations to the site.</p>
13. Workloads migrated to different hosts in the same site	In this example, you plan to migrate workloads to different VMware clusters in a data center.

For deployment information, see [“Section 3.1, “Deployment Requirements,” on page 21”](#).

1.2 PlateSpin Discovery Environment

In a PlateSpin Discovery environment, PlateSpin Transformation Manager works with the PlateSpin Migrate Connector to provide automated discovery of details when you import a workload or create a Host resource. Workload discovery is required before you can submit a workload for automated migration.

NOTE: PlateSpin Migrate servers are not required for discovery. They can be set up later in your migration projects.

Import with automated discovery simplifies and standardizes the setup of workloads for planning. You provide minimal connection information and logon credentials for the machines. The discovery process retrieves details about each machine, populates properties for the related object in the planning database, and sets up a proposed workload based on those settings.

Transformation Manager provides automated discovery of workloads and hosts:

- ♦ **Source workload discovery:** Transformation Manager provides the following methods of import and automated discovery of workloads:
 - ♦ Spreadsheet
 - ♦ Range of IPv4 addresses (0 to 255)
 - ♦ Single IPv4 address
- ♦ **Target host discovery:** Transformation Manager provides automated discovery for target VMware Cluster hosts. Discovery adds the Host resource and adds resources for its discovered networks and datastores.

1.3 Key Features

PlateSpin Migrate Connector supports automated Windows and Linux workload migration for the following transformation types:

- ♦ Physical to virtual (VMware)
- ♦ Virtual (VMware) to virtual (VMware)

PlateSpin Migrate Connector also supports status monitoring for migration jobs for imported workloads that you initiate on the project's associated PlateSpin Migrate servers.

PlateSpin Migrate Connector supports automated discovery and migration by integrating Transformation Manager with the PlateSpin Migrate servers in a project. It provides several advantages for planning, managing, and executing workload transformation projects:

- ♦ **Integrates PlateSpin Transformation Manager and PlateSpin Migrate servers.** Migrate Connector integrates Transformation Manager and your PlateSpin Migrate servers by using event messaging and secure REST API communications.
- ♦ **Allows multiple Connector instances.** You can have multiple Connector instances registered with a single PTM server, where each instance is associated with a separate project.
- ♦ **Configure global settings for Migrate Connectors.** System Configuration settings on the Migrate Connector page in Transformation Manager apply globally to all Connector instances registered with the PTM Server.
- ♦ **Provides automated discovery of details for source workloads.** Migrate Connector works with import options in Transformation Manager to discover details for source Windows and Linux workloads.
- ♦ **Load-balances migration jobs across available Migrate servers.** Migrate Connector uses round-robin load-balancing to distribute workload migration jobs evenly across multiple PlateSpin Migrate servers in your project.
- ♦ **Drives the automated migration on Migrate Servers.** In Automated Mode, Migrate Connector drives the automated execution of workload migrations for your VMware migration projects in a PlateSpin Migration Factory environment based on each workload's transformation plan. Global settings control when automated migration jobs are set up, if and when pre-cutover testing begins, and when the jobs are removed after cutover.
- ♦ **Coordinates communications in the PlateSpin Migration Factory environment.** Migrate Connector supports polling and eventing types of communications in a PlateSpin Migration Factory environment.
 - ♦ Migrate Connector listens for migration events from Transformation Manager and delivers them to the appropriate Migrate servers.
 - ♦ Migrate Connector listens for migration status events from the PlateSpin Migrate servers and delivers them to the appropriate project and workloads.
- ♦ **Supports user-provided callouts.** Migrate Connector supports user-provided callouts during the transformation workflow that integrate Transformation Manager with your internal systems.

2 Installing, Upgrading, or Uninstalling PlateSpin Migrate Connector

Use the information in this section to deploy instances of the PlateSpin Migrate Connector in the same networks as the source workloads you want to migrate.

- ♦ [Section 2.1, “Before You Install PlateSpin Migrate Connector 1.1,” on page 13](#)
- ♦ [Section 2.2, “Before You Install or Upgrade to PlateSpin Migrate Connector 1.1.1,” on page 15](#)
- ♦ [Section 2.3, “Installing PlateSpin Migrate Connector,” on page 17](#)
- ♦ [Section 2.4, “Upgrading PlateSpin Migrate Connector from 1.1 to 1.1.1,” on page 18](#)
- ♦ [Section 2.5, “Uninstalling the Connector,” on page 19](#)

2.1 Before You Install PlateSpin Migrate Connector 1.1

Use the information in this section to deploy instances of PlateSpin Migrate Connector 1.1 in your source networks.

- ♦ [Section 2.1.1, “Requirements for PlateSpin Migrate Connector 1.1,” on page 13](#)
- ♦ [Section 2.1.2, “Downloading PlateSpin Migrate Connector 1.1,” on page 14](#)

2.1.1 Requirements for PlateSpin Migrate Connector 1.1

Ensure that your environment meets the following installation requirements for PlateSpin Migrate Connector.

- ♦ [“Supported Components of PlateSpin Migration Factory” on page 13](#)
- ♦ [“Supported Operating System” on page 14](#)

Supported Components of PlateSpin Migration Factory

PlateSpin Migrate Connector 1.1 supports the following components of PlateSpin Migration Factory:

- ♦ PlateSpin Transformation Manager 1.1
- ♦ PlateSpin Migrate 12.2

PlateSpin Transformation Manager and PlateSpin Migrate Connector requires PlateSpin Migrate servers for automated migration and external migration tracking. Other discovery and planning features do not require PlateSpin Migrate servers.

Supported Operating System

PlateSpin Migrate Connector software supports SUSE Linux Enterprise Server (SLES) 11 Service Pack 4 (SP4).

PlateSpin Transformation Manager Appliance includes a pre-installed instance of the PlateSpin Migrate Connector that is configured to work with the Transformation Manager server. You can install additional instances of Migrate Connector on your SLES 11 SP4 servers, where each is deployed in the source network for a specific project.

2.1.2 Downloading PlateSpin Migrate Connector 1.1

PlateSpin Migrate Connector 1.1 is a component of PlateSpin Transformation Manager 1.1.

PlateSpin Migrate Connector 1.1 download files are available with PlateSpin Transformation Manager 1.1 on the [Micro Focus Downloads website \(https://download.microfocus.com/\)](https://download.microfocus.com/). A public Internet connection is required for download. Use your Micro Focus Customer Center account credentials to log in to this site.

- ♦ “File Description” on page 14
- ♦ “Download Instructions” on page 14

File Description

PlateSpin Migrate Connector 1.1 download files include the following:

Download File Name	Description
<code>platespin-migrate-connector-1.1.0-xxx.noarch.rpm</code> Where xxx.x is the build number	Contains the files to install a new instance of PlateSpin Migrate Connector 1.1 on your intended Migrate Connector hosts.
<code>ptm_public-key.key</code>	Contains a PlateSpin Transformation Manager Public Key for new installs of remote instances of PlateSpin Migrate Connector on your intended Migrate Connector hosts. NOTE: To install the Migrate Connector RPM without warnings, you must import the PTM Public Key file to your keyring on the intended Migrate Connector host before you install the Connector RPM.

Download Instructions

To download the Migrate Connector files from Micro Focus Downloads:

- 1 In a web browser, connect to the [Micro Focus Downloads website \(https://download.microfocus.com/\)](https://download.microfocus.com/), and log in with your Customer Center credentials.
- 2 Search for PlateSpin Transformation Manager 1.1, then follow the [download link for version 1.1](#).
- 3 Download the Migrate Connector files to your computer:

```
platespin-migrate-connector-1.1.0-xxx.x.noarch.rpm
ptm_public-key.key
```

4 Continue with either of the following:

- ♦ [Section 2.3, “Installing PlateSpin Migrate Connector,” on page 17](#)
- ♦ [Section 2.4.2, “Upgrading Migrate Connector on a Connector Host,” on page 19](#)

2.2 Before You Install or Upgrade to PlateSpin Migrate Connector 1.1.1

Use the information in this section to deploy instances of PlateSpin Migrate Connector 1.1.1 in your source networks.

- ♦ [Section 2.2.1, “Requirements for Migrate Connector 1.1.1,” on page 15](#)
- ♦ [Section 2.2.2, “Downloading PlateSpin Migrate Connector 1.1.1,” on page 16](#)

2.2.1 Requirements for Migrate Connector 1.1.1

PlateSpin Migrate Connector 1.1.1 is a service pack upgrade to PlateSpin Migrate Connector 1.1. You can use the RPM file to install new instances or to upgrade existing Connector instances.

Ensure that your environment meets the following installation requirements for PlateSpin Migrate Connector.

- ♦ [“Supported Components of PlateSpin Migration Factory” on page 15](#)
- ♦ [“Supported Operating System” on page 15](#)

Supported Components of PlateSpin Migration Factory

PlateSpin Migrate Connector 1.1.1 supports the following components of PlateSpin Migration Factory:

- ♦ PlateSpin Transformation Manager 1.1.1
- ♦ PlateSpin Migrate 12.2.1

PlateSpin Transformation Manager and PlateSpin Migrate Connector requires PlateSpin Migrate servers for automated migration and external migration tracking. Other discovery and planning features do not require PlateSpin Migrate servers.

IMPORTANT: You cannot use PlateSpin Migrate Connector 1.1.1 with earlier versions of PlateSpin Transformation Manager and PlateSpin Migrate.

Supported Operating System

PlateSpin Migrate Connector software supports SUSE Linux Enterprise Server (SLES) 11 Service Pack 4 (SP4).

PlateSpin Transformation Manager Appliance includes a pre-installed instance of the PlateSpin Migrate Connector that is configured to work with the Transformation Manager server. You can install additional instances of Migrate Connector on your SLES 11 SP4 servers, where each is deployed in the source network for a specific project.

2.2.2 Downloading PlateSpin Migrate Connector 1.1.1

PlateSpin Migrate Connector 1.1.1 is a component of PlateSpin Transformation Manager 1.1.1. This service pack release is available for download with PlateSpin Transformation Manager 1.1.1 on the Micro Focus Patch Finder website. If you have a Full License, you can alternatively access the files through the PTM 1.1 Online Update Channel by using Zypper commands in a terminal console on the PTM Appliance VM.

NOTE: For PlateSpin Transformation Manager 1.1.1, you must deploy a separate Connector instance for each project in PTM.

- ♦ “File Description” on page 16
- ♦ “Download Instructions for Micro Focus Patch Finder” on page 16
- ♦ “Download Instructions for PTM Online Update Channel Using Zypper” on page 17

File Description

PlateSpin Migrate Connector 1.1.1 is a service pack upgrade to PlateSpin Migrate Connector 1.1. You can use the RPM file to install new Connector instances or to upgrade existing Migrate Connector 1.1 instances. The new key is required for installation or upgrade.

PlateSpin Migrate Connector 1.1.1 download files include the following:

Download File Name	Description
platespin-migrate-connector-1.1.1-xxx.x.x86_64.rpm Where xxx.x is the build number	Contains the files to install a new instance of PlateSpin Migrate Connector 1.1.1 on your intended Migrate Connector host, or to update an existing installation of PlateSpin Migrate Connector 1.1.
ptm_public-key_1-1-1.key	Contains a PlateSpin Transformation Manager Public Key for new installs of remote instances of PlateSpin Migrate Connector on your intended Migrate Connector hosts. NOTE: To install the Migrate Connector RPM without warnings, you must import the PTM Pubic Key file to your keyring on the intended Migrate Connector host before you install the Connector RPM.

Download Instructions for Micro Focus Patch Finder

Installation files for PlateSpin Migrate Connector 1.1.1 are available with PlateSpin Transformation Manager 1.1.1 on the [Micro Focus Patch Finder website \(https://download.microfocus.com/patch/finder/\)](https://download.microfocus.com/patch/finder/). No license is required. A public Internet connection is required for download. Use your Micro Focus Customer Center account credentials to log in to this site.

To download the Migrate Connector files from Micro Focus Patch Finder:

- 1 In a web browser, connect to the [Micro Focus Patch Finder website \(https://download.microfocus.com/patch/finder/\)](https://download.microfocus.com/patch/finder/), and log in with your Customer Center credentials.
- 2 Search for PlateSpin Transformation Manager 1.1.1, then follow the [download link for version 1.1.1](#).
- 3 Download the Migrate Connector files to your computer:


```
platespin-migrate-connector-1.1.1-xxx.x.x86_64.rpm  
ptm_public-key_1-1-1.key
```

4 Continue with either of the following:

- ♦ [Section 2.3, “Installing PlateSpin Migrate Connector,” on page 17](#)
- ♦ [Section 2.4.2, “Upgrading Migrate Connector on a Connector Host,” on page 19](#)

Download Instructions for PTM Online Update Channel Using Zypper

For the PlateSpin Migrate Connector instance running on your existing PlateSpin Transformation Manager 1.1 Appliance, you can upgrade the Connector when you upgrade PlateSpin Transformation Manager. The RPM files for this service pack release are available in the PTM Online Update Channel by using `zypper` commands.

NOTE: Because the service pack upgrade is not a simple patch to PTM 1.1, the files will not appear on the Online Update page in the Appliance Management Console. You must use `zypper` commands to access and apply the RPMs.

You must first register with the Online Update Channel before the Migrate Connector RPM is available to you through the channel. A Full License is required for registration. A public Internet connection is required for registration and access to the channel. Use the same Micro Focus Customer Center account credentials that you used to get the Full License to register with the channel. You provide the registration information by using `zypper` commands before you access the files.

Continue with [Section 2.4.1, “Upgrading Migrate Connector on the PTM Appliance,” on page 18](#).

2.3 Installing PlateSpin Migrate Connector

Before you begin, ensure that you have prepared for an install by using the appropriate planning section:

- ♦ [Section 2.1, “Before You Install PlateSpin Migrate Connector 1.1,” on page 13](#)
- ♦ [Section 2.2, “Before You Install or Upgrade to PlateSpin Migrate Connector 1.1.1,” on page 15](#)

Complete the following steps to install PlateSpin Migrate Connector.

- 1 Log in to the Migrate Connector host as the `root` user.
- 2 Copy the RPM and KEY files that you downloaded to a location on the server.
- 3 Import the PTM Public Key to your keyring.

Launch a terminal, then enter one of the following commands as the `root` user:

```
gpg --import <ptm-public-key-filename>
```

or

```
rpm --import <ptm-public-key-filename>
```

- 4 Open a terminal console, then install the RPM:

```
rpm -ih <platespin-migrate-connector-rpm-filename>
```

- 5 Configure the instance for the PlateSpin Transformation Manager server.

See [Section 3.2, “Configuring a Project Assignment for a Connector Instance,” on page 27](#).

2.4 Upgrading PlateSpin Migrate Connector from 1.1 to 1.1.1

Use the instructions in this section to apply the upgrade for Migrate Connector. Before you begin the upgrade, perform the tasks in [Section 2.2, “Before You Install or Upgrade to PlateSpin Migrate Connector 1.1.1,”](#) on page 15.

NOTE: If you have deployed additional instances of Migrate Connector, ensure that you upgrade the PTM Server and Connector instance on the PTM Appliance, and then apply the upgrade to the remote Connector instances.

- [Section 2.4.1, “Upgrading Migrate Connector on the PTM Appliance,”](#) on page 18
- [Section 2.4.2, “Upgrading Migrate Connector on a Connector Host,”](#) on page 19

2.4.1 Upgrading Migrate Connector on the PTM Appliance

If you have a Full License to PlateSpin Transformation Manager 1.1, you can access the PlateSpin Migrate Connector 1.1.1 download files in the Online Update Channel system for PlateSpin Transformation Manager to upgrade the Connector instance on the PlateSpin Transformation Manager Appliance.

NOTE: You can update both PlateSpin Transformation Manager and PlateSpin Migrate Connector in the same procedure. See [“Upgrading PlateSpin Transformation Manager Using Files from Online Update Channel and Zypper Commands”](#) in the *PlateSpin Transformation Manager Appliance Guide*.

To update the Appliance instance of Migrate Connector:

- 1 Log in to the Appliance as the `root` user, and launch a terminal console.
- 2 Provide the registration information for PlateSpin Transformation Manager Online Update Channel. Enter

```
suse_register -a email=<email address> -a regcode-ptm=<ptm license code>
```

For the email address, specify the email address associated with your Customer Center credentials that you use to get the Full License.

For the PTM license code, provide the code for the Full License that you used to activate your PTM Server.

- 3 To verify that the upgrade file is available, enter

```
zypper lu
```

You should see the file:

```
platespin-migrate-connector-1.1.1-xxx.x.x86_64.rpm
```

- 4 Apply the updates. Enter

```
zypper up platespin-migrate-connector
```

When you are prompted to confirm the update, enter `y`.

2.4.2 Upgrading Migrate Connector on a Connector Host

Complete the following steps to update a standalone instance of PlateSpin Migrate Connector on a Migrate Connector host. These instructions assume that the PTM Public Key file was previously installed on the keyring before you first installed the instance of Migrate Connector on the server.

To update a remote instance of the Migrate Connector:

- 1 Download the PlateSpin Migrate Connector RPM file.
See [Section 2.2.2, “Downloading PlateSpin Migrate Connector 1.1.1,”](#) on page 16.
- 2 Ensure that you have updated the PlateSpin Transformation Manager software first. See [Upgrading PlateSpin Transformation Manager from 1.1 to 1.1.1](#) in the *PlateSpin Transformation Manager Appliance Guide*.

- 3 Log in to the Migrate Connector host as the `root` user.

- 4 Import the PTM Public Key to your keyring.

Launch a terminal, then enter one of the following commands as the `root` user:

```
gpg --import <ptm-public-key-filename>
```

or

```
rpm --import <ptm-public-key-filename>
```

- 5 Copy the `platespin-migrate-connector-1.1.1-xxx.x.x86_64.rpm` file to a location on the server.

- 6 Launch a terminal console, then navigate to the location where you copied the `platespin-migrate-connector-1.1.1-xxx.x.x86_64.rpm` file.

- 7 Apply the new PlateSpin Migrate Connector file. In a console, enter

```
rpm -Uvh platespin-migrate-connector-1.1.1-xxx.x.x86_64.rpm
```

Replace `xxx.x` with the actual build numbers.

2.5 Uninstalling the Connector

You might need to uninstall the PlateSpin Migrate Connector after a transformation project is complete and you no longer need the Migrate Connector instance to run on its host server.

- 1 Log in to the Connector host server as the `root` user.
- 2 Open a terminal console, then combine the `rpm -qa` and `grep` commands to find the exact name of the installed PlateSpin Migrate Connector package:

```
rpm -qa | grep -i platespin-migrate-connector
```

The query reports the exact name of the package, such as

```
platespin-migrate-connector-1.1.1-xxx.x.x86_64.rpm
```

where `xxx` represents the build number.

- 3 Uninstall the package:

```
rpm -ev <exact-package-name>
```

- 4 Repeat the query to verify that the package is no longer installed:

```
rpm -qa | grep -i platespin-migrate-connector
```

The command should return the following message:

```
package platespin-migrate-connector is not installed
```

- 5 (Optional) Delete the matching Connector instance in the Transformation Manager Connectors list.

See “[Deleting a Connector Instance](#)” in the *PlateSpin Transformation Manager User Guide*.

3 Configuring PlateSpin Migrate Connector

The PlateSpin Transformation Manager server works with one or more instances of PlateSpin Migrate Connector that are deployed in the networks where you have source workloads. After you register a Connector instance with Transformation Manager, the Connector is available to all projects that have source workloads in that network. You can alternatively configure the Connector instance to be registered only for a single project. You can configure a separate Connector instance for each project.

NOTE: Only users assigned to the Transformation Manager System Administrator role can modify the global settings for PlateSpin Migrate Connector that control the default workflow settings. If you need to modify the default workflow settings, contact the System Administrator.

- [Section 3.1, “Deployment Requirements,” on page 21](#)
- [Section 3.2, “Configuring a Project Assignment for a Connector Instance,” on page 27](#)
- [Section 3.3, “Configuring Global Settings for Connectors,” on page 29](#)
- [Section 3.4, “Configuring Connection Information for PlateSpin Migrate Servers,” on page 32](#)
- [Section 3.5, “Starting, Restarting, or Stopping the Connector Service,” on page 32](#)
- [Section 3.6, “Setting the Connector Service Startup as Automatic or Manual on the Appliance,” on page 33](#)
- [Section 3.7, “Configuring Proxy Client Settings,” on page 34](#)

3.1 Deployment Requirements

PlateSpin Migrate Connector requires the following hardware, software, and network settings in your migration environment.

- [Section 3.1.1, “PlateSpin Products,” on page 21](#)
- [Section 3.1.2, “Project Assignment,” on page 22](#)
- [Section 3.1.3, “Network Connectivity and Access Requirements,” on page 22](#)
- [Section 3.1.4, “Security Guidelines,” on page 25](#)

3.1.1 PlateSpin Products

PlateSpin Migrate Connector integrates and orchestrates migration activities between the following PlateSpin products that you deploy in your environment:

- **PlateSpin Transformation Manager 1.1 SP1**

Configure PlateSpin Transformation Manager and set up a transformation project. You can assign the Migrate Connector to the PlateSpin Transformation Server or to a specific project on the server. Transformation Manager is required for automated discovery and automated migration execution. See [Section 3.2, “Configuring a Project Assignment for a Connector Instance,” on page 27](#).

- ♦ **PlateSpin Migrate 12.2 SP1**

In a PlateSpin Migration Factory environment, PlateSpin Migrate Connector can connect to one or more PlateSpin Migrate 12.2 SP1 servers for your project. See [Section 3.4, “Configuring Connection Information for PlateSpin Migrate Servers,”](#) on page 32.

IMPORTANT: If the Role service WebDAV Publishing is installed on the PlateSpin Migrate server, uninstall it from **Server Manager > Roles > Web Server (IIS) > Role Service > Common HTTP features > WebDAV Publishing**.

For information about how to buy this product, see [PlateSpin Migrate \(https://www.microfocus.com/products/platespin/migrate/\)](https://www.microfocus.com/products/platespin/migrate/).

For information about installing and using this product, see the [PlateSpin Migrate Documentation website \(https://www.netiq.com/documentation/platespin-migrate-12-2-1/\)](https://www.netiq.com/documentation/platespin-migrate-12-2-1/).

3.1.2 Project Assignment

Each project in PlateSpin Transformation Manager must have a dedicated PlateSpin Migrate Connector. Deploy an instance of PlateSpin Migrate Connector in the source network for the project.

After you configure the project in PlateSpin Transformation Manager, use its assigned Project ID to configure the appropriate Connector instance for that project. See [“Configuring a Project Assignment for a Connector Instance”](#) on page 27.

3.1.3 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 VMware cluster hosts
- ♦ PlateSpin Migrate servers

In addition, review the security guidelines in [Section 3.1.4, “Security Guidelines,”](#) on page 25.

Your environment must meet the requirements described in this section for network connectivity and access. Refer to the ports map in [Figure 3-1](#).

Table 3-1 shows the protocol and port required for event messaging in a PlateSpin Migration Factory environment. These messages reflect events and state changes and do not contain sensitive information.

Table 3-1 *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 PlateSpin Transformation Manager Appliance, which includes a pre-installed instance of PlateSpin Migrate Connector. Open this port on all other Connector host servers, the PlateSpin Migrate servers configured for the project, and the firewalls between them.

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 3-2.

Table 3-2 *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://www.netiq.com/support/kb/doc.php?id=7920711) .

Target Host Discovery

Host discovery requires that you enable incoming ping (ICMP echo reply and ICMPv4-In echo request) traffic for target VMware hosts and firewalls. PlateSpin supports only IPv4. For information about required software, network, and port settings for host discovery, see Table 3-3.

Table 3-3 *Host 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

Workload Migration

Table 3-4 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 3-4 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

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 12.2.1 User Guide*.

3.1.4 Security Guidelines

PlateSpin Transformation Manager provides several key security options.

- ♦ [“SSL \(HTTPS\) for Secure Communications”](#) on page 25
- ♦ [“SSL Certificate for Secure Communications”](#) on page 25
- ♦ [“Antivirus Setup for Discovery”](#) on page 26
- ♦ [“Proxy Services”](#) on page 26
- ♦ [“Unique Login Credentials for Each Connector Instance”](#) on page 26
- ♦ [“Password Security for Credentials Resources”](#) on page 26

SSL (HTTPS) for Secure Communications

For secure connections between PlateSpin Migrate Connector and PlateSpin Transformation Manager, the Jetty SSL settings on the PlateSpin Transformation Manager Appliance VM are configured with the latest recommended security settings.

Ensure that you configure the Appliance to use port 8183 for secure communications.

SSL Certificate for Secure Communications

The installation of the PlateSpin Transformation Manager Appliance generates and installs a self-signed certificate for SSL (Secure Sockets Layer) communications. It uses the DNS name that you specify for the PlateSpin Transformation Manager Appliance. The certificate applies to the appliance and the software.

For higher security, Micro Focus recommends that you use a server certificate that is signed by a trusted certificate authority (CA) such as VeriSign or Equifax. You can use your own existing signed certificate, or you can use the Digital Certificate tool on the appliance to create a certificate, have it signed by a trusted certificate authority, and then add it to the appliance.

NOTE: The DNS name of the server must match the subject of the security certificate.

To import your signed certificate, you must provide the certificate and key, as described in “[Digital Certificates](#)” in the *PlateSpin Transformation Manager Appliance Guide*.

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` utility 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 the PTM Discovery Service creates and uses are located under the `PlateSpinDiscovery` directory in the first Windows share it discovers, such as `Admin$`.

- ♦ **Ports:** The antivirus software must not restrict any of the ports needed for discovery. For port information, see “[Workload Discovery](#)” on page 24.

Proxy Services

PTM is proxy aware. It can use the Proxy Client settings on the host Appliance for communications with the Micro Focus License Server. Persistent Internet access is required to license the individual workloads during the planning process. You might need to configure proxy services in a highly restrictive networking environment.

For information about configuring the PlateSpin Migrate Connector host server as a Proxy Client, see [Section 3.7, “Configuring Proxy Client Settings,”](#) on page 34.

Unique Login Credentials for Each Connector Instance

To distinguish actions initiated by the project’s Connector instance, we strongly recommend that you create a unique User object to use for the Connector login credentials instead of using a real User object. Create this special user as a System user, then assign it a Project Architect role at the Project level. Create a different User object for each Connector instance with permissions appropriate for its assigned project.

Password Security for Credentials Resources

PlateSpin Transformation Manager uses industry-standard strong encryption to secure passwords in the PTM database for the Credentials resources used to access source machines and target hosts. The 16-digit key is randomly generated during the Appliance installation. The key is unique to each PTM server. As new Credentials resources are created, their passwords will be encrypted with this key.

The encryption key is stored as the `tm.encrypt.key` property in the `system.properties` file:

```
/opt/microfocus/ps_transform_mgr/config/system.properties
```

PTM writes the `system.properties` file to a ZIP file and saves it in the `/vastorage/conf/` folder when the appliance shuts down.

The `system.properties` file is protected by the strength of the password you set for root and other system users on the Appliance as well as other security best practices in your data center.

3.2 Configuring a Project Assignment for a Connector Instance

The PlateSpin Transformation Manager Appliance includes an instance of the PlateSpin Migrate Connector that is automatically installed and configured to work with the Transformation Manager server on the Appliance. It works with all projects by default. After you set up projects in Transformation Manager, you can add a `ptm_project_id` to the `/opt/microfocus/migrate_connector/config/settings.cfg` file on the Appliance to assign the Connector instance to a specific project.

You must manually configure each PlateSpin Migrate Connector instance that you deploy on your own SUSE Linux Enterprise Server 11. SP4 server.

To configure the Connector instance for a PTM server or for a specific project:

- 1 Log in to the SLES 11 SP4 server with a `root` user account.
- 2 In a text editor, open the `/opt/microfocus/migrate_connector/config/settings.cfg` file.
- 3 Configure the values in the top section called `[PlateSpin Transformation Manager Server]`.

Option	Description
<code>ptm_host</code>	Specify the host name or IP address of the Transformation Manager server. For example, the Migrate Connector instance on the Appliance is <code>localhost</code> . <code>ptm_host=localhost</code>
<code>ptm_port</code>	Specify the port used for the Transformation Manager server. The default port for HTTPS is 8183. The default port for HTTP is 8182. <code>ptm_port=8183</code>
<code>ptm_ssl</code>	Specify a value of <code>true</code> to use SSL to connect to the Transformation Manager server. Valid values are <code>true</code> and <code>false</code> . <code>ptm_ssl=true</code>
<code>verify_ptm_ssl_cert</code>	Specify whether you want to require the certificate to be validated for connections to the PlateSpin Transformation Manager server. Valid values are <code>false</code> or <code>true</code> . The default is to disable validation (<code>false</code>). <code>verify_ptm_ssl_cert=false</code> We recommend verifying the PTM Server certificate for remote instances of the Connector. Certificate validation is not necessary for the Connector instance installed on the Appliance.

Option	Description
local_ptm_ssl_cert	Specify local PTM server certificate store for authenticating the PTM server certificate. Specify the directory location to use a local certificate authority for certificate validation. If no value is set, the Connector will use Mozilla's root certificates. local_ptm_ssl_cert=
ptm_username	Specify the email address of a valid System user account on your PlateSpin Transformation Manager server that has been assigned a at least a Project Architect role at the Project level. ptm_username=john.doe@example.com The Transformation History can distinguish Connector-initiated actions by the User object if you create a unique dedicated User object to use for the Connector login credentials instead of using a real User object. NOTE: We recommend that you create a dedicated user account in PlateSpin Transformation Manager for the Connector instance to use. Create this special User object as a System user, then assign it a Project Architect role at the Project level. Create a different User object for each Connector instance with permissions appropriate for its assigned project.
ptm_password	Specify the password for the user account. ptm_password=yourpassword
ptm_project_id	(Optional) Specify the numeric project ID for the project in Transformation Manager to restrict the Connector to a single project instead of making it available for all projects. The Connector processes only events and actions within the assigned project. ptm_project_id=1234 To discover the numeric ID associated with a project in PlateSpin Transformation Manager: <ol style="list-style-type: none"> 1. In the Web Interface, go to Planning > Projects. 2. Select the project, then click Edit. 3. In the Edit Project dialog, mouse over the project name in the dialog title area. A tooltip displays the numeric ID of the project.

4 Save the file, then exit the text editor.

5 Start or restart PlateSpin Migrate Connector. In the terminal console, enter

```
rcps_migrate_connector restart
```

For the Migrate Connector instance installed on the PlateSpin Transformation Manager Appliance, you can alternatively restart the Connector from the Appliance Management Console.

3.3 Configuring Global Settings for Connectors

If your migration environment involves different networks, you deploy a PlateSpin Migrate Connector server in each network. You assign each connector to your PlateSpin Transformation Manager server as described in [Section 3.2, “Configuring a Project Assignment for a Connector Instance,” on page 27](#).

The connectors inherit their default behavior from the settings you provide in **System Configuration > Migrate Connector** in the Transformation Manager Web Interface.

- ♦ [Section 3.3.1, “About Global Options for Connectors,” on page 29](#)
- ♦ [Section 3.3.2, “Viewing Global Migrate Connector Settings,” on page 31](#)
- ♦ [Section 3.3.3, “Configuring Global Settings for Migrate Connector,” on page 32](#)

3.3.1 About Global Options for Connectors

On the **System Configuration > Migrate Connector** page in PlateSpin Transformation Manager, a System Administrator can customize the default workflow of migration projects that leverage one or more PlateSpin Migrate servers to execute workload migrations.

NOTE: You must restart each instance of PlateSpin Migrate Connector after you modify global options in order to apply the changes.

- ♦ [“General Settings” on page 29](#)
- ♦ [“Migrate Server Settings” on page 30](#)
- ♦ [“Customer-Provided Scripts” on page 31](#)

General Settings

Missed Event Poll Interval

Specify the number of seconds between polls for workload migration events.

The default value is 300 seconds (5 minutes). A lower value puts more stress on your PTM server and Migrate servers.

Reconnect Retry Interval

Specify the number of seconds to wait after a connection fails to a PlateSpin Migrate server before the PTM Server tries to reconnect.

The default value is 1500 seconds (25 minutes).

Pause for Manual Pre-Cutover Testing

Specify whether to pause the Transformation Workflow in a Transforming / Incremental Replication state until the Migrate user manually triggers Pre-Cutover Testing.

The default is to disable manual pre-cutover testing.

Pause for Manual Post-Cutover Testing

Specify whether to pause the Transformation Workflow in a Cutover / Waiting for User state until the Migrate user manually triggers Post-Cutover Testing.

The default is to disable manual post-cutover testing.

Migrate Server Settings

Add Workload to Migrate

Specify the number of days before the start date to add the workload migration job to an auto-assigned PlateSpin Migrate server.

This option is disabled by default with a value of 0 (zero). When you submit a transformation plan, the Migrate Connector immediately auto-assigns a Migrate server, adds a workload migration job, then waits until the start date to execute the migration. The job consumes capacity and a Migrate license while it waits for start date. Consuming capacity before it is needed might block migration of workloads with earlier start dates.

Set a value of 1 or greater to enable automation control to wait until the specified pre-start-date interval to begin the preparation for migration. You can submit the workload transformation plans as they are ready without immediately consuming capacity or a license on a Migrate server.

Maximum Workloads

Specify the maximum number of workloads to allow for a PlateSpin Migrate server at a time.

The default value is 100. To determine an appropriate value for your PlateSpin Migration Factory environment, see “[Performance](#)” in the *PlateSpin Migrate 12.2.1 User Guide*.

NOTE: Capacity to add more workloads can be regained by doing the following:

- ♦ Wait until a pre-start-date interval before the start date to add the workload to a Migrate server. See [Add Workload to Migrate](#).
 - ♦ Remove the workload information after a successful cutover. See [Remove Workload After Cutover](#).
-

Maximum Targets

Specify the maximum number of discovered targets for a PlateSpin Migrate server.

The default value is 27.

Pre-Cutover Testing Days

Specify the maximum number of before cutover to begin automated pre-cutover testing.

The default value is 3 days.

Verify SSL Certificate

Specify whether to enable the validation of SSL certificates for connections to the PlateSpin Migrate servers.

The default is to disable certificate validation. Select the check box to enable it.

Remove Workload After Cutover

Specify whether to clean up the workload information from the PlateSpin Migrate servers after a cutover completes.

The default is enabled. Deselect the check box to disable it.

Remove after (days)

Specify the number of days after a workload is cut over to clean up the workload information from the PlateSpin Migrate server.

The default value is 3 days.

Customer-Provided Scripts

Run Custom Import Script

Specify whether to automatically execute the Custom Import callout script after initial workload discovery.

The default is disabled.

Run Submit Validation Script

Specify whether to automatically execute the Submit Validation callout script before adding the workload to Migrate.

The default is disabled.

Run Pre-Cutover Testing Script

Specify whether to automatically execute the Pre-Cutover Testing callout script after workload replication.

The default is disabled.

Run Post-Cutover Testing Script

Specify whether to automatically execute the Post-Cutover Testing callout script after workload cutover.

The default is disabled.

Sample Custom Callout scripts are available on the PTM Appliance in the `/opt/microfocus/migrate_connector/custom_callouts/` folder.

When it first compiles Custom Callout scripts, PTM reports any discovered coding errors as sub-states for the workload in the Workloads list and Workload dialog. Pause over the error sub-state to view additional debugging information as a tooltip. Scripts that fail for coding or validation failure reasons can be retried. A script success must occur before the migration workflow can proceed. PTM forces a reload of Custom Scripts each time they are run to ensure the most recent code changes are applied.

3.3.2 Viewing Global Migrate Connector Settings

The System Administrator, Project Manager, and Project Architect can view the global settings for the PlateSpin Migrate Connector instance associated with the PTM Server.

To view the connector settings:

- 1 In the Web Interface toolbar, select **Configuration**.
- 2 In the System Configuration dialog, select **Migrate Connector**.
- 3 View the settings:
 - ♦ [General Settings](#)
 - ♦ [Migrate Server Settings](#)
 - ♦ [Customer-Provided Scripts](#)
- 4 When you are done, click **Close** to exit the System Configuration dialog.

3.3.3 Configuring Global Settings for Migrate Connector

The System Administrator or a user with the Administrator role can modify any of the global settings for the PlateSpin Migrate Connector instances that are assigned to the PTM Server. The changes apply throughout the product for all transformation projects.

To configure global settings for Migrate Connector:

- 1 In the Web Interface toolbar, select **Configuration**.
- 2 In the System Configuration dialog, select **Migrate Connector**.
- 3 In the Migrate Connector dialog, specify appropriate option settings for the following:
 - ♦ [General Settings](#)
 - ♦ [Migrate Server Settings](#)
 - ♦ [Customer-Provided Scripts](#)
- 4 Click **Save**.
- 5 Click **Close** to exit the System Configuration dialog.
- 6 For each PlateSpin Migrate Connector server that is connected to your PTM Server, log in to the Connector server as the `root` user and restart the Connector service. In a terminal console, enter

```
rcps_migrate_connector restart
```

3.4 Configuring Connection Information for PlateSpin Migrate Servers

PlateSpin Migrate Connector recognizes only the Migration Server resources in a Transformation Manager project that are of type PlateSpin Migrate. You provide connection information about the PlateSpin Migrate servers as you create Migration Server resources in a project. To create Migration Server resources, go to the **Resources > Migration Servers** tab in the PlateSpin Transformation Manager Web Interface, then click **Create**. See [“Managing Migration Server Resources”](#) in the *PlateSpin Transformation Manager User Guide*.

For network and access requirements, see [“Workload Migration”](#) in the *PlateSpin Transformation Manager User Guide*.

3.5 Starting, Restarting, or Stopping the Connector Service

The PlateSpin Migrate Connector service starts automatically when you power on the Transformation Manager Appliance. You can start, restart, or stop the PlateSpin Migrate Connector service using the `rcps_migrate_connector` command on any Connector host server.

On the Appliance or on your Connector host server:

- 1 Log in to the Connector host server with a local `root` user account.
On the Appliance, ensure that SSH is enabled. See [“Enabling or Disabling the SSH Service”](#) in the *PlateSpin Transformation Manager Appliance Guide*.
- 2 Launch a terminal console.

- 3 Enter the appropriate command to start, stop, or restart the process:

```
rcps_migrate_connector [start | stop | restart]
```

- 4 (Optional) View the log file at `/var/opt/microfocus/migrate_connector/logs/migrate-connector.log`.

The Appliance Management Console supports these functions for the Connector service instance on the PlateSpin Transformation Manager Appliance.

On the PlateSpin Transformation Manager Appliance:

- 1 Log in to the PlateSpin Transformation Manager Appliance Management Console as the `vaadmin` user.
- 2 Click **System Services**.
- 3 In the list of Available System Services, select **PlateSpin Migrate Connector for PTM**.
- 4 Click **Action**, then select **Stop**, **Start**, or **Restart** as appropriate.
- 5 (Optional) To make the startup of the Connector service Automatic or Manual, click **Options**, then select either **Set as Automatic** or **Set as Manual**.
- 6 (Optional) In the Log Files column, click the **download** link for the Connector service, and download the files to your management machine.
- 7 Click **Close** to exit System Services.
- 8 Exit the Appliance Management Console.


3.6 Setting the Connector Service Startup as Automatic or Manual on the Appliance

On the PlateSpin Transformation Manager Appliance, PlateSpin Migrate Connector service is set to automatically start up on system restart. You can set the service startup as Automatic or Manual.

- 1 In a web browser, specify the DNS name or the IP address for the appliance with the port number 9443. For example:

```
https://10.10.10.1:9443
```


or

```
https://ptm.example.com:9443
```
- 2 Specify the administrative username and password for the appliance, then click **Sign in**. The default users are `vaadmin` or `root`.
- 3 Click **System Services** .
- 4 Select the Migrate Connector service.
- 5 Click **Options**, then select either **Set as Automatic** (the default) or **Set as Manual**.
- 6 Click **Close** to exit System Services.

3.7 Configuring Proxy Client Settings


If you have a Proxy Server in your environment, you can enable PlateSpin Transformation Manager to use that server for Internet communications by configuring the Proxy client settings on the PlateSpin Transformation Manager Appliance and host servers of PlateSpin Migrate Connector instances. The Proxy client informs applications of the Proxy Server URL and credentials to use (if you specify them). It does not affect how the applications communicate with the server.

- [Section 3.7.1, “Configuring Proxy Client Settings for the PTM Appliance,” on page 34](#)
- [Section 3.7.2, “Configuring Proxy Client Settings for Migrate Connector Hosts,” on page 36](#)

3.7.1 Configuring Proxy Client Settings for the PTM Appliance

You can enable the PlateSpin Transformation Manager Appliance to work with the Proxy Server in your environment. Log in to the Appliance via SSH, then use YaST to configure the Internet proxy client settings that the Appliance, Web Interface, and PlateSpin Migrate Connector instance will use for HTTP and HTTPS communications.

To configure Proxy client settings on the Appliance:

- 1 Enable the SSH protocol on the Appliance.
 - 1a In a web browser, log in to the Appliance Management Console as the `vaadmin` user.
`https://<ptm-ipaddr-or-dns-name>:9443`
 - 1b Click **System Services** .
 - 1c Select the SSH service.
 - 1d Select **Action > Start**.
 - 1e Click **Close** to exit System Services.
 - 1f Log out of the Appliance Management Console, then close your web browser.
- 2 Configure the Proxy client settings needed to access your Proxy Server:
 - 2a From your computer, start an SSH session for `ptm-ipaddr-or-dns-name` on port 22, then log in as the `root` user to the Appliance.
You can use any SSH tool, such as [Putty \(http://www.putty.org/\)](http://www.putty.org/).
 - 2b At the terminal prompt, enter

`yast`


```
login as: root
Using keyboard-interactive authentication.
Password:
Last login: Wed May 10 20:23:23 2017
bgarrett9:~ # yast
bgarrett9:~ #
```


FTP Proxy URL: The URL (with host name and port number) of the Proxy Server used for access to the file transfer services (FTP). For example: `https://ftp.proxy.example.com:2121/`

Use the Same Proxy for All Protocols: Enable this option and provide a single URL in **HTTP Proxy URL** that will be used as the Proxy Server for HTTP, HTTPS, and FTP communications.

No Proxy Domains: Specify a comma-separated list of domains for which requests should be made directly without caching. The default is `localhost`.

Proxy User Name and Proxy Password: Provide the credentials for your Proxy Server if it requires authorization.

- 2f (Optional) Tab to **Test Proxy Settings**, then press Enter.
- 2g Tab to **OK**, then press Enter to save and apply the settings.
- 2h Tab to **Quit**, then press Enter to exit YaST.
- 2i At the terminal prompt, enter `exit` to close the SSH session.
- 3 Disable the SSH protocol on the Appliance.
 - 3a In a web browser, log in to the Appliance Management Console as the `vaadmin` user.
`https://<ptm-ipaddr-or-dns-name>:9443`
 - 3b Click **System Services** .
 - 3c Select the SSH service.
 - 3d Select **Action > Stop**.
 - 3e Click **Close** to exit System Services.
 - 3f Log out of the Appliance Management Console, then close your web browser.

3.7.2 Configuring Proxy Client Settings for Migrate Connector Hosts

You can enable the PlateSpin Migrate Connector host servers to work with the Proxy Server in your environment. On SUSE Linux Enterprise Server (SLES) servers that host an instance of Migrate Connector, log in to the desktop and use YaST2 to configure the Internet proxy client settings that the Connector instance will use for HTTP and HTTPS communications.

To configure Proxy client settings on SLES servers that host a Migrate Connector instance:

- 1 Log in as the `root` user to the desktop on the SLES server.
- 2 Start the YaST Control Center from the main menu. Provide the `root` user password if you are prompted for it.
To start the YaST Control Center from the command line, open a terminal, then enter `yast2`.
- 3 Select **Network Services**, then select **Proxy**.
- 4 Configure the Proxy settings by using the information for your Proxy Server. Provide the URL for the Proxy Server for HTTP and HTTPS communications.

HTTP Proxy URL: The URL (with host name and port number) of the Proxy Server used for non-secure access to the Internet. For example: `http://proxy1.example.com:3126/`

HTTPS Proxy URL: The URL (with host name and port number) of the Proxy Server used for secure access to the Internet. For example: `https://proxy2.example.com:3128/`

FTP Proxy URL: The URL (with host name and port number) of the Proxy Server used for access to the file transfer services (FTP). For example: `https://ftp.proxy3.example.com:2121/`

Use the Same Proxy for All Protocols: Enable this option and provide a single URL in **HTTP Proxy URL** that will be used as the Proxy Server for HTTP, HTTPS, and FTP communications.

No Proxy Domains: Specify a comma-separated list of domains for which requests should be made directly without caching. The default is `localhost`.

Proxy User Name and Proxy Password: Provide the credentials for your Proxy Server if it requires authorization.

- 5 Click **Test Proxy Settings**.
- 6 Click **Finish** to save and apply the settings.
- 7 Exit YaST.
- 8 Log out of the server.

4 Monitoring Connectors

The Connectors list in PlateSpin Transformation Manager enables you to view the connection status and project assignment for one or more PlateSpin Migrate Connector instances. It lists all of the Connector instances that are currently registered with the Transformation Manager server.

- ♦ [Section 4.1, “About the Connectors List,” on page 39](#)
- ♦ [Section 4.2, “Viewing Migrate Connector Assignments,” on page 39](#)
- ♦ [Section 4.3, “Viewing Migrate Connector Connection Status,” on page 40](#)
- ♦ [Section 4.4, “Deleting a Connector Instance,” on page 40](#)
- ♦ [Section 4.5, “Troubleshooting Migrate Connector Connections,” on page 41](#)

4.1 About the Connectors List

On the **System Configuration > Connectors** page in PlateSpin Transformation Manager, you can view a list of Migrate Connector instances that are currently registered with the Transformation Manager server. It reports the current health status of the connection between them.

Name

The FQDN name and IP address of the Connector instance. The IP address also appears in the FQDN position if the FQDN is unknown.

Project

The project assignment for the Migrate Connector instance. An instance can be assigned at the to a single project.

The login name of the User object credentials configured for the Connector instance. This login name is used to connect to the PTM Server.

Status

The health of the connector reports whether the Transformation Manager server can communicate with the Migrate Connector instance. Valid values are **OK** or **Warning**. If a warning is triggered, the second row displays the date and time of the last good connection.

The default Connector heartbeat communicates every 5 minutes.

4.2 Viewing Migrate Connector Assignments

The System Administrator, Project Manager, and Project Architect can view the list of Migrate Connectors. The list identifies the Connector instances associated with Transformation Manager and whether they are available to all Projects or to a specific project.

NOTE: To add or remove a project assignment for a Connector instance, set the `ptm_project_id` parameter in the PlateSpin Migrate Connector configuration file.

To view a list of the Connectors:

- 1 In the Web Interface toolbar, select **Configuration**.

- 2 In the System Configuration dialog, select **Connectors**.
- 3 View the list of Connector instances associated with Transformation Manager.
- 4 View the **Projects** column to identify which Connector instance is associated with a specific project.
- 5 When you are done, click **Close** to exit the System Configuration dialog.

4.3 Viewing Migrate Connector Connection Status

The System Administrator, Project Manager, and Project Architect can view the list of Migrate Connectors. The Status column indicates the health of the connection between Transformation Manager and the Connector instance.

To view the status of the Migrate Connectors:

- 1 In the Web Interface toolbar, select **Configuration**.
- 2 In the System Configuration dialog, select **Connectors**.
- 3 View the **Status** column in the **Connectors** list.
- 4 For each Connector with a Warning status:
 - 4a View the date and time of the last heartbeat received from the Connector instance.
 - 4b Go to the host server for the Connector instance to restart the process.
- 5 When you are done, click **Close** to exit the System Configuration dialog.

4.4 Deleting a Connector Instance

Over time, you might have PlateSpin Migrate Connector instances that are no longer running. A System Administrator user can delete the instance from the list.

The Delete option removes the instance from the list, but it does not stop or uninstall the Connector instance. If the instance is still running, the Connector re-registers to Transformation Manager at its next heartbeat, and reappears in the list.

To delete a Migrate Connector instance from the Connectors list:

- 1 Stop the Connector process for each Migrate Connector instance that you want to remove from the Connectors list:
 - 1a Go to the host server for the Connector instance.
 - 1b Stop the Connector service.
- 2 In the Web Interface toolbar, select **Configuration**.
- 3 In the System Configuration dialog, select **Connectors**.
- 4 Select one or more Connector instances from the list that are no longer used.
- 5 Click **Delete**, then confirm the deletion.
- 6 When you are done, click **Close** to exit the System Configuration dialog.

- 7 (Optional) For each Connector instance that you deleted from the list, uninstall the Migrate Connector software from its Connector host:
 - 7a Log in as the `root` user to the host server for the Connector instance.
 - 7b Use the Linux `rpm` command to uninstall the PlateSpin Migrate Connector package from the Connector host server.

4.5 Troubleshooting Migrate Connector Connections

The following issues can cause connection errors for the PlateSpin Migrate Connector:

Table 4-1 Connectivity Issues for PlateSpin Migrate Connector

Issue	Action
A required port is not configured, is misconfigured, or is being blocked by the firewall or by antivirus software.	Verify port availability.
A network outage has occurred.	Resolve the network issues.
PlateSpin Migrate Connector service has stopped running.	Log in to the Migrate Connector host server as the <code>root</code> user, and restart the Connector.
PlateSpin Migrate Connector host server is down.	Resolve the host server issues, then restart the PlateSpin Migrate Connector instance.
The Event Messaging port is not configured on the PlateSpin Migrate Server.	See “Requirements for Event Messaging” and “Enabling Event Messaging for PlateSpin Migration Factory” in the <i>PlateSpin Migrate User Guide</i> .
The PlateSpin Migrate server is down.	Resolve the Migrate Server issues.

A Troubleshooting the Connector

PlateSpin Migrate Connector must be running and network communications available in order to communicate with the PlateSpin Transformation Manager server and the PlateSpin Migrate servers. Use the information in this section to troubleshoot Connector issues.

- [Section A.1, “Troubleshooting Transformation Workflow Errors,” on page 43](#)
- [Section A.2, “Viewing Connector Logs,” on page 43](#)
- [Section A.3, “Downloading Connector Log Files on the Appliance,” on page 43](#)

A.1 Troubleshooting Transformation Workflow Errors

If a failure occurs at any step during the workload discovery workflow or migration workflow, an error message appears at the top of the workload’s Transformation Plan dialog in PlateSpin Transformation Manager. Mouse over the error message to view a tooltip with additional troubleshooting details.

For more information, see “[Troubleshooting Discovery Failures](#)” in the *PlateSpin Transformation Manager User Guide*.

A.2 Viewing Connector Logs

You can access logs for the PlateSpin Migrate Connector service on the Appliance or on your Connector host. Log in as the `root` user, then navigate to the following locations.

Migrate Connector Log File

```
/var/opt/microfocus/migrate_connector/logs/migrate_connector.log
```

PlateSpin Migrate Connector Out File

```
/var/opt/microfocus/migrate_connector/logs/platespin-migrate_connector.out
```

A.3 Downloading Connector Log Files on the Appliance


If you experience an issue with the PlateSpin Migrate Connector instance on the PlateSpin Transformation Manager Appliance, you might need to download the log files to send them to Technical Support.

- 1 In a web browser, specify the DNS name or the IP address for the Appliance with the port number 9443. For example:

```
https://10.10.10.1:9443
```

or

```
https://ptm.example.com:9443
```

- 2 Specify the administrative username and password for the appliance, then click **Sign in**. The default users are `vaadmin` or `root`.
- 3 Click **System Services** .
- 4 In the **Log Files** column, click the **download** link for the appropriate service to download the log files to your management workstation:

PlateSpin Transformation Manager: Collects, zips, and downloads the following log files:

- ♦ `tm_server.log`
- ♦ `platespin-transformmgr.out`
- ♦ `platespin_transformmgr_config.log`

PlateSpin Migrate Connector for PTM: Collects, zips, and downloads the following log files:

- ♦ `migrate_connector.log`
- ♦ `platespin-migrate-connector.out`

- 5 Click **Close** to exit System Services.

B Documentation Updates

This section contains information on documentation content changes that were made in this *Quick Start* after the initial release of PlateSpin Migrate Connector 1.1 SP1.

- ♦ [Section B.1, “June 2018,” on page 45](#)
- ♦ [Section B.2, “May 2018,” on page 45](#)

B.1 June 2018

Location	Update
“Network Connectivity and Access Requirements” on page 22	This section contains information about port requirements for the Connector instance. Duplicate information is included in the PlateSpin Transformation Manager User Guide .
“Security Guidelines” on page 25	This section contains information about security considerations for communications with the Connector instance. Duplicate information is included in the PlateSpin Transformation Manager User Guide .
Chapter 2, “Installing, Upgrading, or Uninstalling PlateSpin Migrate Connector,” on page 13	This section was reorganized for clarity.

B.2 May 2018

Location	Update
“Supported Components of PlateSpin Migration Factory” on page 15	Revised to clarify the use of <code>zypper</code> commands for installing updates delivered through the Online Update Channel that are not patches.
“Upgrading Migrate Connector on the PTM Appliance” on page 18	Revised to clarify the use of <code>zypper</code> commands instead of the Patches UI.
“Uninstalling the Connector” on page 19	This topic was relocated to Installing, Upgrading, or Uninstalling PlateSpin Migrate Connector .

