

PlateSpin Migrate 12.1 Beta Release Notes

December 2015



PlateSpin Migrate 12.1 Beta includes support for the migration of Microsoft Windows workloads to Microsoft Azure.

Many of these improvements were made in direct response to suggestions from our customers. We thank you for your time and valuable input. We hope you continue to help us ensure that our products meet all your needs. You can post feedback in the PlateSpin Migrate Discussion Forum on the [PlateSpin Beta Workspace](#).

The documentation for this product is available on the NetIQ website in HTML and PDF formats on a page that does not require you to log in. If you have suggestions for documentation improvements, click **comment on this topic** at the bottom of any page in the HTML version of the PlateSpin Migrate 12.1 Beta documentation posted at the [PlateSpin Migrate 12.1 Beta Documentation website](#).

This product contains undocumented utilities that the Technical Support team might use to diagnose or correct problems.

For documentation that accompanied earlier releases, visit the [PlateSpin Migrate 12.1 Beta Documentation website](#) and scroll to *Previous Releases*.

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1 What's New?

PlateSpin Migrate 12.1 Beta includes a technical preview for migration of Windows workloads to Microsoft Azure. It provides an enhanced PlateSpin Migrate Web Interface that lets you migrate the following Windows workloads to Microsoft Azure:

- ♦ Microsoft Windows Server 2012 R2
- ♦ Microsoft Windows Server 2012
- ♦ Microsoft Windows Server 2008 R2

NOTE

- ♦ Migration of Windows cluster workloads is not supported because Microsoft Azure does not support Windows clusters.
 - ♦ Only Windows workloads are currently supported for migration to Microsoft Azure. However, migration of UEFI workloads is not supported.
 - ♦ The PlateSpin Migrate Client does not support migration of workloads to Microsoft Azure. You can use only the PlateSpin Migrate Web Interface to migrate Windows workloads to Microsoft Azure.
 - ♦ Test Cutover of workloads is not supported. You can perform only Run Cutover of workloads.
 - ♦ Each migration workload can have 31 or fewer disks. Azure allows up to 32 disks per workload, but PlateSpin Migrate uses one of these disks for the PlateSpin Replication Environment.
Each data disk must have a maximum size of 1TB (1024 GB).
 - ♦ The target VM configuration must be equal to or greater than your source workload in terms of the number of cores, the amount of memory, and the number of available disks. Remember that Migrate needs one of the target data disks for replication.
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2 Software Fixes

PlateSpin Migrate 12.1 Beta addresses the following software issues:

- ♦ [Section 2.1, “Performing a Test Cutover of a Workload Resulted in a Run Cutover,” on page 2](#)
- ♦ [Section 2.2, “Changes to the VM Memory in the Target Workload Settings and Target Workload Test Settings Is Not Effective,” on page 2](#)

2.1 Performing a Test Cutover of a Workload Resulted in a Run Cutover

If you chose to perform a Test Cutover on a workload with **Perform Incremental Replication** option selected, it resulted in a Run Cutover. (Bug 940244)

Fix: Performing Test Cutover of a workload with **Perform Incremental Replication** option selected no longer results in a Run Cutover.

2.2 Changes to the VM Memory in the Target Workload Settings and Target Workload Test Settings Is Not Effective

If you use the PlateSpin Migrate Web Interface to configure the migration settings for a workload and specify a value for **VM Memory** in the Target Workload Settings and the Target Workload Test Settings sections, the specified value is not effective. However, the default source value continues to apply. (Bug 940013)

Fix: The value you specify for **VM Memory** in the Target Workload Settings and Target Workload Test Settings sections when configuring the migration settings is now effective.

3 System Requirements

For information about the requirements to install the PlateSpin Migrate 12.1 Beta software, see [Preparing to Install PlateSpin Migrate](#) in the *PlateSpin Migrate 12.1 Beta Installation and Upgrade Guide*.

4 Downloading the PlateSpin Migrate 12.1 Beta Software

To download the PlateSpin Migrate 12.1 Beta software, go to the [PlateSpin Beta Workspace](#), and follow the download link on that page. Use your NetIQ account credentials to log in to this website.

5 Installing PlateSpin Migrate 12.1 Beta

Upgrading to PlateSpin Migrate 12.1 Beta from previous releases of PlateSpin Migrate is not supported. To install PlateSpin Migrate 12.1 Beta, see “[Installing PlateSpin Migrate](#)” in the [PlateSpin Migrate 12.1 Beta Installation and Upgrade Guide](#).

IMPORTANT: Use of PlateSpin Migrate 12.1 Beta in a production environment is prohibited.

6 Prerequisites for Migrating Workloads to Azure

PlateSpin Migrate uses the Microsoft Azure Resource Manager for migrating workloads to Microsoft Azure. Before you use PlateSpin Migrate to migrate workloads to Microsoft Azure, ensure that the following cloud access prerequisites are correctly configured and available:

- ♦ A Microsoft Azure Account and a subscription for your account
- ♦ A Client ID required to access Microsoft Azure
- ♦ An Azure Active Directory user created as a contributor for the subscription
- ♦ A Virtual Network with a Subnet different from the default Gateway Subnet
- ♦ The minimum network-related prerequisites for a successful migration are:
 - ♦ The source and the target workload must be able to communicate with the PlateSpin Migrate server on port 443. The target workload is the replica of the source workload that will reside in Microsoft Azure.
 - ♦ The PlateSpin Migrate server must be able to communicate with the Microsoft Azure API endpoint on port 443.
 - ♦ The PlateSpin Migrate server must be able to communicate with the source workloads on the ports that are used for DCOM, WMI, and RPC.
 - ♦ The target workload must be able to reach the source workload on port 3725 (default). The direction of this connection can be reversed (source to target), and the port number is configurable. For information about changing the default settings, see the [PlateSpin Migrate 12.1 Beta User Guide](#).

For information about setting up your Azure cloud account to work with PlateSpin Migrate, see “PlateSpin Migrate Best Practices for Migrating Windows Workloads to Microsoft Azure” on the [PlateSpin Beta Workspace](#).

7 Key Tasks For Migrating Workloads to Microsoft Azure

To migrate workloads to Microsoft Azure, you must have a source workload that you want to migrate and a Microsoft Azure target VM to which you can migrate the source workload. Review the following sections for information about migrating workloads to Microsoft Azure:

- ♦ [Section 7.1, “Add or Discover a Windows Workload,” on page 4](#)
- ♦ [Section 7.2, “Add a Microsoft Azure Location as a Migration Target,” on page 4](#)
- ♦ [Section 7.3, “Migrating the Discovered Windows Workload to Microsoft Azure,” on page 4](#)

7.1 Add or Discover a Windows Workload

To migrate a workload through the Web Interface, you must first add or discover the workload:

- 1 In the PlateSpin Migrate Web Interface, click **Workloads > Add Workload**.
Alternatively, you can click the **Add Workload** option on the Dashboard page.
- 2 Specify the hostname or the IP address of the workload you want to add.
- 3 Select the type of workload as **Windows**.
- 4 Specify the credentials to connect to the workload.
- 5 Click **Add Workload** to discover the workload and list it on the Workloads page.

7.2 Add a Microsoft Azure Location as a Migration Target

The Targets page displays all the available targets and lets you add a new target.

To add a Microsoft Azure target:

- 1 In the PlateSpin Migrate Web Interface, click **Targets > Add Target**.
- 2 Specify the following:
 - ♦ **Type:** Select **Microsoft Azure Location**.
 - ♦ **Subscription Id:** Specify the subscription id for your Microsoft Azure account.
 - ♦ **Client Id:** Specify your Azure Client id required to allow the PlateSpin software access your Azure subscription.
 - ♦ **Username and Password:** Specify the administrator-level credentials for accessing the target host.
 - ♦ **Location Name:** Select the location for the Microsoft Azure target.

For more information about the fields, see the “PlateSpin Migrate Best Practices for Migrating Windows Workloads to Microsoft Azure” on the [PlateSpin Beta Workspace](#).

- 3 Click **Add**.

7.3 Migrating the Discovered Windows Workload to Microsoft Azure

After you add or discover a workload, the workload is listed on the Workloads page and the status is set as **Not Configured**. Before you migrate the workload, you must configure the workload for migration.

To configure and migrate a discovered workload:

- 1 Launch the PlateSpin Migrate Web Interface.
- 2 On the Workloads page, select the workload you want to configure.
- 3 Click **Configure Migration**.
- 4 Select **Full Replication** to transfer a full volume of data from the source to the target.

NOTE: Incremental Replication of data to Microsoft Azure is not supported.

- 5 Select a Microsoft Azure Location that you previously configured as a target. See [Section 7.2, “Add a Microsoft Azure Location as a Migration Target,”](#) on page 4.
- 6 Click **Configure Migration**.
- 7 Configure the following settings:

Setting Name	Description
Schedule Settings	
Compression Level	<p>These settings control how workload data is compressed before transmission. See Data Compression. Select one of the following options:</p> <ul style="list-style-type: none">♦ Fast: Consumes the least CPU resources on the source, but yields a lower compression ratio.♦ Optimal: Consumes optimal CPU resources on the source and yields an optimal compression ratio. This is the recommended option.♦ Maximum: Consumes the most CPU resources on the source, but yields a higher compression ratio.
Bandwidth Throttling	<p>These settings control the bandwidth throttling. PlateSpin Migrate enables you to control the amount of available bandwidth consumed by direct source-to-target communication over the course of a workload migration. You can specify a throughput rate for each migration job. This provides a way to prevent migration traffic from congesting your production network and reduces the overall load of your PlateSpin Server.</p> <p>To throttle replications to a specified rate, specify the required throughput value in Mbps and the time pattern.</p>
Migration Settings	
Transfer Method	<p>Select a data transfer mechanism and security through encryption. See Supported Transfer Methods.</p> <p>To enable encryption, select the Encrypt Data Transfer option. See Security and Privacy.</p> <p>NOTE: The Offline Transfer with Temporary Boot Environment transfer method is not applicable for the Web interface.</p>
Source Credentials	<p>Specify the credentials required for accessing the workload. See Discovery Guidelines for Machine Types and Credentials.</p>
Cloud Instance Size	<p>Select the cloud instance size appropriate for your workload. By default, the cloud instance size that most closely matches your workload is selected.</p>

Setting Name	Description
Replication Network	<p>Separate replication traffic based on virtual networks defined on your VM container.</p> <p>For this setting, you can also specify an MTU value that the PlateSpin Migrate Linux RAM Disk (LRD) replication network can use. Setting a low value helps to avoid jabber over networks. For example: a VPN.</p> <p>The default value is an empty string. When networking is configured in the LRD allows the network device to set its own default, which is usually 1500. However, if you specify a value, PlateSpin Migrate adjusts the MTU when it configures the network interface.</p>
Networks Allowed for Replication	Specify one or more network interfaces (NIC or IP address) on the source to use for replication traffic.
Virtual Machine Name	Specify a display name for the new virtual machine.
Disks	<p>Specify the path to the hard disk on the target virtual machine.</p> <p>Select Thin Disk to enable the thin-provisioned virtual disk feature. The virtual disk then appears to the VM to have a set size, but only consumes the amount of disk space that is actually required by data on that disk.</p>
Volumes	Select volumes to be included in the target for migration.
Services to Stop on Source	Select Windows services to be automatically stopped during the replication.
<p style="text-align: center;">Target Workload Settings</p> <p style="text-align: center;">(These settings are applied during the Run Cutover.)</p>	
Hostname	<p>Do one of the following:</p> <ul style="list-style-type: none"> ♦ To retain the same hostname, select No Change. ♦ To change the hostname, select Set To and specify the new name.

Setting Name	Description
Domain / Workgroup	<p>Depending on whether the source workload belongs to workgroup or domain, one of the following displays:</p> <ul style="list-style-type: none"> ♦ Workgroup: <i>Workgroup_name</i> where <i>Workgroup_name</i> is the workgroup name to which the source belongs. ♦ Domain: <i>Domain_name</i> where <i>Domain_name</i> is the domain name to which the source belongs. <p>Do one of the following depending on where you want the target workload to join:</p> <ul style="list-style-type: none"> ♦ When the source workload belongs to a workgroup: Assume that the source workload belongs to a workgroup named WorkGroup1. <ul style="list-style-type: none"> ♦ For the target workload to join the same workgroup (WorkGroup1), retain the following existing selection: Workgroup: Workgroup1 ♦ For the target workload to join a different workgroup (say WorkGroup2), select Join Workgroup and specify the name as WorkGroup2. ♦ For the target workload to join a domain, select Join Domain and specify the domain name you want the target to join. ♦ When the source workload belongs to a domain: Assume that the source workload belongs to a domain named Domain1. <ul style="list-style-type: none"> ♦ For the target workload to join a workgroup, click Join Workgroup and specify the name of the workgroup you want the target to join. ♦ For the target workload to join the same domain (Domain1) with the domain registration settings preserved, retain the following existing selection: Domain: Domain1 ♦ For the target workload to join the same domain (Domain1) without preserving the domain registration settings, select Join Domain and specify the domain name as Domain1. ♦ For the target workload to join a different domain, select Join Domain and specify the domain name you want the target to join.
Domain Credentials	If you select Join Domain , specify the domain administrator credentials.
Network Connections	<p>Select the local area connection and then select one of the following:</p> <ul style="list-style-type: none"> ♦ DHCP: Obtain an IP address automatically assigned by a DHCP server. ♦ Static: Specify a static IP address.
Services States on Target VM	Select Windows services that must be automatically stopped on the target VM.
Tag	
Tag	Select a tag to assign to the workload.

8 (Optional) To change the target, click **Change Target**.

NOTE: If you change the target, all the settings you specified will be cleared.

- 9 Do one of the following:
 - ♦ Click **Save** to save the settings.
 - ♦ Click **Cancel** to exit.
- 10 Review the migration details you configured for the workload. NetIQ recommends that you stop all services on the source workload before you migrate the workload.
- 11 Click **Run Cutover** to migrate the workload.

PlateSpin Migrate automatically enables remote desktop services for the workload if you have not enabled it. When the migration completes, PlateSpin Migrate boots the target workload in Microsoft Azure. You can now log in to the workload through a remote desktop client.

8 Known Issues

NetIQ Corporation strives to ensure our products provide quality solutions for your enterprise software needs.

If you need assistance with any issue, please use the **Forum - PlateSpin Migrate** discussion forum on the [PlateSpin Beta Workspace](#). Use your NetIQ account credentials to log in to this site.

- ♦ [Section 8.1, “Known Issues For Migrate to Azure Technical Preview,” on page 8](#)
- ♦ [Section 8.2, “Known Issues For Migrate,” on page 10](#)

8.1 Known Issues For Migrate to Azure Technical Preview

The following issues are being researched:

- ♦ [Section 8.1.1, “Remove Workload Job Does Not Remove the Azure Resource Group Created for the Workload,” on page 8](#)
- ♦ [Section 8.1.2, “Abort Might Not Remove Objects in Azure,” on page 9](#)
- ♦ [Section 8.1.3, “Cutover Fails During Partitioning Operations,” on page 9](#)
- ♦ [Section 8.1.4, “Migration Fails With Partitioning Exception When UI Reports a Size Discrepancy for a Target Disk,” on page 9](#)
- ♦ [Section 8.1.5, “RDP Cannot Connect to a Workload in Azure,” on page 9](#)
- ♦ [Section 8.1.6, “Windows Target VM Does Not Allow Remote Desktop Connection After Migration to Azure,” on page 9](#)

8.1.1 Remove Workload Job Does Not Remove the Azure Resource Group Created for the Workload

Issue: When you run the cutover action with settings of **Preserve Source** and **Delete Target VM**, the target workload VM in Azure is removed, but the Resource Group container created for VM in Azure is not removed. The orphaned Resource Group is visible in the Microsoft Azure Portal Web UI. This issue has no functional impact. (Bug 957687)

Workaround: None. This issue is planned to be resolved for the PlateSpin Migrate 12.1 release.

8.1.2 Abort Might Not Remove Objects in Azure

Issue: When you abort an action for a workload, some objects might remain in Azure depending on the different increments in the workload lifecycle such as create, copy, or configure service.

Workaround: Manually clean up the Azure objects. This issue is planned to be resolved for the PlateSpin Migrate 12.1 release.

8.1.3 Cutover Fails During Partitioning Operations

Issue: A race condition can occur during the disk partitioning where PlateSpin Migrate attempts to read the partition table before all of the partition information has been returned by the `npart` utility. This condition causes the cutover to fail with the following message:

```
Unable to find a device to map the windows volume
```

(Bug 959079)

Workaround: Re-run the cutover.

8.1.4 Migration Fails With Partitioning Exception When UI Reports a Size Discrepancy for a Target Disk

Issue: When a partition is added for a target disk, the remaining available space on the disk is less than the amount of space needed by the source disk. This condition can occur if the specified disk size does not allow for the space consumed by the disk partition table. When this error occurs, the cutover fails and PlateSpin Migrate reports an exception error similar to the following:

```
PlateSpin.PowerConvert.Linux.DiskManagement.DiskManagementException: There is not  
enough space on target disk /dev/sdf. The size of the disk is 1073741824 bytes, but  
the minimum required space is 1074659328 bytes
```

(Bug 957419)

Workaround: Ensure that the disk is sized appropriately, then re-run the cutover.

8.1.5 RDP Cannot Connect to a Workload in Azure

Issue: In some situations, you might be unable to connect to a workload in Azure using the public IP address. (Bug 954656)

Workaround: Try using the private IP address.

8.1.6 Windows Target VM Does Not Allow Remote Desktop Connection After Migration to Azure

Issue: A Windows Server 2012 R2 source workload is configured to allow RDP and the port is open in the Windows Firewall. However, after a migration is completed, an administrator user might be unable to RDP to the Windows target VM because the proper port is not configured in the Windows Firewall. (Bug 954656)

Workaround: None. The symptoms are inconsistent. This issue is planned to be resolved in PlateSpin Migrate 12.1.

8.2 Known Issues For Migrate

The following issue is being researched:

- ♦ [Section 8.2.1, “Migration to VMware 6 Fails on Migration,” on page 10](#)

8.2.1 Migration to VMware 6 Fails on Migration

Issue: Migration to a target VM on a VMware 6 container fails with the following error:

```
Error executing command. An unexpected error occurred while trying to execute the
last command: Object reference not set to an instance of an object. Diagnostics
show Error: ErrorExecutingWorkflowTemplate
```

(Bug 958696)

Workaround: Migrating to a VMware 6 container is not supported for this beta.

9 Beta Program Contact Information

A PlateSpin Migrate Discussion forum is available on the [PlateSpin Beta Workspace](#). Use your NetIQ account credentials to log in, then click **Forum - PlateSpin Migrate** to discuss issues with product engineers and other Beta Customers.

10 NetIQ Contact Information

Our goal is to provide documentation that meets your needs. If you have suggestions for improvements, please email Documentation-Feedback@netiq.com (<mailto:Documentation-Feedback@netiq.com>). We value your input and look forward to hearing from you.

For detailed contact information, see the [Customer Service Contact Information website](http://www.netiq.com/support/process.asp#phone) (<http://www.netiq.com/support/process.asp#phone>).

For general corporate and product information, see the [NetIQ Corporate website](http://www.netiq.com/) (<http://www.netiq.com/>).

For interactive conversations with your peers and NetIQ experts, become an active member of our [community](https://www.netiq.com/communities/) (<https://www.netiq.com/communities/>). The NetIQ online community provides product information, useful links to helpful resources, blogs, and social media channels.

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