PlateSpin Migrate 12.2.2 Release Notes

June 2018

PlateSpin Migrate 12.2.2 includes new features and enhancements and resolves several previous known issues. The service pack includes all patches and hotfixes released since the PlateSpin Migrate 12.2.1 release.

The documentation for this product is available in HTML and PDF formats on the PlateSpin Migrate 12.2.2 Documentation website (https://www.netiq.com/documentation/platespin-migrate-12-2-2).

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

1 Documentation Updates

This section identifies changes made to the English version of the *Release Notes* since the General Availability of PlateSpin Migrate 12.2.2. These changes do not appear in translated versions of the document.

1.1 June 2018

Location	Change
“[Migrate Agent] Re-Registering a Previously Migrated Linux Workload Causes an Error”	This issue is new.

1.2 May 2018

Location	Change
"Target Virtualization Platforms"	Added support for Microsoft Hyper-V Server 2016 (core) in the PlateSpin Migrate Client.
"Target Cloud Platforms"	Added support for VMware vCloud Director 9.1 in the PlateSpin Web Interface.
"Replication Cannot Complete If an Anti-Virus Update Is Pending a Restart on the Source"	This issue is new.

2 What's New

PlateSpin Migrate 12.2.2 includes several new features and enhancements.

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 forum (https://forums.novell.com/forumdisplay.php/1337-Platespin-Migrate) on Micro Focus Forums, our online community that also includes product information, blogs, and links to helpful resources.

2.1 PlateSpin Migrate Server Software

PlateSpin Migrate 12.2.2 provides the following enhancements for PlateSpin Migrate Server host components. For more information, see "System Requirements for PlateSpin Server" in the *Installation and Upgrade Guide*.

PlateSpin Server Host Requirements	Details
Operating System	◆ Adds support for Microsoft Windows Server 2016 as the PlateSpin Server host operating system. ◆ Deprecates support for Microsoft Windows Server 2008 R2 as the PlateSpin Server host operating system. **NOTE:** No direct upgrade path is supported from the Windows Server 2008 R2 platform. See "Upgrading to a New Host Platform" in the *Installation and Upgrade Guide*.

PlateSpin Server Host Requirements	Details
Database Server	◆ Microsoft SQL Server 2017 Express Edition is included in your PlateSpin Migrate 12.2.2 distribution instead of Microsoft SQL Server 2014 Express Edition. **NOTE:** For upgrades of PlateSpin Migrate Server to version 12.2.2, your existing installation of Microsoft SQL Server 2014 Express is supported. The SQL Server Express software is not updated. ◆ Adds support for Microsoft SQL Server 2016.
Prerequisite Software	◆ Adds prerequisites for using Windows Server 2016 as the PlateSpin Migrate Server host. ◆ Adds the requirement for Microsoft .NET Framework 4.7.1. ◆ Deprecates the requirement for Microsoft.NET Framework 3.5. SP1. For more details, see "Prerequisite Software" in the *Installation and Upgrade Guide*.

2.2 PlateSpin Migrate Client Software

PlateSpin Migrate 12.2.2 provides the following enhancements for PlateSpin Migrate Client host components. For more information, see "System Requirements for PlateSpin Migrate Client" in the *Installation and Upgrade Guide*.

PlateSpin Migrate Client Host Requirements	Details
Operating System	Adds support for Microsoft Windows Server 2016 as the PlateSpin Migrate Client host operating system.
Windows Software Components	Adds the requirement for Microsoft .NET Framework 4.7.1.

2.3 PlateSpin Migrate Images in Azure

PlateSpin Migrate 12.2.2 provides the following enhancements for PlateSpin Migrate images in the Azure Marketplace and the Azure China Marketplace.

PlateSpin Migrate Images	Details
PlateSpin Migrate Server 12.2.2	◆ Uses Windows Server 2016 as the PlateSpin Migrate Server host operating system. ◆ Applies Microsoft recommended security enhancements to help prevent against Spectre and Meltdown threats. ◆ Rebranded from NetIQ to Micro Focus.

PlateSpin Migrate Images	Details
PlateSpin Replication Environment (PRE) 12.2.2	◆ Uses SUSE Linux Enterprise Server 12 SP3 as the Linux RAMDisk (LRD) host operating system. ◆ Rebranded from NetIQ to Micro Focus.

2.4 Supported Configurations

PlateSpin Migrate 12.2.2 enhances support for source workloads and target containers.

2.4.1 Supported Windows Workloads

PlateSpin Migrate 12.2.2 supports Windows workloads on the new Target Virtualization Platforms identified in Supported Target Platforms. For detailed information and caveats about supported Windows workloads, see “Supported Configurations” in the *User Guide*.

2.4.2 Supported Linux Workloads

PlateSpin Migrate 12.2.2 supports Linux workloads on the new Target Virtualization Platforms identified in Supported Target Platforms. For detailed information and caveats about supported Linux workloads, see “Supported Configurations” in the *User Guide*.

PlateSpin Migrate 12.2.2 adds support for the following Linux workloads. For information about precompiled `blkwatch` drivers, see “List of Distributions” in the *User Guide*.

Platform	Versions	Remarks
Red Hat Enterprise Linux (RHEL)	7.4	This release adds support for the XFS version 5 (v5) file system on RHEL 7.3 and later, and on distributions based on those versions. This support does not apply to vCloud target containers. For VMware vCloud target containers, PlateSpin Migrate does not support the XFS version 5 (v5) file system. RHEL 7.3 and 7.4 (and distributions based on them) are not supported for workloads with XFS v5 file systems. This release adds support for Linux workloads using the GRUB 2 boot loader. For Red Hat Enterprise Linux 6.8, Oracle Linux 6.8, and CentOS 6.8 workloads with LVM volumes, PlateSpin Migrate supports incremental replication only for the latest available kernel (version `2.6.32-696.20.1.el6.x86_64`) for the 6.8 distribution.
Oracle Linux	Distributions based on RHEL.	Precompiled blkwatch drivers are available for the standard kernel and Unbreakable Enterprise Kernel (UEK) for RHEL 6.7 and later.
CentOS	Distributions based on RHEL.	Use RHEL precompiled blkwatch drivers.

2.4.3 Supported Target Platforms

PlateSpin Migrate 12.2.2 adds support for the following target platforms. For detailed support information, see the "Supported Configurations" section in the *User Guide*.

2.4.3.1 Target Virtualization Platforms

For detailed information and caveats about supported target virtualization platforms, see "Supported Target Virtualization Platforms" in the *User Guide*.

- **VMware**
  - VMware vCenter 6.5 U1
  - VMware ESXi 6.5 U1
  - vSAN 6.6

- **Microsoft Hyper-V**
  - Microsoft Hyper-V Server 2016
    - Migrate Client supports automated or semi-automated migrations of Windows and Linux workloads to Microsoft Hyper-V Server 2016.
    - Windows workloads are migrated as BIOS workloads irrespective of the firmware on the source workload. See "Unable to Migrate a Windows Workload as a UEFI-Based Target to Microsoft Windows Server 2016 Hyper-V or Microsoft Hyper-V Server 2016."
  - Windows Server 2016 Hyper-V
    - Migrate Client supports automated or semi-automated migrations of Windows and Linux workloads to Windows Server 2016 Hyper-V.
    - Windows workloads are migrated as BIOS workloads irrespective of the firmware on the source workload. See "Unable to Migrate a Windows Workload as a UEFI-Based Target to Microsoft Windows Server 2016 Hyper-V or Microsoft Hyper-V Server 2016."
- **KVM**
  - RHEL 7.4 KVM
  - Deprecates support for migration to KVM on earlier RHEL versions
- **Citrix XenServer**
  - Citrix XenServer 7.3
  - Deprecates support for Citrix XenServer 6.5 and earlier.

2.4.3.2 Target Cloud Platforms

For detailed information and caveats about supported target cloud platforms, see "Supported Target Cloud Platforms" in the *User Guide*.

- **Amazon Web Services**
  - Support for automated cloud-to-cloud migration of VMs from AWS to Azure. See "Prerequisites for Migration from AWS to Azure" in the *User Guide*.
    - Does not require site-to-site VPN connections between any of the participating locations: AWS, Azure, and your data center.
    - Internet access and public IP addresses are required.
    - Uses the Migrate Agent to register source AWS VMs with the Migrate Server deployed in Azure.
  - Option to encrypt EBS volumes during migration to AWS.
- **Microsoft Azure**
  - Support for automated cloud-to-cloud migration of VMs from AWS to Azure. See "Prerequisites for Migration from AWS to Azure" in the *User Guide*.
    - Requires a Migrate Server in Azure.
    - Internet access is required.
    - Uses the Migrate Web Interface to configure automated cloud-to-cloud migration of registered source AWS VMs.
    - Automatically removes AWS tools on the target VM in Azure.
- **VMware vCloud Director**
  - VMware vCloud Director 9.1, 8.20

2.4.4 Support for MPIO

PlateSpin Migrate 12.2.2 adds support for Multipath I/O (MPIO) for Fibre Channel (FC) SANs on the following workloads with all SAN disks. Workloads must boot from SAN disk. Mixed local and SAN disks are not supported for MPIO.

- Red Hat Enterprise Linux 6.8

See “Multipath I/O” in the *User Guide*. See also “PlateSpin ISO”.

2.5 PlateSpin ISO

In this release, PlateSpin ISO uses SUSE Linux Enterprise Server 12 SP3 for the Linux RAMDisk (LRD). The ISO file adds the following features:

- Supports migration of 64-bit workloads.
- Contains boot options for the optional use of FCoE, MPIO, or both FCoE and MPIO.
- Adds support for GRUB 2 (Grand Unified Bootloader Version 2) booting on Linux workloads.
- Adds support for XFS v5 file systems, according to supported configurations. See “Supported Linux Workloads”.

A PlateSpin ISO based on SLES 11 SP4 is available for migration of 32-bit workloads.

See “Downloading the PlateSpin ISO Images” in the *User Guide*.

2.6 PlateSpin Configuration Parameters

PlateSpin Migrate 12.2.2 adds the following parameter for the PlateSpin Configuration tool:

- **RemoveVMwareDevicesAtCutover:** The PlateSpin Configuration parameter `RemoveVMwareDevicesAtCutover` controls whether floppy drives are removed after a successful cutover. The default value is **False**, which leaves an extra floppy drive attached but not connected to the VM. You can set the value to **True** to force the removal of the extra floppy drive at cutover. The removal process shuts down and restarts the Guest OS. This reboot is required.

2.7 Security

PlateSpin Migrate 12.2.2 adds support for TLS 1.2 connections for the PlateSpin Server.

As a security best practice, you should apply patches that address security vulnerabilities to your PlateSpin Migrate Server host and PlateSpin Migrate Client host, as you would for other Windows servers in your enterprise.

Micro Focus is aware of the side-channel analysis vulnerabilities described in CVEs 2017-5715, 2017-5753 and 2017-5754, known as Meltdown and Spectre. The current recommended actions have been applied on the PlateSpin Server images in Azure. We strongly recommend that you continue to apply security updates that address such threats as recommended by Microsoft for the Windows operating system for the PlateSpin hosts. Consult the vendor documentation for information.

3 Deprecated Functionality

PlateSpin Migrate 12.2.2 no longer supports the following:

- Installation or upgrade of PlateSpin Migrate Server on Windows Server 2008 R2.

- Migration to target VMs on Red Hat Enterprise Linux 7.3 or earlier with KVM is not supported for the PlateSpin ISO based on SUSE Linux Enterprise Server 12 SP3.
- Migration to target VMs on Citrix XenServer 6.5 or earlier.

4 Known Issues

Micro Focus strives to ensure our products provide quality solutions for your enterprise software needs. The following issues are currently being researched. If you need further assistance with any issue, please contact Micro Focus Support and Services (http://www.microfocus.com/support-and-services).

For information about known issues in previous releases, see Previous Releases.

4.1 Known Issues for Installation or Upgrade

4.1.1 Symantec Endpoint Protection Can Block the Installation or Upgrade of PlateSpin Server in Windows Server 2012 R2

Issue: If your Windows Server 2012 R2 server is protected by Symantec Endpoint Protection, the PlateSpin Server Installation/Upgrade file might be improperly quarantined by SONAR, which is part of the Symantec Proactive Threat Protection / Virus and Spyware Protection policy. (`Bug 1080782`)

Workaround: Do one of the following:

- Disable Symantec Endpoint Protection during the PlateSpin Server installation or upgrade.
- Exclude SONAR detection for the folder where you extract PlateSpin Install/Upgrade file. The `%TEMP%` folder is the default location for extraction. Refer to *Managing SONAR* on the Symantec website.

4.1.2 Cannot Apply the Upgrade to PlateSpin Server Running Windows 2008 R2

Issue: PlateSpin Migrate 12.2.2 does not support a direct upgrade for PlateSpin Servers running on Windows 2008 R2.

Workaround: You can export your database, then deploy Migrate Server on a supported Windows Server platform. See “Upgrading to a New Host Platform” in the *Installation and Upgrade Guide*.

4.2 Known Issues for Migration to Hyper-V

4.2.1 Unable to Migrate a Linux Workload to a Hyper-V Target VM Using a Semi-automated (X2P) Migration

Issue: When you use the semi-automated (X2P) workflow to migrate a Linux workload to a target VM, the migration job fails with the following error if the job network configuration has the **Enable Compression** option selected to allow compression of data during data transfer. (`Bug 1089276`)

```
Message Exception happened in Compressor Decompressor:
Compressor::RunDecompressor().
```

Workaround: Before using the semi-automated (X2P) workflow to migrate a Linux workload to a target VM, deselect the **Enable Compression** option in the **Network** section of the Job Configuration window.

4.2.2 Unable to Migrate a Windows Workload as a UEFI-Based Target to Microsoft Windows Server 2016 Hyper-V or Microsoft Hyper-V Server 2016

Issue: When you choose to migrate a UEFI or BIOS Windows workload to Windows Server 2016 Hyper-V or Microsoft Hyper-V Server 2016 target, the Virtual Machine generation type in the Hyper-V Virtual Machine Configuration dialog is set by default to **Generation 1** and you cannot edit the generation type. (`Bug 1087212`)

Workaround: None. Migrate Client does not support UEFI-to-UEFI or BIOS-to-UEFI Windows conversions for migrations to Windows Server Hyper-V 2016 or Microsoft Hyper-V Server 2016. The target workload will be deployed with BIOS architecture irrespective of the source architecture.

See “Planning for Migration to Microsoft Hyper-V” in the *User Guide*.

4.2.3 Install Hyper-V Integration Services Warning Message Displays When a Windows Workload Is Migrated to Windows Server 2016 Hyper-V Target VM

Issue: When you migrate a Windows Server 2008 SP2 or Windows Server 2008 R2 source workload to Microsoft Windows Server 2016 Hyper-V, the following job warning message displays if Migrate cannot use the `C:\Windows\system32\vmguest.iso` file to install the Hyper-V Integration Services driver on the Hyper-V target VM during the migration:

```
"InstallHyperVIntegrationServices" (Failed: Non-Critical Error)
```

The migration completes successfully, but Migrate does not automatically install the Hyper-V Integration Services driver on the target VM. (`Bug 1084987`)

Workaround: PlateSpin Migrate Client uses the `C:\Windows\system32\vmguest.iso` file on the Hyper-V host to install the Hyper-V Integration Services driver on the guest VM during migration. However, Windows Server 2016 Hyper-V does not include the `C:\Windows\system32\vmguest.iso` file because Hyper-V 2016 uses a different method to manage the driver for its guest VMs.

To work around this issue, do one of the following to ensure that the Hyper-V Integration Services driver is installed on guest VMs on your Windows Server 2016 Hyper-V host:

- Enable Migrate to install a Hyper-V Integration Services driver during the migration. Before you begin migrations to the Hyper-V 2016 host, copy the `C:\Windows\system32\vmguest.iso` file from a Windows Server 2012 R2 Hyper-V host to the same location on your Windows Server 2016 Hyper-V host.
- Ignore the error message during migration. After the migration, manually install the Hyper-V Integration Services driver on the guest VM. Use Windows Update on the Windows guest VM to add the Hyper-V Integration Services driver, or use alternative Microsoft installation methods as appropriate. For Linux guest VMs, use a package manager to install Integration Services for Linux that are built-in for the Linux distribution. See *Manage Hyper-V Integration Services* on the Microsoft documentation website.

NOTE: Ensure that Hyper-V Integration Services are properly configured so that the Integration Services driver is automatically installed or updated on the Windows guest VM during Windows updates. For Linux guest VMs, use a package manager to install or update Hyper-V Integration Services for Linux. They are built-in for Linux distributions, but there might be optional updates available. See *Manage Hyper-V Integration Services* on the Microsoft documentation website.

See "Planning for Migration to Microsoft Hyper-V" in the *User Guide*.

4.3 Known Issues For Migration to KVM

The following issue is being researched:

- Section 4.3.1, "Migration of a Workload to a KVM Virtual Machine Having One or More Virtio Disk Fails When the Target VM Has Multiple NICs," on page 10

4.3.1 Migration of a Workload to a KVM Virtual Machine Having One or More Virtio Disk Fails When the Target VM Has Multiple NICs

Issue: When you migrate a Windows workload to a KVM virtual machine having one or more Virtio disks, the migration of the workload fails with recoverable error at configuring operating system step if the target VM has more than one NIC. `(Bug 1085105)`

Workaround: When you use Virtio disks in the target VM on a KVM host, ensure that the target VM has only one NIC. Alternatively, do not use a virtio disk when the target VM has multiple NICs. Using another disk type, such as SATA, works fine in this scenario.

4.4 Known Issues For Migration to VMware

The following issue is being researched:

- Section 4.4.1, "No Network Connectivity on a Target VM That Is Shut Down Post Cutover to a VMware Cluster," on page 11
- Section 4.4.2, "Incremental Replication of a Linux Workload Having Multiple NICs to a VMware Cluster Target Gets Stuck During Copying Data Step," on page 11
- Section 4.4.3, "Alarm Message Displays in vSphere Web Client Even After a Workload is Successfully Migrated to VMware 5.5 Target," on page 11

4.4.1 No Network Connectivity on a Target VM That Is Shut Down Post Cutover to a VMware Cluster

Issue: When you migrate a workload to a VMware Cluster with a migration job that is configured to shut down the target post cutover, the migration job shuts down the target after successful migration. However, the target VM does not have any network connectivity when it is powered on. (Bug 1089454)

Workaround: Do one of the following:

- Perform the migration without choosing to shut down the target VM post cutover.
- Manually set the correct network on the target VM before you power up the target VM.

4.4.2 Incremental Replication of a Linux Workload Having Multiple NICs to a VMware Cluster Target Gets Stuck During Copying Data Step

Issue: If you choose to perform incremental replication of a Linux Workload that has multiple NICs to a VMware Cluster target and configure the **Replication Networks for Source** setting of the migration job to use only one NIC on the source workload for replication traffic, the job gets stuck at `Copy Data` step. (Bug 1089593)

Workaround: Before performing the incremental replication, ensure that the **Replication Networks for Source** setting of the migration job includes all the networks on the source.

4.4.3 Alarm Message Displays in vSphere Web Client Even After a Workload is Successfully Migrated to VMware 5.5 Target

Issue: When you migrate a workload to a VMware 5.5 target, the migration completes successfully. However, the following message is displayed in the vSphere Web Client: (Bug 1090278)

```
vSphere Web Client Configuration Issue: Virtual Machine Disks Consolidation is needed.
```

```
vSphere Web Client Triggered Alarm: Virtual machine Consolidation Needed status
```

Workaround: Perform the following steps in the vSphere Web Client to consolidate all redundant redo logs on the virtual machine:

1. Right-click the VM.
2. Click **Actions** > **All vCenter Actions** > **Snapshots** > **Consolidate**.
3. In the pop-up dialog, click **Yes**.

4.5 Known Issues For Migration to VMware vCloud

4.5.1 Cutover Hangs with CDROM Locked Message in VMware vCloud Director; User Intervention Required

Issue: The test cutover or cutover of a source Linux workload (running RHEL, CentOS, or Oracle Linux RHCK Linux distributions) from AWS to VMware vCloud hangs with the following message in the Web Interface:

```
Configuration services is taking a long time to start
```

In VMware vCloud Director (`vApps\vAppname\virtual Machine\vmName`), a dialog box requiring user intervention displays stating that the guest OS has locked the CDROM on the target VM and prompts you to override the CD-ROM lock. In the Web Interface, the cutover hang continues until you manually override the CDROM lockout in the VMware vCloud Director for the target environment. (bug 1087949)

Workaround: To override the CD-ROM lock, log in to the VMware vCloud Director and select **Yes** and then click **OK** when prompted for overriding the lock.

4.6 General Issues

4.6.1 [Migrate Agent] Re-Registering a Previously Migrated Linux Workload Causes an Error

Issue: After Test Cutover, remove the migrated VM and clean up the workload. When you try to re-register the workload with the Migrate Agent, the following error occurs in the UI:

```
A pre-installed controller is not heart-beating, and no address/credential provided for installing a new one.
```

The documented procedure for clean up of the OFX Controller does not reflect the latest command requirements for Migrate 12.2.2. (Bug 1088939)

Workaround: See the updated clean-up procedure for "Controller Software" in "Cleaning Up Linux Workloads" in the *PlateSpin Migrate User Guide*.

4.6.2 Replication Cannot Complete If an Anti-Virus Update Is Pending a Restart on the Source

Issue: Automatic updates for anti-virus software on Windows source workloads sometimes have pending system changes that require a restart. While the required restart is pending, any replication seems to get stuck and cannot complete. (Bug 1091267)

Workaround: To prevent this potential replication conflict, ensure that you restart the source Windows workload after an anti-virus automatic update occurs that requires a restart. Perform the restart before the next replication begins.

To gracefully resolve this conflict for an in-progress replication:

1. Abort the replication by using the Migrate Client or Migrate Web Interface, as appropriate.
2. Reboot the source Windows workload.
3. In Migrate Client or Migrate Web Interface, initiate the replication again.

   The replication should complete successfully.

4.6.3 Migrate Web Interface: Only the Active Node Is Shut Down When Shut Down Is Set as the Post Migration End State for the Source Windows Server 2016 Cluster

Issue: When Shut Down is set as the post-migration end state for a Windows Server 2016 Cluster, the PlateSpin Migrate Web Interface shuts down only the active node of the cluster; the passive nodes are not shut down. Migrate Client properly shuts down all source nodes. (Bug 1087669)

Workaround: Manually shut down the passive nodes if they do not automatically shut down when Shut Down is set for the post-migration end state of a Windows Server 2016 Cluster.

4.6.4 File-Based Transfer Conversion Fails at Cutover with Kernel Panic or GRUB Rescue Mode for Older Linux Workloads with an XFS `/boot` Directory

Issue: In the Migrate Client, file-based transfer conversions fail at cutover for older Linux workloads that have an XFS `/boot` directory. The replication completes normally. However, when the target workload boots at cutover, it either has a kernel panic (UEFI workloads) or fails into a GRUB rescue console with XFS errors (BIOS workloads). This issue has been observed on RHEL/CentOS/OL 7.1 and older workloads. (`Bug 1087726`)

Workaround: You can try the migration using block-based data transfer.

4.6.5 File-Based Transfer Conversion Gets Stuck at Starting Virtual Machine for RHEL 6.3 UEFI Workloads

Issue: In the Migrate Client, file-based transfer conversions gets stuck at Starting Virtual Machine for RHEL 6.3 UEFI workloads. Diagnostics for the migration job shows the following error:

```
Configure Target Machine Running Controller > Starting Virtual Machine Running
  Information:32:Task PowerOnVM_Task completed successfully
  Information:32:ChangeVMState: failed to change state to poweredOn, current state
is poweredOff
```

This error has been observed only for RHEL 6.3 UEFI workload migrations using file-based data transfer. (`Bug 1087728`)

Workaround: You can try the migration using block-based data transfer.

4.6.6 File-Based Transfer Conversion Gets Stuck in the Take Control Step If Source Windows Workload Is in Citrix XenServer

Issue: For source Windows workloads in Citrix XenServer, the NIC is not detected in the Source Under Control state and is not configured. The file-based conversion process gets stuck in the Take Control step with the error message: `Machine controller copy failed`. (`Bug 1085326`)

Workaround: You can try the migration using block-based data transfer.

5 Resolved Issues

PlateSpin Migrate 12.2.2 resolves the following issues:

5.1 Floppy Drive Not Cleaned Up on the VMware Target VM

Issue: After cutover is completed for a migration to VMware, an extra floppy drive remains attached but not connected to the target VM. (Bug 1076091)

Fix: The PlateSpin Configuration parameter `RemoveVMwareDevicesAtCutover` controls whether floppy drives are removed after a successful cutover. The default value is False, which leaves an extra floppy drive attached but not connected to the VM. You can set the value to True to force the removal of the extra floppy drive. The removal process must shut down and restart the Guest OS.

5.2 Cannot Deselect Volumes when Configuring Migration for Linux Workloads

Issue: When you configure migration jobs in PlateSpin Migrate 12.2.1, you cannot deselect any volumes on Linux workloads. It should be possible to deselect data volumes when configuring migration jobs. `(Bug 1084597)`

Fix: You can deselect data volumes on Linux workloads during configuration.

5.3 Linux Target Cannot Boot after Migration from Citrix XenServer 6.5 to KVM 7.2

Issue: RHEL 5.*x* and 6.*x* workloads cannot boot after migration from Citrix XenServer 6.5 to KVM 7.2. `(Bug 1079030)`

Fix: PlateSpin Migrate checks for a Xen console entry in the `grub.conf` file (`console=hvc0`), and removes it on the target machine.

5.4 mkinitrd Command Failed in Migrations from Xen to KVM

Issue: In migrations from Xen to KVM, the `mkinitrd` command failed because virtio drivers were not properly injected for the source and target kernels. (`Bug 1076995`)

Fix: PlateSpin Migrate checks for various source and target virtio support and injects virtio drivers as appropriate for the migration scenario.

5.5 Data Is Not Transferred to Target During Incremental Replication for RHEL 6.8 Workloads with LVM Volumes

Issue: Precompiled blkwatch drivers for kernel version `2.6.32-642` on RHEL 6 U8 fail at incremental replication for workloads with LVM volumes. Data is not transferred to the target machine. (`Bug 1078055`)

Fix: For Red Hat Enterprise Linux 6.8, Oracle Linux 6.8, and CentOS 6.8 workloads with LVM volumes, incremental replication is supported only for the latest available kernel (version `2.6.32-696.20.1`) for the 6.8 distribution. Update the kernel, then use the following blkwatch drivers:

Red Hat Enterprise Linux 6 U8

`RHEL6-RHSA20180169-2.6.32-696.20.1.el6.i686-x86`

`RHEL6-RHSA20180169-2.6.32-696.20.1.el6.x86_64-x86_64`

For a list of all precompiled blkwatch drivers, see "List of Distributions" in the *User Guide*.

5.6 Migrate Web Interface: Only the Active Node Is Shut Down When Shut Down Is Set as the Post Migration End State for the Source Windows Server 2012 R2 Cluster

Issue: When Shut Down is set as the post-migration end state for a Windows Server 2012 R2 Cluster, the PlateSpin Migrate Web Interface shuts down only the active node of the cluster; the passive node is not shut down. Migrate Client properly shuts down all source nodes. (`Bug 1085603`)

Fix: PlateSpin Migrate Web Interface properly shuts down all source nodes when Shut Down is set for the post-migration end state of a Windows Server 2012 R2 Cluster.

5.7 Server Sync for Windows Workloads Fails at Test Cutover or Cutover

Issue: Server Sync for Windows workloads fails at Test Cutover or Cutover because of an error in translating the network configuration on the target machine. The MAC address information was not available for the target machine. (`Bug 1086507`)

Fix: PlateSpin Migrate verifies that the MAC address for the target machine is available in the configuration information.

5.8 Some Cloud Instance Sizes Are Incorrectly Displayed as Not Supporting Premium Storage in the Web Interface

Issue: The Instance menu incorrectly indicated that some Cloud Instance Sizes did not support Premium Storage. This was only a display error; the product properly recognized the type of storage. (`Bug 1071399`)

Fix: The Instance menu properly indicates support for Premium Storage.

5.9 Linux Workloads: Boot and Root Partitions Must Be on the Same Disk

Issue: Microsoft Azure does not support Linux workloads that have the boot (/boot) partition on a different disk than the root (/) partition. (`Bug 972062`)

Fix: A validator prevents Azure containers from being selected as the target for Linux workloads if the boot (/boot) partition is on a different disk than the root (/) partition.

5.10 PlateSpin OFX Controller Does Not Start on a Virtual Machine Source

Issue: PlateSpin OFX Controller startup event times out during the Install Block-Based Components step if the VM is running too slowly. This issue affects migrations to VMware or Azure for workloads with low memory and CPU resources. (`Bug 1033673`)

Fix: See "PlateSpin OFX Controller Does Not Start on a Virtual Machine Source" in the *User Guide.*

5.11 Setting a MTU Value Less Than 1500 Is Not Honored For Migrations to Hyper-V Host for VMs With Synthetic Adapters

Issue: MTU values less than 1500 are not honored for migration to VMs with synthetic adapters on target Hyper-V hosts. (`Bug 1062546`)

Workaround: None. The MTU setting is a limitation of Hyper-V for VMs with synthetic adapters.

5.12 Error When Migrating a Windows Workload to a Hyper-V Target Using the X2P Workflow

Issue: When you use the X2P workflow to migrate a Windows 2003 or 2008 workload to a Microsoft Hyper-V host, the job stalls or goes into a recoverable error at the `Uninstalling Controller` step. This error occurs if the integration services driver is not available on the Hyper-V host. (`Bugs 1053168, 1062716`)

Fix: Manually add the missing integration services driver on the Hyper-V host. See KB Article (https://www.netiq.com/support/kb/doc.php?id=7022274).

5.13 Migration of a Workload to a KVM Virtual Machine Having Virtio Disk as the Boot Disk and IDE Disk as the Data Disk Fails

Issue: When you migrate a workload to a KVM virtual machine that has its Virtio disk configured as the boot disk when both IDE and Virtio disks are available on the VM, the migration of the workload fails at `Creating and Partitioning Volumes` step. (`Bug 1063004`)

Fix: When you use Virtio disks in the target VM on a KVM host, ensure that you configure the target VM with the appropriate disk type as the boot disk:

- **Virtio and IDE disks:** Configure the IDE disk as the boot disk and the Virtio disk as the data disk.
- **Virtio and non-IDE disks:** Configure the Virtio disk as the boot disk and a non-IDE disk such as SATA or SCSI disk as the data disk.

5.14 Mouse Does Not Work in the VM Console Window for the Target VM

Issue: Sometimes on Test Cutover or Cutover, the mouse does not work for the VM in the vSphere Web Client. That is, when you perform **Actions** > **Open Console** to open the VMware Web Console, the mouse pointer does not function properly within the virtual machine console window.

Fix: Manually restart the VM to allow VMware Tools to recognize the USB Controller for the mouse. In vSphere, select **Actions** > **Power** > **Restart Guest OS**.

5.15 Migrate Client: After Undiscover Server, the Jobs View Does Not Show the Undiscover Server Job Status

Issue: After performing an Undiscover Server action, the Jobs view does not display a job entry for the Undiscover Server job. The user cannot easily determine whether the job completed successfully. Undiscover Server jobs were available in the Jobs view in PlateSpin Migrate 12.2. (Bug 1071172)

Fix: Jobs view properly shows the Undiscover Jobs.

5.16 Web Interface Does Not Display the Edited Host Name of a Discovered Workload

Issue: If you edit the host name of a discovered workload, the new host name displays in the Migrate Client, but not in the Web Interface. (`Bug 1042869`)

Fix: A discovery refresh option is not available for the Web Interface. See "Removing and Re-Adding Workloads in the Web Interface" in the *User Guide*.

5.17 Undiscover Target Job Displays an Error in the Migrate Client Even When the Target Is Successfully Undiscovered

Issue: When you use the Migrate Client to undiscover a target residing on an unreachable vCenter, the status of the undiscovery job in the Migrate Client displays as Failed. However, the target is successfully undiscovered from both the Migrate Client and the Web Interface. (`Bug 1062786`)

Fix: For potential cleanup of files copied during discovery to the target container, ensure that the target container is reachable before you remove (undiscover) the target container. See "Undiscovering or Removing Source Workloads" in the *User Guide*.

5.18 X2P Migration of a Workload to a Hyper-V VM Having Dynamic Memory Enabled Fails

Issue: When you use the X2P workflow to migrate a source workload to a Hyper-V VM that has dynamic memory enabled, the migration fails at `Sending and Receiving files` step. (`Bug 1064801`).

Fix: Disable the dynamic memory on the Hyper-V VM before you begin the X2P migration. You can enable the dynamic memory on the Hyper-V VM after cutover.

6 Installing or Updating PlateSpin Migrate

PlateSpin Migrate 12.2.2 provides the *Install PlateSpin Migrate Prerequisites* PowerShell script to check for and install prerequisite software and apply the appropriate configuration: ASP.NET, IIS, and .NET Framework. See "Installing Prerequisite Software" in the *Installation and Upgrade Guide*.

To install PlateSpin Migrate 12.2.2, see "Installing PlateSpin Migrate" in the *Installation and Upgrade Guide*.

To apply the PlateSpin Migrate 12.2.2 service pack to your PlateSpin Server, you must have an existing installation of PlateSpin Migrate 12.2.1 on a supported Windows platform, with or without interim patches and hotfixes applied. See "Upgrading Migrate" in the *Installation and Upgrade Guide*.

NOTE: No direct upgrade path is supported from the Windows Server 2008 R2 platform. You can export your database, then deploy Migrate Server on a supported Windows Server platform. See "Upgrading to a New Host Platform" in the *PlateSpin Migrate 12.2.2 Installation and Upgrade Guide*.

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7 Licensing Information

For information about activating a new license, see PlateSpin Migrate Product Licensing in the *User Guide*.

8 Previous Releases

For documentation that accompanied earlier releases, visit the PlateSpin Migrate 12.2.2 Documentation website and scroll to *Previous Releases.*

9 Contacting Micro Focus

If you have suggestions for documentation improvements, click **comment on this topic** at the bottom of any of its HTML pages, or email Documentation-Feedback@netiq.com.

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

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