PlateSpin Forge 11.1 Release Notes

March 2015

NetIQ PlateSpin Forge 11.1, a hardware and software release of PlateSpin Forge, provides new features, improves usability, and resolves several previous issues. This version of Forge is a software only release.It also resolves important performance and reliability issues.

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 our products meet all your needs. You can post feedback in the NetIQ PlateSpin Forge discussion on *NetIQ Forums* (https://forums.netiq.com/forumdisplay.php?56-Platespin-Forge), our community website that also includes product notifications, blogs, and product user groups.

The documentation for this product is available on the NetIQ website in HTML and PDF formats. If you have suggestions for documentation improvements, click **comment on this topic** at the bottom of any page in the HTML version of the documentation posted at the PlateSpin Forge 11.1 Documentation (http://wwwtest.netiq.com/documentation/platespin-forge-11-1) website. For information about how to purchase and download this product, see the PlateSpin Forge (https://www.netiq.com/products/forge/) website.

For Release Notes documents that accompanied previous PlateSpin Forge releases, visit the PlateSpin Forge 11.1 Documentation website and go to *Previous Releases* in the Table of Contents at the bottom of the main page.

1 What's New?

The following outline the key features and functions provided by this version, as well as issues resolved in this release:

1.1 Operating Systems Support

PlateSpin Forge includes expanded operating systems support for the following components:

1.1.1 Virtualization Host Environments

PlateSpin Forge includes support for the following virtualization host environments:

- VMware ESXi 5.5 Update 2
- VMware ESXi 5.1 Update 2

1.1.2 Workloads

PlateSpin Forge adds support for the following operating platforms as workloads:

- Microsoft Windows Server 2012 with a Hyper-V Role
- Red Hat Enterprise Linux 7 (including the XFS file system)
- CentOS 7

  NOTE: CentOS 7 is supported for experimental use.

In addition, PlateSpin Forge provides support for the UEFI firmware interface, for GPT partitioning of disks for Linux workloads, and for the XFS file system on all supported Linux platforms.

This release deprecates support for Windows XP and Vista workstation class workloads.

For information about the workload configurations supported by PlateSpin Forge 11.1, see "Supported Configurations" in the *PlateSpin Forge User Guide*.

1.2 Software Components

PlateSpin Forge includes the following new and enhanced software components:

- Section 1.2.1, "ProtectAgent," on page 2
- Section 1.2.2, "Blkwatch Drivers," on page 2
- Section 1.2.3, "TakeControl ISO," on page 3

1.2.1 ProtectAgent

PlateSpin Protect provides a self-installable ProtectAgent for Microsoft Windows Server.

1.2.2 Blkwatch Drivers

PlateSpin Forge provides updated `blkwatch` drivers for the various Linux kernel versions found in the Updates or Service Packs of the following:

- Red Hat Enterprise Linux 7
- Red Hat Enterprise Linux 6
- Red Hat Enterprise Linux 5
- Red Hat Enterprise Linux 4
- SUSE Linux Enterprise Server 11 (SP1, SP2, SP3)
- SUSE Linux Enterprise Server 10 (SP2, SP3)

For a list of the non-debug Linux distributions for which PlateSpin Forge has a `blkwatch` driver, see "Linux Distributions Supported by Forge" in the *PlateSpin Forge User Guide*.

1.2.3 TakeControl ISO

PlateSpin Forge provides a single TakeControl ISO (LRD) that works for BIOS and UEFI firmware.

1.3 Security Enhancements

PlateSpin Forge provides information in Knowledgebase Article 7015818 about how to remove the vulnerability to potential POODLE (Padding Oracle On Downgraded Legacy Encryption) attacks from your PlateSpin Forge servers.

1.4 Software Features and Enhancements

PlateSpin Forge provides the following key features and enhancements for usability and management:

- New look and feel for the Protect Web Interface
- Support for white-labeling of the PlateSpin Forge Web Interface
- Ability to generate a report for planned resource allocation on fail-over
- Ability to modify the volume snapshots directory
- Ability to do IP address pinning for replication traffic
- Ability to adjust MTU for replication traffic per workload
- Ability to apply tags to workloads in the Workload Overview for ease of management
- Ability to see PlateSpin Events in the Windows System Application Event Log

1.5 Software Fixes

This release addresses the following software issues:

- **902259 - Replication statistics report that the same data is being transferred repeatedly on subsequent incremental replications.** Formerly, bitmap history files were not being deleted, which caused incremental transfers to include previously transferred data. After you update a PlateSpin Server to version 11.1, the duplicate data will be transferred one additional time during the next incremental replication. This behavior occurs because the bitmap history file(s) that need to be deleted on the source, which cause the issue, are not deleted until after the next incremental replication occurs.

  The workaround to prevent the duplicate data transfer from occurring is to manually delete the bitmap history files from the source after you update the PlateSpin Server and prior to the next incremental replication. The bitmap history files are hidden files that reside on the root of each protected volume with the file naming format of `platespin.bitmap.bbvt.pr.%date%`. You can manually delete the bitmap history files if the last incremental replication was successful. However, if there is uncertainty that the last incremental replication was successful, then you should leave the bitmap history files on the source for the next incremental replication.

- **901292 - Workload has Stop error during failover.** Formerly, a workload that was configured to convert on failover had a Stop error during the failover process because the registry required cleanup. This release adds the `HostNamesForRegCleanup` property to configuration services. The property allows you to specify whether a workload's Registry requires cleanup by adding its hostname to the property. The Registry file will be updated only for workloads that are mentioned in this property.

- **899474 - `FileTransferSendReceiveBufferSizeLinux` parameter needs better description that helps customers.** See FileTransferSendReceiveBufferSizeLinux in the PlateSpin Forge User Guide.

- **898294 - Server sync replication fails with volume serial number error.** The `SerialNumberUpdater` will now automatically update the volume serial number in order to avoid this issue.

- **897361 - Windows 2003 The Target VM does not Boot "Volume with serial number 00000000 does not exist among these known serial numbers".** Formerly, during the first full replication, all of the data transfers without error, but the target VM fails to boot because it cannot be found. This issue is resolved to handle conditions that caused the error.

- **892206 - Incorrect link to Knowledgebase article with information about compiling a custom block-based driver.** Formerly, an error message about building custom drivers for kernel-based workloads linked to an incorrect Knowledgebase article. The message now links to the correct Knowledgebase Article 7005873.

- **892202 - Validator warning on block-based kernel driver may not be always accurate.**

  Currently, when you add a Linux workload for protection, the product interface might display a message informing you that the system is

  ```
  Unable to find a compiled version of the block-based kernel driver to exactly
  match the kernel on this Linux workload....
  ```

  The message advises further to build a block-based driver upon the next replication.

  This validator message is likely inaccurate, due to the addition of hundreds of newly- supported Linux distributions for which Forge has a pre-compiled version of the `blkwatch` driver (see "Linux Distributions Supported by Forge" in the *PlateSpin Forge User Guide*). If your workload (that is, the Linux distribution) matches an entry on the list, you can ignore the message and continue.

- **884401 - Windows 2012 R2 workload is created with a variant disk controller type.**

  Although Windows Server 2003/2008 target workloads created by PlateSpin Forge user the `LSI Logic Parallel` controller type (classified as "Best of Breed"), Windows 8.1 and Windows Server 2012 R2 workloads are created with the `LSI Logic SAS` controller type. This substitution is by design. VMware explains in its Knowledgebase (http://kb.vmware.com/selfservice/ microsites/search.do?language=en_US&cmd=displayKC&externalId=2059549) that, by default, these operating systems do not do not ship with the parallel driver. For this reason, Forge uses the SAS driver for these targets.

- **881197 - Unable to manage target VM settings with VIC; target created as VM version 10.**

  The version for the target VM for failover was being incorrectly set. We added a configuration setting to control the maximum allowed hardware version when creating the failover VM. It now defaults the created target VM as version vmx-09.

- **880841 - Container IP address and name doesn't get updated in Forge user interface.**

  After changing ESXi host IP address to an IP address already in use, the container IP address and name were not being updated in the Forge UI. Now, assuming that the **Confirm Changes** option is selected, Forge detects the problem and rolls back changes.

- **880616 - Appliance Version Missing in Forge user interface.** Formerly, if you selected **About** from the Forge menu, an *Appliance Version Unknown* message was displayed. Now, the appliance version 3 is registered and correlated with ESXi version 5.5 and is displayed as such in the interface.

- **880179 - Add container failed.** After installing Forge 11 VM and changing the appropriate network information, the Container object in the Forge Web Client displayed an "Add failed" status. We added a starter license in the new Windows 2012 Forge Management VM, which corrected the problem.

- **878344 - Forge Appliance Configuration Console triggered refresh container is failing or timing out.** Because OFX and PlateSpin Management Services were not updated with new user passwords, they were unable to start when using the Forge ACC to make changes to the Forge Host or Forge VM. These services were updated with the new passwords and now function correctly.

- **874359 - The https://forgeVM_IP:8098 page needs to be merged into the Forge Appliance Configuration Console.** Formerly, there were some visual details on the `https://forgeVM_IP:8098` page of the PlateSpin Server that were redundant with the Forge Appliance Configuration Console. This port 8098 page has now been rendered inaccessible.

- **874861 - Forge installation validator doesn't halt the install.** Formerly, the Forge installation would continue in spite of any error, and then report it in the installation log. Currently, the installation is halted after script failure and an error message is displayed on the terminal (ttyll: Ctrl+F11).

- **869036 - The PlateSpin Server fails to install on Windows Server 2008 R2.** The product now uses the .NET 4 framework for installation launcher prerequisites. As a result, the server installation on Windows Server 2008 R2 is now successful.

- **862462 - Windows hostname fails to change when configured to do so at test failover.** The product formerly had a problem with changing the Windows hostname at Test Failover. Changes to the process for creating the configuration tasks lists have corrected the problem.

- **863853 - Non-translation in Ready for Failback Window.** Some strings in the Failback Window in localized versions of the product were appearing in English. The strings in question have now been properly localized.

- **857253 - No warning/info message given for 64-bit MSSQL server regarding shutting down SQL services.** The product failed to display a warning message to users to shut down a Windows 2003 workload running a 64-bit SQL Server when a file-based transfer was selected for the replication method. The product now properly detects the SQL Server version and prompts for shutting down related services or configuring services to stop appropriately.

- **769439 - Windows BBT Incremental: Possible data loss when uninstalling and re-installing the driver.** Each install method for the driver now creates a `ServerSyncRequired` flag in the registry. This flag tells the replication that one full or md5 sync must be completed before the block based data is valid.

- **701400 - When protecting onto cluster with NFS datastores, local datastores are exposed in Web UI.** This issue is resolved so that the NFS datastores are not exposed.

- **686911 - Problems with file downloads from or uploads to datastore:** Under certain conditions, where the protection target is a VMware DRS Cluster, the system might fail to upload or download a file, such as a boot ISO image. This negatively impacts a protection contract.

  See Knowledgebase Article 7008408 and Knowledgebase Article 7008306.

- **655828 - Failure to mount NSS volumes.** Upon failover or test failover, NSS volumes with snapshots enabled are not automatically mounted as expected.

  See Knowledgebase Article 7008773.

- **610918 - Unresponsive Expand and Collapse icons in integrated help.** On some systems with enhanced browser security settings (such as Internet Explorer 11 on Windows Server 2008), the Expand and Collapse icons (+ and -) in the Table of Contents might fail to work. To fix the issue, enable JavaScript in your browser.

2 Known Issues

NetIQ Corporation 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 Technical Support (http://www.netiq.com/support).

- **No Windows 2012 Cluster support for Windows workloads.** Support for Microsoft Windows 2012 Cluster support is blocked by a bug in the Microsoft product. An incident has been filed with Microsoft to resolve the issue.

- **No software RAID support for Linux workloads.** PlateSpin Forge does not support Linux workloads with volumes on software RAID.

- **897843 - Volumes do not map correctly when doing incremental add of workload at Reprotect for MS Cluster workloads.** During reprotect, the workload volumes might not map correctly between the source and the target after an incremental add of a Microsoft Cluster workload where the shared storage volumes on the Failback machine are not the same shared storage volumes that existed on the original source. The Windows **System** volumes map correctly from the source to the target, but the **Quorum** and **Cluster Resource** volume mappings show as `not mapped` on the Workload Configuration page in the Protect Web UI.

  Workaround: When you configure the workload for first replication at reprotect, manually select the correct volume mapping for the shared storage volumes in the **Replication Settings > Volume Mapping** section for the workload.

- **886325 - Windows Server 2012 Workload's network configuration UI should not show up as DHCP enabled when it has a static ip address.** The source workload and target workload have static IP network configurations. However, Windows network adapter properties report that the network configuration has DHCP enabled. The Powershell commands show that DHCP is disabled. No loss of network functionality is observed.

- **865570 - File Based Transfer breaks for Windows Server 2012 R2 UEFI workload.** X2P File-based transfer of Windows 6.2 and above kernel versions fails during the sending and receiving files stage.

  Workaround: To force file transfer to work in this X2P scenario, you need to disable the CPU advanced flags in the firmware: `VT-d`, `VT-s`, `Execute Disable Bit`. For more information, see Knowledgebase Article 7014698.

- **863173 - The X2P failback of Linux workloads causes failure of the X Server graphical interface.** A protected Linux workload replicated to a target, failed over, and then failed back to a physical target loses functionality of its X Server interface.

  Workaround: The issue is caused by a reconfiguration of the failed-over VM when VMware tools are installed. To correct this, use the following command to find the files with the string `BeforeVMwareToolsInstall` in the filename:

  `find / -iname '*BeforeVMwareToolsInstall'`

  After you identify all such files, move them back to their original locations, then reboot the workload to fix the workload's X Server interface.

- **860917 - Cannot prepare OES workload for incremental replication.** If you create a VM or modify an existing VM in the VMware Virtual Infrastructure Client (VIC) and select *Novell Enterprise Server* as the Guest Operating System, the VM appears in the PlateSpin Browser (as an unknown OS type), but it is not listed at all in the *Virtual Machine* drop down list in the Prepare for Incremental Replication page of the Protect Web UI.

  Workaround: To make this VM available as a target for X2V replication, in the VIC, change the operating system type to *SUSE Linux Enterprise 11 (64-bit)* and refresh the container. The VM is then listed in the Protect Web UI.

- ◆ **698611 - Full cluster replication failure under certain circumstances.** If a Windows Server 2008 R2 Cluster protection contract is set up through the *sync to an existing VM* method, and if the active cluster node "flips" prior to the full replication, the full replication job fails.

  Workaround: See Knowledgebase Article 7008771.

3 Contact Information

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

For detailed contact information, see the Support Contact Information website (http://www.netiq.com/support/process.asp#phone).

For general corporate and product information, see the NetIQ Corporate website (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/). The NetIQ online community provides product information, useful links to helpful resources, blogs, and social media channels.

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