

# Upgrading Your Forge Unit to Appliance Version 2

July, 2012



## 1 About

This document provides information about upgrading your Forge unit from *appliance version 1* to *appliance version 2*. The appliance version—as opposed to a *Forge software version*—encompasses the following collection of features that differentiate version 1 from version 2:

- ♦ **Hypervisor Version:** Appliance version 2 replaces VMware ESX 3.5 U5 with VMware ESX 4.1 U1
- ♦ **Appliance System Setup Utility:** Appliance version 2 replaces the Forge Console with an intuitive browser-based Appliance Configuration Console (ACC). Appliance version 2 has better capabilities for management and maintenance, such as the built-in capability to reset the appliance to its factory defaults.

Information and procedures in this document apply to Forge models that are based on Dell R710 and R610 hardware.

To decide whether this document applies to your unit, determine its appliance version by any of the following:

- ♦ **Help > About in the Forge Web Interface:** <<DOUBLE-CHECK; Areeb: only valid in v1>> Look up the appliance version number in the PlateSpin Forge Web Client's *Help > About* page. You can only do this if you are reconfiguring Forge.
- ♦ **Local Configuration Interface:** Connect a monitor to the appliance and power it on. If the system displays the blue screen of the Forge Console, your appliance version is 1. If the system displays the ESX *Welcome* screen, your appliance version is 2.
- ♦ **Remote Configuration Interface:** Using a Web browser and the IP address of your Forge unit, attempt to launch the Forge Appliance Configuration Console (ACC) as described in [Appliance Version 2 Configuration Procedure Using the Forge ACC](#) topic in your Getting Started guide (Step 2 through Step 4). If you are able to connect, your appliance version is 2.

The following topics provide more information.

## 2 Overview

<<common set of steps for all users; some steps for some users (with VMs on local storage; involves backup and restore>>)

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### IMPORTANT

- ♦ Plan for protection downtime during the upgrade process, which might take several hours, depending on a number of factors, including the number of failover VMs and overall amount of data that you require to back up and restore.
- ♦ If you don't back up your failover VMs, you will have to set up individual protection schedules for each workload from scratch.

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## 2.1 Summary of Steps

The upgrade procedure consists of the following major steps:

- 1 **Preparation:** <<Things mentioned in [What You Need](#) below>>
- 2 **(Optional) Backing up VMs:** Connecting external USB storage to Forge. Backing up your data (<<but maybe not VMs, in which case, if they're using external storage, all they need to back up is config data; this will be supported either by custom code or instructions; disconnect ext storage before re-imaging>>). VMs MUST be backed up if they are local and the user wants them).
- 3 **Re-Imaging the Appliance:** Rebuilding Forge using the the "Forge Rebuild Kit" "as Appl 2".
- 4 **(Conditional) Restoring VMs:** If VMs were backed up in [Step 2](#) <<if no VMs backed up, then no need to restore VMs, just config data>>).

## 2.2 What You Need

To upgrade your unit's appliance version, you need:

- ♦ Your Forge unit
- ♦ (Optional, if you require a backup of failover VMs) External USB storage. You can connect up to a maximum of 2 USB drives whose total capacity is sufficient to hold your failover VMs. The drives must have sector size of 512 bytes, which is the case for most drives whose capacity is 2 TB or less.
- ♦ Backup and Restore Utility. <<Download? Ask Dave?>>
- ♦ Forge Rebuild Kit. <<version 3.1 OK>>
- ♦ Notebook computer with Windows and .NET Framework 2.0; an Ethernet cable (<<xref to topic with visuals in online docs>>)

## 3 Backing Up Your Data

<<backup and restore utility; ctx: cmd lin+e>>

- 1 Use your network cable to connect your notebook computer to your Forge appliance <<which port?>>.
- 2 Open a Command Prompt window and run the following command:  
<command> <parameters>  
<<outcome: IP, credentials>>
- 3 Provide the IP address of the Forge VM and administrative credentials for accessing it.  
<<outcome: warning, all local VMs will be destroyed; backup?>>
- 4 (Optional) If you want to back up your failover VMs, <<cmd ctx response>>  
<<admonition: data will be overwritten on USB storage>>

5 Proceed.

<<the ForgeBackup utility gathers required information, pauses all contracts, powers off all running VMs, and optionally copies all failover VMs from the appliance's local storage to the external USB storage. Some of the gathered information that is required for the upgrade is stored on the notebook computer >>

## 4 Re-Imaging Forge

<<mini summary>>

<<Forge Rebuild Kit>>

1 Rebuild the appliance as documented by *[publication name]* of your Forge Rebuild Kit.

<<XREF:

<<XREF:

2 Using the Forge Appliance Console (ACC), configure the appliance, ensuring that the ESX IP, ESX hostname, root password and forgeuser password are the same as they were before the upgrade.

<<XREF: [Appliance Version 2 Configuration Procedure](#)

## 5 Restoring Your Data

<<backup and restore utility; ctx: cmd line>>

1 (Optional) If you had backed up your failover VMs to external USB storage, re-connect it to the appliance, re-creating the exact same datastore names as were in use prior to the upgrade.

<<clarify>>

2 (<<ctx::"On the notebook computer,">>>) Run the ForgeBackup command-line utility, providing it with the IP and administrative credentials to the Management VM running in the upgraded Forge appliance.

command parameters

command parameters

<<The utility restores the VMs from the USB storage into their original locations, re-registering them with ESX, and imports protection contracts back into Forge, leaving them paused.>>

<<??? if you re-connected the appliance to external storage after rebuilding the appliance, the utility re-registers the VMs which are on external storage>>

## 6 Post-Upgrade Tasks

<<"Start the Forge Web Interface and resume paused replications" — Peter R.: "Resume might be unnecessary>>

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