

# PlateSpin<sup>®</sup> Forge 3.4

## Getting Started Guide

July 31, 2013



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- 893 Windows Vista Enhanced Cryptographic Provider (RSAENH)
- 894 Windows Vista Enhanced DSS and Diffie-Hellman Cryptographic Provider (DSSSENH)
- 989 Windows XP Enhanced Cryptographic Provider (RSAENH)
- 990 Windows XP Enhanced DSS and Diffie-Hellman Cryptographic Provider (DSSSENH)
- 997 Microsoft Windows XP Kernel Mode Cryptographic Module (FIPS.SYS)
- 1000 Microsoft Windows Vista Kernel Mode Security Support Provider Interface (ksecdd.sys)
- 1001 Microsoft Windows Vista Cryptographic Primitives Library (bcrypt.dll)
- 1002 Windows Vista Enhanced Cryptographic Provider (RSAENH)
- 1003 Windows Vista Enhanced DSS and Diffie-Hellman Cryptographic Provider (DSSSENH)
- 1006 Windows Server 2008 Code Integrity (ci.dll)
- 1007 Microsoft Windows Server 2008 Kernel Mode Security Support Provider Interface (ksecdd.sys)
- 1008 Microsoft Windows Server 2008
- 1009 Windows Server 2008 Enhanced DSS and Diffie-Hellman Cryptographic Provider (DSSSENH)
- 1010 Windows Server 2008 Enhanced Cryptographic Provider
- 1012 Windows Server 2003 Enhanced Cryptographic Provider (RSAENH)

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918 - OpenSSL FIPS Object Module v1.1.2 - 02/29/2008 140-2 L1

1051 - OpenSSL FIPS Object Module v 1.2 - 11/17/2008 140-2 L1

1111 - OpenSSL FIPS Runtime Module v 1.2 - 4/03/2009 140-2 L1

Note: Windows FIPS algorithms used in this product may have only been tested when the FIPS mode bit was set. While the modules have valid certificates at the time of this product release, it is the user's responsibility to validate the current module status.

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## **License Grant**

Licenses for PlateSpin Forge 3.4 cannot be used for prior versions of PlateSpin Forge.

## **Third-Party Software**

Please refer to the *PlateSpin Third-Party License Usage and Copyright* ([https://www.netiq.com/documentation/platespin\\_licensing/platespin\\_licensing\\_qs/data/platespin\\_licensing\\_qs.html](https://www.netiq.com/documentation/platespin_licensing/platespin_licensing_qs/data/platespin_licensing_qs.html)) page for information about third party software used in PlateSpin Forge.



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# About this Book and the Library

The *Getting Started Guide* provides information on the basic steps required for setting up your Forge appliance.

## Intended Audience

This guide is intended for IT staff, such as data center administrators and operators, who use PlateSpin Forge in their ongoing workload protection projects.

## Other Information in the Library

The library provides the following information resources:

### User Guide

Provides conceptual and procedural information about the PlateSpin Forge product. This book defines terminology and includes implementation scenarios.

### Help

Provides context-sensitive information and step-by-step guidance for common tasks.





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# 1 Getting Started with Your PlateSpin Forge Appliance

PlateSpin Forge is a consolidated recovery hardware appliance that protects physical and virtual workloads by using embedded virtualization technology. If there is a production server outage or disaster, workloads can be rapidly powered on within the PlateSpin Forge recovery environment and continue to run as normal until the production environment is restored.

## 1.1 Before You Begin

In preparation for the initial configuration of your appliance, do the following tasks:

- 1. Obtain your license activation code:** For product licensing, you must have a license activation code, e-mailed to the named contact of a PlateSpin Purchase Order. To view your activation code, log in to the [Novell Customer Center Web site \(http://www.novell.com/customercenter/\)](http://www.novell.com/customercenter/), using the same e-mail address specified in your Purchase Order.
- 2. Fill in the configuration worksheet:** The PlateSpin Forge Resource Kit package includes a Configuration Worksheet used to document your current environment and list changes needed for configuration.  
  
A copy of the worksheet is available online: [Configuration Worksheet \(https://www.netiq.com/documentation/platespin\\_forge\\_3/pdfdoc/appl/appl\\_worksheet.pdf\)](https://www.netiq.com/documentation/platespin_forge_3/pdfdoc/appl/appl_worksheet.pdf).
- 3. Set up the hardware:** Unpack the PlateSpin Forge appliance and use the Components List in the box to ensure that all components have been received. If there is anything missing, contact your PlateSpin representative. Use the enclosed documentation to mount and connect the hardware.

## 1.2 Appliance Configuration Procedure

The initial setup and configuration of the PlateSpin Forge appliance is a one-time procedure consisting of the following steps:

- 1 Configuring the appliance host (VMware ESX, which is the hypervisor component of the product).
- 2 Configuring the Forge Management VM (a Windows virtual machine with application logic running on the host).
- 3 Activating your product license.

For your convenience, a [Configuration Worksheet \(https://www.netiq.com/documentation/platespin\\_forge\\_3/pdfdoc/appl/appl\\_worksheet.pdf\)](https://www.netiq.com/documentation/platespin_forge_3/pdfdoc/appl/appl_worksheet.pdf) is included in your appliance documentation; fill it out before starting this procedure.

The initial configuration procedure for your appliance will vary depending on the *appliance version*.

- ♦ [Section 1.2.1, “Determining your Unit’s Appliance Version,”](#) on page 10
- ♦ [Section 1.2.2, “Appliance Version 1 Configuration Procedure Using the Forge Console,”](#) on page 10
- ♦ [Section 1.2.3, “Appliance Version 2 Configuration Procedure Using the Forge ACC,”](#) on page 14

## 1.2.1 Determining your Unit’s Appliance Version

You can determine the appliance version of your Forge unit by using one of the following methods:

- ♦ **Forge Web Client:** Look up the `appliance version` number in the PlateSpin Forge Web Interface’s *Help > About* page. You can only do this if you are reconfiguring Forge.
- ♦ **Local Configuration Interface Type:** 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 configuration 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 \(Step 2 through Step 4\)](#). If you are able to connect, your appliance version is 2.

## 1.2.2 Appliance Version 1 Configuration Procedure Using the Forge Console

The initial setup and configuration of the PlateSpin Forge appliance is a one-time procedure. Record all pertinent information on the printed Configuration Worksheet in case you need to contact PlateSpin Technical Support with any setup issues.

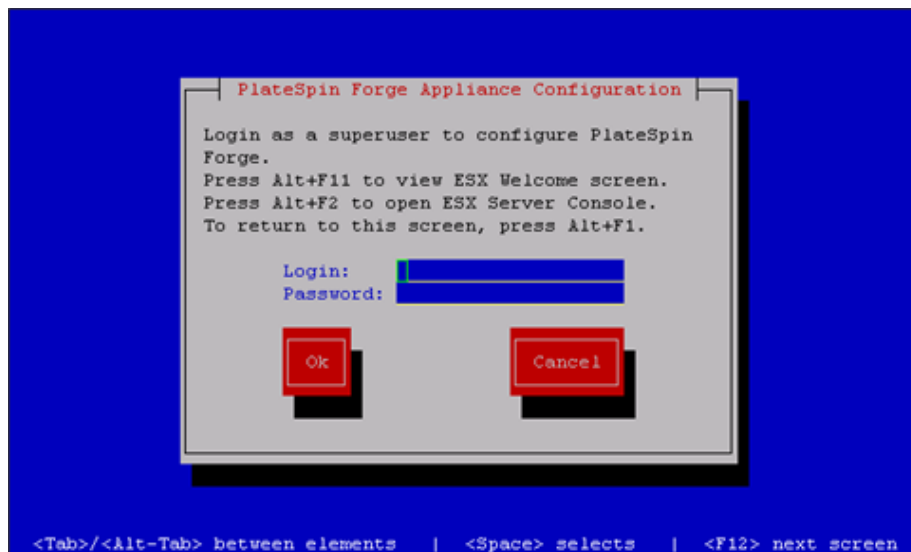
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**IMPORTANT:** Unsupported modifications of the PlateSpin Forge or Management VM, including running other virtual machines on PlateSpin Forge, can impact its performance and might violate the End User License Agreement, voiding your warranty.

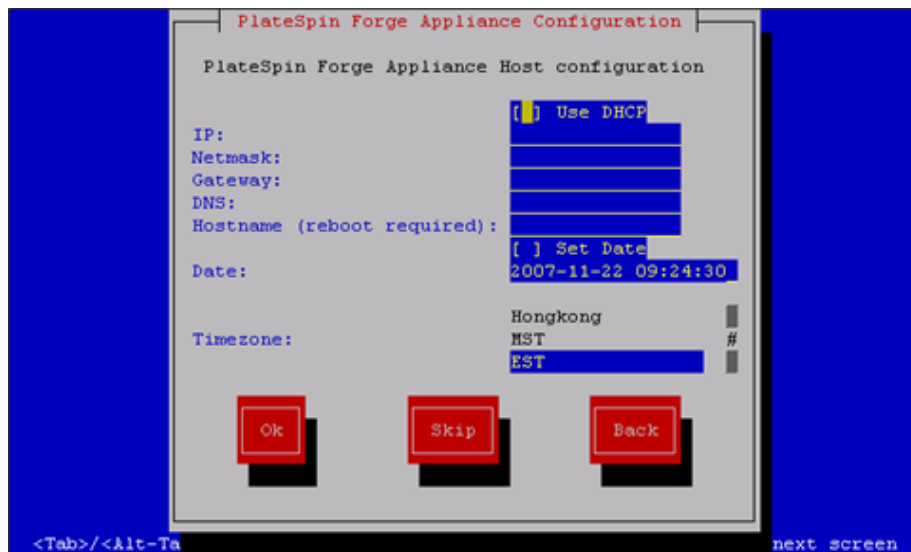
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To fully configure PlateSpin Forge, you need to configure the hardware and the Management VM (the software).

- 1 Perform the preparatory steps described in [“Before You Begin”](#) on page 9.
- 2 Upon initial power-on, ensure that the PlateSpin Forge Configuration dialog box is displayed.



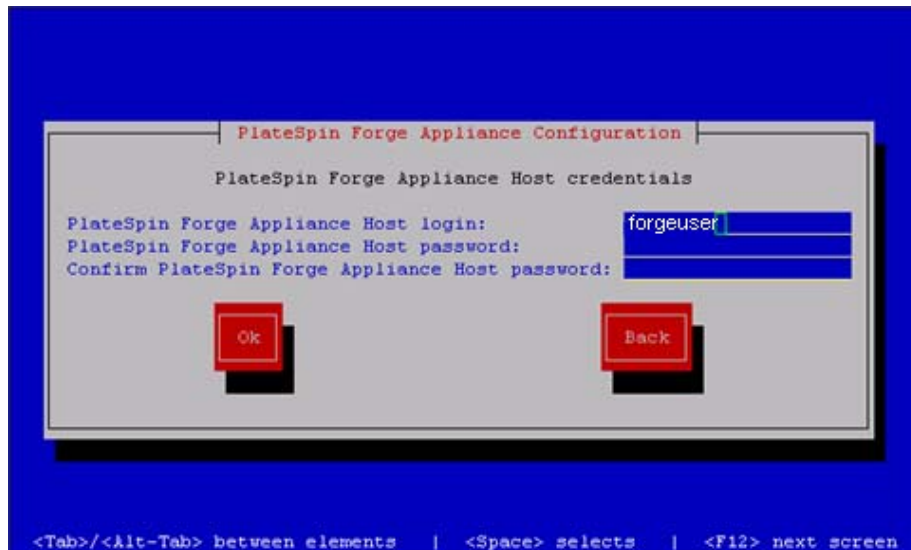
- 3 Type `root` in the *Login* field and password in the *Password* field. Select *OK*.  
The *change default password* dialog box is displayed. You must change the default password before proceeding.
- 4 Type a new password in the *New password* field and again in the *Confirm Password* field. Select *OK*.  
The system confirms the password change.
- 5 Select *OK*.  
You are logged out so that you can log back in with your new password.
- 6 Log back in.  
The VMware ESX EULA dialog box is displayed. You must accept the end user license before continuing.
- 7 Select *I accept the terms and conditions*, then select *OK*.  
See [the VMware Web Site \(http://www.vmware.com\)](http://www.vmware.com) for the latest end user license agreement.  
The PlateSpin Forge EULA dialog box is displayed.
- 8 Select *I accept the terms and conditions*, then select *OK*.  
The PlateSpin Forge Host Configuration dialog box is displayed.
- 9 Specify the *IP* address, *Netmask*, and *Gateway IP* address you want to assign to the Appliance Host. Optionally, you can also enter a *Hostname*, but you will need to reboot the appliance.



You can also use DHCP, but assigning a static IP address is recommended. It is also highly recommended to assign hostnames to the appliances in multiple-appliance environments to avoid hostname conflicts.

- 10 Select *Set Date*, specify a date and time, select a *Timezone*, then select *OK*.

The PlateSpin Forge Host Credentials dialog box is displayed. This is where you enter the credentials you want to use to access the ESX server, which is the hypervisor layer of the appliance.



- 11 Specify a login name in the *PlateSpin Forge Appliance Host login* field, type a password, confirm by retyping the password, then select *OK*. This creates a new ESX user that is a member of the root group. Unlike the *root* user, the new user has SSH permissions on ESX.

The Management VM network settings dialog box is displayed.



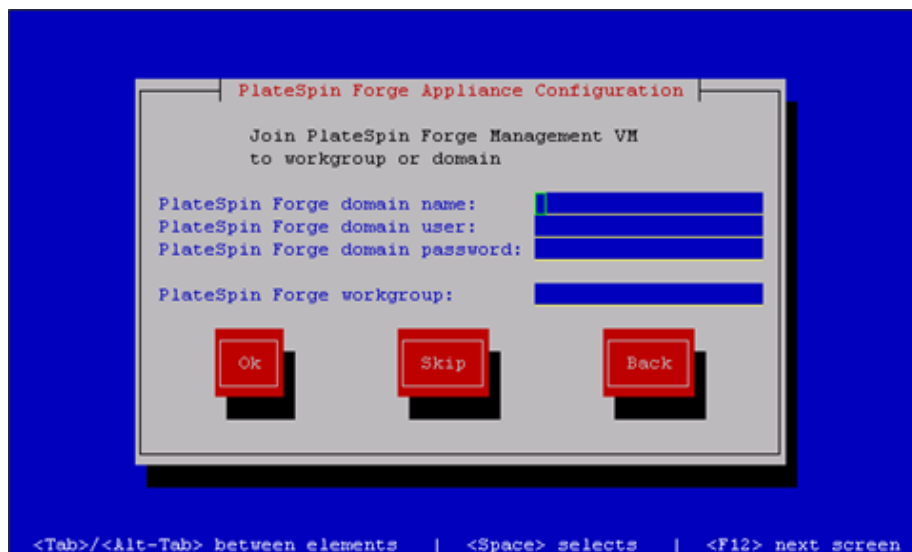
- 12 Deselect *Use DHCP* and provide the Management VM *IP* address, *Netmask*, *Gateway* address, and (optionally) a *Hostname*. The IP address entered here is used to access the PlateSpin Forge Web Client.

You can also use DHCP, but assigning a static IP address is recommended.

- 13 (Optional) Type the name of a DNS server in the *DNS* field and provide a *DNS suffix*.
- 14 Click *OK*.

The Appliance Configuration dialog box prompts whether or not to join a workgroup or domain.

- 15 Select *Yes* to open the Join PlateSpin Forge Management VM to Workgroup or Domain dialog box:



Joining a domain allows you to give selected domain users permissions for the application.

16 Do one of the following:

- ◆ Type a domain name, user, and password, or type a workgroup. If the domain fields are populated, the *Workgroup* field is ignored. Select *OK*.
- ◆ Leave the fields empty and click *Skip* to proceed to the next step and use `WORKGROUP` as the default workgroup name.

A Configuration Review dialog box is displayed with a summary of the parameters you have selected. Use the information to verify your settings.

If necessary, select *Cancel* to display an error message or to exit the configuration interface. Select *Back* to edit previous settings.

17 Select *OK*.

A configuration progress dialog box is displayed. Configuration can take several minutes. A final dialog box is displayed confirming the configuration's success or failure. If the process is successful, the dialog box presents a URL you can use to access the PlateSpin Forge Web Client. Record this URL for future use.

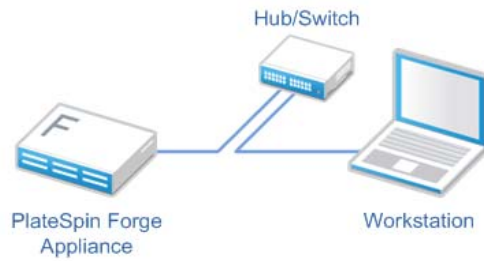


18 Select *OK*.

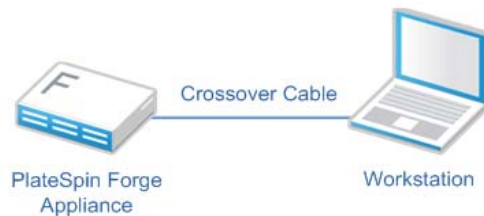
### 1.2.3 Appliance Version 2 Configuration Procedure Using the Forge ACC

To begin the installation and configuration of the appliance, you must connect directly to it through another computer and use the browser-based Appliance Configuration Console (ACC) utility. Consider using a notebook computer for flexibility and mobility.

- 1 Perform the preparatory steps described in [“Before You Begin” on page 9](#).
- 2 Connect your computer to the appliance. You can do this in two ways:
  - ◆ **Connection through a Network Switch:** Connect both units to a network switch or a hub through an Ethernet network cable:



- ◆ **Direct Connection:** Connect your PlateSpin Forge appliance and the computer directly through a crossover cable:



- 3 Turn on the power of the PlateSpin Forge appliance. Wait at least 10 minutes for the system to fully start before trying to connect.
- 4 Assign the computer an IP address, in the 192.168.1.x range and an associated subnet mask of 255.255.255.0 (or any IP address/subnet mask combination, making sure that the computer is able to ping the appliance at its default IP address, 192.168.1.200).

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**NOTE:** Do not use the following IP addresses:

- ◆ 192.168.1.200 - used by the hypervisor
- ◆ 192.168.1.210 - used by the Forge VM (assigned by an automatic appliance configuration utility).

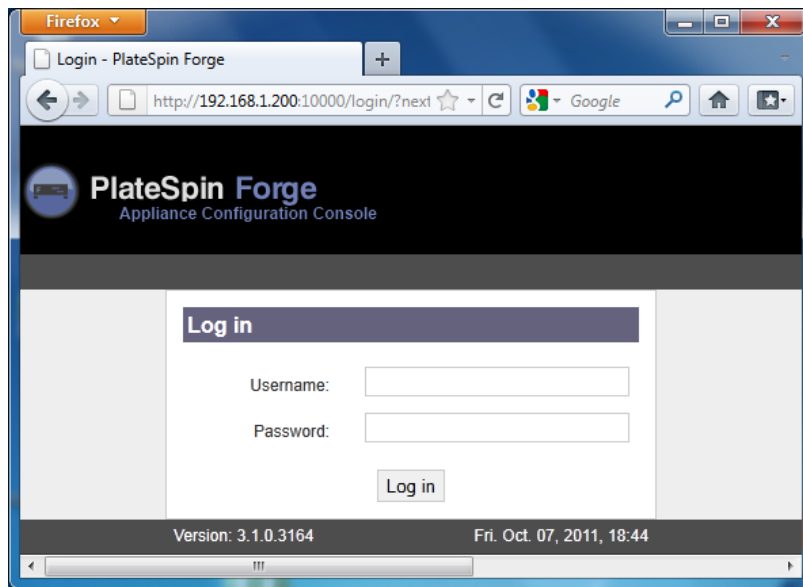
- 5 Open a supported Web browser and go to the Forge Appliance Configuration Console (ACC) at <http://192.168.1.200:10000>.

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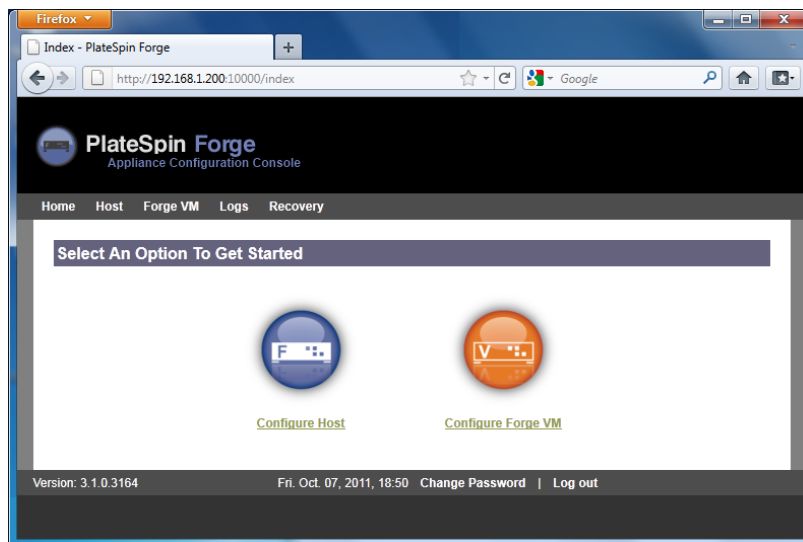
**NOTE:** Depending on your browser, you might have to type the entire URL, including the protocol (<http://>) in the browser's address bar.

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The system prompts you to log in.



- 6 Log in using the root account (password: password).  
The system redirects you to the Change Password page.
- 7 Change the password for the root account as well as for the forgeuser account.
- 8 Log out of the ACC.
- 9 Log in using the forgeuser account using the password you set in [Step 7](#).  
The system prompts you to configure the host or the Forge virtual machine:



- 10 Click *Configure Host*.  
The system displays the Configure Host screen:



PlateSpin Forge  
Appliance Configuration Console

Home Host Forge VM Logs Recovery

Configure Host Apply Cancel

Network Settings:

IP address: 192 . 168 . 1 . 200

Subnet mask: 255 . 255 . 255 . 0

Gateway: 192 . 168 . 1 . 1

DNS (optional): 192 . 168 . 1 . 1

Host Name: forge

Date and Time Settings:

Date: 2011-10-07 Time: HH.MM: 18:49 Time Zone: America/Toronto

Version: 3.1.0.3164 Fri, Oct. 07, 2011, 18:49 Change Password | Log out

**NOTE:** You must first configure the appliance host. Do not attempt to configure the Forge VM before this.

- 11 Enter the appropriate settings and click *Next > Apply*.

The system displays a summary of the configuration parameters you specified:

Home Host Forge VM Logs Recovery

Configure Host

Netw

The following changed settings indicated in **bold** are about to be updated on your Host system:

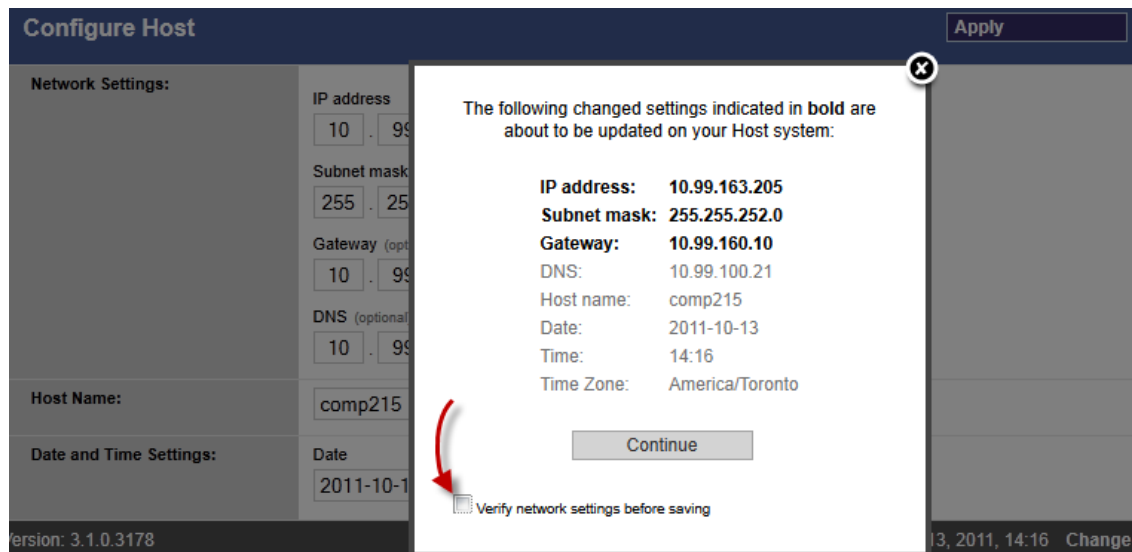
**IP address:** 10.99.163.205  
**Subnet mask:** 255.255.252.0  
**Gateway:** 10.99.160.10  
**DNS:** 10.99.100.21  
Host name: forge  
Date: 2011-10-07  
**Time:** 11:54  
Time Zone: America/Toronto

Host

Date

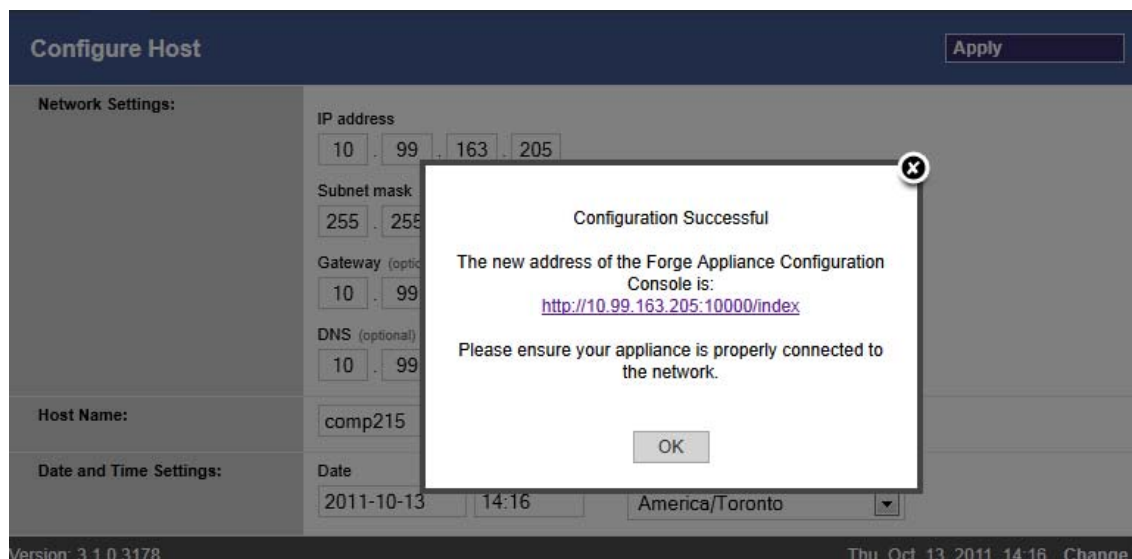
Cancel Continue

**NOTE:** If you are reconfiguring the appliance (if it is not the first time you are performing this procedure), the system prompts you to verify if the new connection works. If the check fails, the Forge IP address is reverted.



- 12 Click *Continue*.

The system displays a progress indicator, and when the configuration is complete, confirms its success:



- 13 Disconnect the computer and connect the appliance to the production network (where the new IP address will be valid).
- 14 From the computer, go to `http://<appliance_IP>:10000`  
 (If you are using the same computer, make sure to change its IP address to one that is valid in your network).
- 15 Log in using the `forgeuser` account.
- 16 Click Configure Forge VM.  
 The system displays the Configure the Forge VM page:

**Configure Forge VM** Apply

**Network Settings:**

Obtain IP settings automatically from a DHCP server  
 Use the following static network settings:

IP address:  .  .  .

Subnet mask:  .  .  .

Gateway (optional):  .  .  .

DNS (optional):  .  .  .

**Host Name:**  ✘

**DNS Suffix:**  (optional)

**Member of:**
  
 Domain 
  
 Workgroup

17 Enter the appropriate settings and click *Next > Apply*.

The system displays a summary of the configuration parameters you specified:

Home Host **Forge VM** Logs Recovery

**Configure Forge VM** Apply

The following changed settings indicated in bold are about to be updated on your Forge VM:

Use DHCP: No  
**IP address: 10.99.125.41**  
**Subnet mask: 255.255.254.0**  
**Gateway: 10.99.124.10**  
**DNS: 10.99.100.21**  
**Host name: forge3178**  
 DNS suffix:  
**Workgroup: TEST**

Note: The Forge VM may be re-booted several times during the configuration process

**Network Settings:**
  
 Obtain IP settings automatically from a DHCP server  
 Use the following static network settings:

IP address:  .  .  .

Subnet mask:  .  .  .

Gateway:  .  .  .

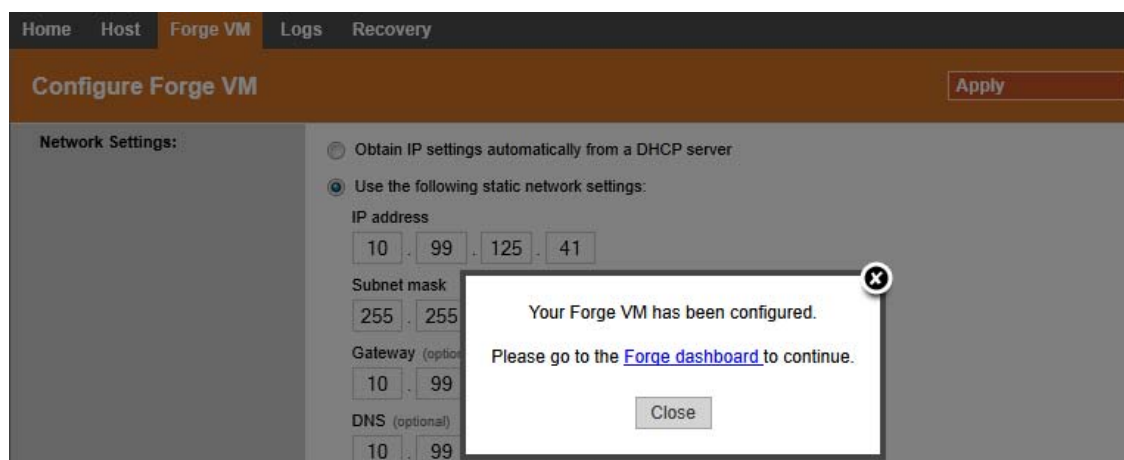
DNS (optional):  .  .  .

**Host Name:**    
Note: Changing

**DNS Suffix:**

18 Click *Continue* and wait for the VM configuration to complete.

The system displays a progress indicator, and when the configuration is complete, confirms its success:



- 19 Click the Forge Dashboard link to connect to the Forge UI at `http://<appliance_IP>/forge`. Use the default credentials for the Forge VM (username: Administrator, password: password).

## 1.3 Launching the PlateSpin Forge Web Client

Most of your interaction with the appliance takes place through the browser-based PlateSpin Forge Web Client.

The supported browsers are:

- ◆ Microsoft Internet Explorer 7 and later
- ◆ Mozilla Firefox 3.6 and later

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**NOTE:** JavaScript (Active Scripting) must be enabled in your browser:

- ◆ **Internet Explorer:** Click *Tools > Internet Options > Security > Internet zone > Custom level*, then select the *Enable* option for the Active Scripting feature.
  - ◆ **Firefox:** Click *Tools > Options > Content*, then select the *Enable JavaScript* option.
- 

To launch the PlateSpin Forge Web Client:

- 1 Open a Web browser and go to:

`http://<hostname | IP_address>/Forge`

Replace `<hostname | IP_address>` with the hostname or the IP address of your Forge VM.

If SSL is enabled, use `https` in the URL.

The first time you log into PlateSpin Forge, the browser is automatically redirected to the License Activation page.

# 1.4 Product Licensing

For product licensing, you must have a license activation code. If you do not have a license activation code, request one through the [Novell Customer Center Web site \(http://www.novell.com/customercenter/\)](http://www.novell.com/customercenter/). A license activation code will be e-mailed to you.

You have two options for activating your product license: online or offline.

- ◆ [Section 1.4.1, “Online License Activation,” on page 21](#)
- ◆ [Section 1.4.2, “Offline License Activation,” on page 21](#)

## 1.4.1 Online License Activation

For online activation, PlateSpin Forge must have Internet access.

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**NOTE:** HTTP proxies might cause failures during online activation. Offline activation is recommended for users in HTTP proxy environments.

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- 1 In the PlateSpin Forge Web Client, click *Settings > Licenses > Add License*. The License Activation page is displayed.



- 2 Select *Online Activation*, specify the e-mail address that you provided when placing your order and the activation code you received, then click *Activate*.

The system obtains the required license over the Internet and activates the product.

## 1.4.2 Offline License Activation

For offline activation, you obtain a license key over the Internet by using a machine that has Internet access.

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**NOTE:** To obtain a license key, you must have a Novell account. If you are an existing PlateSpin customer and you don't have a Novell account, you must first create one. Use your existing PlateSpin username (a valid e-mail address registered with PlateSpin) as input for your Novell account username.

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- 1 In the PlateSpin Forge Web Interface, click *Settings > License*, then click *Add license*. The License Activation page is displayed.
- 2 Select *Offline Activation*.
- 3 Use your hardware ID to create a license key file at the [PlateSpin Product Activation Web Site \(http://www.platespin.com/productactivation/ActivateOrder.aspx\)](http://www.platespin.com/productactivation/ActivateOrder.aspx). This also requires a user name, password, the e-mail address that you provided when placing your order and the activation code you received.

- 4 Type the path to the file or browse to its location and click *Activate*.  
The license key file is saved and the product is activated based on this file.

## 1.5 Post-Setup Tasks

1. (Optional; for international versions) Set up PlateSpin Forge and your browser for use in a specific supported language. See [“Language Setup for International Versions of PlateSpin Forge”](#) in your *User Guide*.
2. Configure appliance host networking to separate replication or failover traffic from your main production network. See [“Setting up Appliance Networking”](#) in your *User Guide*.
3. (Optional) Set up appropriate role-based access settings as required by your organization. See [“Setting Up User Authorization and Authentication”](#) in your *User Guide*. In particular, make sure that you immediately change the default Administrator password (see [“Changing the PlateSpin Forge Administrator Password”](#)).
4. Configure SMTP settings and add e-mail notification recipients. For information, see [“Setting Up Automatic E-Mail Notifications of Events and Reports”](#) in your *User Guide*.
5. (Optional) Add additional data storage capacity to Forge. See [“Using External Storage Solutions with PlateSpin Forge”](#) in your *User Guide*.
6. Familiarize yourself with the PlateSpin Forge Web Interface (see [“Up and Running”](#) in your *User Guide*), as well as the workload protection life cycle ([“Basic Workflow for Workload Protection and Recovery”](#) in your *User Guide*).