

Quick Start Guide

For
Ipswitch Failover v9.0.1

I P S W I T C H

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Quick Start Guide

This guide is intended to provide you with the minimum steps necessary to deploy Ipswitch Failover components within your environment for High Availability purposes. Detailed information about the complete deployment process, configuration, and use of Ipswitch Failover for Disaster Recovery can be found in the Ipswitch Failover Installation Guide and Administrator's Guide.

Introduction

Ipswitch Failover provides a flexible solution that can be adapted to meet most business requirements for deployment and management of critical business systems. Capitalizing on VMware vCenter Server's ability to manage virtual infrastructure assets combined with Ipswitch's application-aware continuous availability technology, Ipswitch Failover brings a best in class solution for protecting critical business systems.

Ipswitch Failover consists of the Ipswitch Failover Management Service that is used to deploy and manage the Ipswitch Failover nodes of the Ipswitch Failover cluster. Ipswitch Failover provides for application aware continuous availability used for protecting critical business systems. The Ipswitch Failover Management Service can be installed on the same system as vCenter Server or another Windows server with access to a remote instance of vCenter Server and is accessible via common web browsers.

Using the Ipswitch Failover Management Service User Interface, users can deploy and manage Ipswitch Failover with the ability to view Ipswitch Failover component status and perform most routine Ipswitch Failover operations from a single pane of glass.

Environmental Prerequisites

Ipswitch Failover supports the following environments listed below.

Supported Environments

- Ipswitch Failover is supported on the following versions of Windows Server
 - Windows Server 2008 R2 x64 Standard/Enterprise/Datacenter
 - Windows Server 2012 x64 Standard/Enterprise/Datacenter
 - Windows Server 2012 R2 x64 Standard/Enterprise/Datacenter

Unsupported Environments

- Ipswitch Failover is not supported across the following:
 - A server where Ipswitch Failover Management Service is already running
 - On a server deployed as a Domain Controller
 - On a server deployed as a Global Catalog
 - On a server deployed as a Domain Name Service (DNS)
 - On an IA-64 Itanium Platform

Pre-Install Requirements

Prior to installing Ipswitch Failover, the following requirements must be met and are in addition to those required for installed applications.

Note: Microsoft[™] .Net Framework 4 must be installed prior to the Failover Management Service installation. If .Net Framework 4 is not installed, EMS Installation will not proceed and you will be prevented from installing Failover Management Service.

For Ipswitch Failover Management Service:

- vCenter Server 5.1 or later running on Windows Server 2008 R2 or later

Note: Ipswitch recommends that you open a command window with elevated permissions and launch the `Ipswitch-Failover-[n]-[n]-[nnnnn]-x64.msi` file from within the command window.

For Ipswitch Failover on the Primary node:

Note: When deploying the Primary server, use a built-in local administrator account to successfully deploy the Primary server.

- Verify no other critical business applications are installed on the server.
- Verify that there is a minimum of 2GB of available RAM in addition to any other memory requirements for the Operating System or installed applications.
- Verify that a minimum 2GB of free disk space is available on the installation drive for Ipswitch Failover.
- At a minimum, the File Server role must be enabled.
- Verify that all services to be protected are running or set to *Automatic* prior to installation.
- *Register this connection's address in DNS* must be disabled on all NICs on the target server.
- VMware Tools must be installed on the Primary node prior to deployment when the Secondary node is virtual.
- File and Printer Sharing must be enabled on the Primary target server prior to deployment and allowed to communicate through any firewalls.

Firewall Configuration Requirements

When using Windows Firewalls, Ipswitch Failover service can automatically configure Windows firewall rules to open ports required for successful Ipswitch Failover communications. In the event that a firewall other than Windows Firewall is being used, see the Ipswitch Failover Installation Guide for information on configuring Firewalls.

Note: Ensure that File and Print Server communications are allowed through any configured firewalls.

Installing Ipswitch Failover

This section provides the installation procedure used to install Ipswitch Failover Management Service and deploy Ipswitch Failover in a virtual-to-virtual (V2V) configuration for High Availability on Windows Server 2008 R2 or Windows Server 2012/R2.

Install Ipswitch Failover Management Service

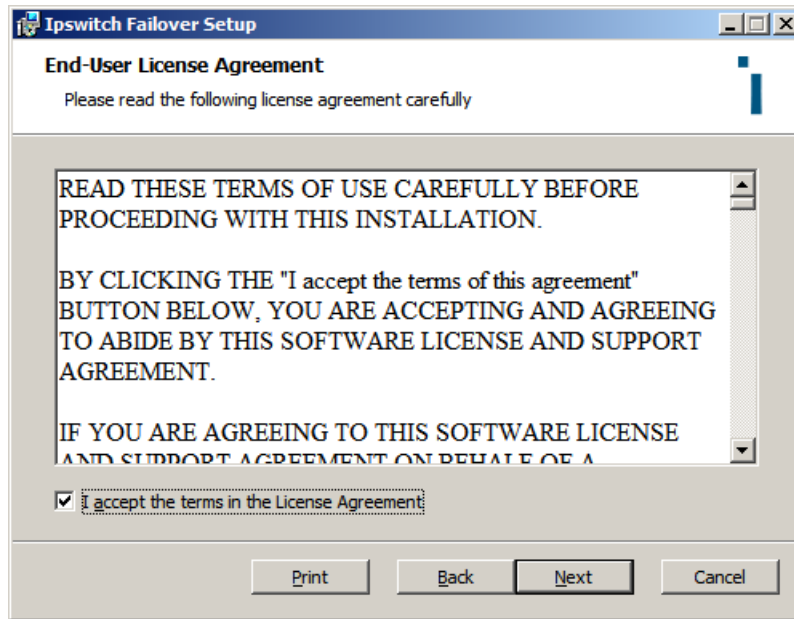
1. Having verified all of the environmental prerequisites are met, download the Ipswitch Failover Management Service .msi file to an appropriate location.

Note: The Ipswitch Failover Management Service allows you to install on any server running Windows Server 2008 R2 (64-bit) or later with local or remote connectivity to a vCenter Server.

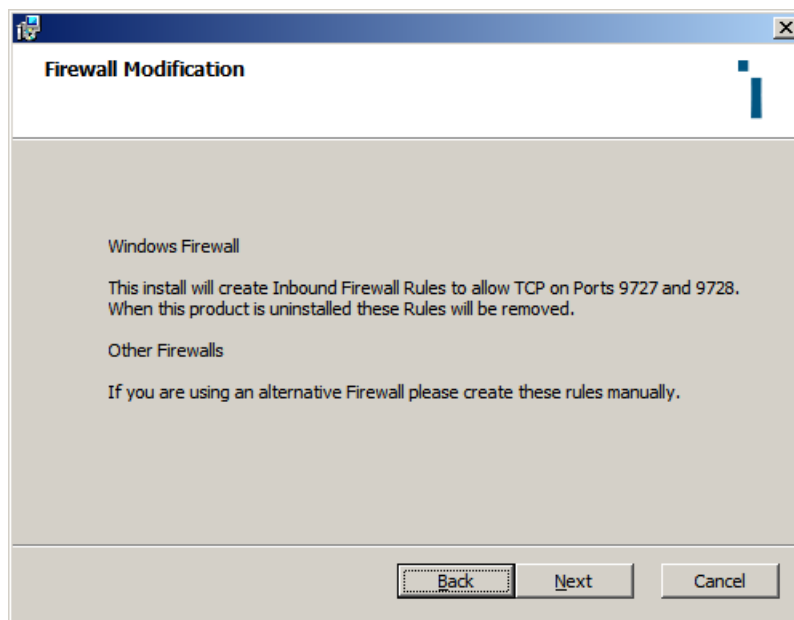
2. While logged in as the Local built-in Administrator or Domain built-in Administrator, double-click the Ipswitch-Failover-[n]-[n]-[nnnnn]-x64.msi file to initiate installation of the Failover Management Service. The *Welcome* screen is displayed, click **Next**.



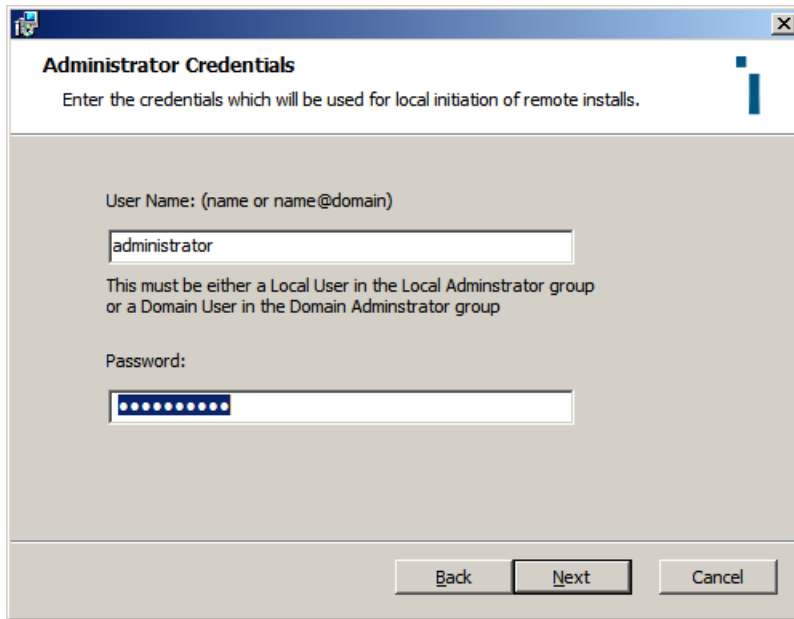
3. Review the *End User License Agreement* and select *I accept the terms in the License Agreement*. Click **Next**.



4. The *Firewall Modification* screen is displayed. If using Windows Firewall, the *Inbound Firewall Rules* are created automatically and no actions are necessary. Click **Next**.

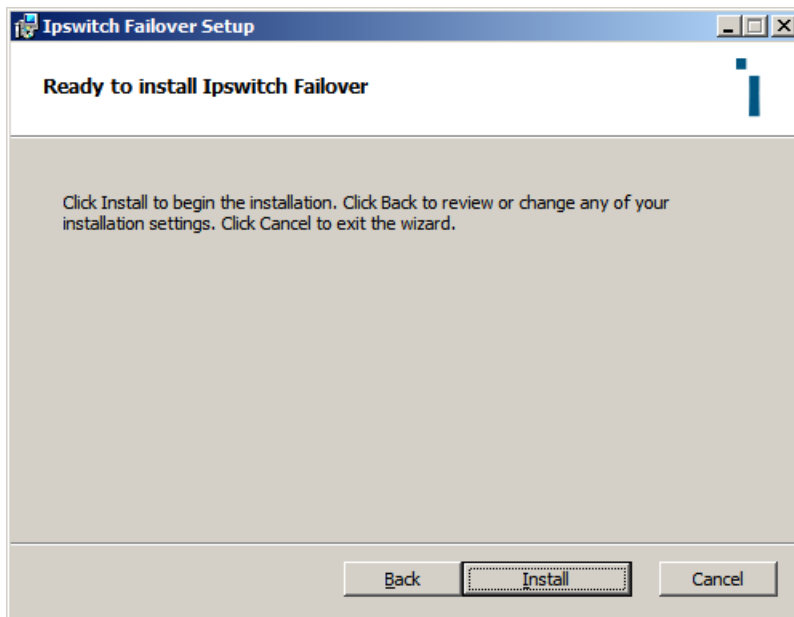


5. The *Administrator Credentials* screen is displayed. Enter a Username and Password with Administrator permissions for the server that Failover Management Service is being installed on. Click **Next**.



The **Administrator Credentials** dialog box is shown. It has a title bar with a close button. The main area contains the text "Enter the credentials which will be used for local initiation of remote installs." Below this, there is a label "User Name: (name or name@domain)" followed by a text box containing "administrator". Below the text box is a note: "This must be either a Local User in the Local Administrator group or a Domain User in the Domain Administrator group". Below the note is a label "Password:" followed by a password box with 10 dots. At the bottom, there are three buttons: "Back", "Next", and "Cancel".

6. The *Ready to install Ipswitch Failover* screen is displayed. Click **Install**.



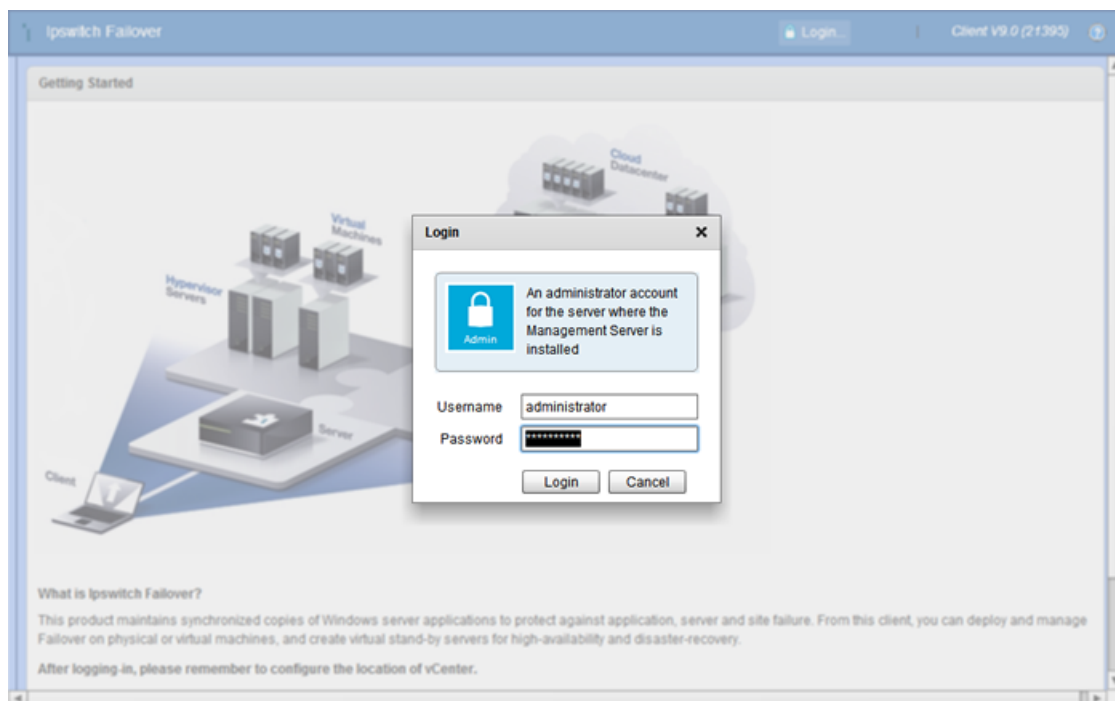
The **Ready to install Ipswitch Failover** dialog box is shown. It has a title bar with standard window controls. The main area contains the text "Click Install to begin the installation. Click Back to review or change any of your installation settings. Click Cancel to exit the wizard." Below this text, there are three buttons: "Back", "Install", and "Cancel".

7. The *Installing Ipswitch Failover* screen is displayed. When the installation has finished installing the appropriate components, the *Completed the Ipswitch FailoverSetup Wizard* screen is displayed. Click **Finish**.

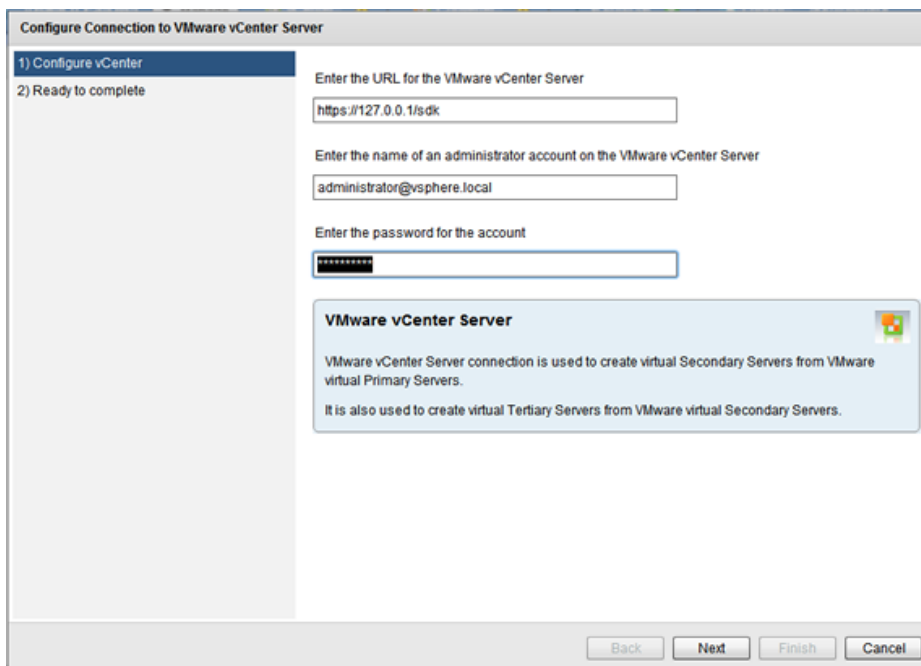


Deploy Ipswitch Failover service

1. Launch the Ipswitch Failover Management Service User Interface. Click on the **Login** button and using an account with Administrator permissions, login to the Failover Management Service.



2. Click on the **vCenter** icon. The *Configure Connection to VMware vCenter Server* dialog is displayed.
3. Enter the URL and the credentials of an administrator account for VMware vCenter Server. Click **Next**.



Configure Connection to VMware vCenter Server

1) Configure vCenter
2) Ready to complete

Enter the URL for the VMware vCenter Server

Enter the name of an administrator account on the VMware vCenter Server

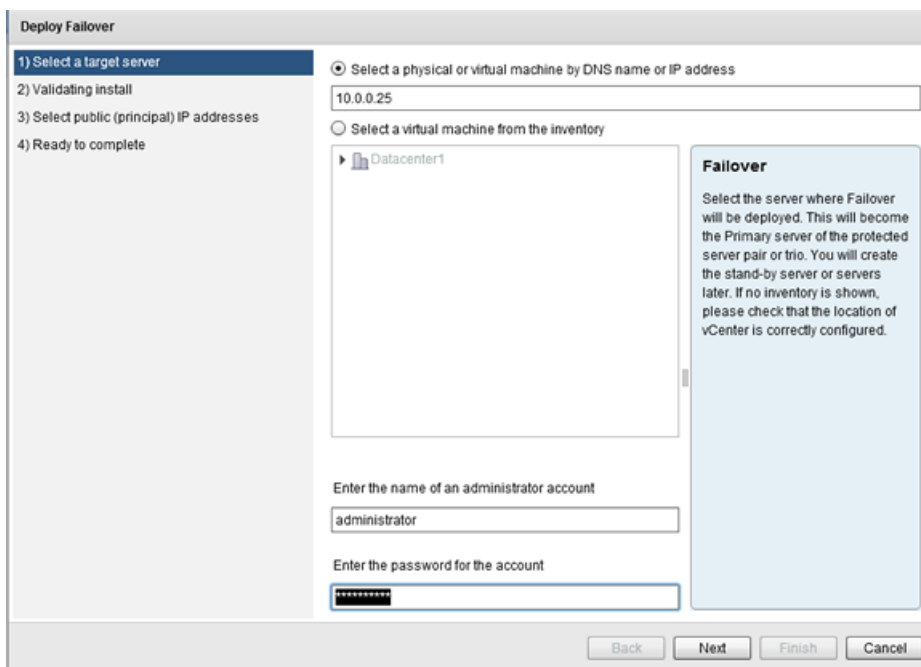
Enter the password for the account

VMware vCenter Server

VMware vCenter Server connection is used to create virtual Secondary Servers from VMware virtual Primary Servers.
It is also used to create virtual Tertiary Servers from VMware virtual Secondary Servers.

Back Next Finish Cancel

4. The *Ready to Complete* dialog is displayed. Verify the information and click **Finish**.
5. Click on the **Manage** drop-down and select **Deploy > Deploy to a Primary server** to initiate the Primary server deployment wizard. The *Deploy Failover* page is displayed. Either enter the DNS name or IP address of the Primary server, or select a virtual server from the inventory.



Deploy Failover

1) Select a target server
2) Validating install
3) Select public (principal) IP addresses
4) Ready to complete

☒ Select a physical or virtual machine by DNS name or IP address

☐ Select a virtual machine from the inventory
Datacenter1

Enter the name of an administrator account

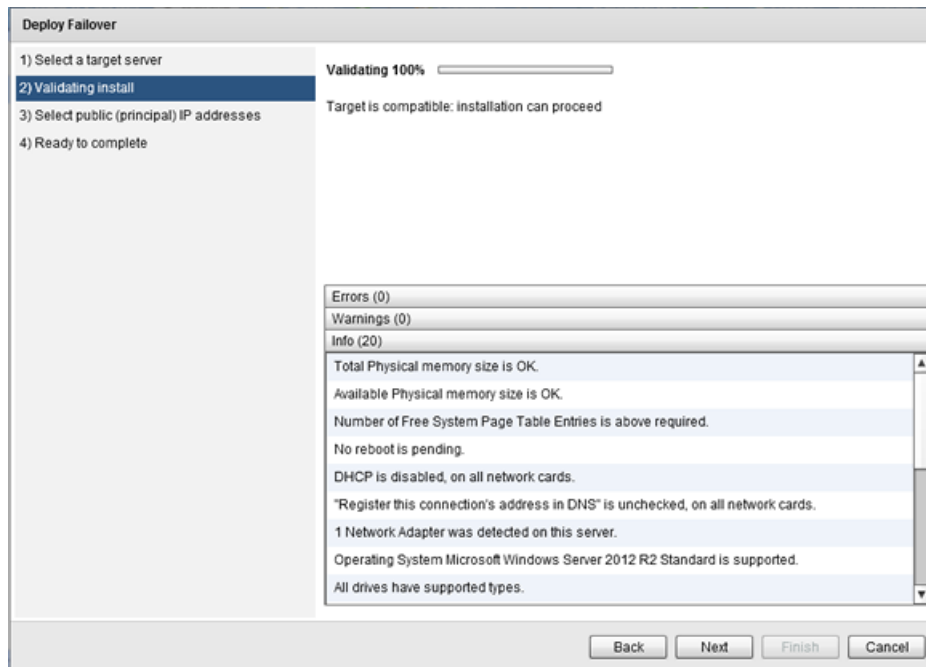
Enter the password for the account

Fallover

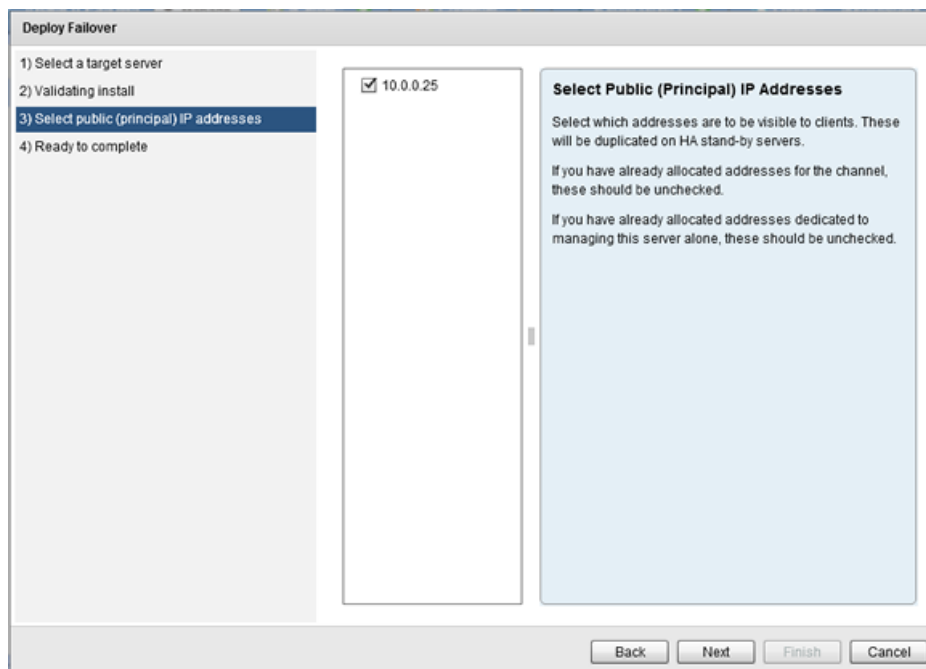
Select the server where Failover will be deployed. This will become the Primary server of the protected server pair or trio. You will create the stand-by server or servers later. If no inventory is shown, please check that the location of vCenter is correctly configured.

Back Next Finish Cancel

6. Enter credentials for a user that is a member of the local Administrator group on the target server and click **Next**. The *Validating Install* page is displayed. The Failover Management Service automatically configures Windows firewalls allowing installation to continue.



7. Once the *Validating Install* page completes and displays that the server is a valid target, click **Next**. The *Select Public (Principal) IP Address* page is displayed.



8. Validate the Public (Principal) IP address displayed and ensure the check box is selected. Click **Next**. The *Ready to Complete* page is displayed.

The screenshot shows a 'Deploy Failover' wizard window. On the left, a list of steps is shown: '1) Select a target server', '2) Validating install', '3) Select public (principal) IP addresses', and '4) Ready to complete'. Step 4 is highlighted with a blue background. To the right of the steps, a table displays the configuration: 'Host Name' is '10.0.0.25' and 'IP Addresses' is '10.0.0.25'. Below the steps list, a large light blue box contains the following text: 'Ready to Complete', 'Failover will be deployed on the specified target server.', 'Failover will discover applications which it can protect and protected applications will have their services set to manual to allow them to be managed.', and 'Next Steps: After the Primary install has completed, you can choose to create a stand-by VM for high-availability locally, and/or for disaster recovery using a host at a remote location.' At the bottom right of the window, there are four buttons: 'Back', 'Next', 'Finish', and 'Cancel'.

Step	Host Name	IP Addresses
1) Select a target server	10.0.0.25	10.0.0.25
2) Validating install		
3) Select public (principal) IP addresses		
4) Ready to complete		

Ready to Complete

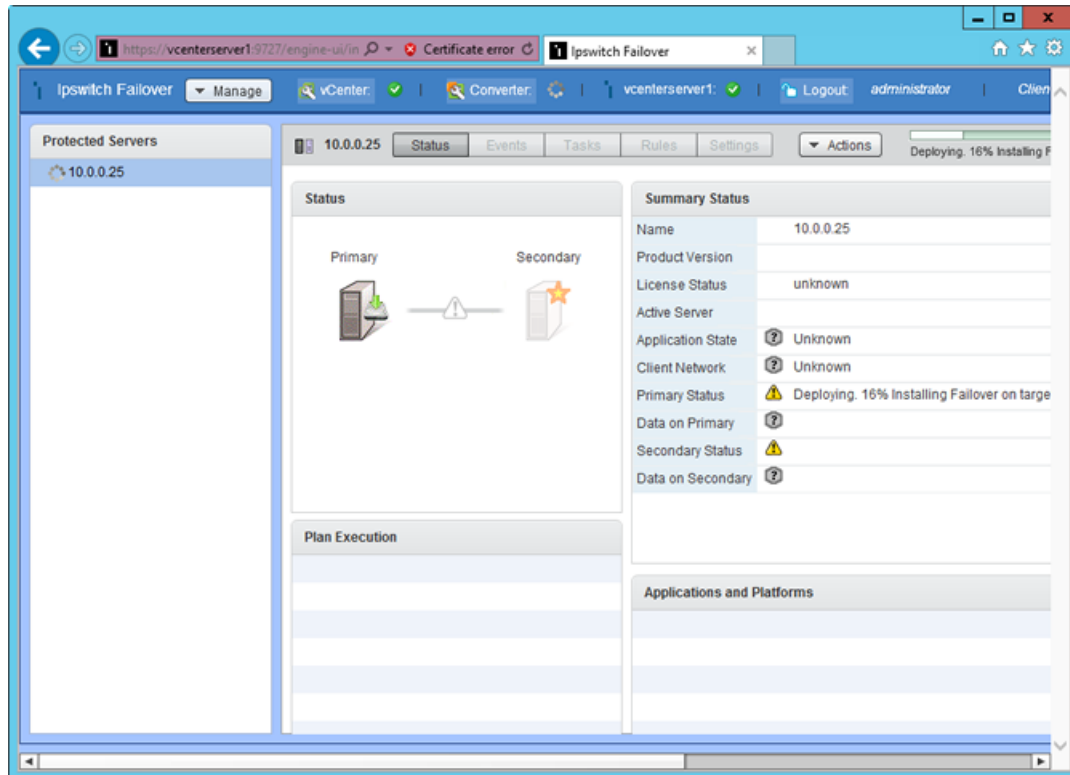
Failover will be deployed on the specified target server.

Failover will discover applications which it can protect and protected applications will have their services set to manual to allow them to be managed.

Next Steps: After the Primary install has completed, you can choose to create a stand-by VM for high-availability locally, and/or for disaster recovery using a host at a remote location.

Back Next Finish Cancel

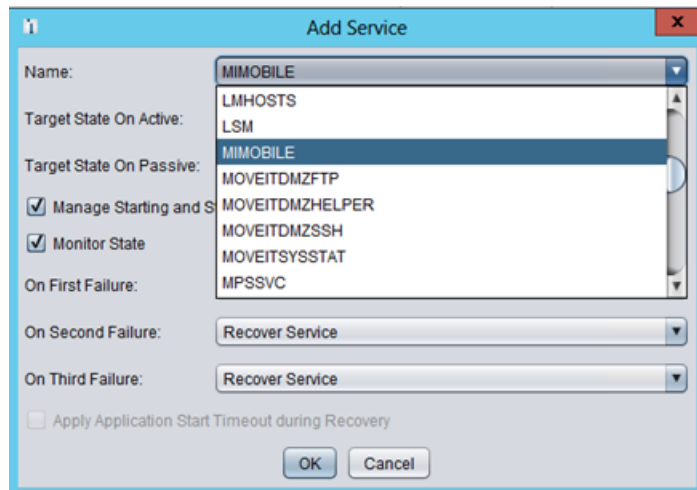
9. Review the information and click **Finish**. The installation of the Primary server proceeds.
10. Once installation of the Primary server is complete, in the *Protected Servers* pane, select the Primary server. The *Summary Status* page is displayed.



Optional

Important: For installations that include Ipswitch MOVEit Mobile or Ipswitch Analytics agent, perform the following additional steps.

1. Add Ipswitch MOVEit Mobile service or Ipswitch Analytics agent service to the protected services.
 - a. Start the Ipswitch Failover Manager.
 - b. Right-click the *Default Group* and select Add Connection.
 - c. Enter 127.0.0.1 or localhost.
 - d. Enter domain credentials to provide local machine access.
 - e. Navigate to *Applications: Services*.
 - f. Click **Add** and select:
 - **MIMOBILE** service for Ipswitch Mobile application.
 - or
 - **IPSWITCHANALYTICSAGENT** service for Ipswitch Analytics application.



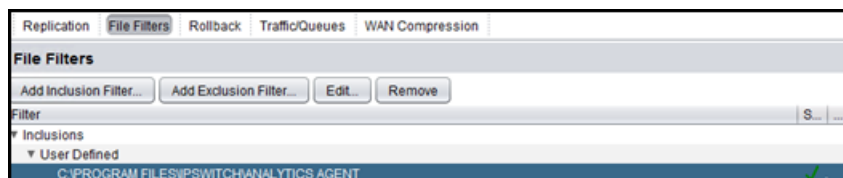
The Ipswitch MOVEit Mobile service or the IPSWITCHANALYTICSAGENT Service is added under the *User Defined* section.

▼ User Defined			
MOVEit Mobile	Running	0	

2. Add an Inclusion file filter for the data directories for Ipswitch Mobile or Ipswitch Analytics.

- a. Navigate to *Data: File Filters*.
- b. Click **Add Inclusion Filter**.
- c. Depending on the installation location, enter:
 - C:\PROGRAM FILES (x86)\IPSWITCH\MOVEIT MOBILE**
 - or
 - C:\Program Files (x86)\Ipswitch \ANALYTICS AGENT**
- d. Click **OK**.

The installation directory is added under the Inclusion User Defined file filters. For example:



Create a Stand-by VM for High Availability

1. Click on the **Manage** drop-down and select **Deploy > Create a Stand-by VM for High Availability**. The *Create a Stand-by VM for High Availability* dialog is displayed.

Create a Stand-by VM for High Availability

1) Select a host
2) Select storage
3) Select channel IP addresses
4) Provide additional network settings
5) Ready to complete

Select a datacenter and host for the virtual machine

Datacenter1
192.168.1.141

Selecting a Host

A new VM will be created to provide High Availability.

To protect against server failure, this should be a separate host from a Primary VM.

To provide high-availability, it should have a reliable, high-bandwidth connection with the Primary.

Back Next Finish Cancel

2. Select the *Datacenter* and *Host* where the Secondary server will be created and click **Next**. The *Select Storage* page is displayed.

Create a Stand-by VM for High Availability

1) Select a host
2) Select storage
3) Select channel IP addresses
4) Provide additional network settings
5) Ready to complete

Select a storage location for the virtual machine

Datastore	Free Space (GB)
datastore1	128.64
datastore3	880.29
datastore2	121.23

Selecting a Datastore

Select a datastore on which to locate the virtual machine.

To protect against storage failure, this should be different from that of a virtual Primary Server

Back Next Finish Cancel

3. Select a storage location for the virtual machine and click **Next**. The *Select Channel IP Addresses* page is displayed.

4. Enter the Channel IP addresses used to replicate data for the Primary and Secondary servers. The Channel IP addresses will be automatically added to the NICs by the Failover Management Service as a result of the installation process. Click **Next**. The *Ready to Complete* dialog is displayed.

5. Click **Finish** to initiate the cloning process for creation of a Secondary server.

Once cloning process is complete, automatic reconfiguration of the Secondary server will take place requiring only a few minutes to finish. Once complete, perform *Post Installation Configuration* tasks as listed in the Ipswitch Failover Installation Guide.

The screenshot displays the Ipswitch Failover Manager application window. The title bar includes the application name and a 'Manage' button. The main interface is divided into several sections:

- Protected Servers:** A list on the left showing 'IFO.ABC.local' with a warning icon.
- Status:** A central area showing a diagram of a Primary server connected to a Secondary server via a green arrow.
- Summary Status:** A table on the right providing detailed status information for the selected server.
- Plan Execution:** A section below the Status area, currently empty.
- Applications and Platforms:** A table at the bottom right showing the status of various applications.

Summary Status Table:

Summary Status	
Name	IFO.ABC.local
Product Version	✓ V9.0 (21395)
License Status	⚠ Expires in 31 days
Active Server	✓ Primary
Application State	✓ Started - OK
Client Network	✓ OK
Primary Status	✓ Replicating
Data on Primary	✓ Active
Secondary Status	✓ Replicating
Data on Secondary	✓ Synchronized - Recovery Point (seconds): 0.0

Applications and Platforms Table:

Applications and Platforms	
FileServer	✓ OK - OK
mySql	✓ OK - OK
MOVEitCentral	✓ OK - OK
System	✓ OK - OK