QuickStart Guide for Managing Computers

Version 9.98

jamf

Contents

How to Use This Guide

Managing computers with the Casper Suite is based on eight tenets—Inventory, Imaging, Patch Management, Software Distribution, Remote Control, Settings and Security Management, License Management, and Usage Management. This guide contains a lesson-based workflow for each tenet.

To use this guide, use the "Lesson Plan" section or the Bookmarks panel to navigate each workflow. You can complete one or all of the workflows in any order that meets your organization's needs.

After completing a workflow, see the appropriate "Explore More" section in this guide. Each "Explore More" section includes a list of extended options and related sections in the *Casper Suite Administrator's Guide*.

Keep in mind that you only need to complete each lesson once. If you've already completed a lesson (for example, installing the JSS), skip it and move on to the next one in the workflow.

Lesson Plan

Inventory	1	Install the Jamf Software Server
	2	Enroll Computers
	3	View Inventory Information
Imaging	1	Install the JSS
	2	Add an OS Package
	3	Create a Configuration
	4	Image a Computer
Patch Management	1	Install the JSS
	2	Enroll Computers
	3	Add a Software Update Server
	4	Create a Policy to Run Software Update
Software Distribution	1	Install the JSS
	2	Enroll Computers
	3	Add a Package
	4	Create a Policy to Install a Package
	5	Distribute a Mac App Store App
Remote Control	1	Install the JSS
	2	Enroll Computers
	3	Share the Screen of Another Computer

Settings and Security Management	1	Install the JSS
	2	Enroll Computers
	3	Create a Computer Configuration Profile
License Management	1	Install the JSS
	2	Enroll Computers
	3	Create a Licensed Software Record
Usage Management	1	Install the JSS
	2	Enroll Computers
	3	Update Inventory Using Casper Remote
	4	View Application Usage Logs

Prerequisites

Install the Jamf Software Server

The Jamf Software Server (JSS) is a web application that functions as the administrative core of the Casper Suite. The JSS allows you to perform inventory and remote management and configuration tasks on managed computers and mobile devices. All other administrative applications in the Casper Suite communicate with the JSS.

Installing the JSS involves the following steps:

1. Install the required software (if you haven't already).
2. Create the jamfsoftware database.
3. Run the JSS Installer.

   You can install the JSS on the following platforms:

   - Mac (For instructions, see Install the JSS on Mac.)
   - Linux (For instructions, see Install the JSS on Linux.)
   - Windows (For instructions, see Install the JSS on Windows.)

Install the JSS on Mac

Requirements

The JSS Installer for Mac requires a computer with:

- A 64-bit capable Intel processor
- 2 GB of RAM
- 400 MB of disk space available
- macOS v10.7 or later
- macOS Server (recommended)
- Java SE Development Kit (JDK) 1.7 or 1.8 for Mac
  You can download the JDK from:
  http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html
- Java Cryptography Extension (JCE) Unlimited Strength Jurisdiction Policy Files 1.7 or 1.8 (must be the same version as Java)
  You can download the JCE from:
  http://www.oracle.com/technetwork/java/javase/downloads/jce8-download-2133166.html
- MySQL 5.6.x or 5.7.x (MySQL 5.7.x is recommended)
  You can download MySQL from:
  https://www.mysql.com/downloads/
- Ports 8443 and 9006 available

Step 1: Install the Required Software

Java and MySQL must be installed on the server before you can create the jamfsoftware database and run the JSS Installer. For instructions on how to install and configure Java and MySQL, see the following Knowledge Base article:

Installing Java and MySQL

Step 2: Create the jamfsoftware Database

Create a MySQL database in which the JSS can store its data and a MySQL user that can access the database.

A default MySQL database name, username, and password are used throughout the instructions in this section. It is recommended, however, that you use a custom username and password that comply with your organization's security requirements. It is also recommended that you not use "root" as a username. A different database name can also be set if desired.

The default MySQL settings used in the instructions below are:

- Database name: jamfsoftware
- Username: jamfsoftware
- Password: jamfsw03

Note: If you customize any of the MySQL settings, you will be prompted to enter the custom settings on the Database pane when you run the JSS Installer.

1. Open Terminal and access the MySQL command line as "root" by typing:

```
mysql -u root -p
```

If MySQL is not in the path or it is installed in a custom location, access the MySQL command line by updating the path or by typing:

```
/path/to/mysql -u root -p
```

Note: The default path for MySQL is `/usr/local/mysql/bin/`.

2. When prompted, enter the password for the MySQL "root" user.
   If you did not create a root password, press the Return key.
3. Create a database by executing:

```
CREATE DATABASE jamfsoftware;
```

You can customize the database name by replacing `jamfsoftware` with the desired name as shown in the following example:

```
CREATE DATABASE myDatabaseName;
```

4. Create a new MySQL user:

```
CREATE USER 'jamfsoftware'@'localhost' IDENTIFIED BY 'jamfsw03';
```

5. Grant access to that user so that it can access the database:

```
GRANT ALL ON jamfsoftware.* TO 'jamfsoftware'@'localhost';
```

You can customize the MySQL username and password by replacing 'jamfsoftware' and 'jamfsw03' with the desired username and password as shown in the following examples:

```
CREATE USER 'customUsername'@'localhost' IDENTIFIED BY
'customPassword';
```

```
GRANT ALL ON myDatabaseName.* TO 'customUsername'@'localhost';
```

Step 3: Run the JSS Installer

The JSS Installer for Mac installs Apache Tomcat and the JSS web application. It also creates your initial distribution point.

To run the JSS Installer for Mac, copy it to the server. Then open the installer and follow the onscreen instructions.

Install the JSS on Linux

Requirements

The JSS Installer for Linux requires a server with:

- A 64-bit capable Intel processor
- 2 GB of RAM
- 400 MB of disk space available
- One of the following operating systems:

  - Ubuntu 12.04 LTS Server (64-bit)
  - Ubuntu 14.04 LTS Server (64-bit)
  - Red Hat Enterprise Linux (RHEL) 6.4, 6.5, 6.6, or 7.0

- Open Java Development Kit (OpenJDK) 7 or 8
  For installation instructions, go to http://openjdk.java.net/install/.
- MySQL 5.6.x or 5.7.x (MySQL 5.7.x is recommended)
  You can download MySQL from:
  https://www.mysql.com/downloads/
- Ports 8443 and 8080 available

Step 1: Install the Required Software

Java and MySQL must be installed on the server before you can create the jamfsoftware database and run the JSS Installer. For instructions on how to install and configure Java and MySQL, see the following Knowledge Base article:

Installing Java and MySQL

Step 2: Create the jamfsoftware Database

Create a MySQL database in which the JSS can store its data, and a MySQL user that can access the database.

A default MySQL database name, username, and password are used throughout the instructions in this section. It is recommended, however, that you use a custom username and password that comply with your organization's security requirements. It is also recommended that you not use "root" as the username. A different database name can also be set if desired.

The default MySQL settings used in the instructions below are:

- Database name: jamfsoftware
- Username: jamfsoftware
- Password: jamfsw03

Note: If you customize any of the MySQL settings, you will be prompted to enter them on the Database pane when you run the JSS Installer.

1. Open a command prompt and access the MySQL command-line utility as "root" by typing something similar to the following:

   ```
   mysql -u root -p
   ```

   If you did not create a root password when installing MySQL, do not type -p.
   If MySQL is not in the path or it is installed in a custom location, enter the installation path in place of mysql.

2. If prompted, enter the password for the MySQL "root" user.

3. Create a database by executing:

   ```
   CREATE DATABASE jamfsoftware;
   ```

   You can customize the database name by replacing jamfsoftware with the desired name as shown in the following example:

   ```
   CREATE DATABASE myDatabaseName;
   ```

4. Create a new MySQL user:

   ```
   CREATE USER 'jamfsoftware'@'localhost' IDENTIFIED BY 'jamfsw03';
   ```

5. Grant access to that user so that it can access the database:

   ```
   GRANT ALL ON jamfsoftware.* TO 'jamfsoftware'@'localhost';
   ```

   You can customize the MySQL username and password by replacing 'jamfsoftware' and 'jamfsw03' with the desired username and password as shown in the following examples:

   ```
   CREATE USER 'customUsername'@'localhost' IDENTIFIED BY
   'customPassword';
   ```

   ```
   GRANT ALL ON myDatabaseName.* TO 'customUsername'@'localhost';
   ```

Step 3: Run the JSS Installer

The JSS Installer for Linux installs Apache Tomcat and the JSS web application.

1. Copy the JSS Installer for Linux (`jssinstaller.run`) to the server.
   Note: To obtain the JSS Installer for Linux, log in to Jamf Nation and click **Show alternative downloads** below the Casper Suite DMG on the following page:
   https://jamfnation.jamfsoftware.com/myAssets.html

2. Log in to the server as a user with superuser privileges.

3. Initiate the installer by executing a command similar to the following:

   ```
   sudo sh /path/to/jssinstaller.run
   ```

4. When the requirement check is complete, type "y" to proceed.

5. (RHEL only) When the installation is complete, edit the firewall configuration to allow access to port 8443 by executing:

   ```
   sudo system-config-firewall-tui
   ```

6. (RHEL only) Choose **Other** or **Customize**, and manually add port 8443 with TCP protocol. The option you choose depends on whether you have a GUI or shell-only interface.

7. Access the JSS from an enrolled computer by opening a web browser and typing the protocol, IP address or DNS name of the server, and port. For example:
   https://jss.mycompany.com:8443/

8. If you entered a custom database name, username, or password when you created the jamfsoftware database, or MySQL is using a port other than 3306, the Database Connection Properties pane is displayed. Before you can access the JSS, you must follow the onscreen instructions to create a connection between the JSS and the jamfsoftware database.

Install the JSS on Windows

Requirements

The JSS Installer for Windows requires a server with:

- A 64-bit capable Intel processor
- 2 GB of RAM
- 400 MB of disk space available
- Windows Server 2008 R2 (64-bit), Windows Server 2012 (64-bit), or Windows Server 2012 R2 (64-bit)
- Java SE Development Kit (JDK) 1.7 or 1.8 for Windows x64.
  You can download the JDK from:
  http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html
- Java Cryptography Extension (JCE) Unlimited Strength Jurisdiction Policy Files 1.7, or 1.8 (must be the same version as the JDK)
  You can download the JCE from:
  http://www.oracle.com/technetwork/java/javase/downloads/jce8-download-2133166.html
- MySQL 5.6.x or 5.7.x (MySQL 5.7.x is recommended)
  You can download MySQL from:
  https://www.mysql.com/downloads/
- Ports 8443 and 8080 available

Step 1: Install the Required Software

Java and MySQL must be installed on the server before you can create the jamfsoftware database and run the JSS Installer. For instructions on how to install and configure Java and MySQL, see the following Knowledge Base article:

Installing Java and MySQL

Step 2: Create the jamfsoftware Database

Create a MySQL database in which the JSS can store its data, and a MySQL user that can access the database.

A default MySQL database name, username, and password are used throughout the instructions in this section. It is recommended, however, that you use a custom username and password that comply with your organization's security requirements. It is also recommended that you not use "root" as the username. A different database name can also be set if desired.

The default MySQL settings used in the instructions below are:

- Database name: jamfsoftware
- Username: jamfsoftware

- Password: jamfsw03

Note: If you customize any of the MySQL settings, you will be prompted to enter them on the Database pane when you run the JSS Installer.

1. Open the MySQL Command Line Client.

2. When prompted, enter the password for the MySQL "root" user.

3. Create a database by executing:

```
CREATE DATABASE jamfsoftware;
```

You can customize the database name by replacing `jamfsoftware` with the desired name as shown in the following example:

```
CREATE DATABASE myDatabaseName;
```

4. Create a new MySQL user:

```
CREATE USER 'jamfsoftware'@'localhost' IDENTIFIED BY 'jamfsw03';
```

5. Grant access to that user so that it can access the database:

```
GRANT ALL ON jamfsoftware.* TO 'jamfsoftware'@'localhost';
```

You can customize the MySQL username and password by replacing 'jamfsoftware' and 'jamfsw03' with the desired username and password as shown in the following examples:

```
CREATE USER 'customUsername'@'localhost' IDENTIFIED BY
'customPassword';
```

```
GRANT ALL ON myDatabaseName.* TO 'customUsername'@'localhost';
```

Step 3: Run the JSS Installer

The JSS Installer for Windows installs Apache Tomcat and the JSS web application.

Note: To obtain the JSS Installer for Windows, log in to Jamf Nation and click **Show alternative downloads** below the Casper Suite DMG on the following page:

https://jamfnation.jamfsoftware.com/myAssets.html

To run the JSS Installer for Windows, copy it to the server. Then open the installer and follow the onscreen instructions.

Note: The installer must be run as an administrator.

Lessons

Enroll Computers

Enrollment is the process of adding computers to the Jamf Software Server (JSS). When Mac computers are enrolled, inventory information for the computers is submitted to the JSS, and the computers become managed. This allows you to perform inventory tasks and remote management and configuration tasks on the computers. When you enroll computers, you specify a local administrator account that you want to use to manage them (called "management account").

This guide explains two different enrollment methods:

- **Use the network scanner**—You can remotely enroll multiple Mac computers in specified IP ranges by using the network scanner in Recon. Recon scans the specified IP ranges and enrolls any computers that it can connect to over SSH (Remote Login).
  For instructions, see Enroll Computers Using the Network Scanner.

- **Use a QuickAdd package**—You can use Recon to create a QuickAdd package that enrolls Mac computers when it is installed. The QuickAdd package can be deployed using almost any deployment tool, such as Apple Remote Desktop or the Casper Suite.
  For instructions, see Enroll Computers Using a QuickAdd Package.

For information on alternate enrollment methods, see the "About Computer Enrollment" section in the *Casper Suite Administrator's Guide*.

# Enroll Computers Using the Network Scanner

The network scanner in Recon allows you to remotely enroll multiple Mac computers. It scans specified IP ranges and enrolls any computers that it can connect to over SSH (Remote Login).

Requirements

To enroll computers using the network scanner, SSH must be enabled on the computers.

Enrolling Computers Using the Network Scanner

1. Open Recon and authenticate to the JSS.

2. Select **Network Scanner** in the sidebar.

3. Specify the IP ranges you want to scan:

   a. Click **Add** (+) below the list of IP ranges.

   b. Enter the starting and ending IP addresses.
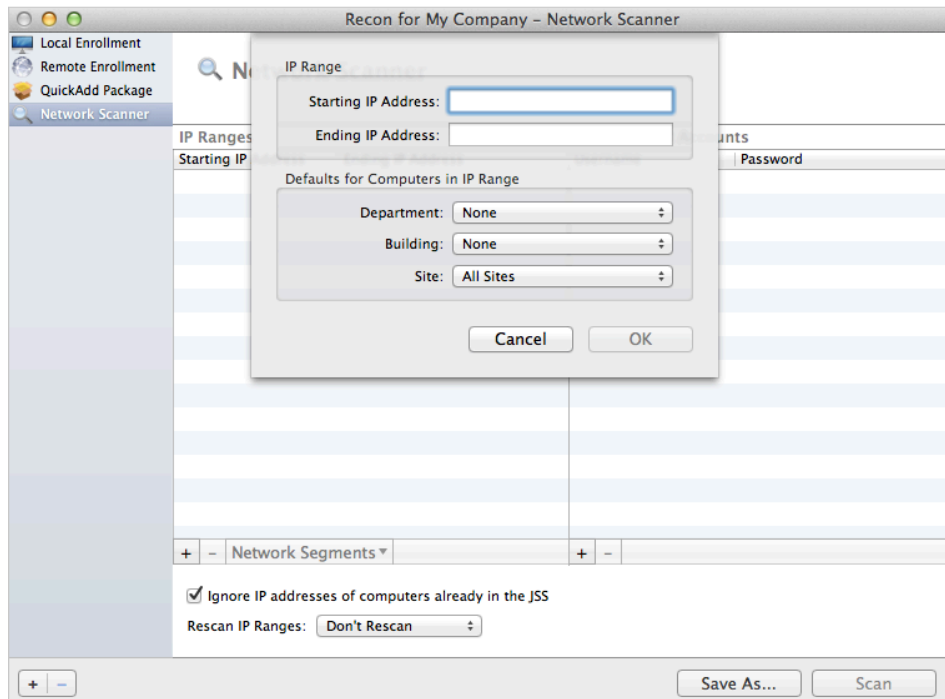
   c. Click **OK.**

4. Specify one or more local administrator accounts that have SSH access to computers in the IP range. When the network scanner finds a computer on the network, it tries each account until it finds one that can be used to connect to the computer over SSH. The first valid account is used as the management account.

   a. Click **Add** (+) below the list of accounts.

   b. Enter credentials for a local administrator account that has SSH access to computers.
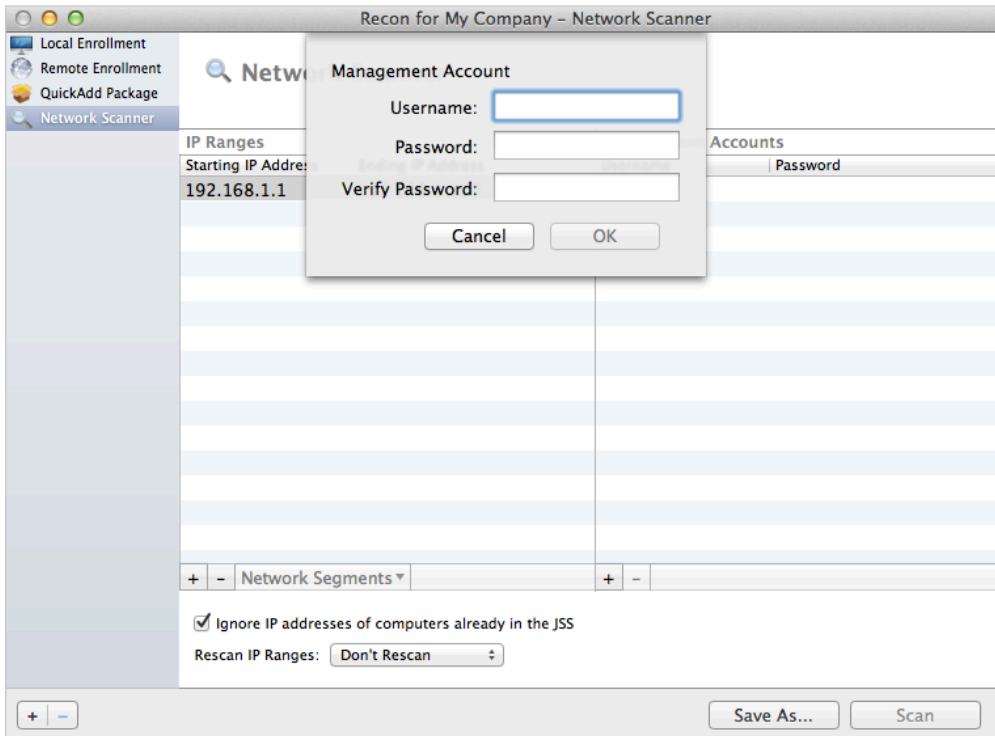
   c. Click **OK**.

   d. If there is more than one administrator account in the specified IP ranges, repeat steps a through c as needed.

5. Click **Scan**.

   Recon scans the specified IP ranges and enrolls any computers that it can connect to over SSH. The progress of the scan is displayed on the Current Activity pane. The results of the scan are displayed on the Enrolled, Not Found, and Problems panes.
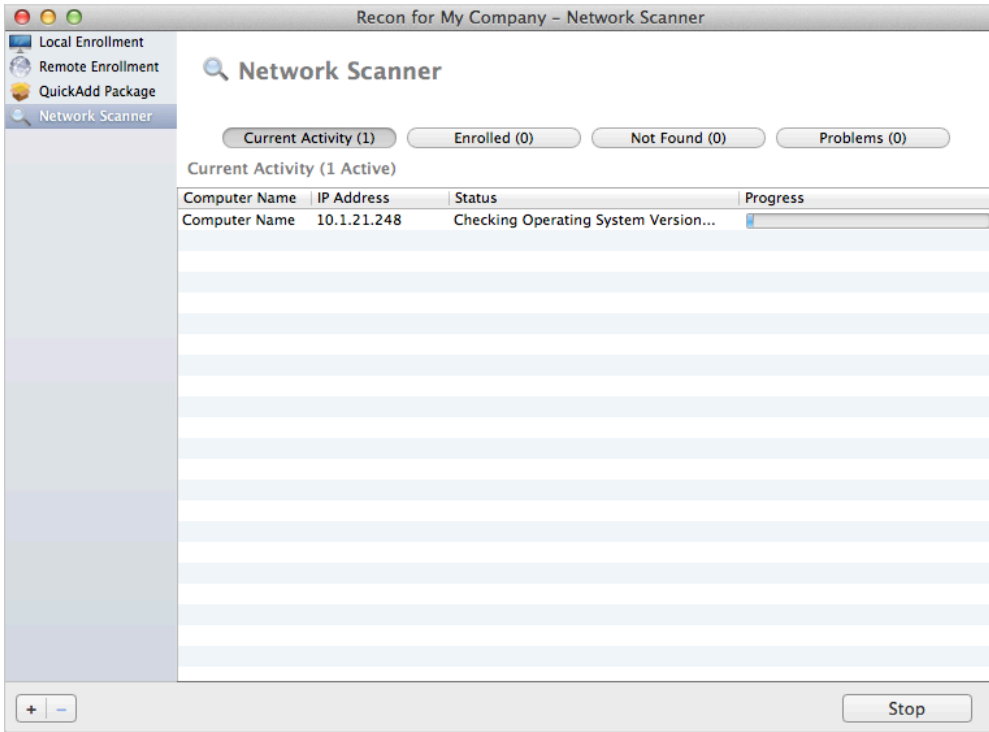
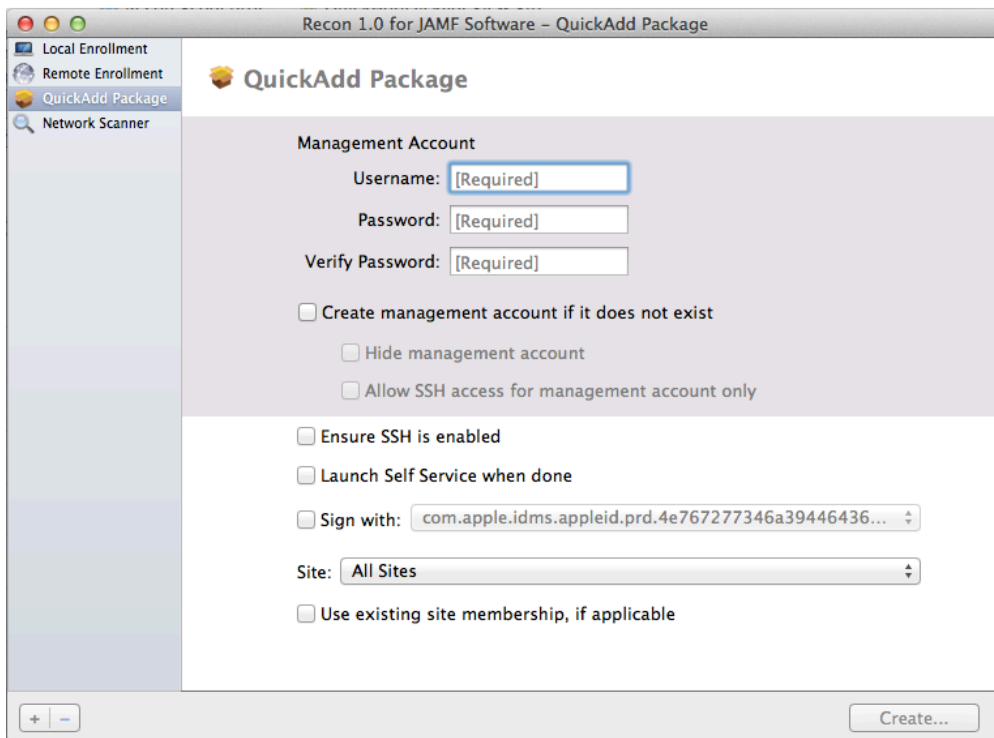# Administrator's Guide Reference Sections

"Network Scanner"

Enroll Computers Using a QuickAdd Package

You can use Recon to create a QuickAdd package that enrolls Mac computers when it is installed. This type of QuickAdd package can be deployed using almost any deployment tool, such as Apple Remote Desktop or the Casper Suite.

To install a QuickAdd package, you double-click it and then follow the onscreen instructions.

Enrolling Computers Using a QuickAdd Package

1. Open Recon and authenticate to the JSS.

2. Select **QuickAdd Package** in the sidebar.

3. Enter credentials for a local administrator account.
   This account is used as the management account.

4. Click **Create**. Then specify a name and location for the package.

5. Deploy the package using a remote deployment tool.

When the QuickAdd package is installed on computers, they are enrolled with the JSS.

Administrator's Guide Reference Sections

"QuickAdd Packages Created Using Recon"

View Inventory Information

The Jamf Software Server (JSS) stores detailed inventory information for each computer. You can view and edit the following information in the JSS:

- General
- Hardware
- Operating System
- User and Location
- Purchasing
- Extension Attributes
- Storage
- Peripherals
- Licensed Software
- Applications
- Fonts
- Plug-ins
- Profiles
- Certificates
- Package Receipts
- Software Updates
- Local User Accounts
- Printers
- Services
- Attachments

Viewing Inventory Information for a Computer

1. Log in to the JSS with a web browser.

2. Click **Computers** at the top of the page.

3. Click **Search Inventory**.
   On a smartphone or iPod touch, this option is in the pop-up menu.

4. Choose "Computers" from the **Search** pop-up menu.

5. Leave the search field blank and press the Enter key.

6. Click the computer you want to view information for.
   The computer's inventory information is displayed.

7. Use the categories to view information for the computer.

Administrator's Guide Reference Sections

"Viewing and Editing Inventory Information for a Computer"

Explore More

For more information on Inventory functions, see Explore More: Inventory.

Add an OS Package

Before imaging computers, add an OS package to Casper Admin.

Requirements

To add an OS package to Casper Admin, you need a distribution point in the JSS. (For more information, see "About Distribution Points" in the *Casper Suite Administrator's Guide*.)

Adding an OS Package to Casper Admin

1. Open Casper Admin and authenticate to the JSS.
2. Drag the OS package to the main repository in Casper Admin.
   The package is displayed in blue text in the Unknown category until you add it to a category.
3. Double-click the package in the main repository.
4. Click the **General** tab and enter a display name for the package.

5. Choose a category for the package.
6. Click **OK**.
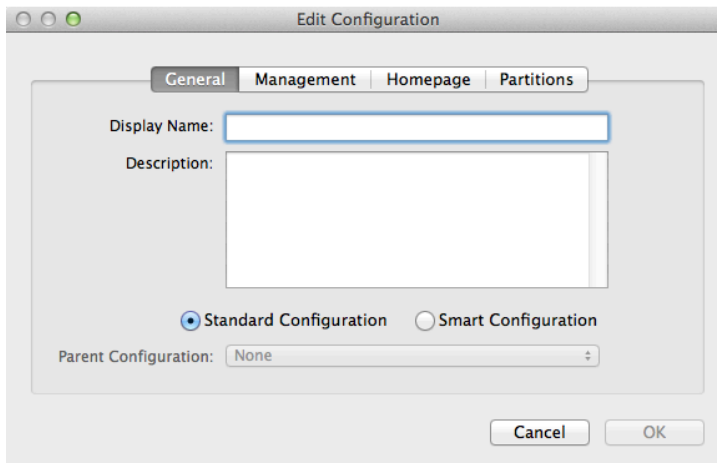
Administrator's Guide Reference Sections

"Managing Packages"

Create a Configuration

After you add an OS package to Casper Admin, create the configuration that you will use to image computers. Configurations are modular images that allow you to quickly specify what needs to be installed and configured on computers during imaging. Unlike standard images, you can easily make changes to configurations without rebuilding them.

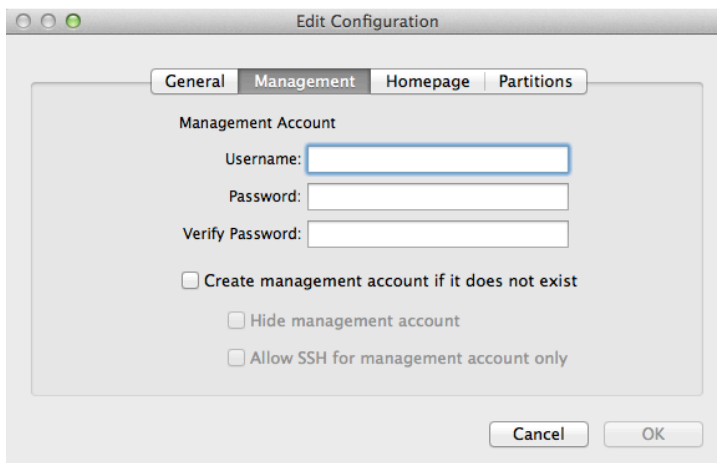## Creating a Configuration

1. Open Casper Admin and authenticate to the JSS.

2. Click **New Config** 📁 .

3. On the General pane, enter a name and description for the configuration.

4. Click the **Management** tab and enter credentials for a local administrator account that you want to use for management.

5. Click **OK.**
   The configuration is added to the list of configurations in the sidebar.

6. Drag the OS package from the main repository to the configuration that you created.

Administrator's Guide Reference Sections

"Configurations"

Image a Computer

After you create a configuration, image a computer using the configuration.

Imaging computers with the Casper Suite involves booting computers to a startup disk other than the target drive and then using the Casper Imaging application to deploy a configuration.

Requirements

To image a computer, you need:

- A distribution point in the JSS (For more information, see "About Distribution Points" in the *Casper Suite Administrator's Guide*.)
- A USB/FireWire drive, Restore partition, or NetBoot image that has Casper Imaging installed

Imaging a Computer

1. On the target computer, boot to the USB/FireWire drive, Restore partition, or NetBoot image.
2. Open Casper Imaging and authenticate locally.
3. Authenticate to the JSS when prompted.
4. Choose the drive to image from the **Target Drive** pop-up menu.
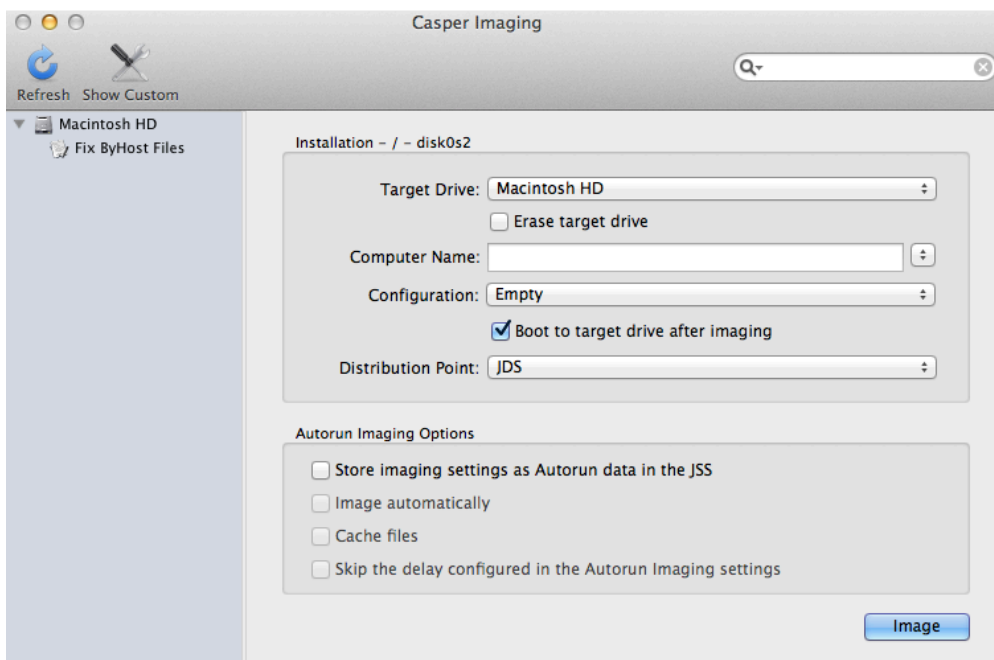
5. Select the **Erase target drive** checkbox.
6. Assign a name to the computer by entering a name in the **Computer Name** field.

7. Choose your configuration from the **Configuration** pop-up menu.

8. Select the **Boot to target drive after imaging** checkbox.

9. Choose a distribution point from the **Distribution Point** pop-up menu.

10. Click **Image**.

Administrator's Guide Reference Sections

"Standard Imaging"

Explore More

For more information on Imaging functions, see Explore More: Imaging.

Add a Software Update Server

Before creating a policy to run Software Update on computers, add an internal software update server to the Jamf Software Server (JSS).

Using an internal software update server allows you to reduce the amount of bandwidth used when distributing software updates from Apple. Instead of each computer downloading updates from Apple's Software Update server, updates are only downloaded from Apple once per server.

Using an internal software update server also allows you to control and approve updates before you make them available.

Adding a Software Update Server

1. Log in to the JSS with a web browser.
2. In the top-right corner of the page, click **Settings** ⚙ .
3. Click **Server Infrastructure**.
   On a smartphone or iPod touch, this option is in the pop-up menu.
4. Click **Software Update Servers** 🌐 .
5. Click **New** ➕ .
6. Configure the settings on the pane.
7. Click Save.

Administrator's Guide Reference Sections

"Software Update Servers"

Create a Policy to Run Software Update

After you add a software update server to the JSS, create a policy to run Software Update on computers.

When you create a policy, you specify the tasks you want to automate, when the policy should run (called "trigger"), how often it should run (called "execution frequency"), and the users and computers for which it should run (called "scope").

Creating a Policy to Run Software Update

1. Log in to the JSS with a web browser.
2. Click Computers at the top of the page.
3. Click **Policies**.
   On a smartphone or iPod touch, this option is in the pop-up menu.
4. Click **New** + .
5. In the General payload, enter a display name for the policy.
6. Choose a trigger and execution frequency for the policy.
7. Select the Software Updates payload and click **Configure**.
8. Choose your internal software update server from the **Install Software Updates From** pop-up menu.
9. Click the **Scope** tab and configure the scope of the policy.
10. Click **Save**.

The policy runs on computers in the scope the next time they check in with the JSS and meet the criteria in the General payload. The default recurring check-in frequency for computers is every 15 minutes.

Administrator's Guide Reference Sections

"Running Software Update"

Add a Package

Before creating a policy to install a package, add the package to Casper Admin.

Requirements

To add a package to Casper Admin, you need a distribution point in the JSS. (For more information, see "About Distribution Points" in the *Casper Suite Administrator's Guide*.)

Adding a Package to Casper Admin

1. Open Casper Admin and authenticate to the JSS.

2. Drag the package to the main repository in Casper Admin.
   The package is displayed in blue text in the Unknown category until you add it to a category.

3. Double-click the package in the main repository.

4. Click the **General** tab and enter a display name for the package.

5. Choose a category for the package.

6. Click **OK.**

Administrator's Guide Reference Sections

"Managing Packages"

Create a Policy to Install a Package

After adding a package to Casper Admin, create a policy to install the package.

When you create a policy, you specify the tasks you want to automate, when the policy should run (called "trigger"), how often it should run (called "execution frequency"), and the users and computers for which it should run (called "scope").

Creating a Policy to Install a Package

1. Log in to the JSS with a web browser.

2. Click **Computers** at the top of the page.

3. Click **Policies**.
   On a smartphone or iPod touch, this option is in the pop-up menu.

4. Click **New** ➕ .

5. In the General payload, enter a display name for the policy.

6. Choose a trigger and execution frequency for the policy.

7. Select the Packages payload and click **Configure**.

8. Click **Add** for the package you want to install.

9. Choose "Install" from the **Action** pop-up menu.

10. Specify a distribution point for computers to download the package from.

11. Click the **Scope** tab and configure the scope of the policy.

12. Click **Save**.

The policy runs on computers in the scope the next time they check in with the JSS and meet the criteria in the General payload. The default recurring check-in frequency for computers is every 15 minutes.

Administrator's Guide Reference Sections

"Installing Packages"

Explore More

For more information on Software Distribution functions, see Explore More: Software Distribution.

Distribute a Mac App Store App

When you distribute a Mac App Store app, you configure settings for the app and specify the users and computers that should receive it (called "scope").

1. Log in to the JSS with a web browser.
2. Click **Computers** at the top of the page.
3. Click **Mac App Store Apps**.
   On a smartphone or iPod touch, this option is in the pop-up menu.
4. Click **New** + .
5. Enter the name of the app, choose an App Store country, and click **Next**.
6. Click **Add** for the app you want to add.
7. Verify the settings on the General pane.
8. Click the **Scope** tab and configure the scope of the app.
9. Click **Save**.

   The app is distributed the next time computers in the scope contact the JSS.

Administrator's Guide Reference Sections

"Mac App Store Apps"

Explore More

For more information on Distribution functions, see Explore More: Software Distribution.

Share the Screen of Another Computer

Screen sharing allows you to remotely view and control the screen of another computer.

Requirements

To share the screen of another computer, SSH (Remote Login) must be enabled on the target computer.

Sharing the Screen of Another Computer

1. Open Casper Remote and authenticate to the JSS.

2. In the list of computers, select the computer that you want to screen share with.
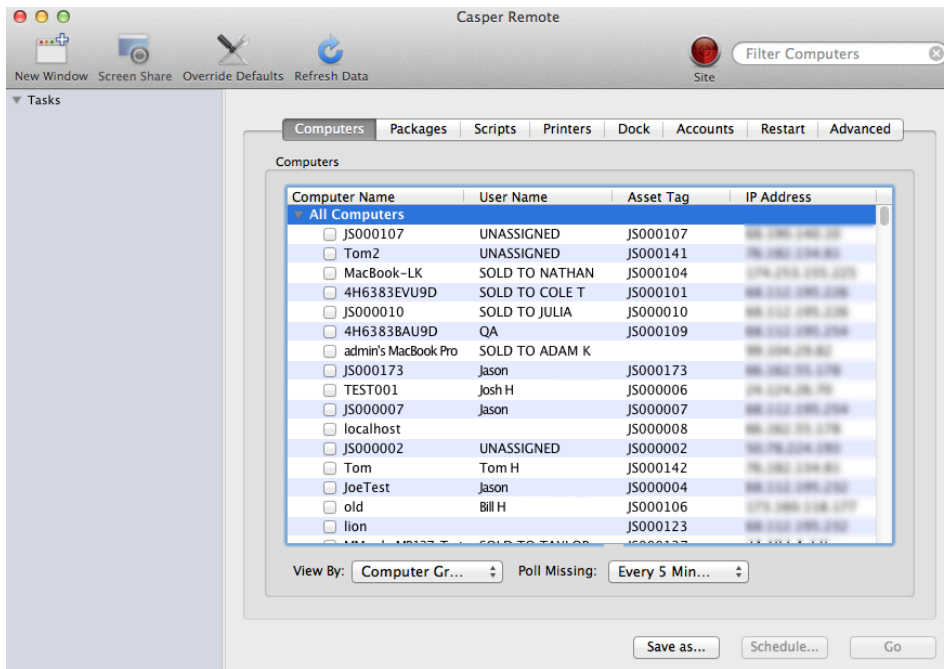
3. Click **Screen Share** ⊙ .

4. When prompted, choose a screen sharing option:

   ▪ To allow the end user to see the screen sharing session, choose "Share Display" (macOS v10.8 or later) or "Ask to share the display" (macOS v10.7).

   ▪ To hide the screen sharing session, choose "Log In" (macOS v10.8 or later) or "Connect to a virtual display" (macOS v10.7).

Administrator's Guide Reference Sections

"Screen Sharing"

Create a Computer Configuration Profile

Computer configuration profiles are XML files (.mobileconfig) that provide an easy way to define settings and restrictions for Mac computers and users. You can use the Jamf Software Server (JSS) to create computer configuration profiles and specify the computers and users to which the profile should be applied (called "scope").

When you create a computer configuration profile, you must also specify the level at which to apply the profile—computer level or user level. Each level has a unique set of payloads and a few that are common to both.

This lesson explain how to create a computer-level configuration profile that enforces a passcode on computers.

Requirements

To install a computer configuration profile, you need:

- A push certificate in the JSS (For more information, see "Push Certificates" in the *Casper Suite Administrator's Guide.*)
- The **Enable certificate-based authentication** and **Enable push notifications settings** configured in the JSS (For more information, see "Security Settings" in the *Casper Suite Administrator's Guide*.)
- Computers with macOS v10.7 or later
- (User-level profiles only) Computers that are bound to a directory service or local user accounts that have been MDM-enabled (For information, see "Binding to Directory Services" in the *Casper Suite Administrator's Guide* and the Enabling MDM for Local User Accounts Knowledge Base article.)

Creating a Computer Configuration Profile

1. Log in to the JSS with a web browser.
2. Click **Computers** at the top of the page.
3. Click **Configuration Profiles**.
4. Click **New** `+` .
5. In the General payload, enter a name for the profile, select "Computer Level" from the **Level** pop-up menu.
6. Select the Passcode payload and click **Configure**.
7. Configure the settings on the pane.
8. Click the **Scope** tab and configure the scope of the profile.
9. Click **Save**.

The profile is installed the next time computers in the scope contact the JSS.

Administrator's Guide Reference Section

"Computer Configuration Profiles"

Create a Licensed Software Record

Licensed software allows you to track licenses for the software in your environment. For each software product that you want to track licenses for, you must create a licensed software record in the Jamf Software Server (JSS). These records allow you to store the licenses owned and the software titles that count toward each license (called "software definitions").

Each time a computer submits inventory to the JSS, the software titles on the computer are compared to the software definitions in licensed software records. If they match, the computer counts toward the number of licenses in use.

Creating a Licensed Software Record

1. Log in to the JSS with a web browser.
2. Click **Computers** at the top of the page.
3. Click **Licensed Software**.
   On a smartphone or iPod touch, this option is in the pop-up menu.
4. Click **New From Template** ⊞ .
5. Click the licensed software template you want to use.
6. On the General pane, enter a display name for the licensed software record.
7. Click the **Licenses** tab and add license information:
   a. Click **Add** ＋ .
   b. Enter information about the license, including the license type and license count.
   c. Click **Save**.
   d. Repeat steps a through c as needed.
8. Click **Save**.

Administrator's Guide Reference Sections

"Licensed Software Records"

Explore More

For more information on License Management functions, see Explore More: License Management.

Update Inventory Using Casper Remote

Before viewing Application Usage logs, make sure that you have the most current inventory information by using Casper Remote to update inventory.

Updating Inventory Using Casper Remote

1. Open Casper Remote and authenticate to the JSS.

2. In the list of computers, select the checkbox for each computer that you want to update inventory for.

3. Click the **Advanced** tab and select the **Update Inventory** checkbox.

4. Click **Go.**

View Application Usage Logs

Application Usage logs allow you to monitor how frequently applications are used on computers and track usage behaviors. The Application Usage logs for a single computer consist of a pie chart that shows the amount of time each application was in the foreground on the computer during a specified date range.

Viewing Application Usage Logs for a Single Computer

1. Log in to the JSS with a web browser.

2. Click **Computers** at the top of the page.

3. Click **Search Inventory**.
   On a smartphone or iPod touch, this option is in the pop-up menu.

4. Choose "Computers" from the **Search** pop-up menu.

5. Leave the search field blank and press the Enter key.

6. Click the computer you want to view Application Usage logs for.

7. Click the **History** tab.
   Application Usage logs for the computer are displayed.

8. To view Application Usage logs for a different date range, specify the starting and ending dates using the **Date Range** pop-up menus. Then click **Update**.

Administrator's Guide Reference Sections

"Application Usage"

Explore More

For more information on Usage Management functions, see Explore More: Usage Management.

Explore More

Explore More: Inventory

- "Computer Inventory Collection"—Learn about the policy that determines how often computers submit inventory to the Jamf Software Server (JSS).

- "Computer Inventory Collection Settings"—Find out how to collect additional items as part of your inventory and specify custom search paths to use when collecting applications, fonts, and plug-ins.

- "Computer Extension Attributes"—Find out how to create custom fields that you can use to collect almost any type of data from computers.

- "Computer Inventory Display Settings"—Find out how to change the attribute fields displayed in the results of a simple computer search.

- "Peripherals"—Learn how to collect and store peripheral information as part of your inventory.

- "Simple Computer Searches"—Learn how to quickly search the items in your inventory for a general range of results.

- "Advanced Computer Searches"—Learn how to use detailed search criteria to search the computers in your inventory.

- "Computer Reports"—Find out how to export the data displayed in simple or advanced computer search results.

- "Performing Mass Actions for Computers"—Find out how to perform potentially tedious tasks for multiple computers at the same time.

- "Viewing and Editing Inventory Information for a Computer"—Learn about the types of inventory information that you can view and edit for a computer.

- "Viewing Management Information for a Computer"—Learn how to view management information, such as policies for a computer.

- "Viewing the History for a Computer"—Learn how to view logs and other management history for a computer.

- "Deleting a Computer from the JSS"—Find out how to delete a computer from the JSS.

- "User Assignments"—Find out how to assign users to mobile devices.

- "Simple User Searches"—Learn how to quickly search the users in your inventory for a general range of results.

- "Viewing and Editing Inventory Information for a User"—Find out how to view and edit inventory information for a user.

Explore More: Imaging

- "About Imaging"—Learn about the different imaging methods.
- "Managing Packages"—Learn how to manage packages so you can deploy or uninstall them during imaging.
- "Managing Scripts"—Learn how to manage scripts so you can run them during imaging.
- "Managing Printers"—Learn how to manage printers so you can map or unmap them during imaging.
- "Managing Dock Items"—Learn how to manage Dock items so you can add or remove them during imaging.
- "Managing Directory Bindings"—Learn how to manage directory bindings so you can bind computers during imaging.
- "Booting Computers to NetBoot Images"—Find out how to boot computers to a NetBoot image for imaging purposes.
- "PreStage Imaging"—Find out how to use PreStage imaging so you can image new computers as you add them to the network.
- "Autorun Imaging Settings"—Find out how to configure the settings for Autorun imaging.
- "Autorun Imaging"—Find out how to store imaging settings in the Jamf Software Server (JSS) so you don't have to configure them at imaging time. This also allows you to fully automate the imaging process, if desired.
- "Target Mode Imaging"—Learn how to image multiple computers subsequently by connecting them to a host computer using a Firewire or Thunderbolt cable.
- "Customizing the Imaging Process"—Find out how to customize the imaging process using Casper Imaging or using the JSS to configure a PreStage or Autorun data.

Explore More: Software Distribution

- "Managing macOS Installers"—Learn how to manage DMGs of macOS Installers so you can deploy them to computers.

- "Caching Packages"—Find out to how cache packages.

- "Installing Cached Packages"—Learn how to install cached packages.

- "Uninstalling Packages"—Find out how to uninstall packages that were installed with the Casper Suite.

- "Mac App Store Apps"—Find out how to distribute Mac App Store apps.

- "Integrating with VPP"—Find out how to integrate with Apple's Volume Purchase Program (VPP) so that you can utilize VPP-managed distribution.

- "VPP-Managed Distribution for Computers"—Find out how to assign Mac App Store apps to computers for VPP-managed distribution.

- "VPP User Registration"—Find out how to register users with VPP so that you can assign content to users for VPP-managed distribution.

- "User-Based VPP Assignments"—Find out how to assign content to users for VPP-managed distribution.

Explore More: Settings and Security Management

- "Computer Configuration Profiles"—Find out how to distribute computer configuration profiles to define settings and restrictions for computers and users.
- "Remote Commands for Computers"—Find out how to use remote commands to manage computer security.
- "Managing Scripts"—Find out how to manage scripts so you can run them on computers.
- "Running Scripts"—Find out how to run scripts.
- "Managing Printers"—Find out how to manage printers so you can map or unmap them to computers.
- "Administering Printers"—Find out how to map or unmap printers.
- "Managing Dock Items"—Find out how to manage Dock items so you can add or remove them from computers.
- "Administering Dock Items"—Find out how to add or remove Dock items.
- "Administering Local Accounts"—Find out how to create new local accounts, delete existing accounts, and reset the password for existing accounts
- "Administering the Management Account"—Find out how to reset management account passwords and enable or disable the management account.
- "Managing Directory Bindings"—Find out how to add directory bindings so you can bind computers to a directory service.
- "Binding to Directory Services"—Find out how to bind computers to a directory service.
- "Managing Disk Encryption Configurations"—Find out how to create and manage disk encryption configurations so you can activate FileVault 2 on computers.
- "Deploying Disk Encryption Configurations"—Find out how to deploy disk encryption configurations to activate FileVault 2.
- "Administering Open Firmware/EFI Passwords"—Find out how to set or remove Open Firmware/EFI passwords from computers.

Explore More: License Management

- "About Licensed Software"—Find out how you can store and track licenses for the software in your environment.

- "License Compliance"—Find out how to evaluate license compliance by viewing licensed software records in the Jamf Software Server (JSS).

- "Viewing License Usage"—Find out to how view the computers on which licenses are in use.

- "Application Usage for Licensed Software"—Find out how frequently the licensed software in your environment is being used.

Explore More: Usage Management

- "Computer Usage"—Find out how to view usage logs so you can monitor how frequently each computer is used and track usage behaviors.
- "Restricted Software"—Learn how to prevent users or groups of users from accessing certain applications.

Appendix: Package Building

Composer application allows you to build software package for deployment with the Casper Suite.

Requirements

A disk image or installer DVD for software that's not already installed on your computer

Building a Package

1. Open Composer and authenticate locally.

2. In the toolbar, click **New** .

3. Under the Monitor Installation heading in the sidebar, select **Snapshot**.

4. Select **Normal Snapshot** and click **Next**.

5. Enter a name for the package and click **Next**.

6. Install and configure your software, and then click **Create Package Source** to initiate the "after" snapshot.
   When Composer is finished taking the final snapshot, the package name appears under the Sources list in the sidebar.

7. Select the package source from the Sources list.

8. In the toolbar, click **Build as DMG** .

9. Select a location to save the package and click **Save**.

Administrator's Guide Reference Sections

- "Creating Package Sources"
- "Viewing and Editing the Contents of Package Sources"
- "Building Packages from Package Sources"