

## **Dell KACE M300 Asset Management Appliance**

**V1.0 Concept Guide** 

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# Chapter 1

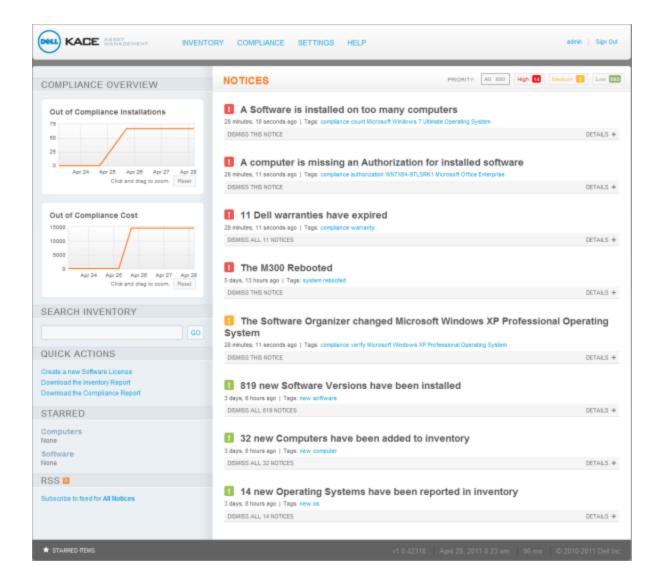
### Welcome

The Dell KACE M300 Asset Management Appliance was designed to reduce the repetitive and time consuming tasks associated with running an IT department at small organizations. The M300 has true "plug and play" operations enabling IT administrators to know the exact state of their PCs and servers, and helps to ensure software license compliance. In addition, network security can be improved by helping IT managers identify which assets are improperly configured, letting them proactively address configuration issues before they become a security problem. Organizations can rely on the M300 to continuously monitor their PC hardware and software giving them the freedom to spend more time on strategic projects and to provide a higher level of service.

#### Overview of the Dashboard

The **Dashboard** (also called *Home*) page displays all notifications, compliance, and cost summaries as well as links to frequently used tasks. The first time you log in, the Dashboard page displays the M300 as Rebooted and indicates that there is no inventory checking in.

From this page, you can sort and manage Notifications, sign up for RSS, run reports, and view the general status of compliance and other activity.



#### **Opening the Dashboard**

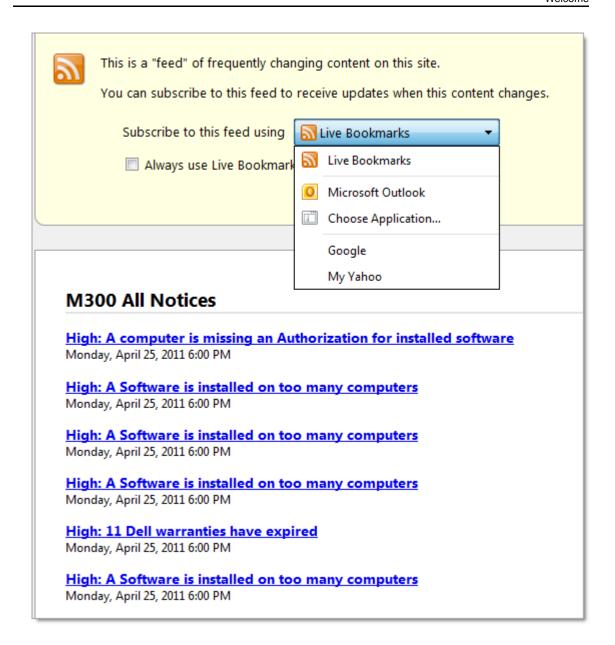
The **Dashboard** is available when you first log in and click the Dell KACE Asset Management logo. This assumes that you are not opening a specific page URL such as logging in after being automatically logged out.

• From any page of the M300, click the logo in the upper-left corner. The **Dashboard** is displayed.

#### **Enabling an RSS Feed**

Get notifications using the RSS feed. This allows you to be notified about compliance and computer status without logging into the M300.

- 1. Click the Dell KACE logo to open the Dashboard.
- 2. Click **Subscribe to feed for All Notices**. A new tab opens the **RSS Feed Configuration** page.



- 3. Select the program or service from which you want to receive the feed.
- 4. Close the tab.

You receive email notifications from the M300.

## **Managing Software Assets**

To track software instances and manage license compliance for software assets on your network, you must add a managed software asset to the **Compliance** > **Software** list.

A *managed software asset* identifies the installed software and the license type and quantity, determines if you are simply tracking software instances or managing license compliance, and provides additional information about the software for reporting.

The easiest and most efficient way to start managing software is to install the software on at least one computer that is running an Agent before adding it to the managed Software assets list.



**Note:** The M300 can only verify whether software is installed on a computer after an Agent has uploaded Inventory.

#### Before you begin

Dell KACE recommends reviewing the software items found by the Agents on the computers in your network and defining the list of software that you want to track (such as freeware or open source programs), manage for license compliance, and require or forbid software from installation.

The M300 lets you configure the managed software asset's license and compliance settings to determine whether the computers in your network are in-or out-of-compliance with the following types of software licensing models:

- Individual and device-based software licenses: Software that is owned either as a single license, as individual seats, or as device-based licenses. Set up a managed software asset that authorizes specific computers to have the software or associate a specific license key with a particular computer. When you also set the Software Version, the M300 reports compliance if other computers have the software installed.
- Multi-seat license (MLS), site licenses, volume licenses, or any other model that is based on count: Software that has a licensing model that allows installation of the same software on more than one computer using the same key. Set up a managed software asset that defines how many seats are allowed by the license and select the Software Versions to which the license is associated with. The M300 reports the number of

installed instances of the software automatically. If the number of installed instances is greater than the number of seats, the software is out-of-compliance.

- Freeware and Open Source programs: Unlicensed programs that you want to track for usage. To ensure compliance, set the value for freeware and open source programs to be greater than the number of computers.
- **Required software**: Software that should be installed on every computer or specific computers. Set up a managed software asset that checks for the software title and reports computers without it as out-of-compliance.
- **Forbidden software**: Software that your company has policies against. Set up a managed software asset that checks for the software title and reports computers with the software as out-of-compliance.

#### **Understanding Compliance**

Compliance is the state of the managed software asset when evaluated against the installed software and/or selected computers.

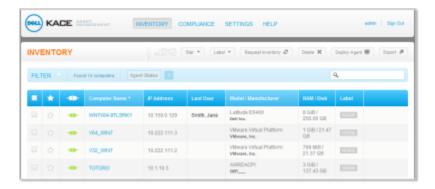
The M300 measures compliance for each asset, where:

- **In-compliance** (Compliant = Yes): All installed software meets the license and compliance conditions. For example, the number of installed instances (Used) does not exceed the total number of licenses. No action is required.
- Out-of-compliance (Compliant = No): One or more computers violate the license and compliance conditions, for example a computer has unauthorized software installed.

#### Overview of the Agent's role

Each Agent reports hardware details and provides a list of installed software that the M300 uses to evaluate software compliance.

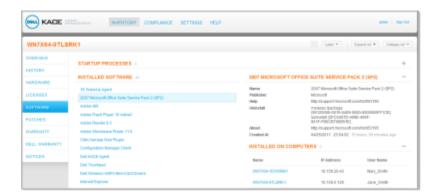
Agents check in to the M300 regularly and uploads software and hardware inventory details. The M300 stores the data and evaluates the inventory reported by the Agent for each of the managed software assets.



To see details about a computer, choose **Inventory** and click the computer's name.

A computer's Inventory details page displays the status of the last check in. For example, if the computer checked in two hours ago, the Inventory shows what was installed on the computer at that time. The default check in is every 8 hours (480 minutes).

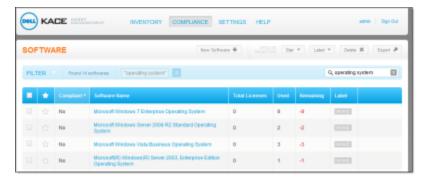
The first time an Agent checks in, it uploads all the details about the computer's hardware and a list of programs that are installed. The figure below shows a list of the software installed on WN764-9TLSRK1.



After initial check in, the Agent uploads only the differences between the last and current check in and the appliance adjusts the inventory accordingly.

#### Overview of the Compliance page

The **Compliance** page shows software that is being tracked, known as managed software assets, and provides the ability to search for titles installed on computers with Agents. From this page, you manage software compliance.



The following table describes the Software table:

Column Name	Value	Description
Compliance	Yes	The asset is in-compliance with the conditions you configured.
	No	The managed software asset is out-of-compliance with the conditions you configured.
Software Name	string	The name that you entered in the <b>License Name</b> field when setting up the asset.
Total Licenses	num	The number of licenses that you entered in the <b>License Count</b> field when setting up the asset.

Column Name	Value	Description
Used	num	Indicates the number of computers where the software is installed. When the version is configured, this is the number of installations detected by the Agents; otherwise, it is the number of computers that you manually assigned.
Remaining	num	The total licenses minus the number used. Displays red when more licenses are in use than the total number of licenses.
Label	string	A tag that you assign to a group of managed software to be able to easily identify it as a filter in the Software list.

#### Searching for installed software

From the Compliance page, you can use the **Search** field to find software titles installed on the computers in your network. When you search, the table displays managed software assets as active links and un-managed software assets as inactive links.

#### 1. Click Compliance.

The Software list displays all the assets you are currently managing.

2. In **Search**, enter the name of the title you want to find.

The Software list displays all the managed software assets that contain the search string as well as the software that is installed on computers but not managed.

You can create managed software assets with the version setting of the new asset pre-populated by clicking on an un-managed title.

#### Finding new software

Whenever an Agent reports new software, a notification displays on the Dashboard and on the computer Inventory details Notification page. You can create a new managed software asset by searching for the title on the Compliance page.

- 1. Copy the software title from the notification.
- 2. Click Compliance.

The Software list displays all the assets you are currently managing.

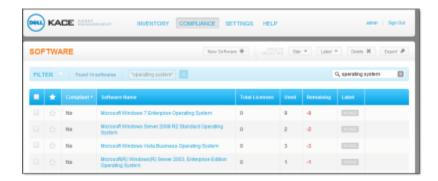
- 3. Click the **Deploy Agent**.
- 4. In **Search**, enter the name of the title that you want to find.

  The Software list displays all the managed software assets that contain the search string as well as the software that is installed on computers but not managed.

You can create managed software assets with the version setting of the new asset pre-populated by clicking on an un-managed title.

#### Tracking operating systems automatically

The M300 automatically tracks all Windows operating systems reported by Agents.



You must modify the License Count of the OS Compliance Software assets with the correct number of licenses.



**Note:** All other installed software reported by Agents display only in the computer Inventory. You must create a new asset to monitor or track it.

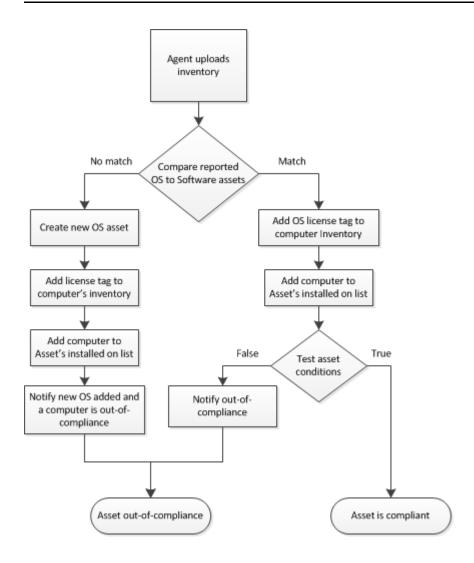
#### How Operating System assets are added

The M300 evaluates whether a Software asset exists for the Windows operating system (OS) version when it is reported by an Agent.

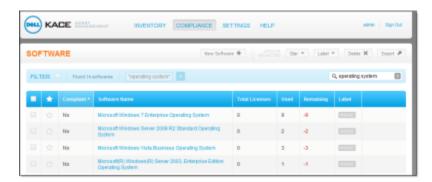
First, the M300 verifies whether a managed software asset already exists for that OS, and then takes the following actions:

- **No match** (first occurrence): The M300 automatically creates a managed software asset, adds a license tag to the computer's Inventory, and posts a notification on the **Home** page. Because the new OS asset default settings is zero licenses tracked by volume, the new OS asset is automatically *out-of-compliance*.
- Match (asset already exists): The M300 adds the computer to the asset's **Installed On** list, adds a license tag to the computer's Inventory, and then tests the compliance settings. If the instance causes the software to become *out-of-compliance* (or the software is already out-of-compliance), the M300 posts notifications.

The following diagram shows the M300 actions when an Agent checks in and uploads the operating system information.



If you followed the instructions in the Quick Start Guide, a list of the Operating Systems gathered from the computers on your network already displays on the **Compliance** > **Software** page. The **Home** page displays one or more notifications alerting you of the new assets and that computers with these Operating Systems are out-of-compliance.



#### Setting up other software to manage

To set up compliance monitoring for any *other* software (non-operating system) reported by an Agent, you create a new Compliance Software asset and identify the software. You can also use the M300 to manually track installed instances of the software.

The Managed Software Asset Configuration Wizard allows you to quickly create a new asset. Click **New Software** to launch the wizard or use the search option to automatically populate the **Version** field.

This section provides an overview of the most important settings required to track software.



**Note:** Asset settings that are not covered by this section are used for reporting only.

The M300 uses the License Count and Expiration, Compliance model, Version, and Selected Computers, or License key-computer pairs to determine whether the asset is compliant as follows:

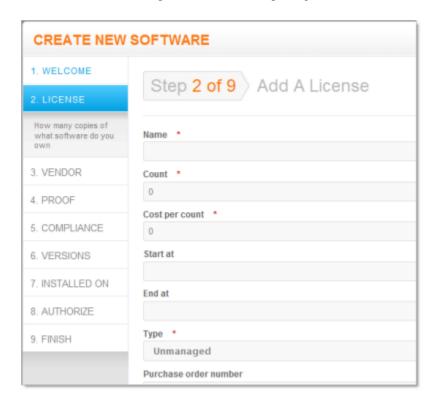
Model	Settings	Description	Use Case
Authorization	Selected versions & no selected computers	Reports the software as out-of-compliance if any computers have the software installed.	Software installed on a test computer only, but you have licenses that you know will be installed elsewhere or is installed on computers that will check in later.
	Selected versions & computers	Reports the software as out-of-compliance if it is installed on computers other than those you selected. Reports selected computers as out-of-compliance when not installed.	Software should only be installed on specific machines, regardless of the number of licenses.  Note: Use this option to allow required software on all computers by selecting all computers. As you deploy Agents, add the computers to list.
	No selected versions & selected computers	Reports the software as out-of-compliance if you manually select more computers than License Count.	Manually track instances on known computers for reporting, or the software does not appear in Programs.
			Note: Only use to track computers that you know have the software installed.
Counting	License count & selected versions (required)	Reports the software as out-of-compliance if the number of installed instances is greater than the total licenses.	Volume or site licenses.  Note: Use this option to forbid software and enter a zero License Count.
License Key	Configured key-computer pairs & selected versions	Reports the software as out-of-compliance if computers with no key associated to them have the software installed.	Per seat, user, and device licenses that should be installed only on specific computers.
	Configured key-computer pairs & no version	Reports the software as out-of-compliance if you manually selected more computers than the License Count.	Manually track instances on known computers for reporting or the software does not appear in Programs.
	Configure no key-computer pairs & selected version	Reports the software as out-of-compliance if any computers have the software installed.	Note: You can use this setting to get a list of the computers with the software, and later configure the key-computer pairs.

Model	Settings	Description	Use Case
License expiration	Set license start at and end dates & no versions	Reports the software as out-of-compliance when a license expires that has been directly assigned to a computer in the authorization or license key model.	Same as authorization and license key pairs without the version selected.
	Set license start at and end dates & version selected	Reports the software as out-of-compliance when it is installed on any computers and the license is expired.	Track licenses that expire using any method.

#### **Configuring the License settings**

The M300 uses the License Count model to calculate whether the installed instances of the software exceeds the license count. Optionally, if you also enter the start and end dates of the license, the M300 alerts when the software license has expired. If the expiration dates are null, then the license never expires.

Use the other license compliance models for reporting.



#### **Configuring the Compliance model**

Set the method of tracking that you want to perform on this asset.

The M300 uses one of these licensing models to evaluate software compliance:

Counting Model use this model to track how many licenses are installed versus purchased; this model requires an additional setup where you must manually add the software versions when new software upgrades are added. This model works best after the Agent is installed onto the computers on the network and the computers are configured to report the specific software versions installed on each one. Whenever the M300 identifies new software versions, it assumes that the software is using a license and updates the license compliance information automatically. The Counting Model is not as accurate as the Authorization Model or License Key

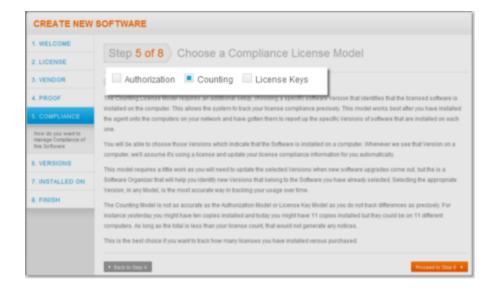
Model as you do not track differences as precisely. For instance yesterday you might have ten copies installed and today you might have 11 copies installed but they could be on 11 different computers. As long as the total is less than your license count, the M300 will not generate any notices.

**Authorization Model** use this model to manually track your licenses by entering the total number of licenses that you own and select which computers are authorized for the software. It's a simple way to record and report on which computers should have which software. If you already have a spreadsheet of the software inventory assigned to specific computers, this is the fastest way to enter that information.

License Key Model use this model to assign a specific license key to a specific computer. This model requires the most manual input and record keeping as the system does not collect license keys from the individual computers. The license keys are expected to be unique within a software, so you cannot enter the same key on two separate licenses. Also, you cannot assign the same key to multiple computers. You can assign versions to the software, and notices will be generated if the software is installed on computers without a license. This model is similar to the Authorization model because of its accurate reporting capability; this is the best choice when you need to track specific license keys on specific computers.



**Note:** If you select License Keys, a text box appears where you can enter one key per line. The number of keys is limited to the amount you entered in the License Count field.



#### **Configuring the Version settings**

Versions allow the M300 to find software that Agents reported as installed on computers in your network.

The Version page opens with a default search for the **Software License Name** field that you entered or with the search criteria you entered. Version searches return software titles from the Inventory reported by the Agents. You can only set the version for software that is installed on a computer with an Agent that has already checked in.



The **Version** search automatically groups software with similar titles and different version numbers, for example if you enter Word, the M300 returns all versions of Microsoft Word that are installed. You can only select an entire group in the Software wizard. Click the group to select it. Selected groups are highlighted.



**Note:** To remove a version, edit the version settings after you save the asset.

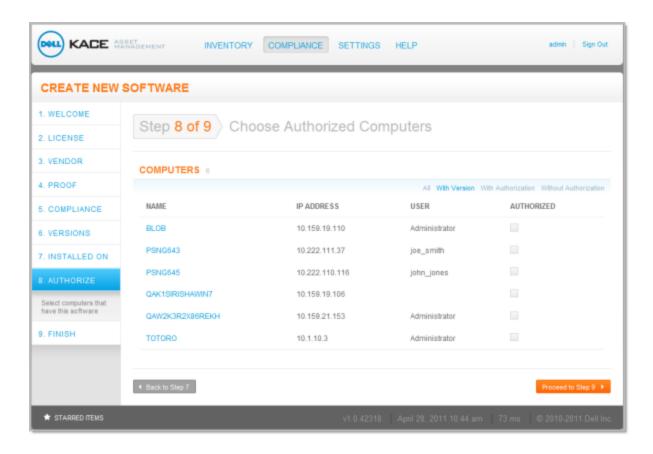
The M300 uses the Version group that you selected to identify which computers have the software installed. The Version group also allows the M300 to determine if the software ever gets uninstalled from the computers and when the software is installed on other computers.

#### **Authorizing computers**

Displays when configuring an asset that uses the authorization compliance model. By default, the list of computers is filtered using **With Version**, that is, only the computers that have the software already installed are displayed. To change the filter and display other computers, click **All**, **With Authorization**, or **Without Authorization**.



**Note:** When you modify an existing managed software asset, the compliance status is not updated; it updates approximately every thirty minutes.

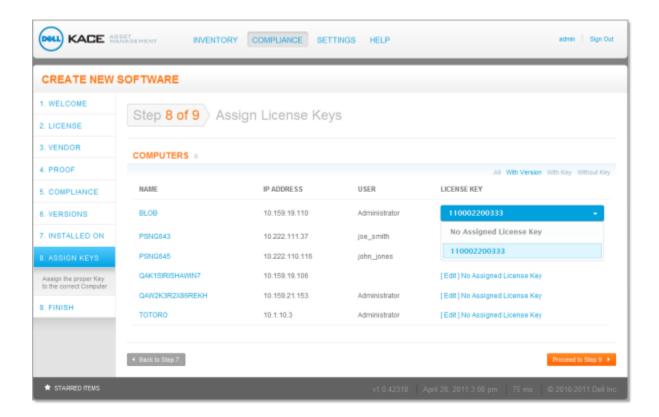


#### Assigning license keys to computers

Displays when configuring an asset that uses the license key compliance model. By default, the list of computers is filtered using *With Version*, that is, only the computers that have the software installed are displayed. To change the filter and display other computers, click **All, With key,** or **Without Key**.



**Note:** When you modify an existing managed software asset, the compliance status is not updated immediately; it updates approximately every thirty minutes.



#### Monitoring compliance

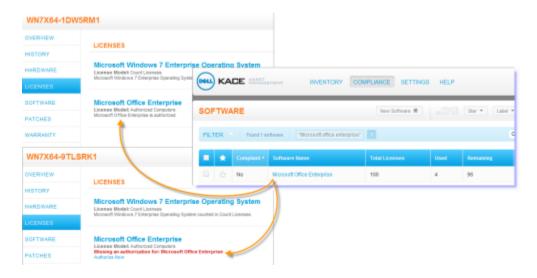
Computers that had the asset installed the last time the Agent checked in appear under **Software** > **Installed On** and a license appears on the computer's **Inventory** > **Licenses** list. The M300 simplifies identifying newly installed software using its search mechanism. When you search, the table displays managed software assets as active links and un-managed software assets as inactive links. Also, it simplifies adding or removing software versions using its Versions feature .

**Installed On** lists all the computers that the M300 detected using the **Version** setting. And based on your compliance license model, the M300 compares it against the current computer Inventory to determine whether the software is in- or out-of-compliance (**Compliance** > **Software**, **Compliant** is Yes/No). Each time an Agent checks in, the M300 checks for the software and re-evaluates all compliance factors using the new information approximately every thirty minutes.



In the computer's Inventory details under **Licenses**, a license tag is displayed (if you set a version). From **Licenses**, you can see all the managed software assets installed on that computer.

The following shows a managed asset for Microsoft Office Enterprise installed on an authorized and on an unauthorized computer. The asset is not compliant because WN7X64-TLSRK1 has the software installed.





**Note:** A license only displays if you set the software version in the managed software asset. It does not display for manually tracked license-key pairs or manually tracked authorized computers.

#### What happens when an asset is out-of-compliance?

Whenever software that is installed on a computer becomes out-of-compliance or the license expires on the software that you are manually tracking, a notification is posted on **Compliance > Software** list page > **Software** detail > **Agent**. The Compliant status of the Software item changes from **Yes** to **No**.

The following shows an example notification when there are more software instances than licenses.

#### A computer is missing an Authorization for installed software

6 minutes, 56 seconds ago | Tags: compliance authorization WN7X64-9TLSRK1 Microsoft Office Enterprise

DISMISS THIS NOTICE

DETAILS -

The Computer WN7X64-9TLSRK1 has the Software Microsoft Office Enterprise installed but does not have an Authorization for it.

Review notifications and dismiss them as soon as the issue is remediated. If remediation, such as removing the software from the computer is required, the managed software asset is reported as out-of-compliance until the next time the computer's agent checks in.



**Note:** You can either wait for the next agent check interval or force an update of the computer from the **Inventory** page if the computer has an active connection.

#### **Generating a Compliance Report**

The M300 allows you to export managed software asset information to a Microsoft Excel Worksheet. The M300 only exports operating system records with one or more licenses and records that you manually created.

- 1. Click Compliance.
- 2. Select the checkbox next to the software that you want to export.



**Note:** Selecting no records exports everything.

3. Click Export.

When the file is ready, a prompt is displayed.

4. Click **Download Export**.

The file open dialog displays, you can save the file or open it with Excel.

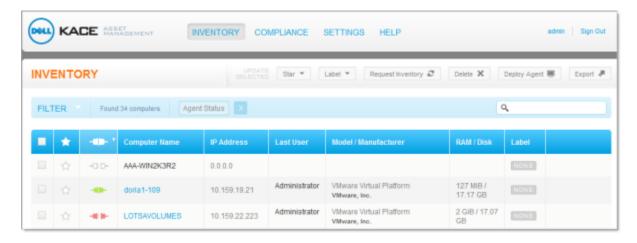
## **Tracking Inventory**

The M300 tracks the state of the computers in your network, warranty information you supply, and automatically downloads and tracks Dell computer warranty information. The M300 posts notifications, which you can also receive using the RSS feed feature.

#### **Overview of Inventory**

The **Inventory** page shows your network inventory, including the computers on your network with Agents and those discovered by a network scan from the Deployment Server. You can access the detailed information provided by Agents for each computer by clicking the computer name.

The following screens shows the three connection types in the Inventory list, white, green, and red:



The Inventory table provides the following information:

Column	Values	Description
Agent Status	White Connector	Discovered computer, which is a computer that does not have an Agent installed.
	Red Connector	Computer with an Agent that is not connected to the appliance.
	Green Connector	Computer with an Agent that is connected to the appliance.
Computer Name	Active Link	Computer with an Agent that has detailed information such as hardware specifics and installed software.
IP Address	dotted quad IP address	The IP address of the computer the last time the Agent checked in.
Last User	User Name	Name of the user who was logged into the computer the last time the Agent checked in.
Model/Manufacturer	Model followed by Company Name	The type of computer and name of the company that manufactured the computer.
RAM/Disk	RAM size and Total Disk space	The RAM size and total disk space of the computer.
Label	string	A label you created and applied to filter the Inventory list.

#### Filtering your inventory

The Filter option allows you to sort the Inventory.

- 1. Click Inventory.
- 2. Expand Filter.
- 3. Click the type of information you want to sort by, and select a filter. The list automatically adjusts based on the criteria you selected.

The list shows only the computers that match your filter criteria.

#### Forcing computer check-ins

When you force an Agent check-in, the Agent uploads information about the computer (if connected).

- 1. Click **Inventory**.
- 2. Select the computers that you want to check in.



**Note:** To display a list of computers that are connected, click **Filter** > **Agent Status** > **Connected**.

3. Click **Request Inventory**.

The computer inventory is uploaded.

The M300 evaluates the software and hardware information after the Agent uploads it.

#### Tracking changes to computer states

The M300 posts a notification on the **Dashboard** and on the computer's **Inventory >Details** page when changes to the computers occur such as the hard drive of a computer is close to reaching its capacity.

The M300 automatically tracks the following changes to the computer state:

Notice	Description
Computer's total RAM has changed	The RAM of a computer either increased or decreased since the last check in.
Computer's Operating System changed	The OS of the computer is different from the last check in.
Computer's Processor has changed	The processor changed since the last check in.
Computer disk change	The total disk space of the computer changed since the last check in.
The records about "machine name" were deleted	The computer name was changed or removed since the last check in.
Computers have a Hard Drive with very little free space	The computer has 20% of disk space or less.
New computer connected	A new computer was discovered on the network.
New Software versions installed or checked in	A computer has new software installed since the last check in.

#### **Managing warranties**

You can add warranty information to the computer record. The M300 tracks the begin and end dates of the warranty and automatically notifies you when the warranty expires.

Notification	Description
Computer warranties have expired	Manually entered warranties expired.

#### Tracking Dell computer warranties automatically

The M300 automatically tracks warranties of Dell computers. When an Agent on a Dell computer first checks in, the warranty information for that computer is downloaded from Dell and appears on the computer's Inventory details Dell warranty page.

Notification	Description
Dell warranties have expired	Automatically downloaded warranties for Dell Computers expired.

#### **Generating an Inventory Report**

You can export the computer records for computers in your network that have Agents.

- 1. Click **Inventory**.
- 2. Filter the computer list or search for the computers you want to export.
- 3. Select the computers. If no computers are selected, all the Inventory with Agents will be exported.
- Click Export.
   When the file is ready, a prompt is displayed.
- 5. Click **Download Export**.

The file open dialog displays, you can save the file or open it with Excel.

Information from the M300 is now available for your reports.