Getting Started with LANrev

macOS Version

HEAT software

www.heatsoftware.com

Getting Started with LANrev 7.0 - Documentation Release 4

Getting Started with HEAT LANrev

Introduction

Thank you for choosing LANrev! The LANrev suite is a uniquely seamless multiplatform client management solution for managing all of your macOS and Windows workstations in a single unified console on the platform of your choice. All LANrev components – including the server, admin console, and clients – can be mixed and matched from either platform. You'll find that there are often multiple ways to accomplish the same task within LANrev so it's up to you to decide which one fits into your workflows and works best in your computing environment.

This guide is by no means comprehensive but is meant to help you quickly get up and running with LANrev in the shortest possible amount of time. It does not explain nor show you how to use some of the more advanced and subtle features of the suite. For more information or help with LANrev, the following resources are available:

- The built-in context sensitive help. This is accessible via the **Help** menu.
- The complete LANrev user guides. The macOS user guide PDF can be found at the root level of the distribution DMG disk image. The Windows user guide can be accessed from the LANrev program group in the Windows Start menu.
- The LANrev support forums at community.heatsoftware.com/ community/products/heat-unified-endpoint-management.
- The LANrev tech notes at http://support.heatsoftware.com.
- LANrev technical support at www.heatsoftware.com/support.

Minimum system requirements

Server:

- macOS 10.6 or up
- Windows Vista or Server 2003 or above
  On Windows Server 2016, PowerShell 2.0 or above is required.

Admin:

- macOS 10.10 or up
- Windows Vista or Server 2003 or above

Client:

- macOS 10.5 or up
  Mac OS X 10.4–10.4.11 support is available via Absolute Manage Agent version 6.7.1
  Mac OS X 10.3.9 support is available via Absolute Manage Agent version 6.1.5

Mac OS X 10.3–10.3.8 support is available via LANrev Agent version 4.5.x
Mac OS X 10.2 support is available via LANrev Agent version 4.0.4

- Windows XP or up (including Windows Server 2003 and up)
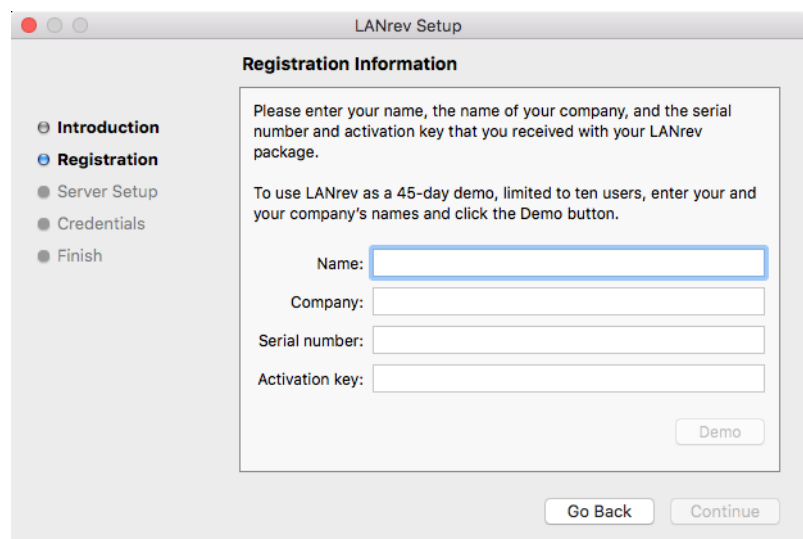
Installing LANrev Server

Installing LANrev Server is a very simple process. On a Mac, open LANrev Server.pkg; on a PC, open setup.exe for LANrev Server, accept the license agreement, and click **Next** or **Continue** through the rest of the prompts to complete the installation. You will be asked to authenticate with admin user credentials required to perform the installation.

Installing the LANrev admin console and activating LANrev
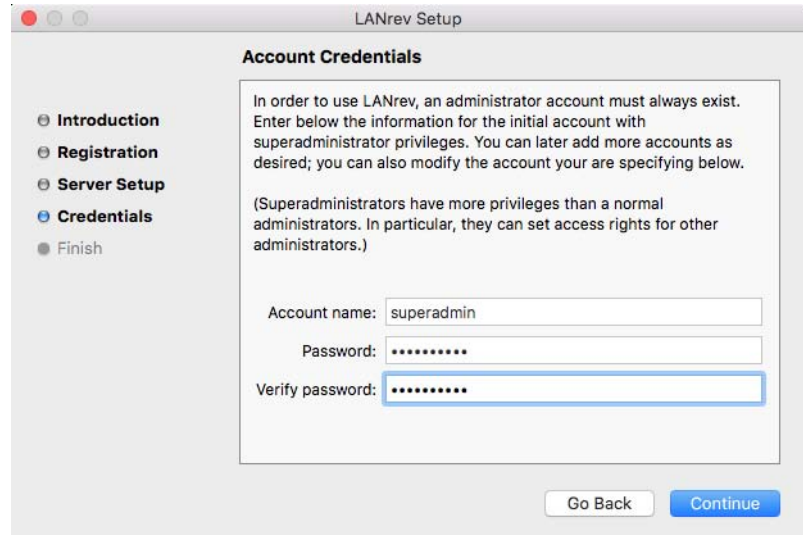
Upon first launch of the LANrev admin console, you are required to register your LANrev installation and create a default superadministrator account. Store the information for this account in a safe place. You should create a separate admin account for everyday use instead of using the default superadministrator account.

1. Copy the LANrev Admin application to the Applications folder. Launch the admin console. When prompted, enter the IP address or DNS name of your LANrev server (do not enter "localhost", "127.0.0.1", or "::1", even if the admin console is installed on the same computer as the server), leave the **Name** and **Password** fields blank, and click **Login**.

2. Click **Next** or **Continue** through the rest of the prompts until you reach the registration screen.

3. In the registration dialog, enter your registration information. If you do not have any, complete the **Name** and **Company** fields and click the **Demo** button for a 45-day 10-seat evaluation. Then click **Next** or **Continue** until you reach the administrator setup screen.

4. Enter the username and password you want to use for the default superadministrator account. Click **Continue** and then **Setup**.

Logging into the admin console for the first time

Launch the LANrev Admin application. At the authentication dialog, enter the IP address or DNS name of your server and the credentials for the default superadministrator account you created previously.

Exporting an SSL certificate for the server

Setting up a LANrev installation requires you to specify an SSL certificate in several places to allow the system to authenticate the server. Export this certificate now:

1. In LANrev Admin, choose **Window** > **Server Center**.

   The **Server Center** window is displayed.

2. In the sidebar at the left of the window, click **Server** > **Server Settings**.

   The server settings are displayed in the main part of the window.

3. Click the **Save Certificate** button at the bottom right of the window.

   A standard Save dialog is displayed.

4. Save the certificate in a convenient location.

You can name it as desired, as long as you keep the ".pem" filename extension.

Configuring LANrev admin console preferences

These settings are separate for each user basis and are stored in the user profiles. Editing these settings helps optimize the performance of your admin console.

1. Choose **LANrev Admin** > **Preferences**.

2. In the **General** tab, check the **Try waking up target computer first** option to activate wake-on-LAN globally. This will make it easier to manage laptops or desktops that have a power management policy in place that puts them to sleep.
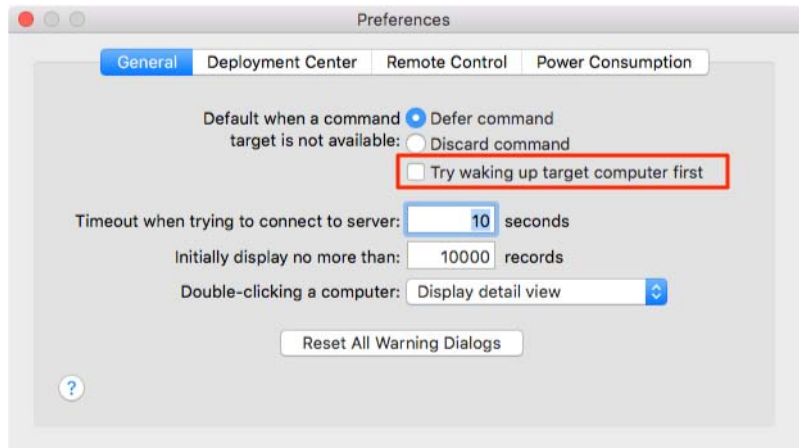
3. In the **Deployment Center** tab enter the default SSH credentials for the Agent Deployment Center to use to push install the LANrev clients.

4. To specify a software distribution server that is assigned to the agents when they are deployed:

   - Click the **Set** button for the SD Server.
     The **Server Properties** dialog is displayed.
   - Enter the DNS name or IP address of your LANrev server in the **Server address** field.
   - Click the **Set** button.
     A standard Open dialog is displayed.
   - Select the SSL certificate that you have previously exported (see "Logging into the admin console for the first time", above) and click **Open**.
   - Click **OK**.

   This step is optional; you can skip it if you do not plan to use LANrev to distribute software.

5. To specify an license monitoring server that is assigned to the agents when they are deployed, repeat the process in step 4, except that you begin by clicking the **Set** button for the LM server.

   This step is optional; you can skip it if you do not plan to use LANrev to monitor software licenses.

6. To specify an inventory server that is assigned to the agents when they are deployed:

   - Click the **+** button in the lower left of the window. The **Inventory Server Properties** dialog is displayed.
   - Enter the DNS name or IP address of your LANrev server in the **Server address** field.
   - Click the **Set** button. A standard Open dialog is displayed.
   - Select the SSL certificate that you have previously exported and click **Open**.
   - Optionally, check and uncheck options in the **Send inventory** section to specify the types of information that the server is to collect from the agents.
   - Click **OK**.

7. If you have a very large Windows domain or Active Directory environment, disable the **Auto-scan when window opens** option for the Active Directory protocol. This will speed up the launching of the admin console but it means that you will have to manually request a scan of these zones in the Agent Deployment Center.

8. In the **Remote Control** tab, move your preferred remote control applications to the top of the list and enter default connection credentials where possible. Note that the application has to already exist on the admin console and the target computers.

9. If you want to deploy the Agent using a local installer, click the **Export Installer Package** button in the **Deployment Center** tab and save the package to a convenient location.

   You can skip this step if you will deploy the Agent using a different method. Deployment options are discussed in "Installing LANrev Agent" on page 10.

10. Close the Preferences window.

Configuring the LANrev Server preferences

These settings affect the server and are stored on the server itself. Of particular importance are the database maintenance and backup settings for disaster recovery.

1. Choose **Window** > **Server Center**.

2. Click **Server Setup** in the category bar at the top of the **Server Center** window and click **Server** > **Server Settings** in the left-hand sidebar.

3. In the **General** tab enable the database maintenance and backup.
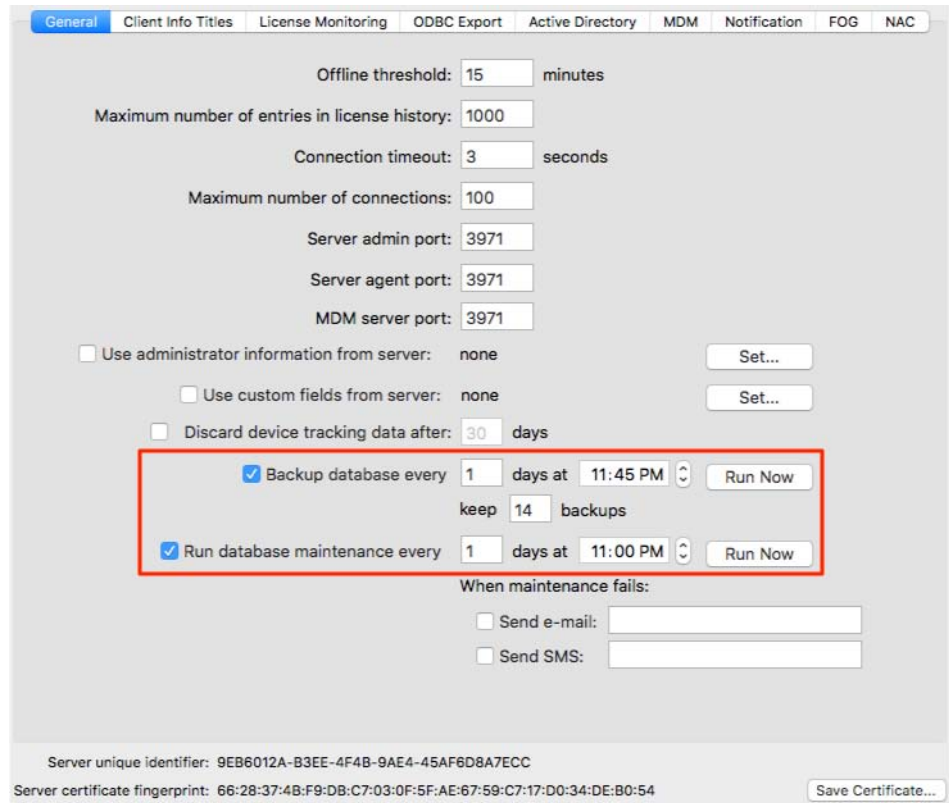
Consult the LANrev Disaster Recovery Guide for best practices on configuring these settings. We recommend that you run the database maintenance every day, back up the database every three days, and keep seven backups. These values can be adjusted depending on the amount of free disk space available and the size of your LANrev databases.

4. In the **Client Info Titles** tab enter the new names to customize these titles. They are meant to be used for things that LANrev cannot gather automatically about a client computer such as asset tags and building locations. These fields can be filled in locally on each managed computer via the LANrev Agent preference pane or

control panel, or remotely from the admin console via the **Agent Settings** command.

| General | Client Info Titles | License Monitoring | ODBC Export | Active Directory | MDM | Notification | FOG | NAC |

Client information field names:

Client Information 1
Client Information 2
Client Information 3
Client Information 4
Client Information 5
Client Information 6
Client Information 7
Client Information 8
Client Information 9
Client Information 10
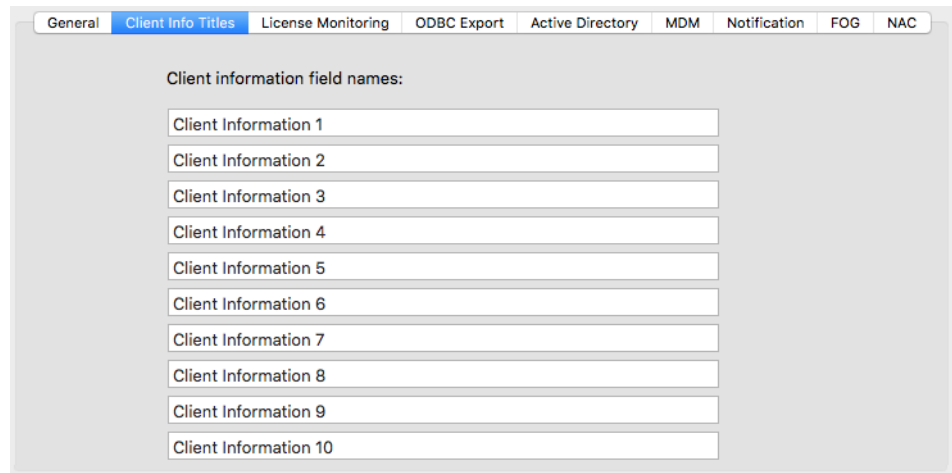
5. If you plan on basing your LANrev admin accounts on Active Directory (AD) user accounts, switch to the **Active Directory** tab and enter the name of any user groups from which you want LANrev to be able to pull user accounts for this purpose. Your LANrev server must be bound for AD for this to work. Click the plus sign and enter just the name of the desired AD user group itself.
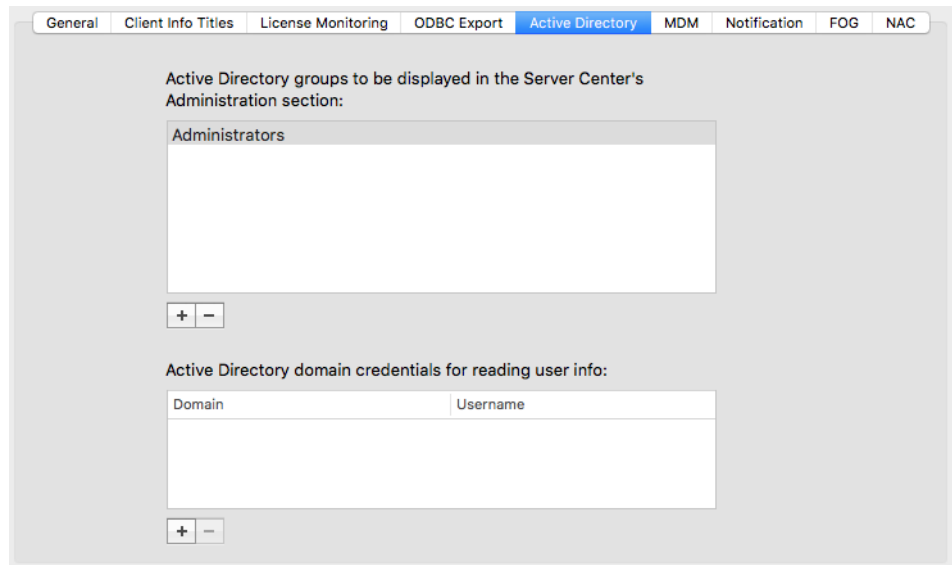
| General | Client Info Titles | License Monitoring | ODBC Export | Active Directory | MDM | Notification | FOG | NAC |

Active Directory groups to be displayed in the Server Center's Administration section:

Administrators

[+] [−]

Active Directory domain credentials for reading user info:

| Domain | Username |

[+] [−]

Setting up an admin hierarchy

Sufficient care should be taken in determining who on your IT staff has access to which computers and what they can do on them. LANrev's granular role-based administration model allows you to do just that. The following instructions will show you how to add a regular superadministrator account for yourself for everyday usage.

1. Choose **Window** > **Server Center**.

2. Click **Administrators** in the category bar at the top of the **Server Center** window and click **Administration** > **Administrators** in the left-hand sidebar.

3. Right-click **Administrators** and choose **Administrator Setup** > **New Administrator** from the context menu.

4. Fill in the **Name**, **Password**, and **Verify** fields, enable the **Superadministrator** and **Can manage all computers** options, and click **OK**.

5. To create a LANrev admin account based on an Active Directory account, click **Administration** > **Active Directory** in the left-hand sidebar and then drag an Active Directory user account from the right-hand pane onto the **Administrators** entry in the left-hand sidebar.

6. Quit the LANrev admin console and log back in using your new credentials.

Discovering client computers

LANrev's Agent Deployment Center (ADC) offers multiple ways of discovering client computers for performing an initial push installation of the LANrev client software.

Client computers must meet certain requirements for push installations to work:

- On macOS, SSH (remote login) must be enabled.
- On Windows:
    - File and Printer Sharing must be enabled.
    - Simple file sharing must be disabled.
    - User Account Control must be disabled.
- On Linux, SSH must be enabled.

These conditions apply only to push-installing LANrev Agent, not normal operation. If they cannot be met, there are other installation methods (using login scripts or group policies on Windows, manual installation by locally executing the installer, using an MDM server) that are described in the LANrev User Guide.

NOTE   An admin console can only push-install the LANrev client to targets using a similar authentication system. So a Mac admin console can only push install LAnrev Agent to other Macs or Linux computers, and a PC admin console can only push-install LANrev agent to other PCs. However, no such issues exist for LANrev Server, so any server can always serve any platform.

1. Choose **Window** > **Agent Deployment Center**.

2. To discover clients:

- You do not need to do anything to discover client computers in the Bonjour zone. This typically can only discover clients on the same subnet as your admin console unless your routers have been reconfigured to support Bonjour across subnets.
- To discover client computers via Active Directory, right-click that particular zone and choose **Refresh** from the context menu. This is the most efficient way to discover clients.

The status of each discovered client is indicated by a colored dot, as described below in "Indicators in the Agent Deployment Center window".

3. If you cannot discover clients via one of the methods described in step 2 or if you want the Agent to be installed automatically on computers that are discovered, create and scan a custom zone as described in the following steps.

4. Right-click **Custom Zones** in the Agent Deployment Center window sidebar and choose **New Custom Zone** from the context menu.

   Discovering clients via custom zones has the following benefits:

   - You can specify a different set of credentials for each custom zone.
   - Autodeployment which lets you automatically push install the LANrev client without having to monitor the ADC.

5. Click the plus sign to add additional entries. You can add targets by either IP address, IP address range, or host name.

   If you want to discover a client via host name, choose **Host Name** from the leftmost pop-up menu. To use an IP address range, choose **is in the range** from the second pop-up menu.

6. To discover the devices in a custom zone, expand **Custom Zones** and double-click the desired zone. A gear icon appears next to a custom zone while it is being scanned.

Indicators in the Agent Deployment Center window

The status of each discovered device in the zones in the **Agent Deployment Center** window is indicated by a colored dot:

● Green dot: LANrev Agent is current.

● Yellow dot: LANrev Agent is present but outdated.

● Red dot: No LANrev Agent present; installing an agent is possible.

○ Grey dot: No LANrev Agent present, and no agent can be installed. A common reason is that you are trying to install across platforms (i.e., from the Mac Admin to a Windows client or vice versa), which is not possible with the Agent Deployment Center. Other reasons include:

The device is not a computer, or SSH is disabled on a Mac or Linux client.

Installing LANrev Agent

You can install LANrev Agent in different ways:

- Manual push installation from LANrev.
  We recommend this method for limited evaluations of LANrev.
- Automatic push installation from LANrev.
  We recommend this method for full deployment throughout a network zone.
- Automatic pull installation using an MDM server.
  We recommend this method for large-scale installations and ongoing integration of new devices.
- By executing a local installer.
  We recommend this method only when technical issues interfere with centralized installation using one of the two above methods.

All methods are described below.

Push-installing the client software manually

Custom zone autodeployment scans can repeatedly generate more traffic (many small packets) than your network admins might like. In that case (or for a limited deployment) your best option would be to push install the client software without autodeployment.

1. Make sure that the computers in your network meet the requirements listed in "Discovering client computers", above.

   In particular, you will not be able to push-install onto computers that do not have the proper network access settings.

2. Once LANrev has finished discovering client computers (see "Discovering client computers", above), highlight the ones with a red dot in front of them in the Agent Deployment Center, right-click and choose **Install Agent** from the context menu.

For an explanation of the colored-dot status indicators, see "Indicators in the Agent Deployment Center window".

3. Enter your SSH credentials and click **OK**.

The **SD Server**, **LM Server**, and **Inventory servers** fields should already be populated; if they are not, you may need to set up the preferences, as described in "Configuring LANrev admin console preferences".

4. Check the **Connection Status** and **Deployment Result** columns on the far right of the **Agent Deployment Center** window to monitor the status of the installation. Your agents should appear in the Computers window within a minute or two.

If you installed a non-customized client manually, it may not show up in the **Computers** window but will show up in the Agent Deployment Center with a green dot and an empty **Inventory Server** field. On these clients, you need to specify the servers manually, as described in the following steps.

5. To specify servers manually for clients, select and right-click them, and choose **Set Inventory Server** from the context menu.

The **Inventory Server Properties** dialog opens.

6. To specify an inventory server for the agents:

   - Click the **+** button in the lower left of the window.
     The **Inventory Server Properties** dialog is displayed.
   - Enter the DNS name or IP address of your LANrev server in the **Server address** field.
   - Click the **Set** button.
     A standard Open dialog is displayed.
   - Select the SSL certificate that you have previously exported (see "Exporting an SSL certificate for the server" on page 3) and click **Open**.
   - Optionally, check and uncheck options in the **Send inventory** section to specify the types of information that the server is to collect from the agents.
   - Click **OK**.

7. To specify a software distribution server that is assigned to the agents when they are deployed:

   - Click the **Set** button for the SD Server.
     The **Server Properties** dialog is displayed.
   - Enter the DNS name or IP address of your LANrev server in the **Server address** field.
   - Click the **Set** button.
     A standard Open dialog is displayed.
   - Select the SSL certificate that you have previously exported (see "Logging into the admin console for the first time", above) and click **Open**.
   - Click **OK**.

This step is optional; you can skip it if you do not plan to use LANrev to distribute software.

8. To specify an license monitoring server that is assigned to the agents when they are deployed, repeat the process in step 4, except that you begin by clicking the **Set** button for the LM server.

   This step is optional; you can skip it if you do not plan to use LANrev to monitor software licenses.

9. Click **OK** to assign the specified servers to the selected clients.

   Your agents should appear in the Computers window within a minute or two.

Automatically push-installing the agent

For a full deployment of LANrev Agent, you can automate the installation by activating auto-deployment. This installs the agent on each computer that meets the requirements (see "Discovering client computers" on page 8) and is discovered in one of the custom zones.

Auto-deployment is available only for custom zones. If you have not already done so, set up custom zones as described in "Discovering client computers".

To enable auto-deployment:

1. Make sure that the computers in your network meet the requirements listed in "Discovering client computers" on page 8.

   In particular, you will not be able to push-install onto computers that do not have the proper network access settings.

2. Choose **Window** > **Agent Deployment Center**.

3. In the sidebar, right-click a custom zone and choose **Edit Custom Zone** from the context menu.

   The **Custom Zone** dialog opens.

4. Check the **Repeat scan every** option and enter a time interval.

This is the interval in which LANrev checks the zone for new computers.

5. In the **Auto Deployment** tab, check **Automatically deploy agents** and specify the software distribution, license monitoring, and inventory servers as described in "Push-installing the client software manually", above (step 6 to step 8).

6. Click **OK**.

Deploying the agent using an MDM server

Setting up enrollment of computers through an MDM server, which includes the installation of the agent, requires the installation and setup of additional software.

This process is not covered in this manual; if you are interested in setting it up, it is described in the LANrev User Guide.

Deploying the agent using a local installer

Locally installing LANrev Agent works like any other local software installation. However, to meet the authentication requirements, the installer must first be customized with the address and SSL certificate of the LANrev Server in your network.

To customize the agent installer and deploy the agent:

1. Make sure that you have properly specified the servers for the deployment, as described in "Configuring LANrev admin console preferences" (step 3 to step 7) and exported the installer package (step 9).

2. Execute the installer on each computer on which you want to install an agent.

Configuring the client

You only need to do this if you deployed the default agent instead of a customized one. The customized agent installer will automatically configure these settings for you but it is still a good idea to confirm that they are correct.

To assign the correct server to the clients:

1. Select all your agents in the **Computers** window.

2. Choose **Commands** > **Agent Settings**.

3. In the **General** tab check the **Include in OS patch management** option.
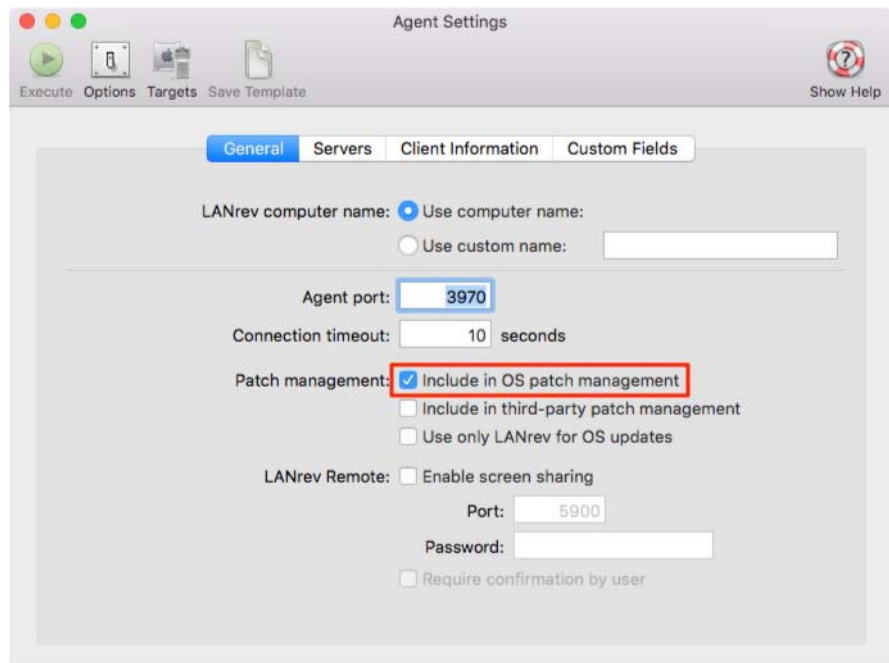
4. In the **Servers** tab's **Software Distribution Server** and **License Monitoring Server** sections, fill in the **Address** fields with the IP address or DNS name of your LANrev server and click the **Set** buttons to select the server certificates.
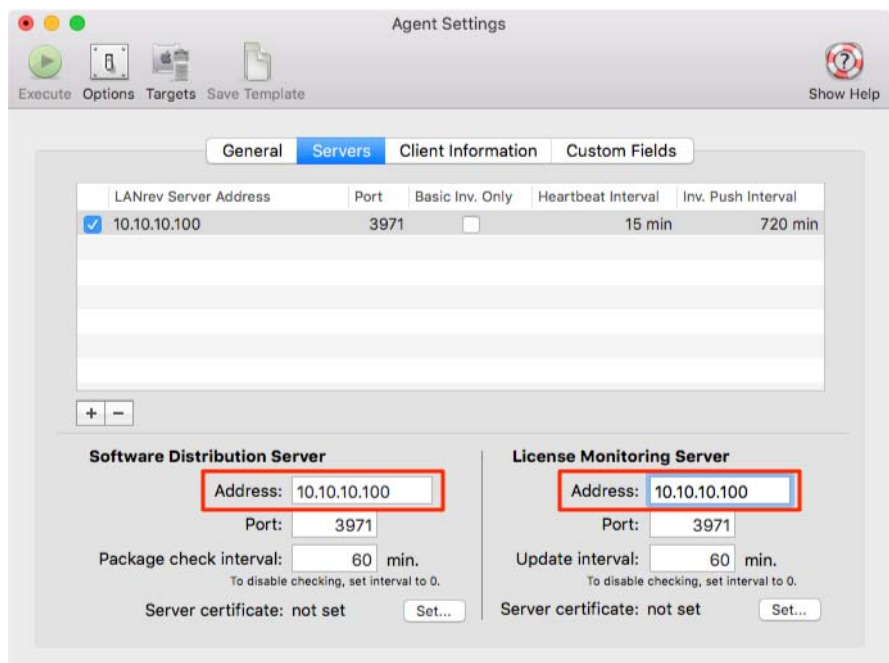
5. Click the **Execute** icon in the upper left corner of the window.

Populating all the optional inventory information for a client if it is not already there

If you preconfigured your agent installers then you might not have to run some of these commands as the optional inventory might already be present.

1. Select all agents in the **Computers** window.

2. Choose **Commands** > **Gather Inventory Information**.

3. Check all options in the window and click the **Execute** icon.

4. Choose **Commands** > **Gather Installed Software**.

5. Check all checkboxes, choose either the **Applications folder** or the **Boot volume** option, and click the **Execute** icon.

You can also force agents to send in optional inventory automatically by specifying the desired options for selected agents in the **Commands** > **Agent Settings** dialog.
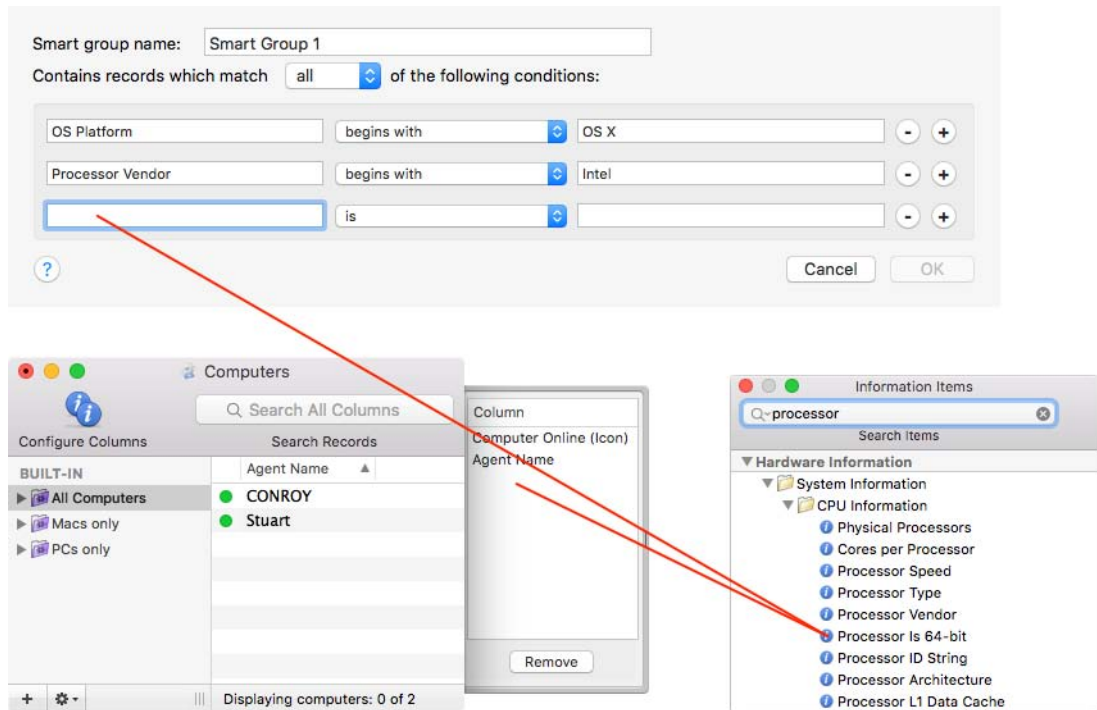
Creating a custom inventory report

Creating an inventory report involves two basic steps:

1. Narrowing down the field to just the client computers you want to include in the report

2. Deciding which inventory items you want to display about them

To create a new standard computer group in the **Computers** window select all the computers you want to include, right-click and choose **Make Group from Selected Computers** from the context menu.

To create a smart computer group, right-click anywhere in the left-hand sidebar of the **Computers** window and choose **New Smart Group** from the context menu. Enter the name of any information items you want to use for selection criteria on the left, choose a comparison operator in the middle, and enter the comparison value on the right. You can get a list of available information items by choosing **Window** > **Information Items**. Copy or drag desired information items into the smart group definition. Alternatively you can also start typing the name

of the desired information item and LANrev will try to autocomplete the name for you. To add more selection criteria click the plus button.

To change which information items are displayed in the custom inventory report, click the **Configure Columns** icon in the upper left corner of the **Computers** window. Information items can be added by copying or dragging them from the Information Items window into the columns drawer. To remove information items select them and click the **Remove** button. To search for an information item in the Information Items window enter a part of its name in the search field at the top and press the Enter key.

Configuring software distribution and patch management

Software distribution setup

These steps only need to be completed once during the initial software distribution setup.

1. Select all agents in the **Computers** window.

2. Choose **Commands** > **Agent Settings**, click the **Servers** tab, and verify that the **Address** field in the **Software Distribution Server** area contains the address of your server.

   If it does not, change it so it does, click the **Set** button and choose the server certificate, and click the **Execute** icon.

3. Choose **Windows** > **Server Center**.

4. Click **Software Distribution** in the category bar at the top of the Server Center window and click **Software Packages** in the left-hand sidebar. No objects should be displayed in the main part of the window.

5. Right-click the **Distribution Points** section and choose **Software Distribution** > **New Distribution Point** from the context menu.

   A distribution point is an agent computer you designate to host packages for software distribution. That means that only computers which appear with a green dot in the **Computers** window can be selected as distribution points.

6. Fill the dialog in as follows:

   - **Server name**: The name by which you will identify the distribution point.
   - **Server address**: The IP address or DNS name of the agent computer which you want to make a distribution point.
   - **Packages root path**: The path of the directory on the chosen agent computer where you want software packages to be stored for deployment. For Windows agents, use the form c:\path\to\folder; for Mac agents, use the /path/to/folder format. The specified directory does not have to exist and will be created automatically by the LANrev Agent on the distribution point computer.
   - **Server type**: Check the **Is master distribution point** option.

7. Click **OK**.

8. Choose **Server** > **Save Distribution and Licensing Info**.

9. Click again the **Software Packages** section in the left-hand sidebar. It should now list two packages named "LANrev Agent (macOS)" and "LANrev Agent (Windows)".

Creating a distribution group

To deploy a software package, you must first create a software package definition for it and then assign it to a distribution group. Agent computers will check in every 60 minutes by default for new assigned software packages, install them, and report the installation status back to the LANrev server.

To create a standard distribution group:

1. Click the **Computer Groups** > **Unassigned Computers** section in the left-hand sidebar.

2. Select the desired computers in the right-hand pane, right-click them, and choose **Make Group from Selected Computers** from the context menu.

To create a smart distribution group:

1. Right-click **Computer Groups** and choose **Computer Groups** > **New Smart Computer Group** from the context menu.

2. Enter the name of any information items you want to use for selection criteria on the left, pick a comparison operator in the middle, and enter the comparison value on the right.

   You can get a list of available information items by going to **Window** > **Information Items**. Copy or drag the desired information item into the smart group definition. Alternatively you can also start typing the name of the desired information item and

press F5 to display a list of information items beginning with the letters you have entered.
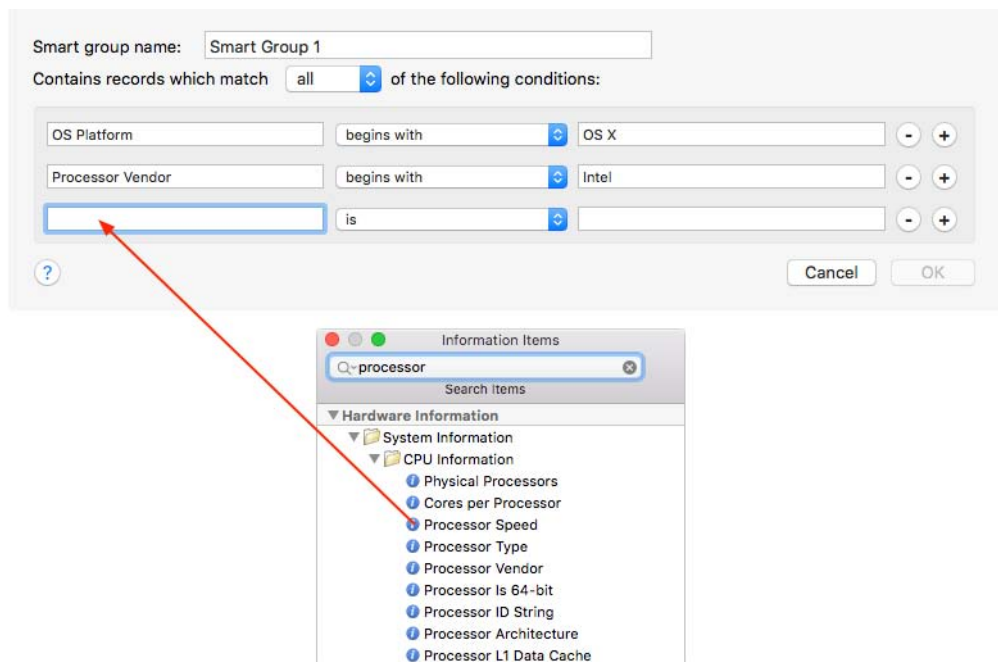
3. To add more selection criteria, click the plus button.

4. Click **OK**.

If you have an existing computer group that you would like to also use for software distribution, you can convert it to a distribution group by dragging it from the **Computers** window to the **Computer Groups** section in the sidebar of the **Server Center** window.

Creating a software package for deployment

macOS software package definitions must be created on an macOS admin console due to Windows not understanding macOS file system resource forks.

1. In the Server Center window, right-click the **Software Distribution** > **Software Packages** section in the left-hand sidebar and choose **Software Distribution** > **New Software Package** from the context menu.

2. In the **Package** tab enter the name for the application you wish to deploy in the **Package Name** field and click the **New Payload** button.
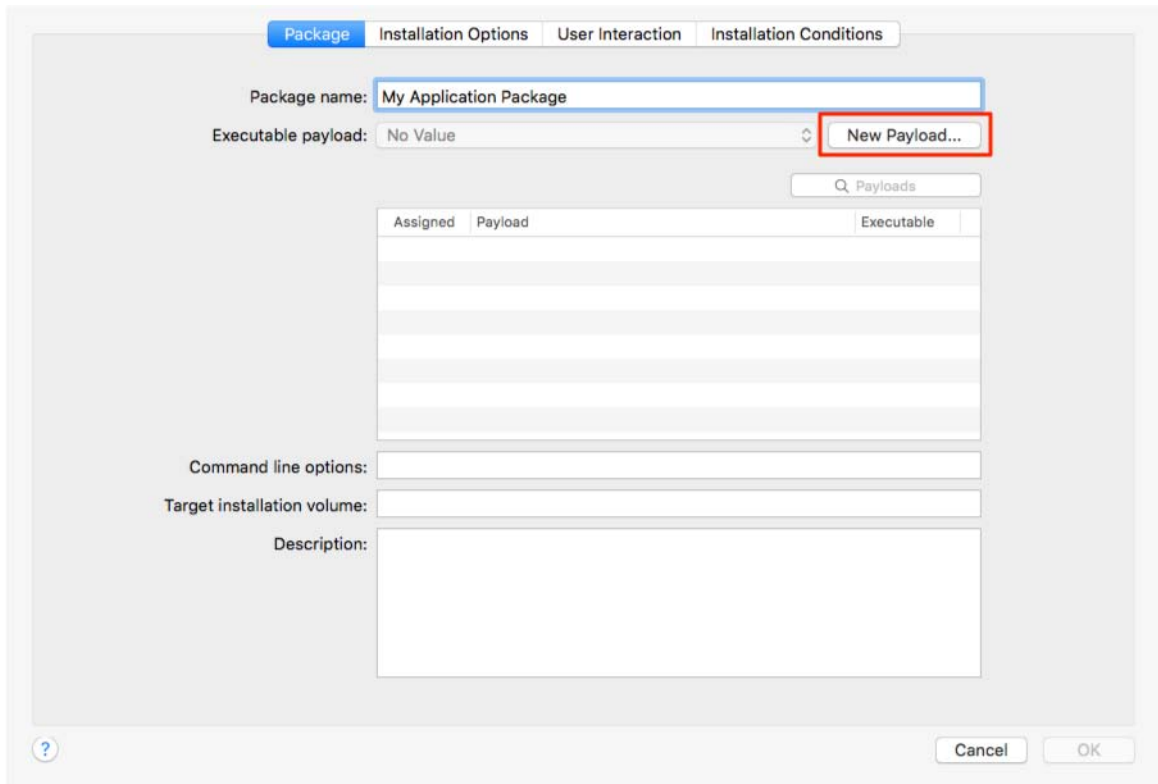
3. In the **Payload** window specify a name for the payload, click the **Select** button, and select the installer file (PKG, VISE, DMG, MSI, MSP, MSU, setup.exe or other installer executable) you wish to deploy.

4. If there are other files included as part of the installation check the **Transfer all files in folder containing selected object** option.

5. Enable the **Selected object is executable or installer package** option and click **OK**.
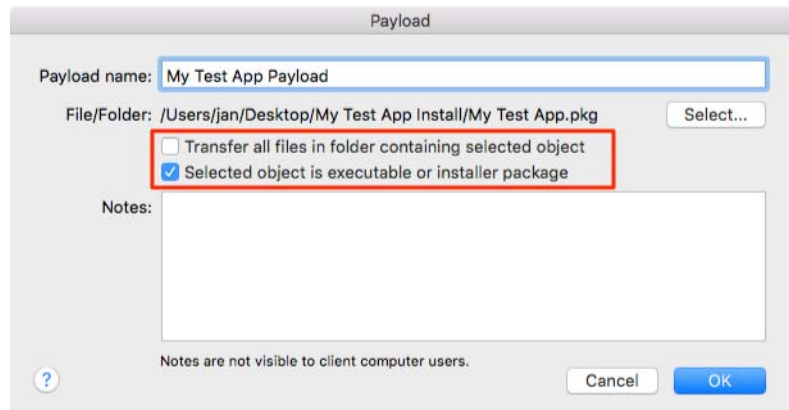
6. Check options as desired in the **Installation Options** tab. For macOS installations, be sure to check **Requires admin privileges** if the installer writes anything to directories outside of the user's home profile (which almost every installer does). For Windows packages, specify the system account user installation context.
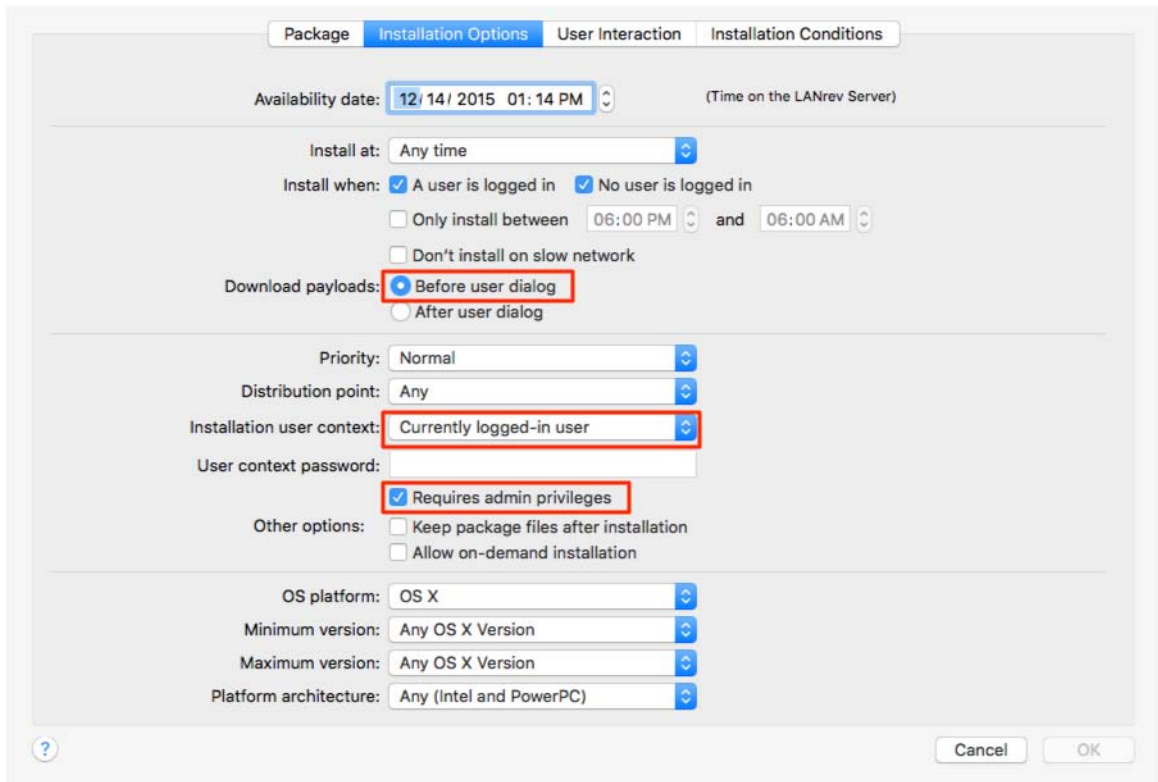
7. If you wish to improve the end user's experience then set **Download payloads** to **Before user dialog** so that the installation can begin immediately once the user has approved it (as opposed to a possibly lengthy software download beginning at that point).

8. In the **User Interaction** tab set whichever options best fit your computer environment. For example, if you want end users to know about software installations, choose the **Inform user before installation** and **Display progress to user** options. If you prefer to deploy software silently, choose **Install without asking** instead.

9. Expand the **Software Distribution** > **Software Packages** section in the left-hand sidebar and select your new package so its details are displayed in the right-hand pane. You might have to increase the size of the **Server Center** window for all the details to be visible.

10. In the **Groups package is assigned to** area in the lower left corner of the pane, check your new distribution group to assign your package to it. Alternatively you could also drag the package on top of the distribution group within the **Computer Groups** section of the sidebar to assign it.

11. Choose **Server** > **Save Distribution and Licensing Info**.

12. To trigger a software distribution now instead of waiting 60 minutes for it to happen automatically select any agent computer, choose **Commands** > **Run Software Distribution Check**, and click the **Execute** icon.

13. If the software distribution job never shows up in the **Software Distribution** > **Installation Status** > **General Log** section of the Server Center window, search the support site for article 20696 and see whether you may have missed a step in setting it up.

Configuring patch management

Agent computers must be enrolled in patch management for:

- LANrev to be able to generate missing OS patch packages for them.
- LANrev to be able to deploy assigned patch packages to them

Agent computers will only check for, generate, and install missing OS patches once every 24 hours. If you want to force this to happen now you must send them a **Run Software Distribution Check** command.

Collecting information on missing patches

To collect information about missing patches when agents are not set up to send this information automatically:

1. Select all agents in the **Computers** window.

2. Choose **Commands** > **Gather Installed Software**.

3. Check only the **Scan for missing operating system patches** option and click the **Execute** icon.

4. Choose **Window** > **Missing Operating System Patches** and check the four built-in categories. If no computers are listed here, all your agent computers are either up to date or do not have network access to an update server.

## Generating missing OS patches

To generate missing OS patches:

1. Choose **Window** > **Server Center**. Click **Software Distribution** in the category bar at the top of the **Server Center** window and click **Software Distribution** > **Mac OS Patches**> **Unconfirmed Patches** or **Software Distribution** > **Windows Patches** > **Unconfirmed Patches** in the left-hand sidebar.

2. If the categories are empty, select all agents and choose **Commands** > **Agent Settings**. In the **General** tab, verify that **Include in patch management** is checked for these agent computers.

3. If that is correct then select the agent computers in the **Computers** window and choose **Commands** > **Run Software**

Distribution Check. Return to the **Unconfirmed Patches** section in the **Server Center** window in a few minutes and some patches should be listed there.

4. If your agents are missing patches but they still don't show up in **Unconfirmed Patches**, search the support site for article 20696 and see whether you may have missed a step in setting it up.

To approve a patch, simply assign it to a distribution group just like any other software package. OS patches will also appear in installation status reports just like custom software packages. In general it is easiest to assign an approved patch to the All Macs or All PCs default smart groups. LANrev Agent is intelligent enough to only install an assigned patch if the target actually needs it. If an agent determines that the target is not missing an assigned patch or the end user has already installed it manually it will ignore the assigned patch.
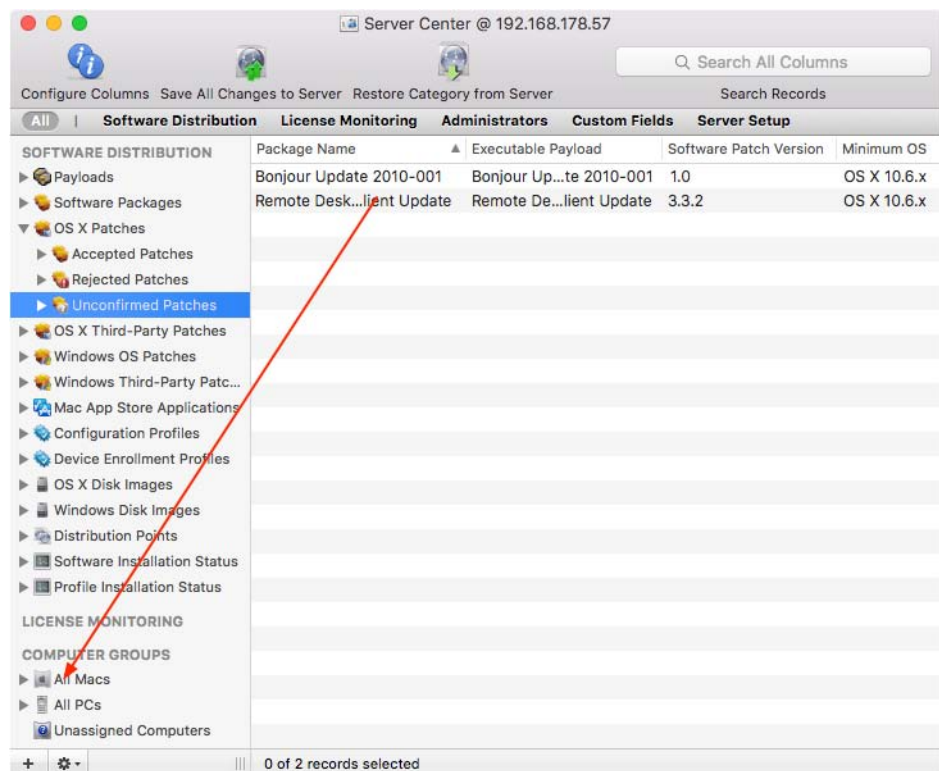
Configuring license monitoring

Software audits with the **Gather Installed Software** command can tell you how many copies of applications are installed on client computers but they cannot reconcile your licensing for you to tell you if are within compliance or not. Software auditing information, which includes statistics reports and reports about which computers have which applications installed, can be found by choosing **Window** > **Installed Software**.

The License Monitoring Center allows you to track specific licensed applications (either by installed copies or by floating licenses) and

remain compliant with your existing software license agreements. It also allows you to track your purchasing information for these specific applications. The "prohibited" license type can optionally be set to terminate and delete applications you do not want end users to be able to launch or install.

1. Select all agents in the **Computers** window.

2. Choose **Commands** > **Agent Settings**, click the **Servers** tab, and verify that the **Address** field in the **License Monitoring Server** area contains the address of your server.

   If it does not, change it so it does, click the **Set** button and choose the server certificate, and click the **Execute** icon.

3. Choose **Window** > **Server Center**.

4. Click **License Monitoring** in the category bar at the top of the Server Center window, right-click the **License Specifications** section in the left-hand sidebar, and choose **License Monitoring** > **New License Specification** from the context menu.

5. Enter a name for the new specification and choose the file type by which you want to identify the software. Add any desired sub-criteria to more precisely identify the software.

6. Check **Meter application usage** and **Terminate launched application if licenses exceeded**.

7. Enter a license count in **Licenses owned** and choose a license type. If you want to enter purchase tracking information leave this field blank and click the **Purchase Tracking** tab.

8. Click the **+** button to add a new purchase entry.

9. Fill in the **Purchase**, **Vendor**, **Maintenance**, and **Notes** subtabs as needed in the bottom half of the window and click **OK** when you are done.
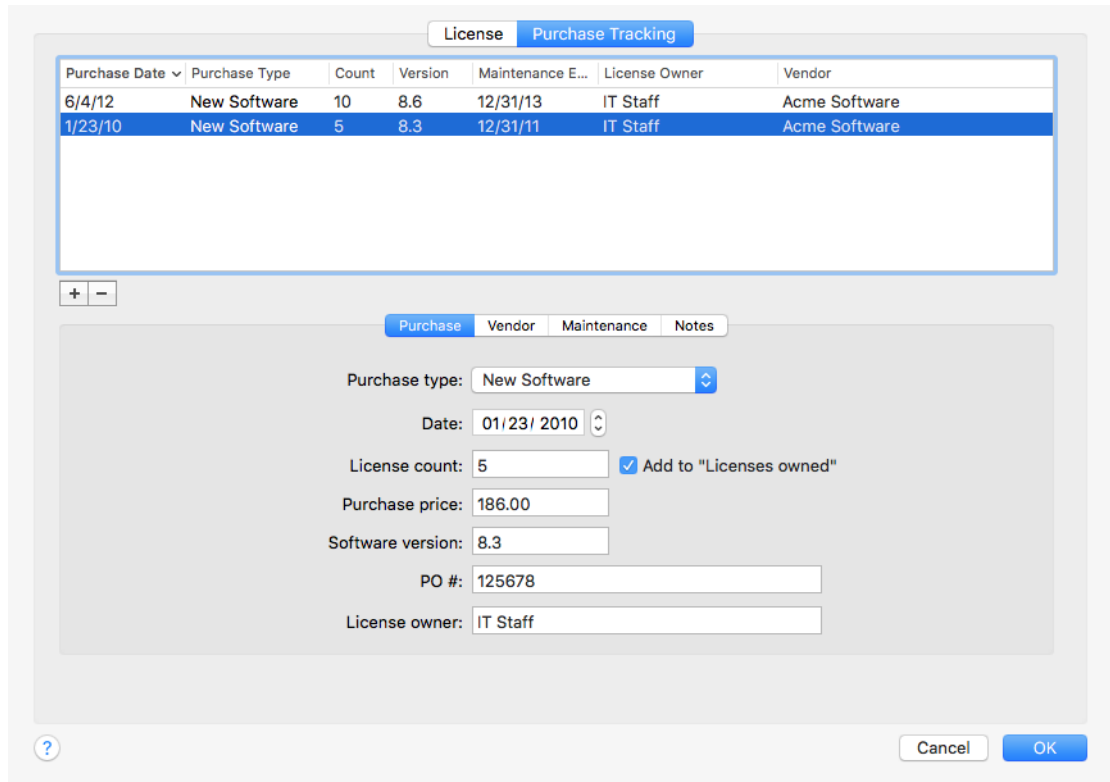
10. Expand the **License Monitoring** > **License Specifications** section in the left-hand sidebar and select your new license specification so its details are displayed in the right-hand pane.

11. In the **Groups specification is assigned to** area in the lower left corner of the pane, check your new distribution group to assign your license specification to it. Alternatively you could also drag the license specification on top of the distribution group within the **Computer Groups** section of the sidebar to assign it.

12. Choose **Server** > **Save Distribution and Licensing Info**.

13. To trigger a license monitoring scan now instead of waiting 60 minutes for it to happen automatically, select an agent computer anywhere, choose **Commands** > **Run License Monitoring**, and click the **Execute** icon.

14. Check the **Fully compliant** and **Licenses exceeded** reports in the **License Monitoring** > **Reports** section in the left-hand sidebar to see how many of your agents registered as having the application

present as defined in your license specifications. To find out which agents have the application installed check the **Software usage** report.