Setting Up Support for iOS Mobile Device Management

Introduction

For its iOS devices – iPhone, iPad, iPod touch – Apple provides mobile device management (MDM) capabilities, intended in particular for enterprise deployment.

LANrev supports these capabilities. Integrating them with LANrev requires some initial setup, as described in this document.

Requirements

- LANrev Server 5.3 or later
- A computer that can be reached from the Internet by HTTP connections
  This can be a computer on which LANrev Server is running or a separate computer.
- An SSL certificate for the computer on which you will be installing the MDM server. The certificate cannot be self-signed.
  See step 2 of "Preparation", below, for details.
- Membership in Apple's iPhone Developer Enterprise Program
- Apple's Configurator Utility
  This utility is also available (for Windows and macOS) from Apple's support page.
- For installing the MDM server on Windows, you need a computer with:
  - Windows Server 2003 or 2008
  - Microsoft Internet Information Services (IIS) 6.0
  - ASP.NET 2.0
  - .NET 3.5
- For installing the MDM server on macOS, you need the Property List Editor utility or Xcode. (Property List Editor used to be a separate utility but is now part of Xcode, which is available for free from the Mac App Store.)

Installation and setup

There are four phases to integrating the iOS mobile device management with LANrev:

- Preparation
- Installing the MDM server
- Configuring the MDM server
- Enrolling iOS devices

Preparation

1. Create a push notification certificate:

- Open the iPhone Provision Portal.
  You can access this portal as a member of the iPhone Developer Enterprise Program.
- Request a new AppID.
  Use any description you like. The bundle identifier must begin with "com.apple.mgmt". As the individual part, we recommend that you use "com.mycompany.mdm", when "mycompany.com" is your company's Internet domain. Thus, the recommended full identifier would be "com.apple.mgmt.com.mycompany.mdm".
  Follow Apple's instructions for requesting and downloading a production push SSL certificate and convert the certificate to p12 format.
- Export the certificate and key, saving them as "MDMPushCertificate.p12".
  Do not specify a password.

2. Obtain an SSL/TLS certificate for the computer on which you will be installing the MDM server.

   The certificate must come from a root certification authority (CA) or signed by a CA with authorization from a root CA. In the latter case, you also need the signer certificate of the CA.

   The certificate must either be a wildcard certificate for the domain under which the computer on which the MDM server will be installed can be reached from the Internet (e.g., *.mycompany.com) or specific to the server's DNS name.

3. Set up your firewall to allow connections from your LANrev server to gateway.push.apple.com on port 2195.

Continue with "Installing the MDM server", below.

Installing the MDM server

The installation process differs slightly between Windows and macOS. Both processes are described in separate sections below.

Installing the MDM server on Windows

1. From LANrev Admin, export the certificate of the LANrev Server, as described in the user guide in "Exporting a server certificate".

2. Run the Setup.exe application from the "LANrev MDM Server" folder.

   You are guided through the installation.

3. When prompted for the IP address of the LANrev Server, use the address of the server whose certificate you exported in step 1.

4. When you are prompted for the server certificate, choose the certificate that you exported in step 1.

As explained in "Preparation", above, this can be the computer on which LANrev Server is running but does not have to be.

Continue with "Configuring the MDM server", below.

Installing the MDM server on macOS

1. Run the provided installer package.

2. By default, MDM communications use port 443. If you want to use a different port, edit the "server.port" entry in the /private/etc/lighttpd/lighttpd.conf file.

3. Copy the SSL certificate for the MDM server (see step 2 of "Preparation") to /etc/lighttpd/certs on the MDM server computer and name it "lighttpd.pem".

4. From LANrev Admin, export the certificate of the LANrev Server, as described in the user guide in "Exporting a server certificate".

5. Copy this certificate to /etc/lighttpd/certs on the MDM server computer and name it "TrustedCertificates.pem".

   As explained in "Preparation", above, this can be the computer on which LANrev Server is running but does not have to be.

6. On the computer on which the MDM server is installed, open the /Library/Preferences/com.heatsoftware.LANrevMDMServer.plist file (using the Property List Editor utility) and enter in the LANrevServerHostname key the IP address or DNS name of the LANrev Server.

7. On the computer on which the MDM server is installed, run the Start_MDM_Server.command shell script provided on the LANrev installation disk.

   This starts the MDM server.

Continue with "Configuring the MDM server", below.

Configuring the MDM server

The MDM server is configured from LANrev Admin.

1. In LANrev Admin, open the Server Center, display the server settings, and click the **iOS MDM** tab.

2. Enter this information:

   - **Profile name**: A descriptive name for the deployment profile. This name will be displayed on the iOS devices during the enrollment process.
   - **Profile identifier**: A unique identifier for the profile. It is needed to distinguish it from other profiles you may create on the server.

- **Description**: A brief explanation of the profile's purpose. It is displayed on the iOS device in the first screen of the enrollment process.
- **MDM server**: The full DNS name of the server on which you have installed the MDM server.
- **Port**: The port over wich the MDM server communicates. By default, this is 443, but if you have edited the server port in step 2 of "Installing the MDM server", you must specify the custom port here as well.

3. Click the Select button at the right of the panel and choose the certificate that you have created in step 1 of "Preparation".

4. Choose **Server** > **Save Server Settings**.

Enrolling iOS devices

Enrolling iOS devices requires providing a configuration file on a web server and sending a link to this file to all devices you want to include in the mobile device management.

Only devices on which iOS 4.0 or newer is installed can be enrolled in the MDM management.

1. Copy the enrollment file from the server.

   The file is named MDMEnrollmentBootstrap.mobileconfig and is found at these locations:

   - Windows XP or Windows Server 2003: C:\Documents and Settings\All Users\Application Data\Pole Position Software\LANrev Server\.
   - Windows Vista and up or Windows Server 2008 and up: C:\ProgramData\Pole Position Software\LANrev Server\.
   - macOS: /Library/Application Support/LANrev Server/.

2. Make the enrollment file available on a web server.

   The file must be accessible with a standard http URL.

   We recommend that you put it in an area of the web server that requires logging in or provides another form of access control.

3. Send an e-mail with the URL of the enrollment file to all users whose iOS devices are to be managed.

   Make sure to send the e-mail to addresses that these users open on the iOS devices – enrollment is not possible if the e-mail is accessed from another device, such as a desktop or portable computer.

4. In the e-mail, instruct the users to click on the link and follow the instructions this will display on the screen.

Each device on which users follow this procedure appears in the iOS Devices window in LANrev Admin. You can manage it there using the context menu commands.