



NotifyMDM

Mobile Device Management

Server Software Installation Guide

This guide provides information on . . .

. . . The architecture model for *NotifyMDM* system setup

. . . Hardware and supporting software requirements for the *NotifyMDM* installation

. . . Server software installation instructions

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NotifyMDM Overview

NotifyMDM is a mobile device management solution that provides organizations with centralized management and control of the wireless device platforms in their enterprise network.

The *NotifyMDM* solution includes a small application downloaded to devices and a server application running as either a hosted on-demand service or as an on-premise enterprise.

A single instance of the server application supports a multi-tenant architecture allowing an enterprise to manage one or multiple organizations.

The Role of the NotifyMDM Server

The *NotifyMDM* server is capable of managing devices in two capacities.

- **ActiveSync Present** - When an ActiveSync server or *NotifyLink Enterprise Server* (v4.7.x or higher) is part of the environment, the ***NotifyMDM System serves as a gateway that proxies ActiveSync traffic***. Settings for the policies that govern devices in your environment are configured from *NotifyMDM*. For ActiveSync policies, the *NotifyMDM* policy setting will take precedence over those configured on the ActiveSync server. In addition, the *NotifyMDM* server relays all email and PIM data to and from the ActiveSync server.
- **ActiveSync not Present** - For systems that do not use the ActiveSync protocol, ***the NotifyMDM system serves as a stand-in ActiveSync server*** that synchronizes policies and issues security command messages. In this scenario, email and PIM are not proxied through the *NotifyMDM* server.

The purpose of taking either of these roles is to control security policies available through ActiveSync and to allow the *NotifyMDM* server to issue remote security command messages.

NotifyMDM as a gateway server

Access. ActiveSync servers can be configured so that users are blocked from accessing the server without going through *NotifyMDM*. This forces even users with devices not running a *NotifyMDM* device application to enroll against the *NotifyMDM* server. This effectively allows you to manage all devices through *NotifyMDM*.

In addition, the *NotifyMDM* server can be configured to allow only devices that meet security standards to access the corporate ActiveSync server. Currently, this tool enables administrators to block jailbroken iOS devices from accessing the server. *(This feature will be enhanced in future versions of the NotifyMDM product giving administrators further criteria on which to base device/user accessibility. Server will allow ActiveSync traffic through as long as a device is currently using the policies defined for it in the NotifyMDM web. When policies are updated in the NotifyMDM web, devices will be required to update security policies before being allowed to continue synchronizing with the corporate server.)*

Security. The *NotifyMDM* server intercepts security policy updates sent from the ActiveSync server to prevent them from being sent to the device. The policies defined in the *NotifyMDM* server are instead enforced on the device.

Remote wipe commands can be issued from either the *NotifyMDM* server or the ActiveSync server. Remote wipes are a crucial security feature, so if intent to wipe is expressed on the ActiveSync server, the *NotifyMDM* server will relay the wipe message to the device.

Authentication. For devices that have an ActiveSync server defined, the *NotifyMDM* server will use the ActiveSync server to authenticate the user's credentials.

Email and PIM. For devices that have an ActiveSync server defined, the *NotifyMDM* Server will relay ActiveSync Email and PIM traffic to and from the ActiveSync server.

NotifyMDM Device App Enrollment. Users associated with a defined ActiveSync server will install the *NotifyMDM* device app and enroll their devices with the *NotifyMDM* server using their ActiveSync account user credentials.

NotifyMDM as a stand-in ActiveSync server

Security. *NotifyMDM* can provide ActiveSync security enforcement even when ActiveSync is not used for Email or PIM synchronization. When functioning in this role *NotifyMDM* will provide a minimum implementation of ActiveSync to send security policies and remote wipe messages, and to record device statistics when they are sent to the server.

The *NotifyMDM* server serves as a stand-in ActiveSync server only when a user is not associated with a defined ActiveSync server.

Authentication. Devices are authenticated directly against the *NotifyMDM* server using the password associated with the user account set up on the *NotifyMDM* server.

NotifyMDM Device App Enrollment. Users not interfacing with an ActiveSync server will install the *NotifyMDM* device app and enroll their devices with the *NotifyMDM* server using the credentials associated with the user account set up on the *NotifyMDM* server.

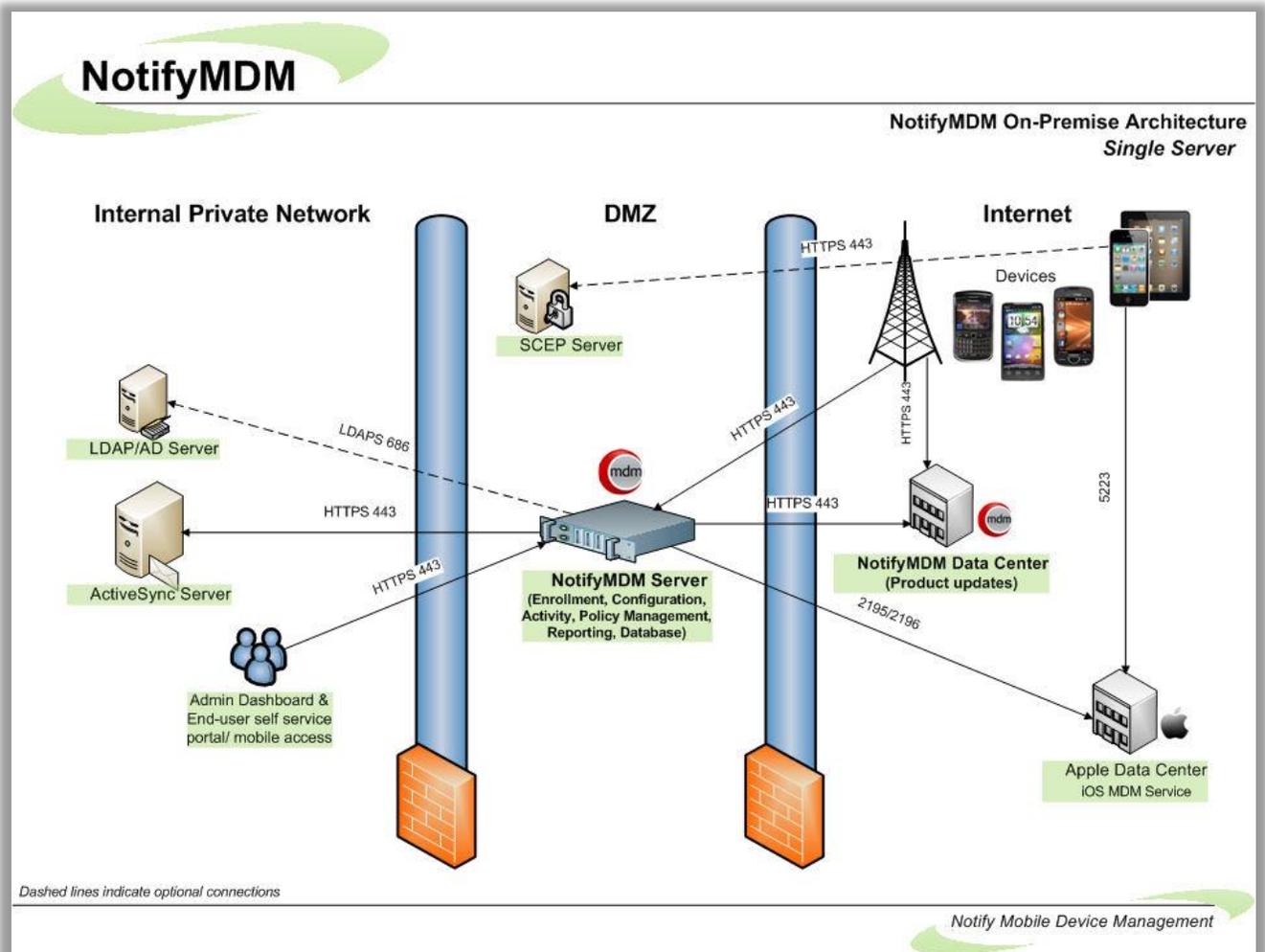
System Architecture

The *NotifyMDM* System consists of two components which may be installed on a single or multiple servers.

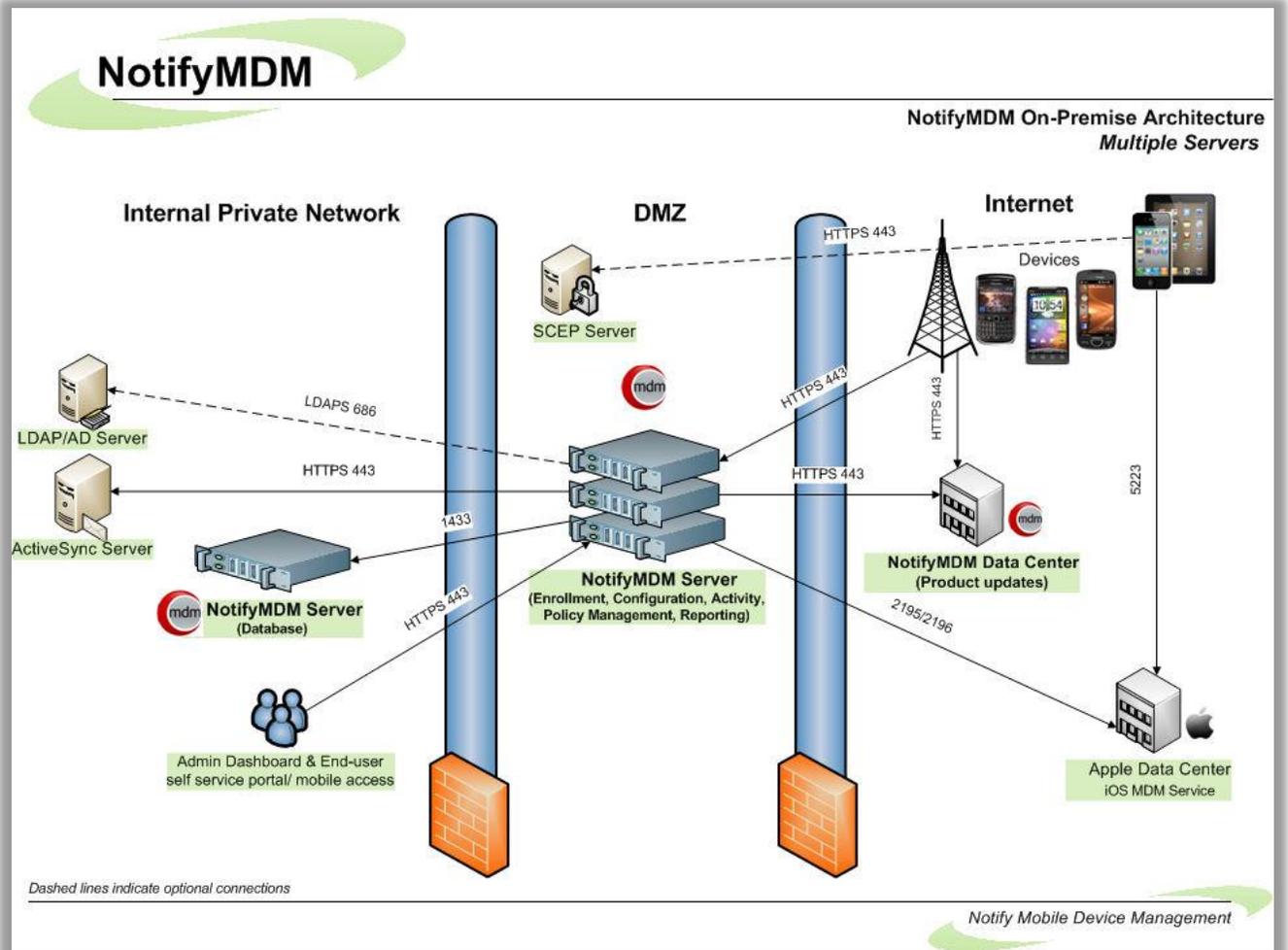
- SQL Database Component
- Web/Http Server Component

In addition to the setups illustrated, a reverse proxy setup is also supported as long as the proxy is sufficiently scalable. For the long term, redundant proxies may be advisable to help ensure high availability. Achieving redundancy through SQL and web clusters is a good way to ensure high availability.

Single Server Configuration Diagram



Multiple Server Configuration Diagram



System Requirements

The *NotifyMDM* System consists of an **SQL Database Component** and a **Web/Http Server Component**.

General Requirements

- Successful installation of the *NotifyMDM* system requires an SMTP Server.
- *NotifyMDM* server requires Secure Sockets Layer (SSL) encryption to meet best practices for security.
 - Note:** The *NotifyMDM* server must have a CA signed certificate. Self-signed certificates are not supported.
- Install *NotifyMDM* on a system with a freshly installed operating system. If the system was previously used with *NotifyLink Enterprise Server*, for example, it is required that you reinstall the OS before you install *NotifyMDM*.

SQL Database Component Requirements

What follows are minimum system requirements. Actual requirements may vary depending on the nature of your environment.

‡**Windows Server 2008 R2 SP1**

‡**Windows Server 2008 with SP2**

***Windows Server 2003 R2 x64 or Windows Server 2003**

Use English versions. Apply all *Windows Server* updates as well.

‡*Setup on Windows 2008 x64:*

<http://support.notifycorp.com/support/index.php?/Knowledgebase/Article/View/794/1/using-nles-on-windows-server-2008-x64>

More information about Windows Server 2008:

<http://support.notifycorp.com/support/index.php?/Knowledgebase/Article/View/669/1/windows-server-2008-issues-and-workarounds>

**Setup instructions for Windows 2003 R2 x64:*

<http://support.notifycorp.com/support/index.php?/Knowledgebase/Article/View/795/1/using-nles-on-windows-server-2003-r2-x64>

The *NotifyMDM Server* is also supported on any of the above operating systems running as a virtual machine.

32-bit Intel Xeon processor or better

2 GB RAM (minimum)

3 GB free hard drive space

Microsoft SQL Server, 2008 R2 SP1 (*Standard Edition*)

Microsoft SQL Server, 2008 R2 (*Standard Edition*)

Microsoft SQL Server, 2008 SP3 (*Standard Edition*)

Microsoft SQL Server, 2008 SP1 (*Standard Edition*)

Microsoft SQL 2008 Web Edition or

Microsoft SQL Express, 2008 (*Supported for product evaluations; Not recommended for production*)

Use English version.

- Make sure that you select SQL server authentication when installing SQL.
- If you will be installing the Web/Http Component on the same server as the SQL Database Component, we recommended you restrict the amount of system resources that Microsoft SQL Server uses. You can accomplish this by adjusting the *min server memory* and *max server memory* options in SQL Server 2008.
- If SQL Express 2008 is used, enter /SQLEXPRESS after the server address.

Web/Http Component Requirements

What follows are minimum system requirements. Actual requirements may vary depending on the nature of your environment.

***Windows Server 2008 R2 SP1**

***Windows Server 2008 with SP2**

***Windows Server 2003 R2 x64 or Windows Server 2003**

Use English versions. Apply all *Windows Server* updates as well.

‡*Setup on Windows 2008 x64:*

<http://support.notifycorp.com/support/index.php?Knowledgebase/Article/View/794/1/using-nles-on-windows-server-2008-x64>

More information about Windows Server 2008:

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**Setup instructions for Windows 2003 R2 x64:*

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The *NotifyMDM Server* is also supported on any of the above operating systems running as a virtual machine.

32-bit Intel Xeon processor or better

Microsoft SQL Server Native Client 10.0

Microsoft .NET Framework 3.5 SP1

- *Automatically installed with Windows Server 2008*
- *Manual installation required for Windows Server 2003*

2 GB RAM (minimum)

256 MB free hard drive space

(Additional space may be required for log files)

Microsoft IIS

Supported Microsoft IIS versions: English versions 7.5, 7.0, or 6.0

PHP, Version 5.2.14 is distributed with the *NotifyMDM Web/Http Component*.

Note: This may cause issues with any existing installation of PHP. Therefore, it is recommended that you do NOT install the Web/Http Component on a server with other PHP websites.

Port 80/443 (http/https) inbound and outbound must be open for device ← → server communications.

Port 1433 for communication with SQL Server.

NotifyMDM dashboard requirements:

- **Internet Explorer or Firefox**
- **Adobe Flash Player 10.1.0**
- Minimum screen resolution: 1024 x 768

An **SSL certificate** is required for the web component

The following certificates have been tested and confirmed to work with all supported *NotifyMDM* devices:

- **Verisign/RSA Secure Server CA: "Secure Site" certificate:** <http://www.verisign.com/ssl/>
- **Thawte Server CA: "SSL Web Server Certificate":** <https://www.thawte.com/products/index.html>

NotifyMDM Installation

The *NotifyMDM* server software is comprised of the SQL Database Component and the Web/Http Server Component.

If you are planning on configuring a highly available *NotifyMDM* setup with Network Load Balancing or SQL Failover Clusters, please read the [NotifyMDM High Availability Guide](#) before you proceed with installation.

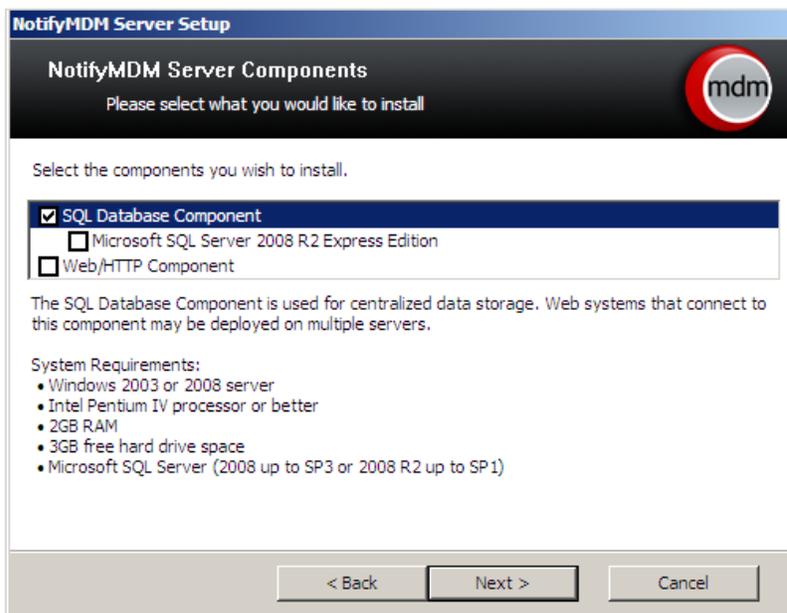
Upgrades: All software updates should be applied using the **NotifyMDM Update Manager**. The Update Manager applies all software patches and may even call up the installer when it is required for an upgrade. See the NotifyMDM [Update Management Guide](#) for details.

Download the NotifyMDM Server Software

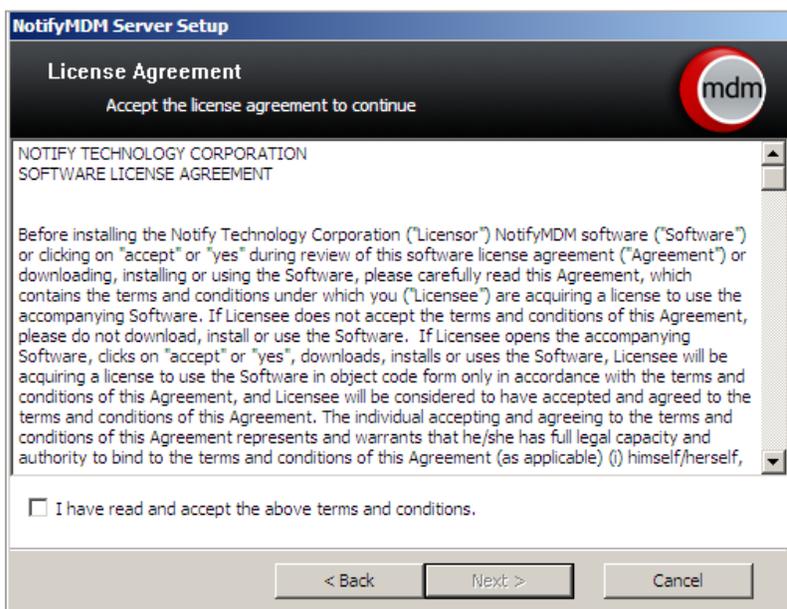
1. From a web browser enter <http://notifymdm.notify.net>
2. Select **NotifyMDM Server Installer** and review the installation instructions on the screen.
3. Extract the contents of the zip file and run **Install.exe**.
4. Click **Next** at the welcome page.

Step 1: Run the Installer

1. Select the components you wish to install at this time. Both the *SQL Database* and *Web/HTTP Component* are required for an initial installation.
 - Check the box beside **SQL Database Component** to install the *NotifyMDM* database component on an existing Microsoft SQL server
 - (Conditional) Check the box beside the *Microsoft SQL Server 2008 R2 Express Edition* if you want to install and use the Express Edition instead.
 - Check the box beside **Web/HTTP Component**.Click **Next**.



2. Read the **License Agreement** carefully and mark the acceptance checkbox. Click **Next**.



3. At the *Installation Directory* screen, browse to select the installation path for the SQL Database and Web/HTTP components. Click **Next**.

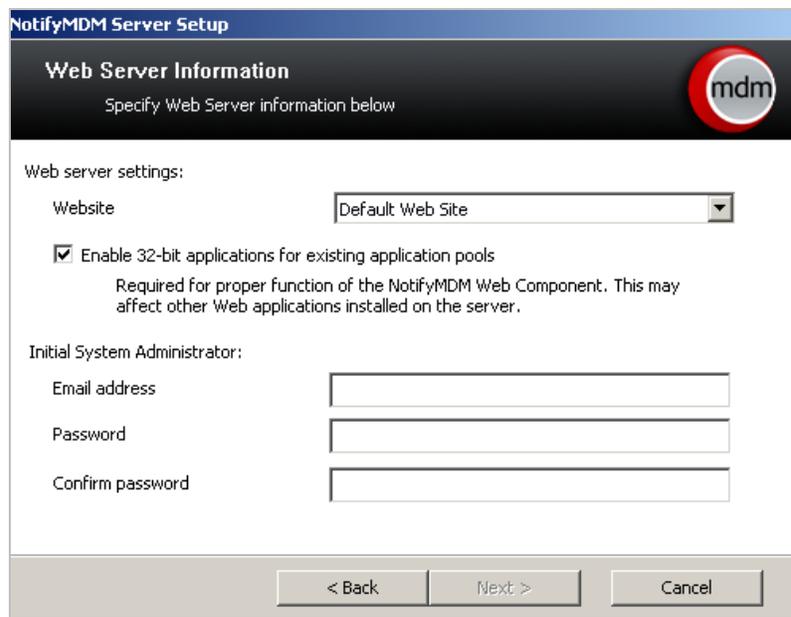
The screenshot shows the 'Installation Directory' screen of the NotifyMDM Server Setup wizard. The title bar reads 'NotifyMDM Server Setup'. The main heading is 'Installation Directory' with the instruction 'Please select a location for the chosen component(s)'. The NotifyMDM logo is in the top right. The screen is divided into two sections. The first section asks for the installation path for the SQL Database Component, with a text box containing 'C:\Program Files\NotifyMDM Server' and a 'Browse...' button. The second section asks for the installation path for the Web/HTTP Component, with a text box containing 'C:\Program Files\NotifyMDM Server\' and a 'Browse...' button. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

4. At the *SQL Information* screen, enter the following information for the SQL server.
- **Server address** – Accept (local) or enter the address of a remote server where SQL resides.
 - **sa password** – Enter the password for an existing SQL server or create an sa password for the SQL Express installation. If creating one, a strong password is required. It must be at least six characters and contain three of these four criteria: uppercase letters, lowercase letters, numbers, and non-alphanumeric characters. An error displays if the password does not meet the criteria.
(SQL Express is only appropriate for systems accommodating 1000 devices or less.)
 - **New SQL Login for Web/HTTP Component** – Create a **username** and **password** for SQL Server login. Confirm the password. This will be used by the *NotifyMDM* components to access the database. Click **Next** to continue.

The screenshot shows the 'SQL Information' screen of the NotifyMDM Server Setup wizard. The title bar reads 'NotifyMDM Server Setup'. The main heading is 'SQL Information' with the instruction 'Specify SQL information below'. The NotifyMDM logo is in the top right. The screen is divided into two sections. The first section is 'Connection information:' and contains three fields: 'Server address' (a dropdown menu with '(local)' selected), 'sa password', and 'Confirm password'. The second section is 'New SQL login for Web/HTTP Component:' and contains three fields: 'Username', 'Password', and 'Confirm password'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

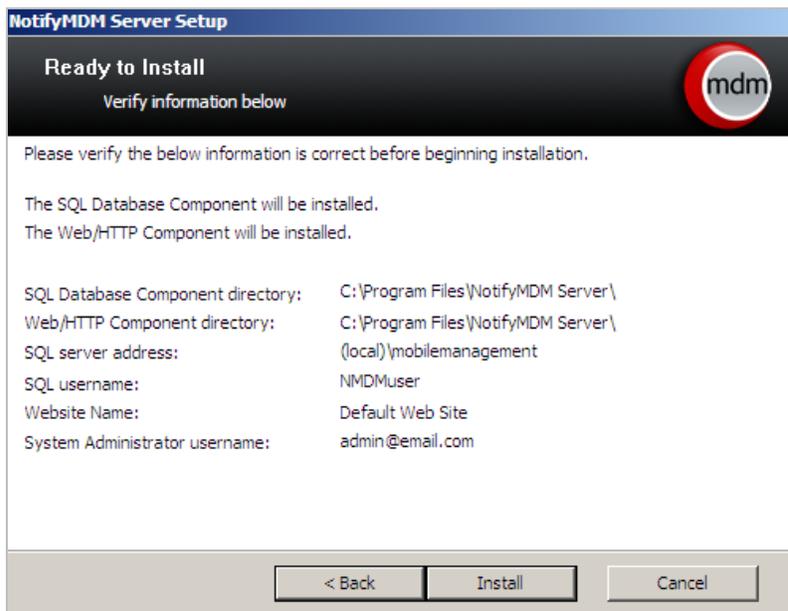
5. At the *Web Server Information* screen, enter the following:
- Select the **Website** to which you are installing. By default, the Enterprise Server Web/Http Component will be installed to the *Default Web Site*. Install to a Web site that is not currently in use or create a new Web site with Microsoft IIS before installation (so that it appears in the drop-down list).
 - If you are installing on a 64-bit machine, mark the checkbox to **Enable 32-bit applications**. Verify that this will not affect other Web applications installed on the server. This option does not appear on 32-bit machines.
 - Enter the email address of the administrator designated as the **Initial System Administrator**. Create a password for the administrator and confirm it. A *NotifyMDM* administrator login with full admin privileges is created using this information. Use it for your initial *NotifyMDM* dashboard login.

Click **Next** to continue.

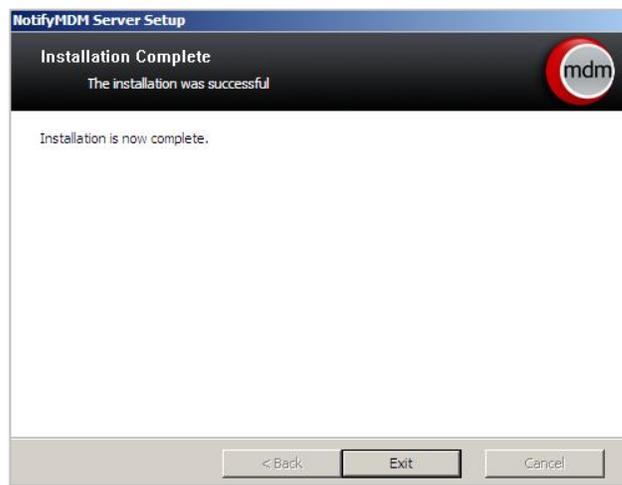
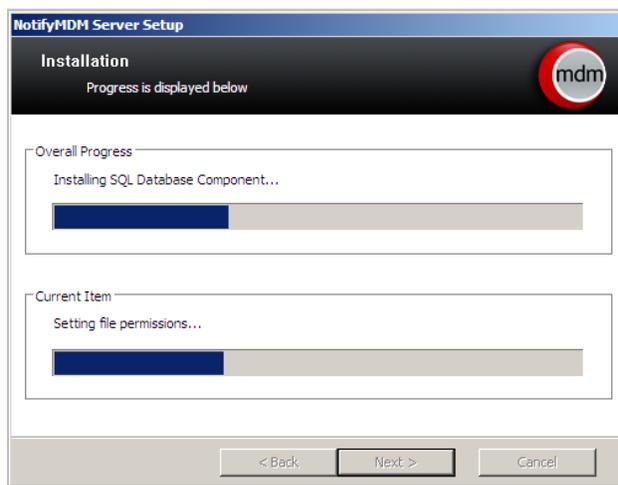


The screenshot shows the 'Web Server Information' dialog box in the 'NotifyMDM Server Setup' application. The dialog has a title bar with the application name and a logo in the top right corner. Below the title bar, the text 'Specify Web Server information below' is displayed. The main content area is divided into two sections: 'Web server settings:' and 'Initial System Administrator:'. In the 'Web server settings:' section, there is a 'Website' dropdown menu currently set to 'Default Web Site', and a checked checkbox for 'Enable 32-bit applications for existing application pools' with a descriptive note below it. In the 'Initial System Administrator:' section, there are three text input fields for 'Email address', 'Password', and 'Confirm password'. At the bottom of the dialog, there are three buttons: '< Back', 'Next >', and 'Cancel'.

- At the summary screen, verify that the information you have provided is accurate. Click **Back** to make corrections if necessary. Click **Install** to initiate the installation.



A progress bar and completion notification display as the installation continues and finishes.



The *NotifyMDM* installation is now complete.

Note: If you have installed on a machine using Microsoft Windows Server 2003, you must restart your system before proceeding.

Step 2: Apply Software Updates

Use the **NotifyMDM Update Manager** application to check for and apply available software updates.

The *Update Manager* is a Windows application that allows the administrator to apply *NotifyMDM* server software updates. You can also use the application to check for new updates and read change logs.

Note: If you have configured your system with multiple Web servers for a Network Load Balanced setup, you will need to apply updates to all servers where the *NotifyMDM* Web/HTTP component resides.

For complete instructions on using the *Update Manager*, see the *NotifyMDM [Update Management Guide](#)*.

To check for available updates

1. Access the **NotifyMDM Update Manager** via the desktop shortcut on the *NotifyMDM* server.
2. Click the **Download Available Updates** button to check the server for and download available updates.
3. Enter the **license key** obtained from your Notify Technology Corporation sales representative. You will see a progress meter as the updates download.
4. If you wish to view descriptions of the updates, click the **View Change Log** button.
5. Select the latest update available (the default) to install.

See the [Upgrade Recommendations Guide](#) for version specific upgrade notes.