



Mobility Services Platform 3.3 Software Installation Guide

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Before You Begin

Read This First

Motorola recommends that you read this entire document before you begin installing MSP 3.3.

About the Guide

The *MSP 3.3 Software Installation Guide* provides general instructions for installing the MSP 3.3 software product. Newer versions of this document may be available at <http://support.symbol.com/support/product/softwaredownloads.do>.

Related Documents

- MSP 3.3 Release Notes, p/n 72E-100160
- Understanding Mobility Services Platform 3.3, p/n 72E-128712
- Using Mobility Services Platform 3.3, p/n 72E-128802
- MSP Client Software Guide, p/n 72E-128805
- Using the MSP 3.3 Administration Program, p/n 72E-128775
- Using the Athena Remote Control Solution, p/n 72E-127346
- Using the Motorola Remote Control Solution, p/n 72E-127347
- AirBEAM Package Builder Product Reference Guide, p/n 72E-55769
- AirBEAM Package Builder Version 2.X Addendum

Service Information

If you have a problem with your software, contact Motorola Enterprise Mobility support for your region. Contact information is available at: <http://www.symbol.com/contactsupport>.

When contacting Enterprise Mobility support, please have the following information available:

Serial number of the software

Model number or product name

Software type and version number

Software license information

Motorola responds to calls by email, telephone or fax within the time limits set forth in support agreements.

If you purchased your Enterprise Mobility business product from a Motorola business partner, contact that business partner for support.

Chapter 1 - Introduction

Introduction

Mobility Services Platform 3.3 (MSP) is being released on CD with a new install interface and simplified instructions for the two most common types of installation. Users that find these two install scenarios inappropriate for their installation of MSP are highly encouraged to contact the MSP Help Desk for assistance.

Mobility Services Platform version 3.3 is available in several Editions that allow you to choose to purchase and install just the functionality you need. MSP Stage Edition provides support only for initial deployment of devices. MSP Provision Edition provides all the features of MSP Stage Edition plus the ability to use Provisioning to keep your devices continuously up to date. MSP Control Edition provides all the features of MSP Provision Edition plus the ability to perform Data Collection and optionally Collection Analysis and the ability to perform Actions on selected devices. Depending on the MSP Edition you choose to install, the functionality you elect to use, and the complexity of the enterprise you need to manage, the installation of MSP will vary in complexity.

Installing MSP 3.3 Stage or MSP 3.3 Provision Edition will typically be the least demanding. You may choose to use either Microsoft SQL Server Express 2005 or Microsoft SQL Server 2005/2008 Standard or Enterprise edition to host your MSP database. Microsoft SQL Server Express 2005 is license-free, and hence Microsoft offers no support. In addition, Microsoft SQL Server Express 2005 has limitations on maximum database size and generally is not considered an enterprise-class solution. Depending on your situation, you may want to use Microsoft SQL Server 2005/2008 Standard or Enterprise editions even though they require the purchase of licenses from Microsoft. By paying for licenses, you get an enterprise-class solution and support from Microsoft.

Installing MSP 3.3 Control Edition without Data Collection is comparable in complexity to installing MSP 3.3 Stage Edition or MSP 3.3 Provision Edition. You may choose to use either Microsoft SQL Server Express 2005 or Microsoft SQL Server 2005/2008 Standard or Enterprise editions to host your MSP database. For the same reasons stated above, it is often advisable to use Microsoft SQL Server 2005/2008 Standard or Enterprise editions to ensure that you have an enterprise-class scalable and supported solution.

Installing MSP 3.3 Control Edition with Data Collection always requires the use of Microsoft SQL Server 2005/2008 Standard or Enterprise editions to host your MSP database. In addition, if you wish to use Collection Analysis, you will need to install the optional Analysis Services feature of Microsoft SQL Server 2005/2008 Standard or Enterprise editions.

Deciding Your Installation Scenario

All Components on One Server

In this installation scenario, you will install all MSP Server Components and the MSP Core Database on one server on which your instance of SQL Server is already installed.

Components Split Between Two Servers

In this installation scenario, you will install the MSP Core Database on one server on which your instance of SQL Server is already installed and all other MSP Components will be installed on another server with connectivity to the SQL/MSP Database server.

Advanced Installations

Any scenario involving the distribution of MSP Components across multiple servers requires expertise that only the most-advanced IT professionals possess. These types of installation scenarios can be accomplished with the MSP 3.3 Installer, but specific details for these scenarios are not covered in this document. Before such installations are attempted users are highly encouraged to contact the MSP Help Desk.

Chapter 2 – MSP Server Requirements

Minimum Software and Hardware Requirements

Servers on which you plan to install MSP 3.3 must meet the minimum software and hardware requirements listed in Table 1.

Table 1 – Minimum Software and Hardware Requirements

Category	Requirements
Windows Operating Systems	<ul style="list-style-type: none">▪ Windows Server 2003 Standard/Enterprise/Web editions x86/x64 with SP2 or higher▪ Windows Server 2003 R2 Standard/Enterprise editions x86/x64 with SP2 or higher▪ Windows Server 2008 Standard/Enterprise/Datacenter editions x86/x64 with SP1 or higher <p>Important:</p> <hr/> <p>Installation on Windows XP or Vista are not supported. MSP 3.3 is not supported on Windows Server systems that are Domain Controllers.</p> <hr/>

Category	Requirements
Additional Software	<ul style="list-style-type: none"> ▪ Microsoft Internet Information Services 6/7. ▪ Microsoft .NET Framework 2.0 SP2 ▪ Microsoft SQL Server 2005/2008. <p>Note:</p> <hr/> <p>If you will not be installing the Data Collection or Long-Term Analysis features of MSP 3.3, you can use SQL Server 2005 Express. This version of SQL Server is free and included for your use on the MSP 3.3 Installation CD. You need not use SQL Server 2008 Express for such an installation.</p> <hr/> <ul style="list-style-type: none"> ▪ Windows Installer 4.5 Update
Hardware for Stage, Provision, or Control Editions <u>without</u> Data Collection and Analysis	<p>These are recommended minimum specifications for the computer on which you will run these editions of MSP. These are only recommendations and you may obtain satisfactory performance on computers with a configuration that differs from these specifications.</p> <ul style="list-style-type: none"> ▪ 3 GHz processor ▪ 2 GB of memory ▪ 40 GB hard drive <p>Note:</p> <hr/> <p>The perceived performance of MSP Server is affected by many parameters other than the configuration of the computer on which it runs. See the <i>Understanding MSP 3.3</i> for more information on factors that can affect MSP performance.</p> <hr/>
Hardware for Control Edition <u>with</u> Data Collection and Analysis	<p>These are recommended minimum specifications for the computer on which you will run these editions of MSP.</p> <ul style="list-style-type: none"> ▪ Dual 2.33 GHz dual-core processors ▪ 4 GB of memory ▪ 40 GB space available on hard drive <p>Note:</p> <hr/> <p>The perceived performance of MSP Server is affected by many parameters other than the configuration of the computer on which it runs. See the <i>Understanding MSP 3.3</i> for more information on factors that can affect MSP performance.</p> <hr/>

SQL Server 2005/2008 Requirements

The edition of Microsoft SQL Server 2005/2008 you must use is determined by how the installation of MSP 3.3 will be used. The following table delineates which edition you must use:

Table 2 – SQL Server 2005/2008 Version Requirements

If MSP 3.3 will be used for a new installation or Upgrade from 3.2/3.2.1...	SQL Server 2005/2008 Version Requirements
<ul style="list-style-type: none"> • On a single server • Without Data Collection and Analysis 	Microsoft SQL Server 2005 Express or SQL Server 2005/2008 Standard or Enterprise without SSAS enabled, as well as the other software and hardware requirements listed in Table 1 – Minimum Software and Hardware Requirements.
<ul style="list-style-type: none"> • On a single server • With Data Collection and Analysis 	SQL Server 2005/2008 Standard or Enterprise with SSAS enabled, as well as the other software and hardware requirements listed in Table 1 – Minimum Software and Hardware Requirements.
<ul style="list-style-type: none"> • The instance of Microsoft SQL Server is on a second, separate server • Without Data Collection and Analysis 	Microsoft SQL Server 2005 Express or SQL Server 2005/2008 Standard or Enterprise without SSAS enabled, as well as the other software and hardware requirements listed in Table 1 – Minimum Software and Hardware Requirements.

Note:

TCP/IP must be enabled under SQL Server Network Configuration

Chapter 3 – Installing MSP 3.3

Before Installing MSP 3.3

If you are planning to install the MSP Core Database on a SQL Server instance that is running on a different box than the rest of the MSP components will be, then you should have two domain users available before beginning the installation of MSP 3.3. One domain user is required for installation and a separate domain user is required for runtime.

Note:

The only exception to this is if you are not using Long Term Analysis and can use SQL Authentication to install the Core Database and access it at runtime.

Upgrading from Previous MSP Versions

1. Upgrades to MSP 3.3 are supported only from MSP versions 3.2/3.2.1.
2. Export all Objects before continuing; see Using MSP 3.3 – Understanding Objects for more detail.
3. All upgrades begin with uninstalling the current version of MSP (and Package Builder if appropriate) using Add/Remove Programs.

IMPORTANT:

If you have an installation of MSP 3.2.0 with the Package Builder 1.0 add-on installed, **you MUST uninstall Package Builder BEFORE you uninstall MSP 3.2.0**. If you do not remove this software in this order, you may not be able to uninstall Package Builder or reinstall MSP later.

4. Make sure you chose to keep the existing data.

IMPORTANT:

Uninstall the existing version of MSP keeping the existing data. Failure to select the check box to keep your data will result in a loss of your database.

5. Migrate the User Data Files shared folder, if applicable.

Domain User for Runtime Access

This domain user does not need special domain permissions and does not need any special permissions granted before installing MSP 3.3. This domain user only needs to be a member of the “domain users” group.

Domain User for Installation

This domain user does not need special domain permissions. It simply needs to be a member of the administrators group on the server where the MSP components will be installed. This user also needs permissions on the SQL Server. The easiest way to grant these permissions are to make the user a member of the administrators group on the SQL Server.

Important:

This domain user is not needed once the install is completed. The installation configuration file will keep track of which user was specified while installing, but this user is not used by the MSP components once the installation is complete.

Installing MSP 3.3

To Install MSP 3.3:

1. Put the Installation CD in the machine on which you are installing all MSP Components or on which you are installing all MSP Components except the MSP Database.
2. When the MSP 3.3 CD Launcher dialog box displays, you will see the results of the pre-requisite software check in the **Pre-requisites** area at the top of the dialog box (Figure 1).



Figure 1

Note:

If all three pre-requisites are installed, go to Step 3.

If IIS is not installed, go to Appendix A for installation instructions.

If either .NET Framework 2.0 SP2 or Windows Installer 4.5 Update are not installed, click **Install** and then **Finish** when the installation is complete.

3. In the **Installation** area, click the Install button to the right of **MSP 3.3 Server**.
4. When the Welcome dialog box for the MSP Install Point Installer is displayed, click **Next**.
5. Accept the license agreement and click **Next**.

6. Accept or change the **Destination** folder and click **Next**.
7. Click **Install**.
8. Click **Finish**.
9. When the Install Interviewer opens, choose your installation scenario and click **Next**.
10. Indicate which, if any, MSP Control Component features you plan to use and click **Next**.

Notes:

Data collection requires SQL Server 2005/2008 Standard or Enterprise Edition. It is not supported on SQL Server Express edition.

Selecting Long Term Analysis will install the MSP Analysis Database.

The SQL Server 2005/2008 Standard or Enterprise Edition restrictions will be checked later in the process once the target SQL Server has been identified.

11. On the **MSP Core Database** dialog box select the SQL instance on which the MSP Core Database will be installed:
 - If you selected the all in one scenario, the SQL Server choices will be prepopulated as the dialog is displayed and will be restricted to the local server.
 - If you selected the scenario where you are going to install all MSP Components except the MSP Database on the installation machine, you will encounter a list of all the SQL instances on all the servers to which there is connectivity from the installation machine. You will not be able to choose the installation machine.
12. Choose the authentication method for installation of the MSP Core Database. Windows Authentication is the default, but you can choose SQL Authentication.
 - If you select SQL Authentication, you will need to provide a SQL login that has sysadmin permissions.

Note:

If you select SQL Authentication, the SQL Server instance must be configured to support mixed mode authentication.

- If you select Windows Authentication, then you will need to be logged in as a user that has sufficient permissions to install the MSP Core and MSP Analysis Services Databases.

Note:

If this is a one box install, an administrator login on the server will have the proper permissions.

If this is a two box install, then a separate domain user who is an administrator on the current server is required.

- If you selected the scenario where you are going to install all MSP Components except the MSP Database on the installation machine and if you wish to stay with the Windows Authentication option, you will need to be logged in to the server with a domain user that has been configured to have sysadmin permissions on the SQL Server.}

13. Click **Next** to go to an **MSP Core Database Review** dialog box. If you indicated a SQL instance on which an Existing MSP Database is installed, the installer defaults to keeping the MSP data. If you accept the information, click **Next**. If you need to change it, click **Back**.

Note:

If you selected MSP Control Component features but do not have SQL 2005/2008 Standard or Enterprise Edition, you will be informed that MSP Control Component features will not be installed and you will be allowed to continue.

- If you do not want to keep any data that was in the previous MSP database, you can check the box to delete the existing data. When the MSP server installs it will wipe out all existing MSP data and install a clean database.
14. On the **SQL Server Analysis Services** dialog box, it will show the SQL Server instance where the MSP Core Database is being installed along with the Analysis Database name.
 15. On the **MSP Runtime Windows Authentication** dialog box, default values are provided for a one box install. Click **Next** to continue.
 - If a one box install was selected, then this default local user will be created if it doesn't exist.
 - If you selected the scenario where you are going to install all MSP Components except the MSP Database on the installation machine, then this user should be a domain user.
 16. On the **MSP Authentication to SQL Database** dialog box, choose the method of authentication and click **Next**.
 - If you select SQL Authentication, then the SQL login credentials that you provide will be used to create a SQL login when MSP is installed.
 - If you select Windows Authentication, then the Windows account specified in the previous dialog will be granted the necessary permissions to access the SQL and Analysis databases.
 17. On the **Install MSP Users** dialog box, review the two initial users that will be created for connection to the MSP UI Console.

Important:

These two MSP Users must be used once MSP is installed to configure any other MSP users or even to configure MSP to use LDAP to authenticate users.

18. Click **Next** to display the **Review Installation Settings** dialog box.
19. Review the settings. If you accept the settings, click **Install**; if you need to change something, click **Back** until you reach the information that needs to be changed.
20. After clicking **Install**, the MSP Server installation process will begin.

Notes:

During the install you will see components being installed that are related to SQL Server 2008.

There is a possibility that one of the installed components will force a system restart. If this occurs, log in again and launch the install from the CD again. The installation process will resume without having to repeat the Interviewer process.

If an error occurs while installing MSP Server that requires changing an answer provided during the interview process then you will need to uninstall the Install Point installation and reinstall it.

21. When you receive the **Install Succeeded** message, the installation is finished. Please see Understanding MSP 3.3 and Using MSP 3.3 for details about enabling non-default configuration options, such as:
 - Enter License keys to enable Provision and Control Editions (Using MSP 3.3 – Administrative Setup).
 - Configure Authentication Sources and MSP Users (Using MSP 3.3 – Administrative Setup).
 - Re-enable optional settings through the MSP Administration Program (Using the MSP 3.3 Administration Program).

22. Depending on your need for various features in MSP, you may need to import one or more MSP Addons. Please see the **Bulk Import for Addons** section in *Using the MSP 3.3 Administration Program* for more information. You will need to import them from the MSP 3.3 Installer CD which contains the .zip files for each of the default Addons. You can also check for updated Addon files at Support Central. It is important to note that there are some commonly used Addons that must be imported before you are able to use the functionality they provide. Some examples include:
 - AthenaMonitor
 - AthenaRemoteControl
 - MotorolaRemoteControl
 - Motorola SSL VPN
 - AppCenter

Uninstalling and Reinstalling MSP Server 3.3 to Change Your Configuration

MSP Install Point is a separate program that controls the installation of MSP 3.3. Install Point keeps track of the configuration files used to install MSP 3.3. You can make changes to the following now by reinstalling MSP Server via MSP 3.3 Install Point:

- Addition or Removal of support for Long Term Analysis
- The MSP runtime connection to the MSP Core Database
- The User under which MSP runs
- The initial MSP Users
- Completely wipe the database clean.

Caution!

You will lose all of your settings and data if and when you wipe the database clean.

To make Changes to MSP 3.3:

1. Click **Start > Add/Remove Programs > MSP 3.3 Install Point**.
2. Click the **Remove** button on the MSP 3.3 Install Point listing to uninstall MSP Server and MSP Package builder. MSP 3.3 Install Point will remain installed.
3. Click the **Change** button on the MSP 3.3 Install Point listing. MSP Server has been uninstalled, but MSP 3.3 Install Point has saved configuration files from the previous installation.
4. When the MSP 3.3 Installation Interviewer restarts, move through the interview process and change the appropriate information.
5. When the interview process concludes, click **Install** to reinstall MSP Server 3.3 with the new settings.

Uninstalling MSP 3.3

Complete removal of MSP 3.3, **excluding the MSP Core Database and the Archive and Temp files**, will require removing MSP Install Point:

1. Click **Start > Add/Remove Programs > MSP 3.3 Install Point**.
2. Click the **Remove** button on the MSP 3.3 Install Point listing to uninstall MSP Server and MSP Package builder. MSP 3.3 Install Point will remain installed.
3. Click the **Remove** button on the MSP 3.3 Install Point listing again to uninstall MSP 3.3 Install Point.

Appendix A – Installing Microsoft IIS

Important:

MSP assumes all the default settings are included with the installation of IIS. Therefore if you install IIS with any configuration other than the defaults, or if the configuration of IIS is modified in any way after it is installed, MSP may not function correctly. It is the responsibility of the end user to make sure the necessary security levels and permissions are in place for all web aspects of IIS prior to installing MSP.

Installing IIS 6

Use the following steps to install IIS 6:

1. Click **Start > Control Panel > Add or Remove Programs**.
2. Click the **Add/Remove Windows Components** tab in the left pane.
3. In the list of Windows Components, select **Application Server** and click **Details**.
4. In the list of Application Server subcomponents, select **Internet Information Services (IIS)** and click the **Details**.
5. In the list of IIS subcomponents, select **World Wide Web Service** and click **Details**.
6. In the World Wide Web Service list, select World Wide Web Service and click OK.
7. In the **Application Server** dialog box, click **OK**.
8. In the **Windows Components** dialog box, click **Next**. The installation program will prompt you for the Windows CD that was used to install the operating system. Follow the prompts to complete the installation of IIS.
9. To verify that IIS has been installed correctly—
 - a. Click **Start > Administrative Tools**.
 - b. Verify that Internet Information Services (IIS) Manager is listed as one of the Administrative tools.

Installing IIS 7 under Windows Server 2008

Use the following steps to install IIS 7:

1. Click **Start > Administrative Tools > Server Manager**.
2. Click on the **Roles** node in the left hand pane, and wait until information is displayed.
3. Click **Option** to add role
4. Following the wizard, select the Application Server role and then the Web Server role service under the Application Server role.
5. Verify that the ASP.Net role service under the Web Server also is added.
6. Click **OK** on the **Summary** screen to begin the process of adding the role components. Wait until the roles and role for it to finish adding the role and role services.
7. Click **Close** when finished.
8. To verify that IIS 7 is properly installed:
 - a. Click **Start > Administrative Tools > Server Manager**.
 - b. Click on the **Roles** node in the left hand pane, and wait until information is displayed.
 - c. Expand the **Web Server Role** node in the left hand pane.
 - d. Verify that the Internet Information Services (IIS) Manager is listed in the left pane.
 - e. Click on the **Internet Information Services (IIS) Manager** node in the left hand pane.
 - f. In the middle pane, click on the node that has the server name.
 - g. Verify in the right hand pane that ASP.NET features are shown.



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