

LocateMyPrinters 2013

Setup Guide

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1 General Notes

1.1 Introduction

LocateMyPrinters 2013 (LMP) is a self-service tool that effectively simplifies network-printer management for users and administrators alike and also significantly reduces support efforts of administrators.

This document details all steps required for installing LocateMyPrinters 2013.

1.2 Technical Support

LocateMyPrinters 2013 is made by AppSphere AG. Technical support is provided on the AppSphere support website, or by e-mail or phone.

1.2.1 AppSphere Website

The AppSphere website at support.appsphere.com offers plenty of information:

- > Detailed manuals
- > [FAQs](#) on LocateMyPrinters 2013
- > A customer forum where you can [ask questions](#) or obtain advice on LocateMyPrinters

1.2.2 E-Mail

To access technical support by e-mail, contact us at:

support@appsphere.com

1.2.3 Phone

Call the following number to contact our support team by phone:

+49 7243 34887-89

1.3 About this Document

1.3.1 Prerequisites

In order to successfully use this manual, you should be basically familiar with Microsoft operating systems. The manual mostly targets at individuals who perform installation, administration, and troubleshooting of the following:

- > Microsoft operating systems
- > SQL servers
- > Windows applications

This manual requires specific technical knowledge, and that the reader is familiar with the relevant terminology. In case you have not been able to solve a problem using the information provided here, visit our website support.appsphere.com for details on solving specific issues.

1.3.2 Conventions

The following formats are used for various types of instructions:

Bold: Menus and menu items, dialog names, input and list boxes, messages, and prompts

Italics: Administrator entries

Monospace Font: Code, paths, and filenames

Underlined blue font: Hyperlinks

2 Introductory Notes

2.1 Overview of the Architecture

The main components of a LocateMyPrinters (LMP) installation include:

- > A central database
- > One or more central LMP services
- > One or more administrator GUIs
- > One or more PowerShell modules (optional)
- > A number of clients in GUI or AutoLogon mode

The central database: Stores all LMP data. The LMP database runs on Microsoft SQL Server or Server Express. You can run multiple databases at the same time.

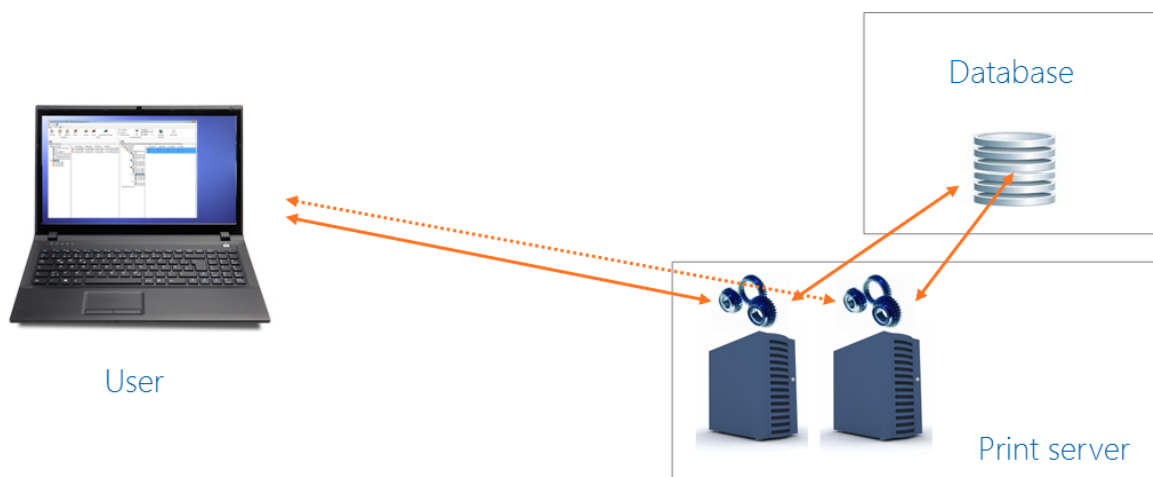


Figure 1: Setup with LMP services on print servers

LMP service: The LMP service provides for communication between client components and the database. In addition, it communicates with the print servers and Active Directory. You can run multiple service instances, for example, in environments with multiple print servers, printers, and LMP clients, or for organizational or administrative reasons (e.g. when administering multiple domains, or for ensuring reliability, see figure 1).

Administrator GUI: When the LMP user interface has been launched, a user who is a member of the LMP administrator group can access all administrative functions in LocateMyPrinters. Therefore, when running LocateMyPrinters 2013 for the first time, you need to specify an Active Directory group as LMP administrator group (if you have not done so during setup).

PowerShell module: The LMP PowerShell module allows administrators to perform operations in LocateMyPrinters without launching the LMP user interface. This allows for performing administrative steps such as applying favorites lists in a user's login script. For more details and a list of commands, refer to the PowerShell Module Manual located in the Modules folder of the LMP installation directory.

Multi-tenant operation in large environments: Thanks to the ability of running multiple LMP-database and LMP-service instances at the same time, LocateMyPrinters allows for implementing a multitude of operator models. For example, you could run (and administer) a dedicated instance

for each geographical region. Very large organizations might consider setting up dedicated instances per subsidiary or administration domain. When an LMP client switches between instances, be sure to enter the corresponding connection endpoint into the configuration (see "3.1.8 Client Installation").

2.2 System Requirements and Preparation

Due to the operating principles of LocateMyPrinters 2013 described above, you first need to address a number of considerations before installing the solution. Refer to our [support website](#) for more information regarding the matter. Be sure to consider the points detailed below.

2.2.1 Selecting the Administration and User Models

Depending on the corporate policy, LMP supports a wide range of uses – from flexible user self-service up to a purely administrative model.

User self-service: When this model has been implemented, users create their own favorites lists, select printers to assign to their lists, and apply those lists autonomously. Initially, the administrators set up the infrastructure, assign the available printers to it, and configure user permissions, so the users can access the printers.

Administration service: With this model, the administrators preconfigure defaults for all settings. On client machines, the software runs in AutoLogon mode where no user interface is available.

Mixed service: With this model, the administrators preconfigure defaults for key settings. On client machines, the software runs in client-GUI mode, allowing users to set up and apply their own favorites lists in addition to the default lists.

2.2.2 Setting the Server to Host the Central Database

You can either use an existing SQL server or create a new one for hosting your LMP database. Setup will then create the LMP database on the specified SQL server. Note that you need an account with administrative rights for SQL Server when installing the LMP database. This account requires permissions for creating a new database. The LMP-database ownership will be assigned to a specific user account during installation. The LMP service uses that account for authentication. While installing the service, you can select between Windows Integrated Authentication and an explicit user login. We recommend using the explicit user login; in large topologies, using the Windows Integrated Authentication for cross-domain authentication may present issues.

2.2.2.1 System Requirements for Database Installation

For performing the installation, you need one of the following operating systems:

- > Microsoft Windows 7 (all editions, x86 or x64 versions)
- > Microsoft Windows 8 (all editions, x86 or x64 versions)
- > Microsoft Windows Server 2008 SP1 or 2008 R2 SP1 (all editions)
- > Microsoft Windows Server 2012 (all editions)

You also need the following:

- > Microsoft SQL Server or Server Express 2005 or later (version ID 9.0). You can obtain Microsoft SQL Server Express from the Microsoft website at www.microsoft.com.

2.2.3 Setting the Server to Host the Central LMP Service

You need to install at least one central LMP service. As the service provides for both a connection point to clients and communication with the database and the print servers, we recommend running it near the database and print servers in the infrastructure. In a very simple setup, you might want to install the service on one of your print servers. With larger setups, however, we recommend running multiple LMP services on separate servers for improved load balancing and reliability.

2.2.3.1 System Requirements for Service Installation

For performing the installation, you need one of the following operating systems:

- > Microsoft Windows 7 (all editions, x86 or x64 versions)
- > Microsoft Windows 8 (all editions, x86 or x64 versions)
- > Microsoft Windows Server 2008 SP1 or 2008 R2 SP1 (all editions)
- > Microsoft Windows Server 2012 (all editions)

You also need the following:

- > Microsoft .NET Framework 4.0 client profile. You can obtain this component from the Microsoft website at www.microsoft.com.
- > WMI on the target system and the printer server
- > A successfully installed LMP database accessible from the target system

2.2.4 Creating the LMP Administrator Group in Active Directory

LocateMyPrinters uses Active Directory for managing implicit roles and permissions. The software is based on two roles: users and administrators.

LMP administrators have full access to all program functions and ribbons while a user in client mode can access only selected functions on the File and Favorites ribbons.

To differentiate between roles, LocateMyPrinters relies on Active Directory security groups. For the administrators, you may either use an existing group or create a new dedicated one. All members of that group will be LMP administrators while non-members will be normal users. You can change the administrator group using the Settings button in the File ribbon. When the GUI is launched, the program checks whether the currently logged-in user is a member of the administrator group. If so, the program runs as an administrator; if not, it runs as a normal user. We recommend installing a dedicated LMP administrator group in Active Directory before installing LocateMyPrinters.

2.2.5 Distribution of Client Components

Setup allows for quick and easy distribution of client components for the various operating modes (client-GUI mode, AutoLogon mode) and the PowerShell module. When installing client components, you just need to supply the service host and the service-port number. In addition, you may provide an alternative service endpoint.

2.2.5.1 System Requirements for Client Installation

For performing the installation, you need one of the following operating systems:

- > Microsoft Windows XP SP3 (x86 or x64 versions)
(Note that Windows XP allows for LMP-client installation only.)
- > Microsoft Windows 7 (all editions, x86 or x64 versions)
- > Microsoft Windows 8 (all editions, x86 or x64 versions)
- > Microsoft Windows Server 2008 SP1 or 2008 R2 SP1 (all editions)
- > Microsoft Windows Server 2012 (all editions)

You also need the following:

- > Microsoft .NET Framework 4.0 client profile. You can obtain this component from the Microsoft website at www.microsoft.com.
- > Successfully completed installations of the LMP database and at least one LMP service
- > Windows PowerShell 2.0 (required for the PowerShell module only)

2.3 License Scheme

The LocateMyPrinters 2013 start-up package includes ten free user licenses with no time restrictions, allowing you to use the solution right away after installation. You can obtain additional user licenses on our website at www.locatemyprinters.com or on request.

3 LocateMyPrinters 2013 Installation

As already mentioned, LocateMyPrinters 2013 requires installing the components in the following order: LMP database, LMP service, LMP client.

3.1 Setup

Start the GUI installation by launching the `LMP2013Setup.exe` file. Then, follow the instructions provided by the installation wizard.

3.1.1 Language Selection

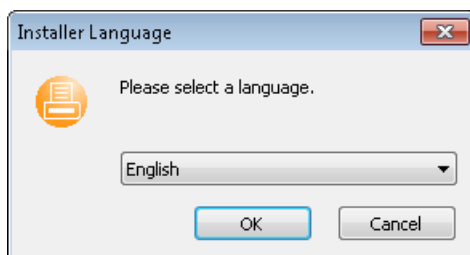


Figure 2: Installer Language dialog

You can set the language of the LocateMyPrinters 2013 installer to either English or German.

3.1.2 Welcome Page



Figure 3: Welcome screen

3.1.3 License Agreement



Figure 4: License Agreement

Before you can install LocateMyPrinters 2013, you must accept the license agreement.

3.1.4 Selecting the Installation Folder

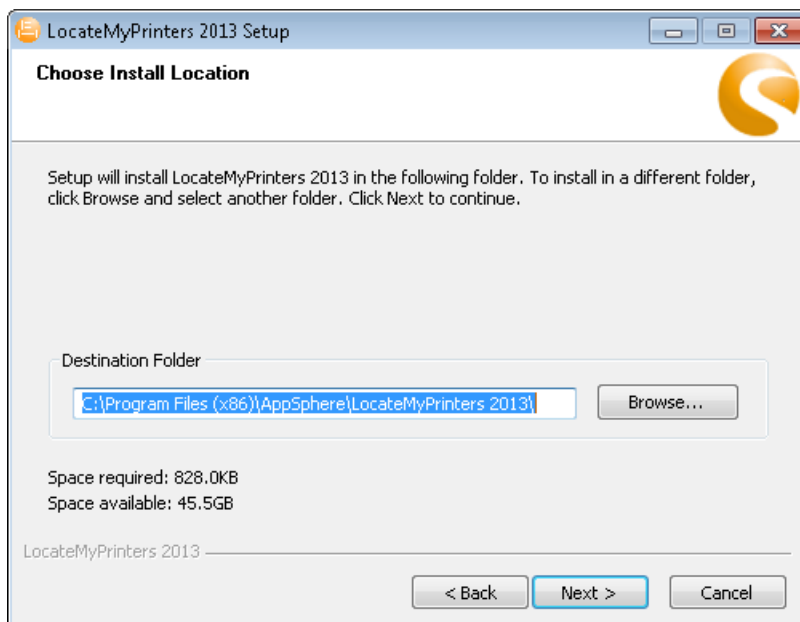


Figure 5: Selecting the installation folder

Here, you select the folder where LocateMyPrinters 2013 will be installed. The default folder is %Programfiles%\AppSphere\LocateMyPrinters 2013.

3.1.5 Selecting the Components to Install

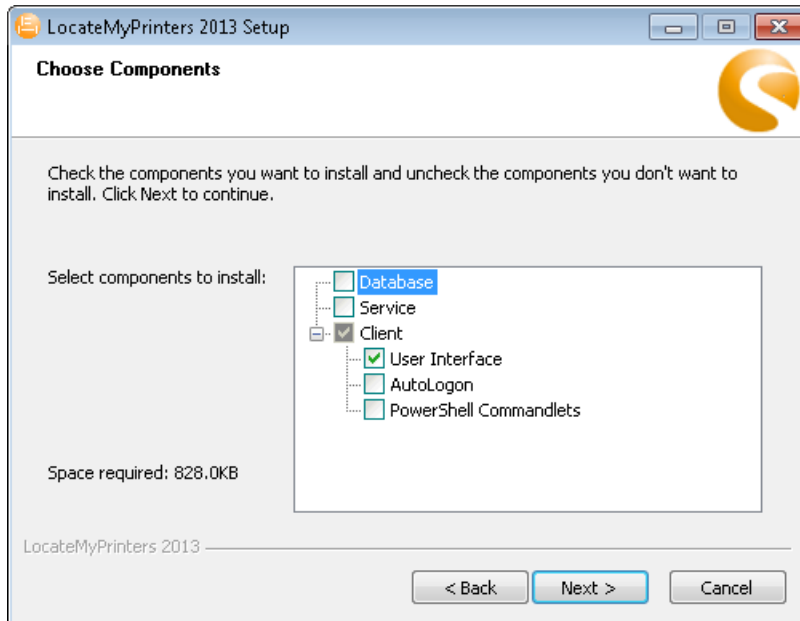


Figure 6: Choose Components dialog

This is where you select the LocateMyPrinters 2013 components to install. A component's installation page will be displayed only if that component has been selected for installation. When you have already completed the initial installation of LocateMyPrinters 2013, you only need to select the Client option for LMP-client distribution. The GUI-mode client is enabled by default.

The following options are available:

- > **Database (refer to section 2.2.2).** When doing a first-time install, creating the LMP database is obligatory.
- > **Service (refer to section 2.2.3).** You can install multiple LMP services to run in parallel on separate servers.
- > **Client/User Interface (refer to section 2.2.5).** Depending on the selected user model (see section 2.2.1), you can install an LMP client in GUI mode and/or an LMP client in AutoLogon mode.
- > **Client/AutoLogon (refer to section 2.2.5).**
- > **PowerShell Cmdlets.** This allows for administering LocateMyPrinters without using the LMP user interface.

3.1.6 Database Installation

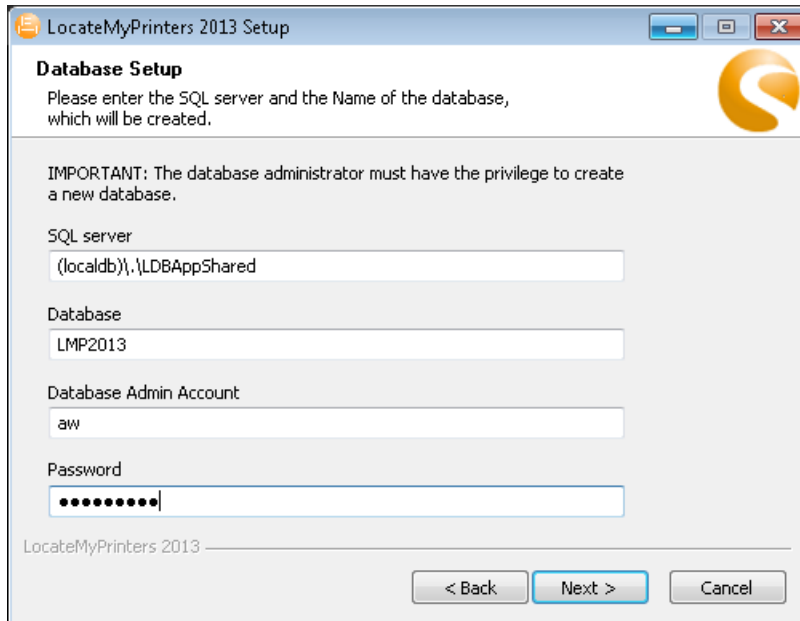


Figure 7: Database Setup dialog

Enter the FQDN (in the *<server name\instance name>* format) or the IP address of the SQL server where the LMP database will be created. In addition, you need to supply the name and password of a database administrator who has permissions for creating a new database (refer to section 2.2.2). You can either use the “LMP2013” default entry or configure a custom database name.

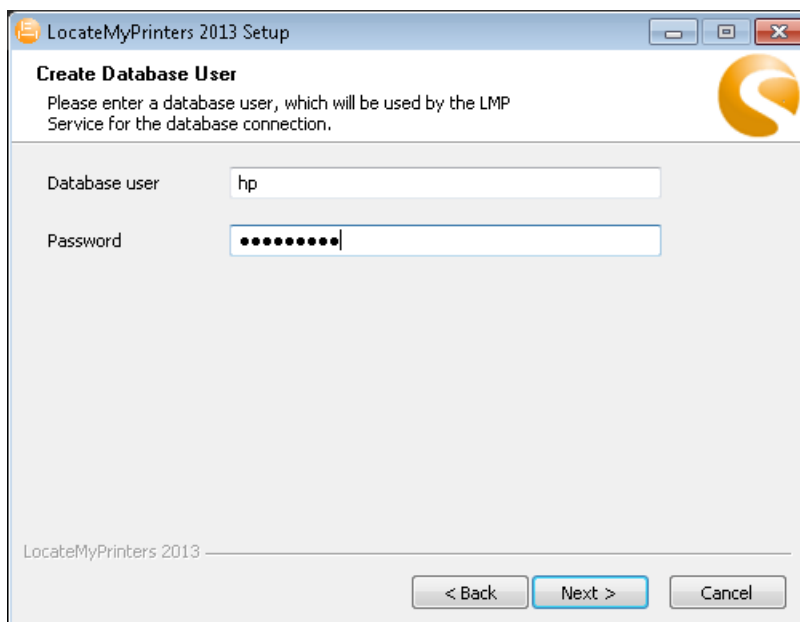


Figure 8: Create Database User dialog

On the second page of the database-installation wizard, you need to indicate a database user that will later be used for database access by the LMP service. If that user does not exist on the SQL server, it will be created (refer to section 2.2.2).

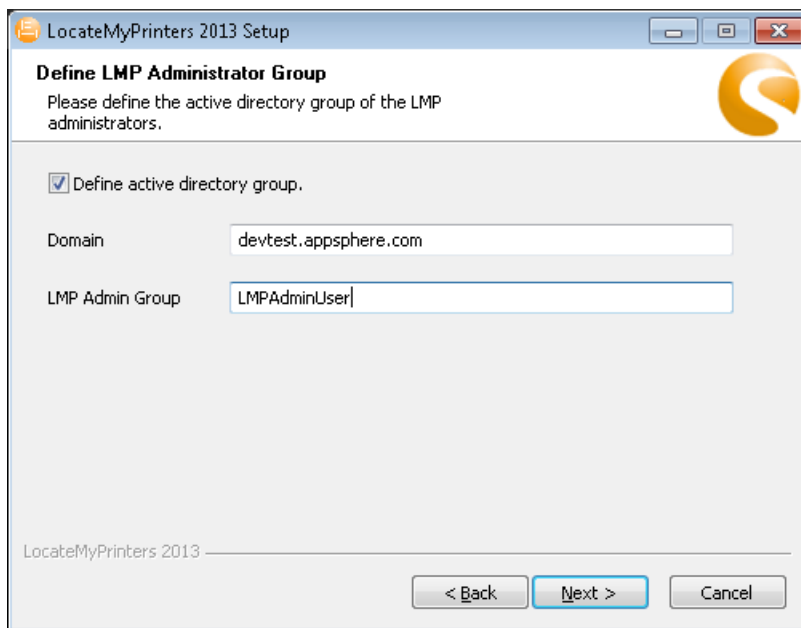


Figure 9: Define LMP Administrator Group dialog

As described in section 2.2.4, LocateMyPrinters 2013 uses Active Directory for managing roles and permissions. You set the Active Directory group containing the LMP administrators on the third page. For this purpose, specify the group and the corresponding domain. Only users who are members of the specified group can run LocateMyPrinters 2013 as LMP administrators.

Note: We recommend you to make yourself a member of that group; this will allow you to set up LocateMyPrinters 2013 when the installation is complete.

3.1.7 Service Installation

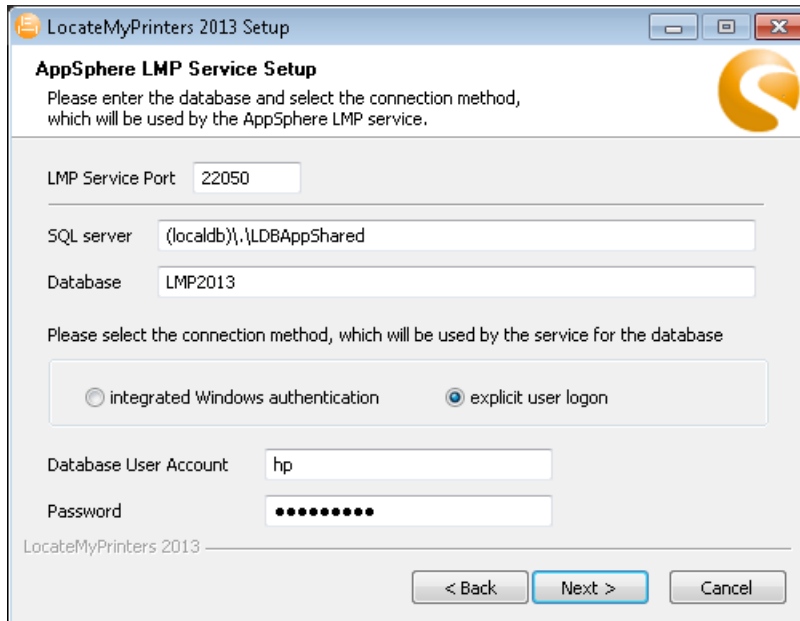


Figure 10: LMP Service Setup dialog

In this dialog, enter the FQDN (in the *<server name\instance name>* format) or the IP address of the SQL server and the name of the database that the LMP service will connect to. For the database connection, you can select between Windows Integrated Authentication and an explicit user login. When choosing the explicit user login, you must supply the user name and password of the account you gave permissions for the LMP database during database installation. We recommend using the explicit user login.

In addition, you may change the service port from the default ("22050") to a different setting.

Note: Before installing an LMP service instance, you first must have successfully installed an LMP database. The installation wizard verifies whether the service can connect to the LMP database.

3.1.8 Client Installation

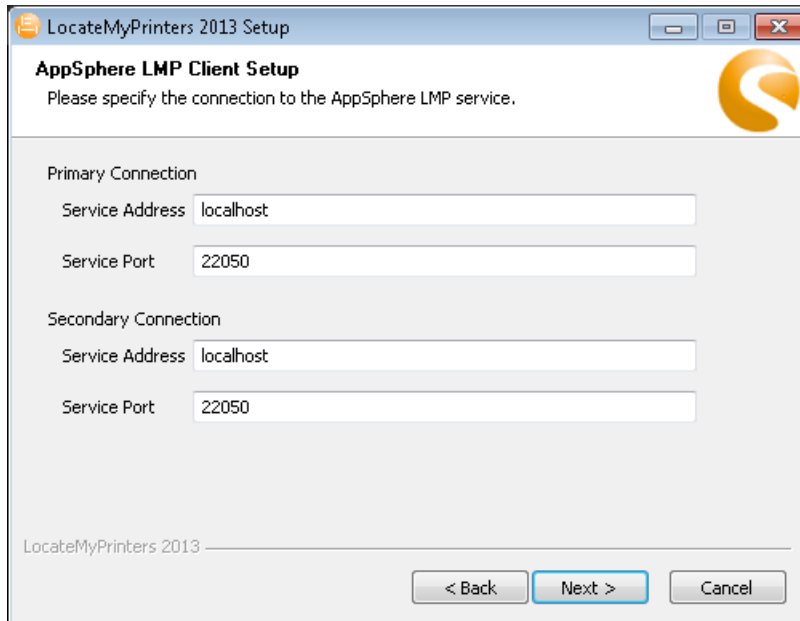


Figure 11: LMP Client Setup dialog

By default, all connections between the LMP client and the LMP service use the *localhost* service address and port *22050*. If the LMP service has been installed on a different computer, you need to specify the FQDN or IP address of the service host. In case that only a single LMP service has been installed, be sure to provide the same address data for both connections. If the primary connection cannot be made, the secondary one will be used. A connection to a running LMP service is required for successfully running an LMP client.

You can adjust the service port to match the service configuration.

Note: Be sure to install an LMP database and an LMP service before installing a client.

3.1.9 Summary

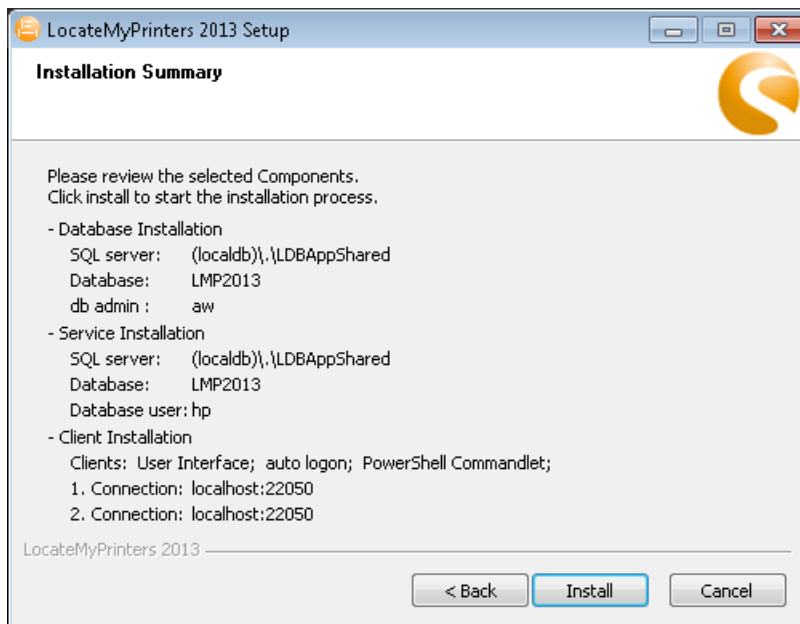


Figure 12: Summary

Before the actual installation is run, Setup will display a summary of your installation settings.

3.1.10 Installation Process

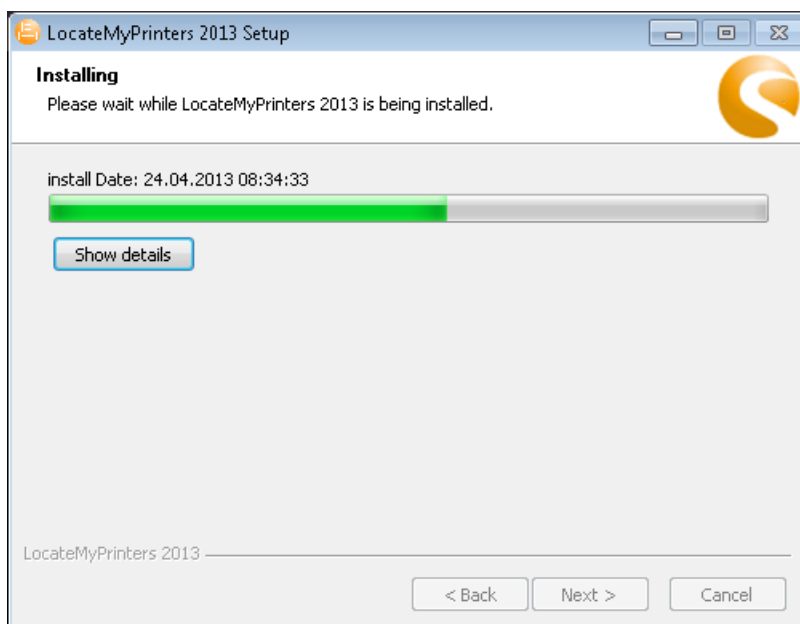


Figure 13: Installing dialog

The installer will now install and configure LocateMyPrinters 2013. This may take a few minutes.

3.1.11 Setup Complete

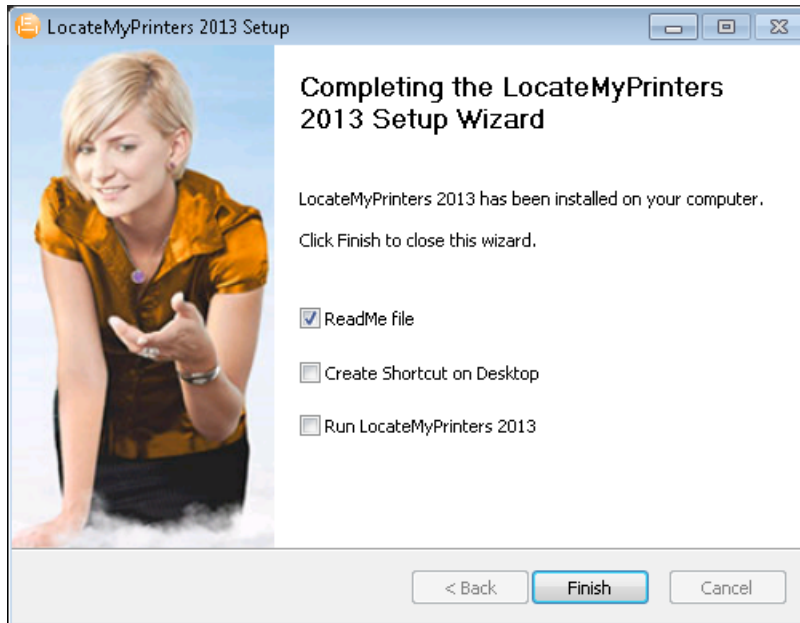


Figure 14: Completing the Wizard dialog

The Completing the LocateMyPrinters 2013 Setup Wizard page will be displayed when the setup is complete. You can choose from various options depending on the type of your installation.

- **ReadMe File**
This item is enabled by default. When clicking the Finish button, the ReadMe file will be displayed in the editor. Please read the file carefully as it includes up-to-date information related to LocateMyPrinters 2013.
- **Create Shortcut on the Desktop**
When this item is enabled, Setup will automatically create a LocateMyPrinters 2013 shortcut on your desktop.
- **Run LocateMyPrinters 2013**
When this item is enabled, LocateMyPrinters 2013 will automatically be launched when you click the Finish button.

Note: The last two options will be available only after installing the LMP client in GUI mode.

3.2 Unattended Installation

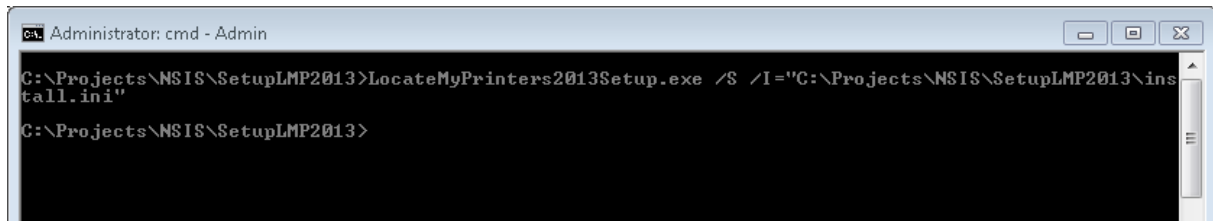


Figure 15: Unattended installation using the INI file

Setup also supports unattended installation. To enable it, use the command-line switch `/S`. (Be sure to use the capital letter `"S"` when using this switch.)

3.2.1 Command-Line Parameters in Unattended Mode

The following parameters are available in unattended mode:

- > When performing the installation using an INI file:

Option	Parameter	Description
<code>/S</code>		Enables the unattended mode.
<code>/D*</code>	Installation path	Defines a different installation directory. The default directory is <code>%Programfiles%\AppSphere\LocateMyPrinters2013\</code> For example: <code>>LocateMyPrinters2013Setup.exe /D=C:\LMP2013</code>
<code>/I</code>	"full path to INI file"	Defines the INI file used for installation. Refer to the appendix for information on the structure of the INI File. For example: <code>/I="C:\Users\Public\LMP\install.ini"</code>
*When this option is not given, the default values will be used.		
Note: All of the following options cannot be used when the <code>/I</code> option is given.		

Table 1: Command-line parameters when using an INI file

> For database installation:

Option	Parameter	Description
/S		Enables the unattended mode.
/db		Enables database installation. This option requires you to provide more options.
/server	"server_name"	UNC name or IP address of the SQL server. For example: <code>/server="127.0.0.1\instance_name"</code>
/database	"database_name"	Specifies the LMP-database name. A database with this name must not exist; otherwise, the database will not be created. For example: <code>/database="LMP2013"</code>
/admin	"database_administrator"	Name of the database administrator.
/adminpwd	"admin_password"	Password of the database administrator.
/user	"username"	Name of the database user account used by the service for authenticating against the database.
/pwd	"user_password"	Password of the database user.
/domain	"domain"	Domain of the LMP administrator group. For example: <code>/admingroup="devtest.appsphere.com"</code>
/admingroup	"Active Directory group"	Name of the LMP administrator group.

Table 2: Command-line parameters for database installation

> For service installation:

Option	Parameter	Description
/S		Enables the unattended mode.
/D*	Installation path	Defines a different installation directory.
/service		Enables the installation of the LMP service. This option requires you to provide more options.
/server	"server_name"	FQDN or IP address of the database server that the service will connect to. For example: <code>/server="127.0.0.1\instance_name"</code>
/database	"database_name"	Name of the LMP database.
/user**	"database_user"	Name of the database user account used by the service for authenticating against the database.
/pwd**	"user_password"	Password of the database user.
/port*	"port_number"	Port number of the LMP service. Default: <code>/port="22050"</code> .
* When this option is not given, the default values will be used.		
** If no database user and password are given, the Windows Integrated Authentication will be used for logging in to the database server.		

Table 3: Command-line parameters for service installation

> For client installation:

Option	Parameter	Description
/S		Enables the unattended mode.
/D*	Installation path	Defines a different installation directory.
/client		Enables the installation of an LMP client.
/auto		Enables AutoLogon-client installation.
/gui		Enables GUI installation.
/wps		Enables LMP PowerShell-module installation.
/srvaddress1*	"computer_name" or "computer_ip_address"	FQDN or IP address of the computer where the LMP service (endpoint 1) is installed. Default: <i>/srvaddress1="localhost"</i> .
/srvaddress2*	"computer_name" or "computer_ip_address"	FQDN or IP address of the computer where the LMP service (endpoint 2) is installed. Default: <i>/srvaddress2="localhost"</i> .
/srvport1*	"port_number"	Port number used for accessing the LMP service (endpoint 1). Default: <i>/srvport1="22050"</i> .
/srvport2*	"port_number"	Port number used for accessing the LMP service (endpoint 2). Default: <i>/srvport2="22050"</i> .
* When this option is not given, the default values will be used.		

Table 4: Command-line parameters for client installation

3.3 Start Menu

During installation, Setup creates several shortcuts in the Start menu. The following shortcuts will be created in the Programs > AppSphere > LocateMyPrinters 2013 group:

- **Uninstall**
Selecting this shortcut launches the uninstaller of the application.
Note that this shortcut is only created when installing the LMP service or an LMP client.
- **LocateMyPrinters 2013**
Selecting this shortcut launches the application.
Note that this shortcut is only created after the GUI has been installed.
- **LMP PowerShell Management**
Selecting this shortcut launches the LMP PowerShell module.
- **LMP PowerShell module manual**
Selecting this shortcut displays the manual of the LMP PowerShell module

The following shortcuts will be created in the Weblinks subfolder:

- **AppSphere AG**
Shortcut for accessing the AppSphere AG website.
- **LocateMyPrinters Homepage**
Shortcut for accessing the LocateMyPrinters product page.
- **Support LocateMyPrinters**
Shortcut for accessing the AppSphere AG support website.

4 Uninstalling LocateMyPrinters 2013

When the LMP service or an LMP client is installed, Setup creates the `uninstaller.exe` program in the install directory and a shortcut to it in the Start menu. The uninstaller provides two modes of operation: the GUI mode and the mode for unattended uninstall. We will describe the mode for unattended installation in more detail below.

4.1 Unattended Uninstall

The uninstaller provides an unattended mode that is enabled using the `/S` command-line parameter. (Be sure to use the capital letter `"S"` when using this switch.)

4.1.1 Command-Line Parameters in Unattended Mode

The following parameters are available in unattended mode:

Option	Parameter	Description
<code>/S</code>		Enables the unattended mode.
<code>/service</code>		Uninstalls the LMP service.
<code>/client</code>		Enables client uninstall. This requires at least one of the <code>"/auto"</code> , <code>"/gui"</code> or <code>"/wps"</code> options.
<code>/auto</code>		Uninstalls the AutoLogon client.
<code>/gui</code>		Uninstalls the GUI.
<code>/wps</code>		Uninstalls the PowerShell module.

Table 5: Command-line parameters for uninstall

Note: The uninstaller will be deleted only after any other LocateMyPrinters 2013 components have been removed.

5 Legal Notes

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Website: www.appsphere.com

5.1 Reproduction and Warranty

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6 Appendix

6.1 Structure of the INI File

The INI file has the following structure:

```
[db]
install=0
server=172.16.2.89\devtestsql
database=LMP2013
admin=LmpAdmin
adminpwd>Password123
user=LmpUser
pwd>Password456
domain=devtest.appsphere.com
admingroup=LMPAdminUser

[service]
install=0
port=22050
server=172.16.2.89\devtestsql
database=LMP2013
user=LmpUser
pwd>Password456

[client]
auto=0
gui=1
wps=0
address1=localhost
port1=22050
address2=127.0.0.1
port2=22050
```

Notes:

Please make sure that no parameter in the `db` section is unpopulated, and that the `install` parameter is 1 or `true`; otherwise, the LMP database cannot be installed.

Also, make sure that the `server` and `database` parameters in the `service` section are populated, and that the `install` parameter is 1 or `true`; otherwise, the LMP service cannot be installed. If the `user` and `pwd` parameters are not populated, the LMP service will use the Windows Integrated Authentication for logging in to the database server.

Finally, make sure that each of the `auto`, `gui`, and `wps` parameters in the `client` is 1 or `true`; otherwise, the respective client cannot be installed.