



# MaintSmart 4.1 Enterprise Edition Installation Guide

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## What is MaintSmart Enterprise Edition?

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- All of the features of previous MaintSmart versions
- Version 4.1 supports MS SQL Server 2005-2008 R2 databases and MS Access 97 databases

(**NOTE:** Access is not required to use MaintSmart nor does MaintSmart Access drivers interfere with existing installs of Access. Version 97 drivers are used because they are 13X faster than newer Access version and more robust and reliable.)

## Typical Resource Consumption

Hard drive space requirements	Depend upon previously installed components but range from 292-675 MB.
CPU usage	4%-7% at idle 20%-37% loading a screen 53%-55% loading first report (Crystal Reports) 64% loading "Hot Sheet"
Memory usage	34188K open to home screen 50000K open one screen 73000K open 2 screens 98000K opening report components 110000K + multiple screens

## System Requirements

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### Client Workstation Requirements

<b>Operating System</b>	Windows: XP, 2003, 2008, Vista, Win 7 (32bit/64 bit) Win 8-8.1 on a stand-alone computer. MaintSmart Software has not been certified or tested to run in a Terminal Server or Citrix environment.
<b>RAM Memory</b>	Minimum 2 GB RAM memory. 4+ GB of RAM or greater is recommended.
<b>Processor</b>	Minimum 1.5 GHz processor, 2+GHz. or better is recommended. Single or dual processors.
<b>Disk Space</b>	Minimum 475-610 MB of free disk space for standalone. Minimum 475 MB of free disk space for client workstation and 500 MB (version 4.1) for server when using on a network.
<b>Display</b>	Minimum 15 inch monitor using 800x600 resolution. Program windows resize automatically for various resolutions and monitor sizes above the minimums. 1024x768 resolution is recommended.
<b>Drive</b>	CD-ROM drive for installation.

### Server Requirements (MS Access)

<b>Operating System</b>	Windows: XP, 2003, Vista, 2008, Win 7 (32 bit/64 bit), Win 8-8.1
<b>RAM Memory</b>	Minimum 2 GB RAM memory. 4+GB of RAM or greater is recommended.
<b>Processor</b>	Minimum 1.5 GHz processor , 2+ GHz. or better is recommended. Single or dual processors.
<b>Disk Space</b>	Minimum 100-500MB of free disk space for database.
<b>Display</b>	Minimum 15 inch monitor using 800x600 resolution. Program windows resize automatically for various resolutions and monitor sizes above the minimums. 1024x768 resolution is recommended.
<b>Drive</b>	CD-ROM drive for installation.

### Server Requirements (MS SQL Server)

Please visit the Microsoft web site for SQL Server requirements:

<http://msdn.microsoft.com/en-us/library/ms143506.aspx>

For Microsoft system requirements for SQL Server 2005-2008 R2 Microsoft Corporation Support should be consulted with. A general summary is presented here (however the below requirements are not representative of all system requirements and all versions of SQL Server

<b>Operating System</b>	Windows: XP, 2003, Vista, 2008, Win 7 (32 bit/64 bit), Win 8-8.1
<b>RAM Memory</b>	Minimum 2GB RAM memory. 4 GB of RAM or greater is recommended.

<b>Processor</b>	Minimum 1 GHz MHz Intel Pentium , 1.4GHz. or better is recommended. Single or dual processors.
<b>Disk Space</b>	Minimum 270-500 MB of free disk space for standalone. Minimum 125 MB of free disk space for client workstation and 100 MB (version 4.1) for server when using on a network. Optimally fast.
<b>Display</b>	Minimum 15 inch monitor using 800x600 resolution. Program windows resize automatically for various resolutions and monitor sizes above the minimums. 1024x768 resolution is recommended.
<b>Drive</b>	CD-ROM drive for installation.

## Installation

There are several steps in implementing MaintSmart Enterprise Edition at your site.

1. Set Up the database (Applies only to SQL Server 2005-2008 R2)
2. Install the application (if upgrading from MaintSmart 4.0 uninstall MaintSmart 4.0 first)
3. Connect the application to the database
4. Load data into the database

### Set Up the Database (below instructions use pictures from SQL Server 2005)

**SQL Server only.** This task is usually performed by a database administrator, although anyone with the necessary SQL Server permissions may do it. It is assumed that the person creating the database is familiar with SQL Server and its utilities and has the necessary permissions. NOTE: the below illustrations may not depict your specific version of SQL Server.

There are three main tasks that must be completed to set up the MaintSmart database:

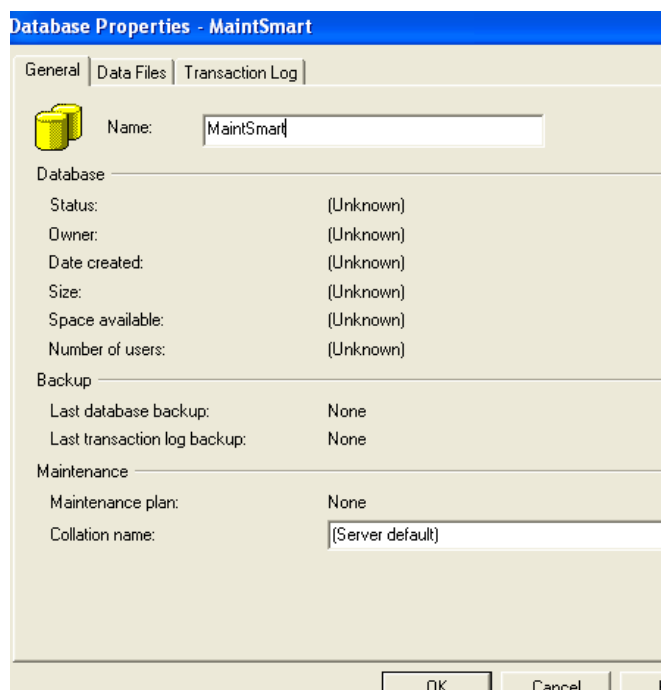
First, create the database on an MS SQL Server (2005-2008 R2)

Second, create the MaintSmart schema within the database

Third, possibly create a SQL Server User Login to use for connecting to the database

Create the database on an MS SQL Server

1. Open SQL Server Enterprise Manager



2. Select the server on which to create the MaintSmart database
3. In the tree-view right click on "Databases" and select "New Database..."
4. In the new database dialog enter the name you want the database to have. Many companies have naming conventions that must be followed. Although any name will do, it is best to not use names containing spaces.
5. On the "Data Files" tab make sure the database can grow by checking "Automatically grow file" and allowing "Unrestricted file growth" or entering a suitably large value for "Restrict file growth". If desired set the Initial Size to something larger than the default 10 MB or more. See the following example (below)
6. Click "OK" and the database will be created

### Create the MaintSmart schema and add default data within the database

- A. Open Microsoft SQL Server Management Studio.
- B. Run the following six (6) scripts from the MaintSmart setup package in the order listed. These scripts are on the CD in the "DatabaseScripts" folder. Otherwise install the MaintSmart program first then find these scripts in the "C:\Program Files (x86)\MaintSmart Software\MaintSmart Enterprise 4.1\DatabaseScripts" folder.

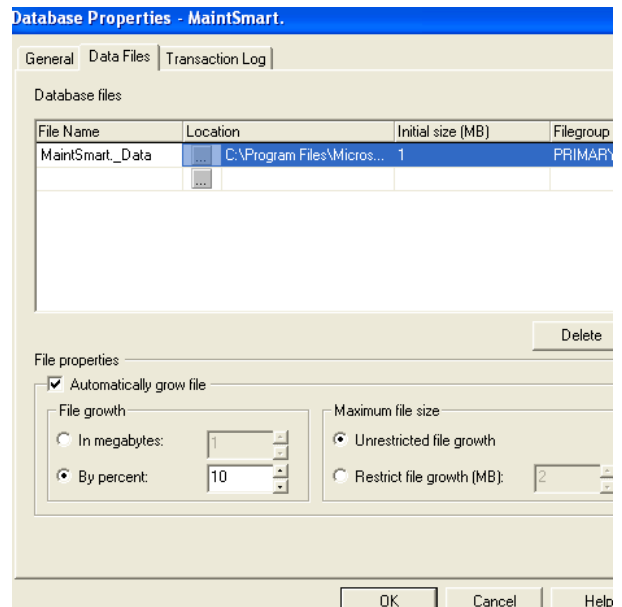
1. Tables.sql
2. UserDefinedFunctions.sql
3. Views.sql
4. StoredProcs.sql
5. Load.sql
6. Translator.sql

If you will NOT be importing data from an existing MaintSmart database, then run the script LoadForNoImport.sql

*Each script must run without errors. There may be warnings regarding field length when running the Tables.sql script. These may be ignored and will have no effect on the database.*

- C. Connect to the MaintSmart database that was created.

**NOTE:** It is necessary to install the application on a workstation to get the script files if you install from a download. These scripts are in the *DatabaseScripts* subdirectory of the MaintSmart install folder. Otherwise obtain scripts from CD or contact MaintSmart Support and we'll email the scripts to you.



## Create a SQL Server User Login to use for connecting to the database

If you want MaintSmart to log into SQL Server using Windows Integrated Security and have it use the database owner permissions you can skip this section. Now, there are two steps necessary to allow a connection to the database to be made if you will not be using Windows Integrated Security. That is, if you will be logging into SQL Server with a user ID and password.

1. Create the Login and assign a password
2. Give the correct permissions to the Login

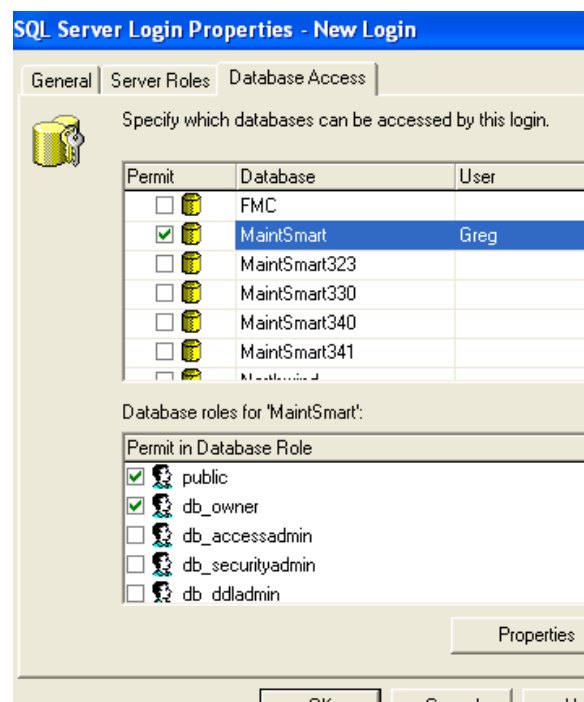
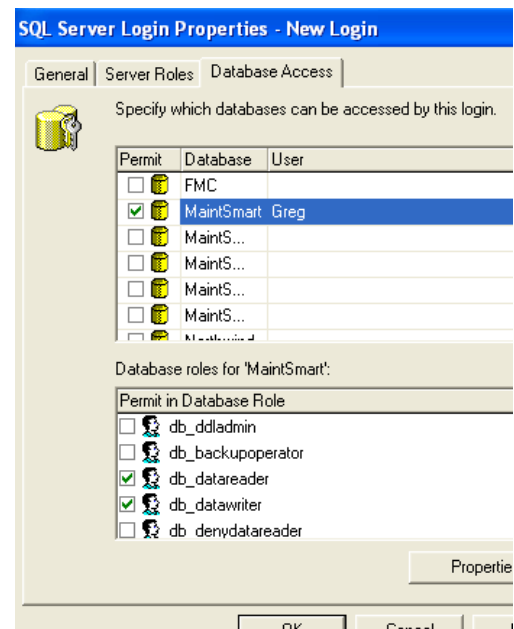
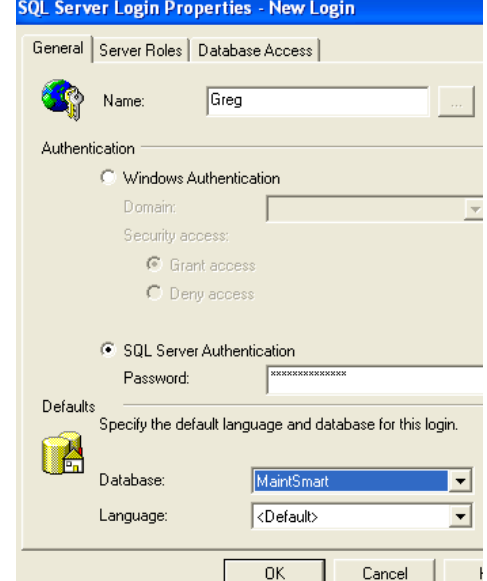
### Create the Login and assign a password

In the SQL Server Enterprise Manager tree-view right-click on Security/Logins and select "New Login...". Enter the login name, password, and set the default database to the MaintSmart database you created to be.

### Give the correct permissions to the Login

Give the Login the db\_datareader and db\_datawriter roles in the MaintSmart database.

You will also need to: either give the Login the db\_owner role.



**or else**

execute the stored procedure admGrantExecute in the MaintSmart database. This can be done in the SQL Server Query Analyzer by executing the following statement:

```
exec admGrantExecute <login name>
```

Be sure to fill in the login name you created in place of "<login name>".

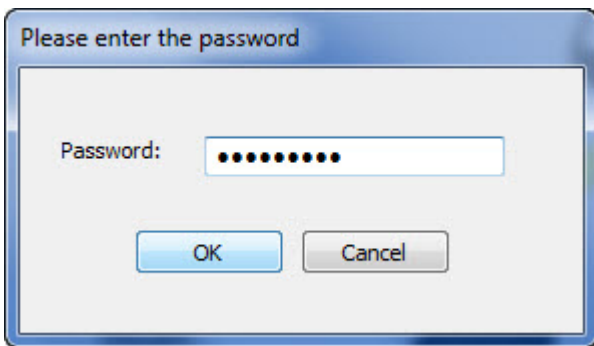
**Install the application (system administrator login required)**

If upgrading MaintSmart 4.1 from 4.0 then you will need to first uninstall the MaintSmart 4.0 program AFTER ensuring that the database is properly backed up. If upgrading MaintSmart 4.0 to 4.1+ be sure to contact MaintSmart Support for the document titled: *Upgrading to MaintSmart Enterprise 4.1 using a SQL Server Database*.

The application must be installed on each workstation from which it will be used. Run the setup program ("MaintSmart Enterprise.exe") from the CD or downloaded installation package. Accept the "Complete" install option.

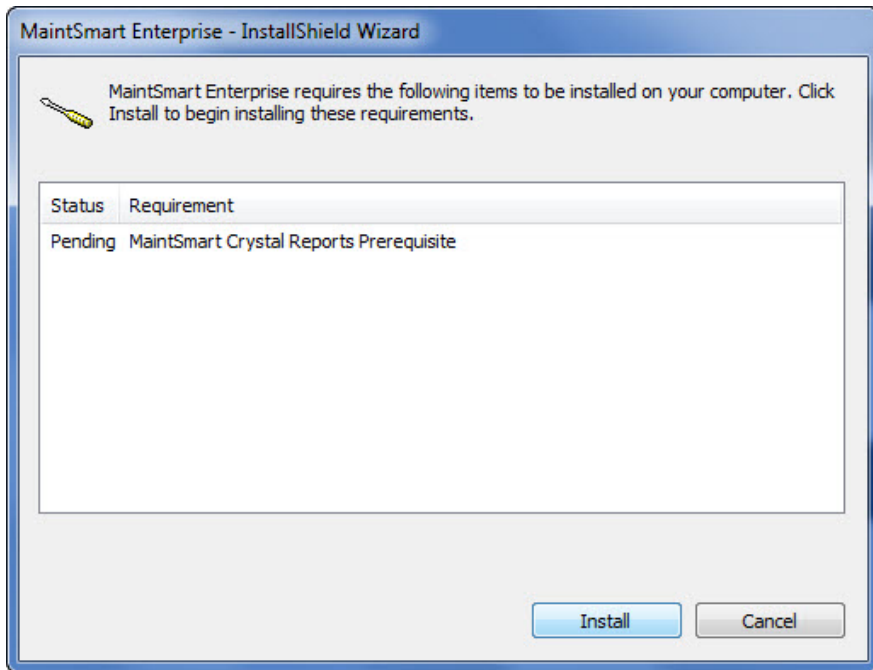
The "Complete" option will install all program and database files onto your computer. If you will be using Access and want multiple users to share the database, then you will need to share the Access database file or copy it to a server where all the users have permissions. If you will be using SQL Server, then the scripts needed to create the SQL Server database will be copied along with all other installed files.

Begin by inserting the CD or running the setup.exe file on a workstation.

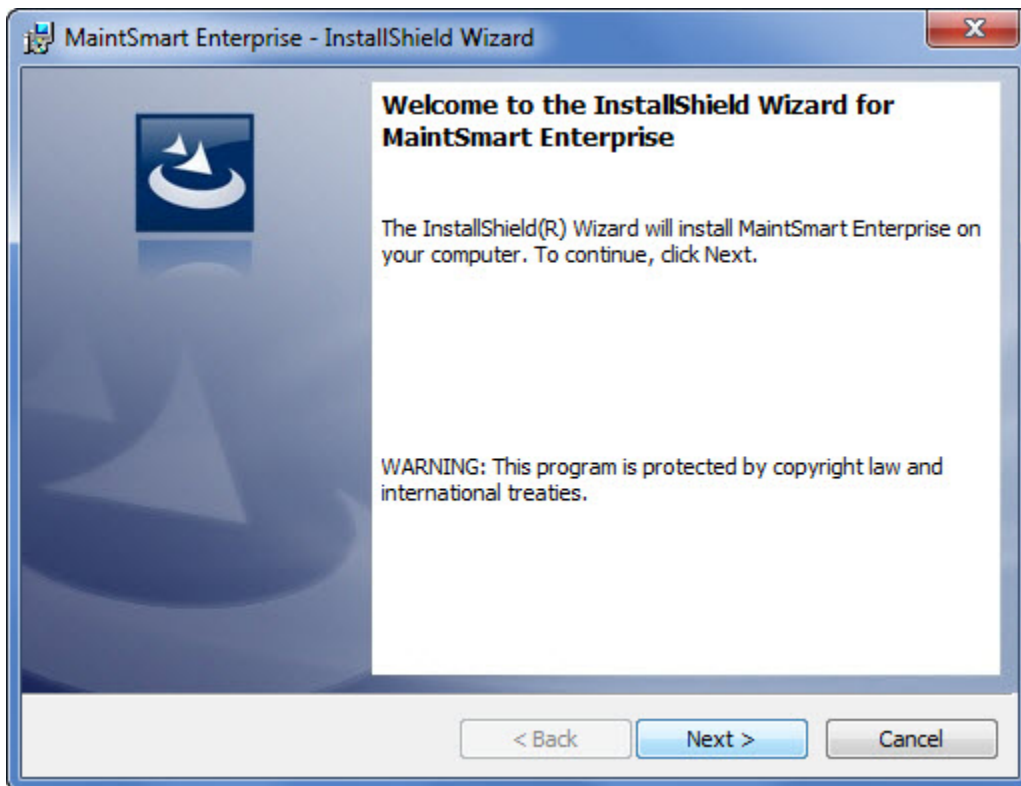


Enter the installer password: '**effective**' (w/o quotes).

This prerequisite (MaintSmart\_Prerequisite) **MUST BE INSTALLED FOR ANY WINDOWS OPERATING SYSTEM (XP, VISTA, 2003, 2008 WIN7 or WIN 8-8.1** and will install some support components needed by the Crystal Reports component included with MaintSmart. In some cases you may need to temporarily disable your virus software so that this .exe file may successfully install these components (picture below).

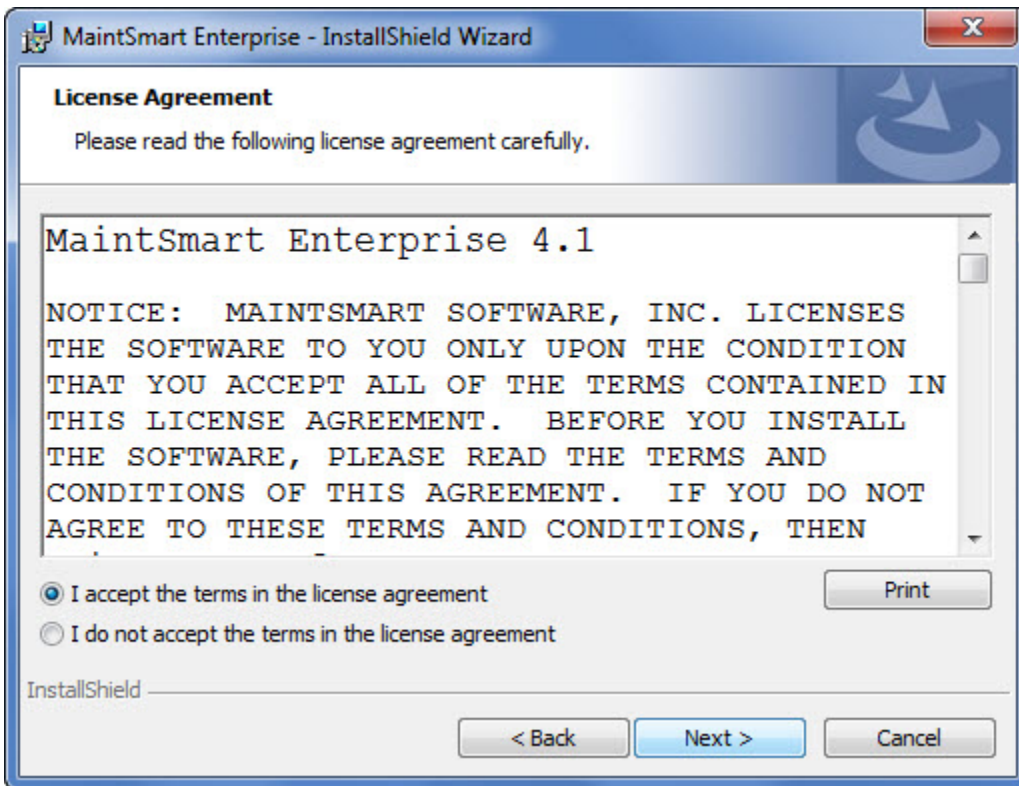


Click 'Next'.

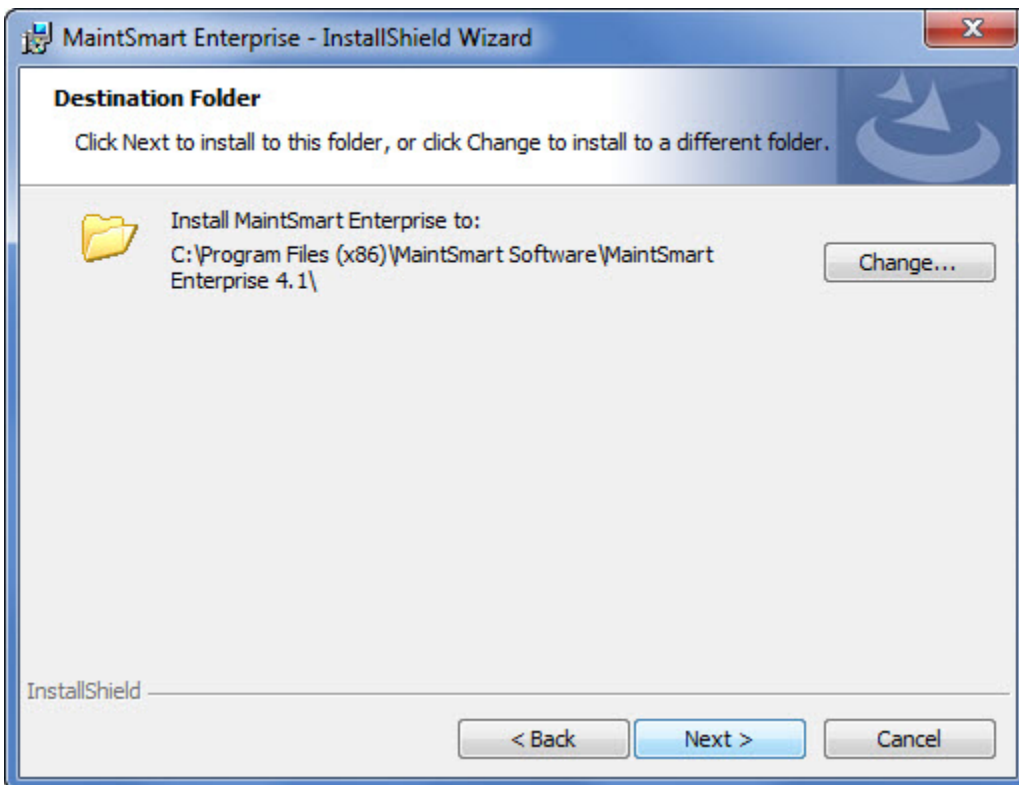




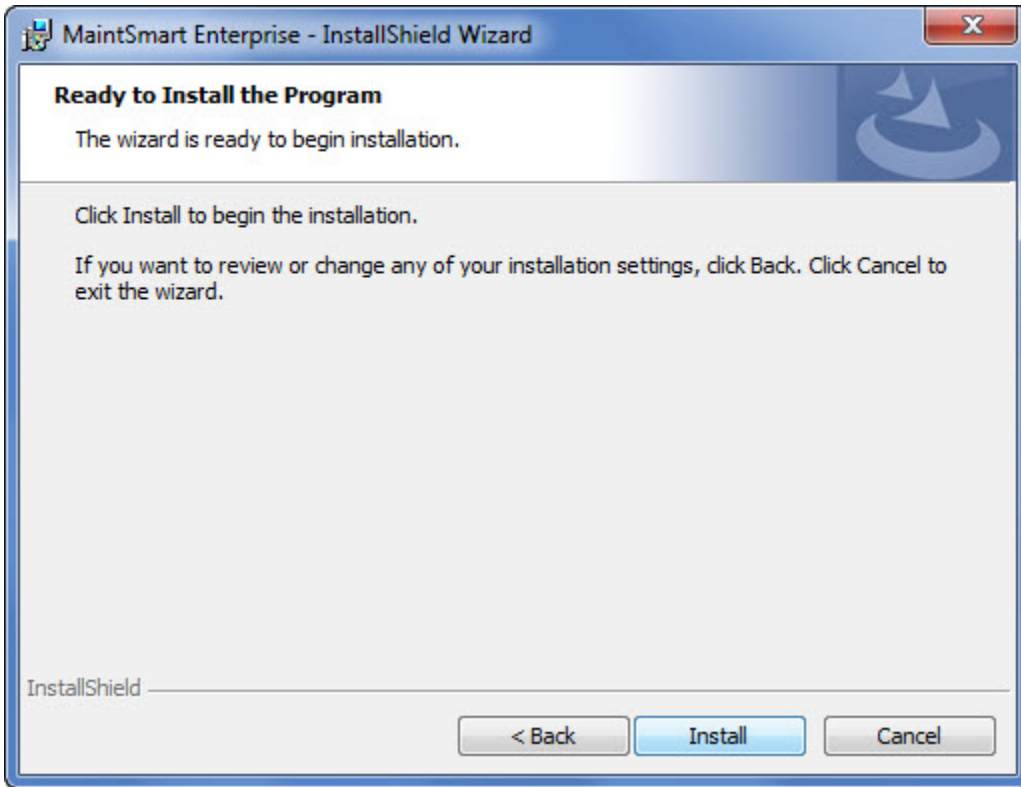
Agree to license. Click 'Next'.



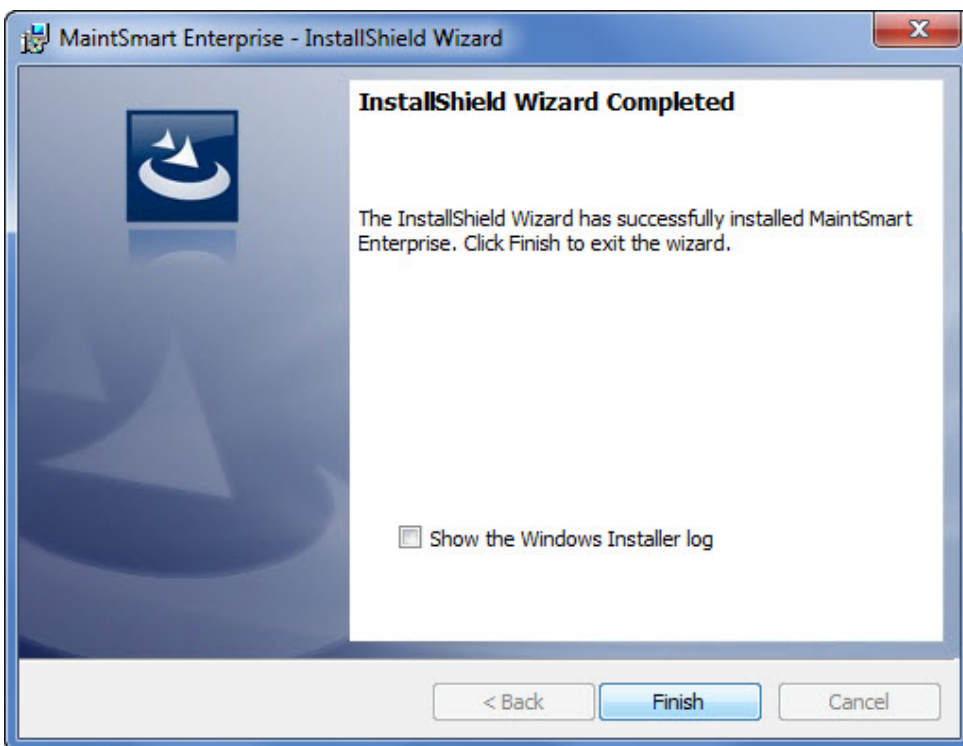
Change program installation folder if required (not recommended).



Click 'Install' and follow any additional prompts through to completion of the installation.



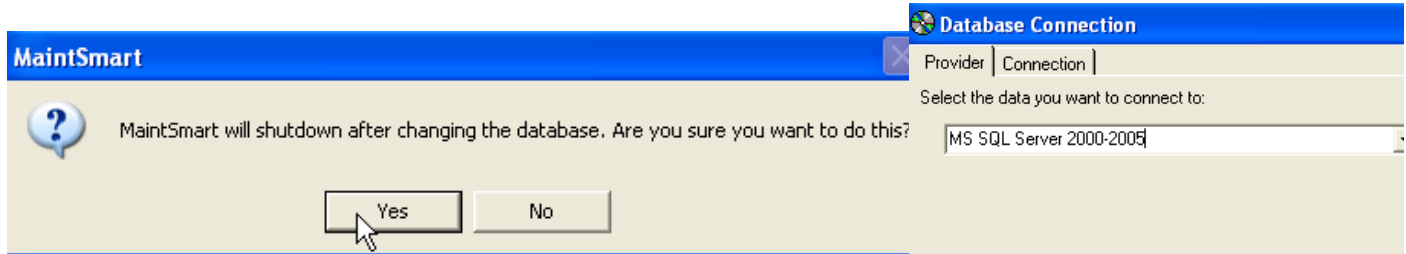
MaintSmart program files installation completed. You are now ready to connect MaintSmart (application) to the database.



## Connect the Application to the Database

### SQL Server 2005-2008 R2

The first time you run MaintSmart Enterprise Edition you will need to tell it how to connect to the database. You will see the following message warning you that MaintSmart will shut down after you select the database connection. Click the "Yes" button to proceed.

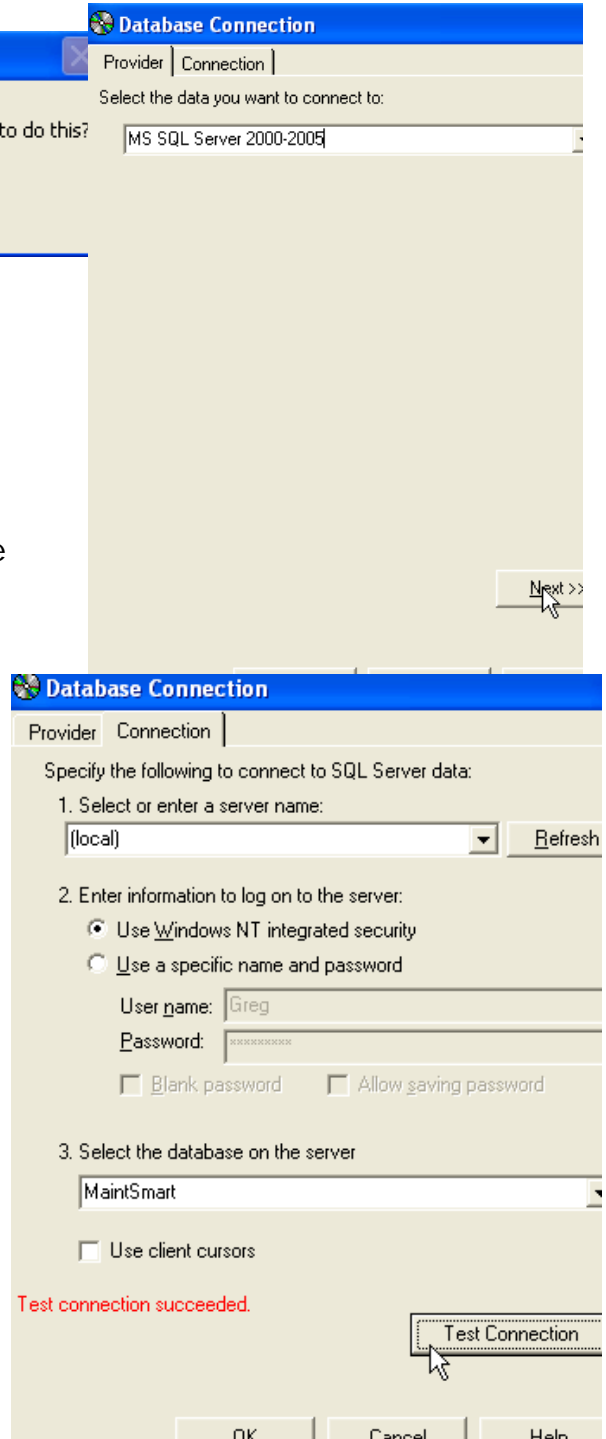


Fill in the database connection information on the Database Connection dialog screen.

First select MS SQL Server 2005-2008 R2 from the drop-down list.

After supplying the necessary database connection information and testing the connection, click the "OK" button. MaintSmart will shut down and you can restart it from the Start menu.

NOTE: in some cases the server name and database name will not automatically populate the drop-down boxes on this screen. If this occurs simply copy/paste or directly type the names into the appropriate boxes manually.

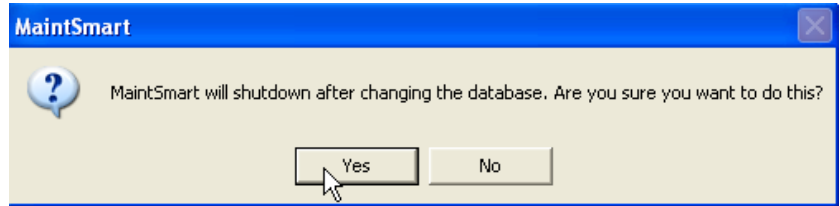


If the connection test fails then some of the information entered is incorrect. *See you SQL Server system administrator to verify that you save the correct information. In all*

*cases this will be the result of incorrect login information or inadequate permissions on the SQL Server database.*

## MS Access

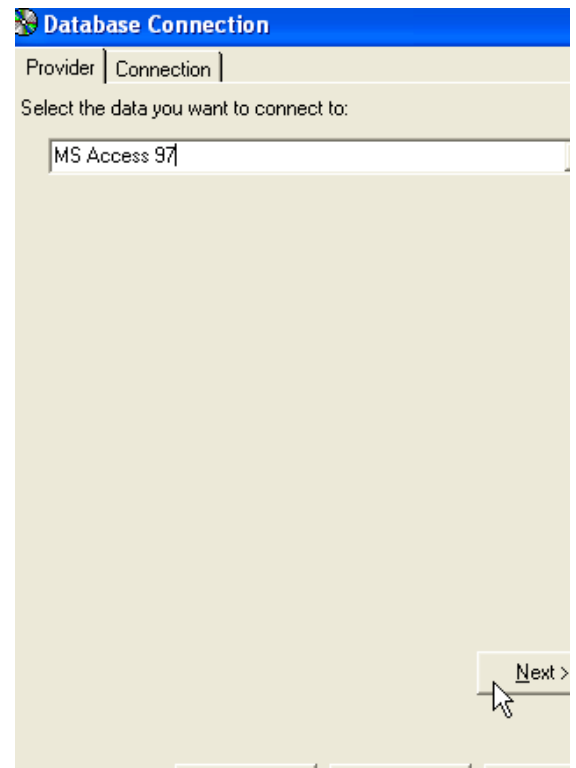
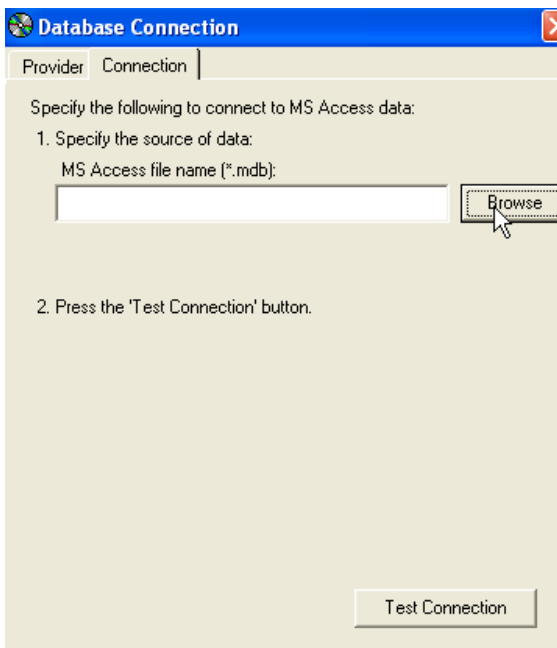
The first time you run MaintSmart Enterprise Edition you will need to tell it how to connect to the database. You will see the following message warning you that MaintSmart will shut down after you select the database connection. Click the "Yes" button to proceed.



Fill in the database connection information on the Database Connection Wizard. In a standard installation you can find your MaintSmart databases in **C:\Program Files\MaintSmart Software\MaintSmart Enterprise 4.1\Access Databases** There are four MS Access database files that are installed with MaintSmart:

File	Purpose
MaintSmart.mdb	Empty database - Use for entering new data manually from MaintSmart.
MaintSmart_B.mdb	Building Maintenance demo database (sample data included)
MaintSmart_M.mdb	Manufacturing demo database (sample data included)
MaintSmartMT_41XXX.mdb	Empty database - Use only for importing into from existing MaintSmart database

Whichever database file you decide to use, you should make a backup copy of it before you start using it so you can start over if you wish.



After supplying the necessary database connection information and testing the connection, click the "OK" button. MaintSmart will shut down and you can restart it from the Start menu.

If the connection test fails then some of the information entered is incorrect. See you SQL Server system administrator to verify that you have the correct connection information.

## Load Data Into the Database

There are two scenarios that may occur for businesses starting to use MaintSmart Enterprise Edition:

- Using MaintSmart for the first time
- Upgrading from previously versions (4.0xxx and earlier) of MaintSmart

### Using MaintSmart For the First Time

When you start MaintSmart after you have established a database connection to a valid, empty MaintSmart database you will see the initial configuration screen. You can now start entering data through MaintSmart's user interface.

SQL Server Only: In this case you should have previously run the script file LoadForNoImport.sql as described in the section entitled "Create the MaintSmart schema within the database"

*Warning: Back up your existing Access/SQL Server database before importing. It will be changed by the import, although it will still be usable by your old MaintSmart application.*

### Upgrading From Versions (4.0x) of MaintSmart

If you have been using a previous version of MaintSmart using an MS Access database (4.0 or higher) you can import the data from your existing database into the new Enterprise Edition database. Select "Import Data" from the Initial Configuration "Options" menu. You will be required so supply information about the location of your existing database.

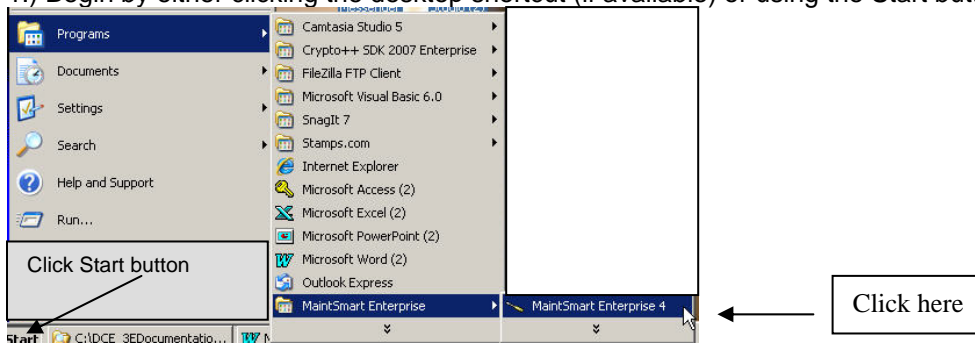
Due to possible corruption of your existing Access database some data may not be imported. If this happens you will see messages for each database table for which a data problem occurred. You can get help from MaintSmart technical support resolving data issues. If you need help it will be necessary to provide technical support with a copy of your original MS Access database.

### Upgrading From Versions (3.4x and earlier) of MaintSmart

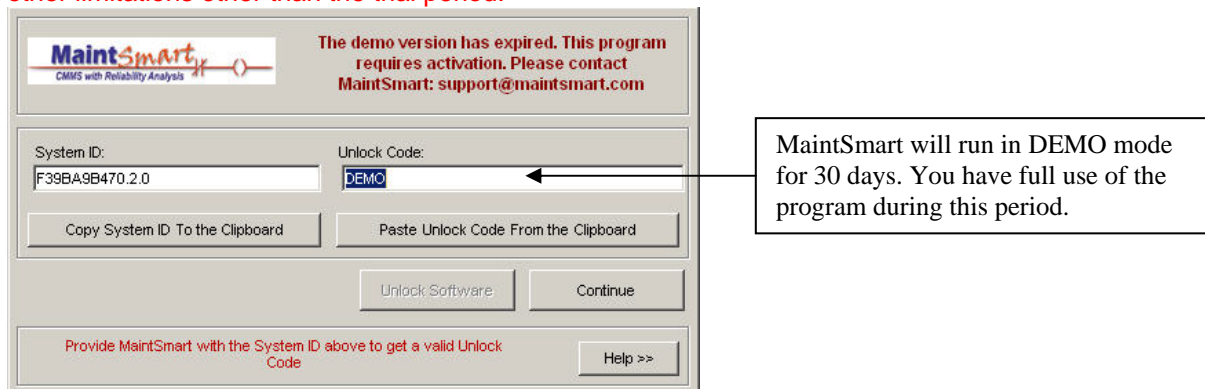
Upgrade the MaintSmart 3.4 database to MaintSmart 4.0 then upgrade the MaintSmart 4.1 database using the MaintSmart 4.0 database as the source database. Alternatively supported users you may consult with MaintSmart support for imports to MaintSmart 4.1 using a source database 3.4 or lower.

## License MaintSmart (activation)

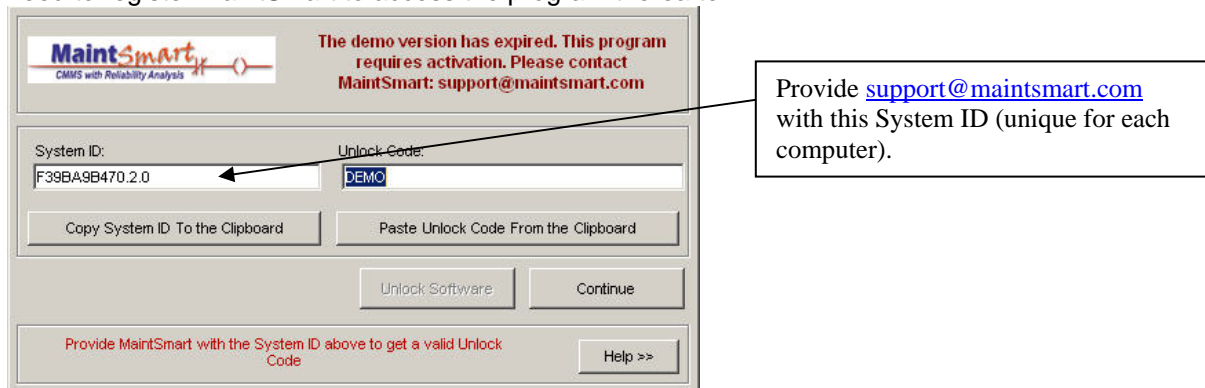
1.) Begin by either clicking the desktop shortcut (if available) or using the Start button Programs menu as depicted below:



2.) Starting MaintSmart will cause the Demo screen to appear. **NOTE: this is the full version of MaintSmart without any other limitations other than the trial period.**



3.) You may continue using until the 30-day trial period expires. At this point, a registration screen will appear and you'll need to register MaintSmart to access the program thereafter.



4.) Once MaintSmart receives the System ID an unlock code is created and sent back to you by email.



5.) Click the button labeled: 'Enter Unlock Code' once you have entered the correct unlock code. **Entering the wrong unlock code may make it more difficult to register this computer so be sure to match the System ID with the proper Unlock code for that computer.**

The screenshot shows the MaintSmart software interface. At the top, there is a logo and a message: "The demo version has expired. This program requires activation. Please contact MaintSmart: support@maintsmart.com". Below this, there are two input fields: "System ID:" with the value "F39BA9B470.2.0" and "Unlock Code:" with the value "54793579859803498503489053498053489534895". There are two buttons: "Copy System ID To the Clipboard" and "Paste Unlock Code From the Clipboard". Below these is a "Continue" button with a red arrow pointing to it. At the bottom, there is a "Help >>" button and a note: "Provide MaintSmart with the System ID above to get a valid Unlock Code".

Once you have entered the correct Unlock Code for this computer press the 'Unlock Software' button.

## Deactivating and Moving MaintSmart

Always deactivate MaintSmart before removing a computer from service OR uninstalling MaintSmart permanently. Failure to do so could result in a lost MaintSmart license.

1.) Go to Program Configuration screen and select menu item depicted below:

The screenshot shows the "Program Configuration Settings for Plant" window. The "Options" menu is open, and the "Deactivate License" option is highlighted with a mouse cursor. Other options in the menu include "Create New Group", "Delete Group", "Set Default Permissions For New Groups", "Edit Chief Administrator", "Impersonate Group/User...", "Configure Work Order Safety Text", and "Clean Up Closed Purchase Transactions". The background shows various configuration fields like "Name", "Address", and "City".

2.) Click "Deactivate License" then send in resulting codes to MaintSmart along with computer name. This will deactivate the license and make it available to another computer.

The screenshot shows the MaintSmart software interface. At the top, there is a logo and a message: "The demo version will expire in 23 days. To activate this program please contact MaintSmart: support@maintsmart.com". Below this, there are two input fields: "System ID:" with the value "F39BA9B470.2.0" and "Unlock Code:" with the value "DEMO". There are two buttons: "Copy System ID To the Clipboard" and "Paste Unlock Code From the Clipboard". Below these is a "Deactivate License" button with a red arrow pointing to it and a "Continue" button. At the bottom, there is a note: "Provide MaintSmart with the System ID above to get a valid Unlock Code".

3.) Email the System ID, Computer Name and Deactivation Code to MaintSmart. This will release this license making it available to another computer.