

**Oracle® Enterprise Single Sign-on
Logon Manager**

Best Practices: Packaging ESSO-LM for Mass Deployment

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Table of Contents

Table of Contents.....	3
Introduction	4
About This Guide.....	4
Terms and Abbreviations.....	4
Accessing ESSO-LM Documentation	4
Packaging ESSO-LM for Mass Deployment	5
Overview	5
Pre-Requisites for Unattended (“Silent”) Installations.....	6
Creating a Customized Agent Installation Package	7
Testing the Customized Package in a Pilot Deployment.....	10

Introduction

About This Guide

This guide describes best practices and recommended procedures for creating a custom MSI package that will be used to deploy ESSO-LM to end-users. This guide is intended for installation engineers and system administrators familiar with Windows Installer (MSI) packaging and enterprise-wide deployment of applications. By following the recommendations in this and other *ESSO-LM Best Practices* guides, you will implement an optimal ESSO-LM configuration.

Terms and Abbreviations

The following table describes the terms and abbreviations used throughout this guide:

Term or Acronym	Description
ESSO-LM	Oracle Enterprise Single Sign-On Logon Manager
Agent	ESSO-LM Client-Side Software
Console	ESSO-LM Administrative Console

Accessing ESSO-LM Documentation

We continually strive to keep ESSO-LM documentation accurate and up to date. For the latest version of this and other ESSO-LM documents, visit http://download.oracle.com/docs/cd/E21040_01/index.htm.

Packaging ESSO-LM for Mass Deployment

Overview

The most convenient way to mass-deploy ESSO-LM SSO is to create a customized MSI package and distribute it to end-user machines using a deployment tool of your choice. An end-user machine that has been configured and tested for production acts as a configuration “master” from which the target Agent configuration will be derived for inclusion in the package. Below is a high-level overview of the required steps. The steps are described in detail later in this guide.

1. Obtain the following:
 - a. The latest ESSO-LM installers.
 - b. The latest versions of the following documents:
 - *Best Practices: Packaging ESSO-LM for Mass Deployment* (this document)
 - *Best Practices: Deploying ESSO-LM with [your target repository]*
 - *Best Practices: Configuring the ESSO-LM Agent*
 - The *Installation and Setup* guide for your version of ESSO-LM
2. If performing an unattended (“silent”) installation, complete the steps in [Pre-Requisites for Unattended \(“Silent”\) Installations](#).
3. Install the ESSO-LM Agent and the ESSO-LM Administrative Console on the “master” machine.
4. Configure ESSO-LM settings using the Console. Make sure you have thoroughly read and understood the *ESSO-LM Best Practices* guides listed above before you begin.
5. Generate the custom MSI package using the ESSO-LM Administrative Console:
 - a. Select the ESSO-LM components that you want installed on the end-user machines. (For example, if your environment calls for a single primary logon method, you may want to exclude all but the desired authenticator.)
 - b. Select the customized set of global Agent settings you have configured in step 4.
 - c. Generate the final MSI package. This package will contain the components selected in step 6a and configuration settings from step 4.
 - d. Test the package by deploying it on a pilot group of machines. Identify and correct any issues that may arise. Document the solutions as necessary.
 - e. Once the pilot deployment is successful, deploy the MSI package enterprise-wide using a third-party tool of your choice.

Pre-Requisites for Unattended (“Silent”) Installations

In order to successfully install ESSO-LM in unattended ("silent") mode, the Windows Management Instrumentation (WMI) service must be running before the installer is executed.

To check whether the WMI service is running, and start it if necessary, do the following on each target machine:

1. Open the System Management Console.
2. Open the **Services** snap-in.
3. Navigate to the **Windows Management Instrumentation** service and check its status and startup mode.
4. Depending on the status, do one of the following:
 - If the status is **Started**, the WMI service is running; proceed to the next section.
 - If the status is blank, check the service's startup type and start it as follows:
 - If the startup type is **Disabled**, do the following:
 1. Double-click the service.
 2. In the dialog box that appears, change the startup type to **Manual** or **Automatic**, as required by your environment.
 3. Click **Apply**.
 4. Click **Start** to start the service. The status changes to **Started**.
 - If the startup type is not **Disabled**, do the following:
 1. Double-click the service.
 2. In the dialog box that appears, Click **Start** to start the service. The status changes to **Started**.
 3. Click **OK**.
5. Click **OK** to close the service properties dialog box.

Creating a Customized Agent Installation Package

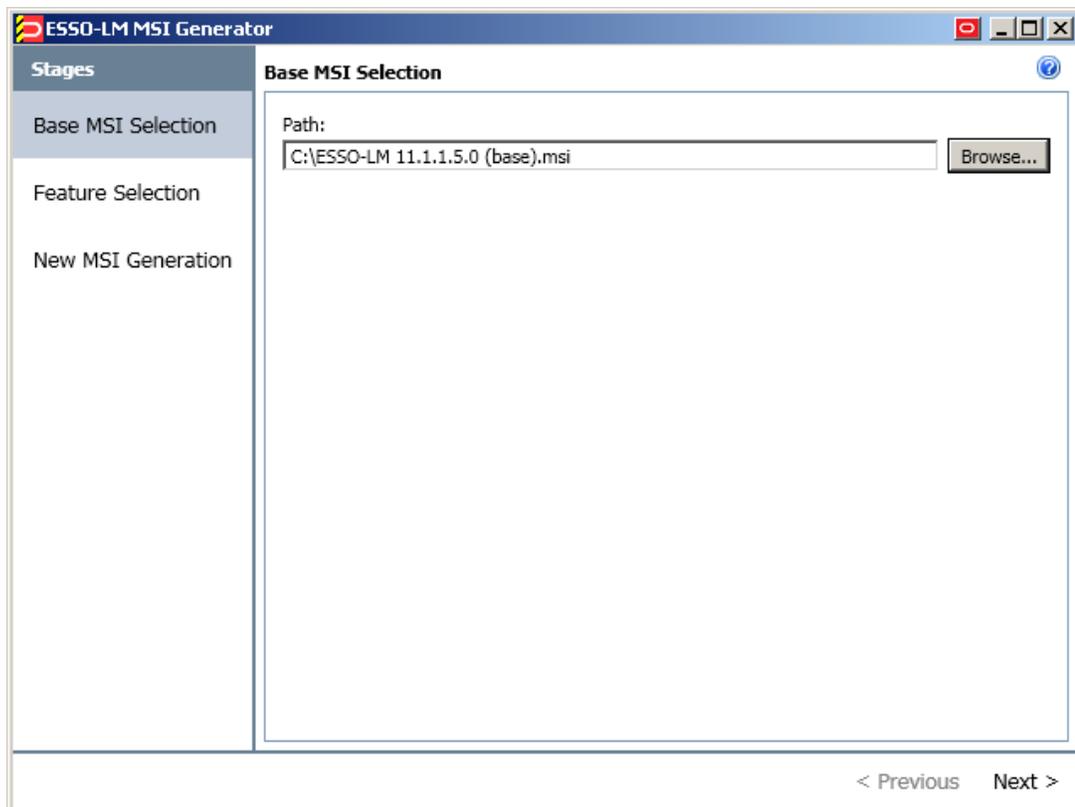
1. Place the base ESSO-LM Agent MSI package in a working directory on the “master” machine.
2. Start the ESSO-LM Administrative Console.
3. Create and configure the desired set of Global Agent settings:

Note: Make sure you have thoroughly read and understood the *ESSO-LM Best Practices* guides listed in the [Overview](#) section of this guide.

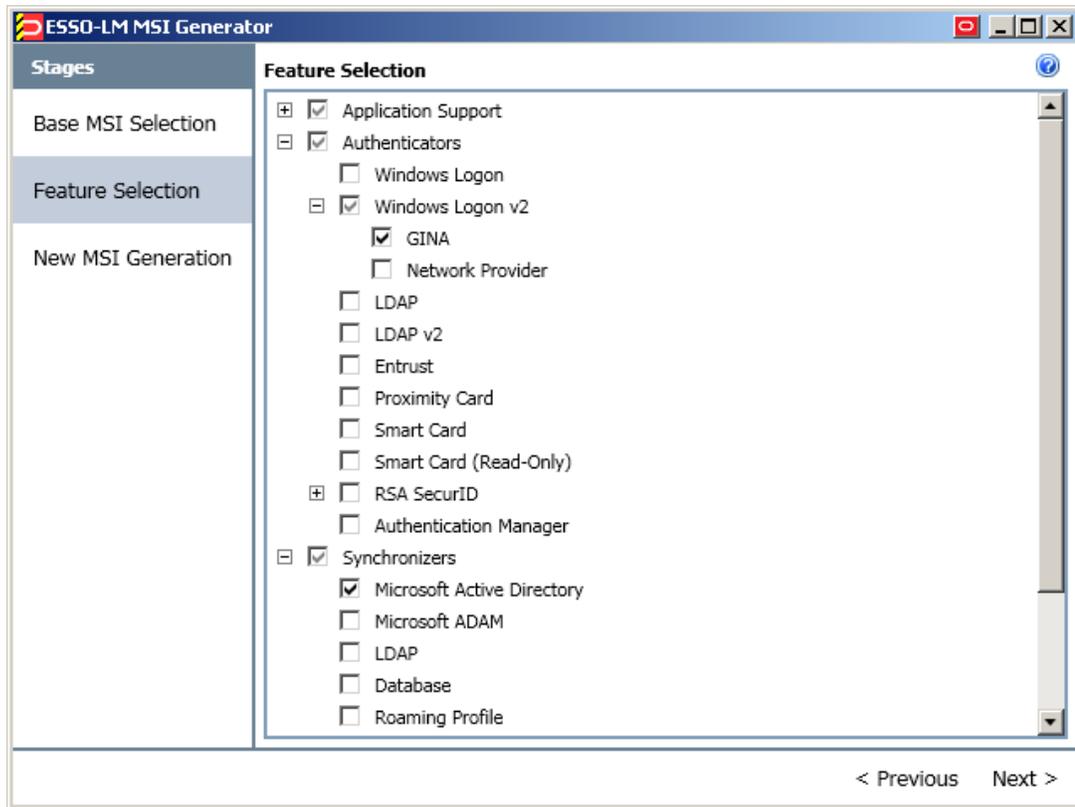
- a. In the tree in the left-hand pane, right-click the **Global Agent Settings** node and select **Import → From Live HKLM**.
- b. When the “Live” settings set appears in the tree, right-click it, select **Rename** from the context menu, give the set a descriptive name, and hit **Enter**.
- c. Configure ESSO-LM as desired.

Note: For detailed information on each setting, see the Console help.

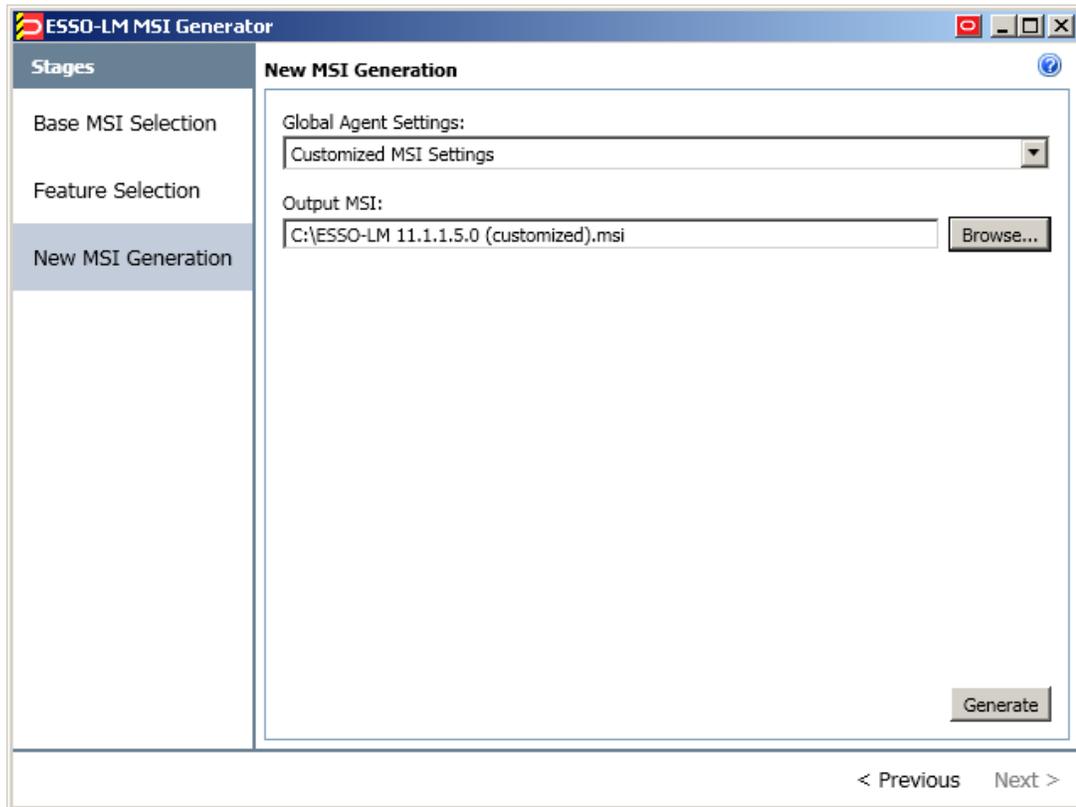
4. Create the customized MSI package for deployment to end-user machines:
 - a. From the **Tools** menu, select **Generate Customized MSI**.
 - b. In the “ESSO-LM MSI Generator” wizard that appears, do the following:
 - a. In the “Base MSI Selection” screen, click **Browse** and navigate to the ESSO-LM Agent base MSI package, then click **Next**.



- b. In the “Feature Selection” screen, select the ESSO-LM components that you want to include in the package. Expand each category node to find the desired component(s), then select the check box next to each desired component. When you have finished, click **Next**.



- c. In the “New MSI Generation” screen, do the following:
 - i. Select the set of global Agent settings you have created in step 3 from the “Global Agent Settings” drop-down list.
 - ii. Click **Browse** and provide the target path and file name for the customized MSI package.
 - iii. Click **Generate**.



5. Close the “ESSO-LM MSI Generator” wizard.
6. Save the package settings to an XML file for future reference:
 - a. From the **File** menu, select **Save**.
 - b. When prompted, enter a descriptive file name and click **Save**.

Testing the Customized Package in a Pilot Deployment

Once you have generated your custom MSI package, test it by installing it on one or more pilot machines. Always install the package on a clean machine – that is, one that does not contain any ESSO-LM-related files or registry entries. If you are using the same machine to test multiple packages, you must sanitize it before installing a new package so that old settings and files do not remain; if the installer detects existing data, it will perform an upgrade instead of a normal installation, resulting in false problems and false positives during testing.

To sanitize your pilot machine:

1. Delete the following directories and their contents:
 - The ESSO-LM application directory:
 - On 32-bit systems: `\Program Files\Passlogix`
 - On 64-bit systems: `\Program Files (x86)\Passlogix`
 - The ESSO-LM user data directory:
 - On Windows XP:
`\Documents and Settings\\Application Data\Passlogix`
 - On Windows Vista and Windows 7:
`\Users\\AppData\Roaming\Passlogix`
2. Delete the following registry keys and their children:
 - On 32-bit systems:
 - `HKEY_CURRENT_USER\Software\Passlogix`
 - `HKEY_LOCAL_MACHINE\Software\Passlogix`
 - On 64-bit systems:
 - `HKEY_CURRENT_USER\Software\Passlogix`
 - `HKEY_LOCAL_MACHINE\Software\Wow6432Node\Passlogix`

When testing the package, look for any deployment and configuration problems; Oracle highly recommends that you set up a dedicated test environment so that you can perform a full range of staging tests, including the chosen global Agent settings, administrative overrides, synchronization with your central repository, and response to applications. The last item will require that you create a set of pilot templates and test them against a selected set of applications. This will let you spot and correct any application response issues that would have otherwise arisen (and been much more costly to resolve) in production.

When the package has been fully tested and verified, use a deployment tool (such as Microsoft Systems Management Server) to deploy ESSO-LM enterprise-wide.