

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

Strong Authenticator Configuration Guide

Release 11.1.1.5.0

**E21026-01**

March 2011

Oracle Enterprise Single Sign-on Logon Manager Strong Authenticator Configuration Guide, Release 11.1.1.5.0

E21026-01

Copyright © 2011, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this software or related documentation is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications which may create a risk of personal injury. If you use this software in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of this software. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software in dangerous applications.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

This software and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

## Table of Contents

Table of Contents .....	3
Abbreviations and Terminology .....	4
About ESSO-LM Strong Authenticators .....	5
Authenticator Configuration Settings .....	6
Proximity Card .....	7
Read-Only Smart Card .....	10
RSA SecurID .....	12
Secure Data Storage .....	14
Smart Card .....	15
Smart Card Middleware .....	18
Kiosk Manager Integration Notes .....	19
Configuring the SoftID Helper .....	20
Pre-requisites .....	20
Install ESSO-LM .....	20
Configuring RSA SecurID Application Templates .....	20
First Time Use Scenarios .....	24

## Abbreviations and Terminology

Following is a list of commonly-used abbreviations and terminology.

Abbreviation or Terminology	Full Name
AD	Active Directory
ADAM	Active Directory Application Mode
Administrative Console	ESSO-LM Administrative Console
Agent	ESSO-LM Manager
FTU	First Time Use Wizard
ESSO-Anywhere	Oracle Enterprise Single Sign-on Anywhere
ESSO-PG	Oracle Enterprise Single Sign-on Provisioning Gateway
ESSO-LM	Oracle Enterprise Single Sign-on
ESSO-PR	Oracle Enterprise Single Sign-on Password Reset
ESSO-UAM	Oracle Enterprise Single Sign-on Universal Authentication Manager

### Authentication Manager

Authentication Manager is a feature of ESSO-LM that adds the capability to enable multiple logon methods to authenticate the user. These logon methods can be the standard ESSO-LM supported logon methods such as LDAP and Windows Logon, or strong authenticators such as smart cards, proximity devices, and RSA SecurID tokens.

### ESSO-LM installed with Strong Authenticators

ESSO-LM includes both standard logon methods such as LDAP and Windows Logon, and strong authenticators such as smart cards, proximity devices, and RSA SecurID tokens.

### Authenticator versus Primary Logon Method

An authenticator is a plug-in module to ESSO-LM. The Primary Logon Method is the authenticator you have selected to use with ESSO-LM. You can have multiple installed authenticators but can only have one Primary Logon Method.

## About ESSO-LM Strong Authenticators

ESSO-LM includes both standard logon methods such as LDAP and Windows Logon, and strong authenticators such as smart cards, proximity devices, and RSA SecurID tokens. ESSO-LM enables organizations to seamlessly bridge strong authentication to all of their applications. Users can employ different authenticators at different times and application access can be controlled based upon the authenticator used.



See the *Oracle Enterprise Single Sign-on Suite Plus Release Notes* for the most up-to-date list of supported authentication devices.

ESSO-LM provides authentication support from a variety of strong authenticators for all authentication events: initial authentication, re-authentication, and forced authentication.

This purpose of this guide is to describe any specific settings that can be enabled within a strong authenticator in order for the authenticator to work with ESSO-LM. It also describes all the ESSO-LM Administrative Console settings and any steps that must be taken to integrate with Kiosk Manager, as well as any known issue or technical notes that apply to a specific strong authenticator.

## Authenticator Configuration Settings

If the strong authenticator you are using is not listed in this section, there are no specific settings that must be adjusted or relevant technical notes.

Select your strong authenticator, or view the Kiosk Manager integration notes which apply to all authenticators:

- [Proximity Card](#)
- [Read Only Smart Card](#)
- [RSA SecurID](#)
- [Secure Data Storage](#)
- [Smart Card](#)
- [Kiosk Manager Integration Notes](#)

## Proximity Card

If you are using Proximity Cards, settings are available in the ESSO-LM Administrative Console. There are also steps that need to be taken when using AD or ADAM and other technical notes about configuring and using this authenticator.

### Administrative Console Settings

To access the proximity card settings, click **Global Agent Settings > Live > Authentication > Proximity Card**.

**Options**

Card family  HID ISO / DUO PROX

Reader type  Omnikey CardMan 5125

Second factor authentication  AD password

**PIN settings**

Minimum length  4

Maximum length  8

Maximum retries  3

Alphanumeric constraints  Numbers and letters

Card family	<p>The proximity card family type.</p> <p><b>Options:</b></p> <ul style="list-style-type: none"> <li>• HID ISO/DUO PROX (default)</li> <li>• iClass</li> <li>• Indala/EM</li> </ul>
Reader type	<p>The name of the proximity card reader to use.</p> <p><b>Options:</b></p> <ul style="list-style-type: none"> <li>• Omnikey CardMan 5125</li> <li>• Omnikey CardMan 5121</li> <li>• Omnikey CardMan 5321</li> <li>• RFIdeas</li> </ul>
Second factor authentication	<p>Configures whether to use the Active Directory Password or a user defined PIN for the second factor in authentication.</p> <p>Options:</p> <ul style="list-style-type: none"> <li>• AD Password (default)</li> <li>• User defined PIN</li> </ul> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p> If User defined PIN is selected, and Kiosk Manager is being used, <a href="#">Secure Data Storage</a> must be enabled and configured in order for this setting to work.</p> </div>

Minimum length	Configures the minimum length of the user defined PIN. Default is 4.
Maximum length	Configures the maximum length of the user defined PIN. Default is 8.
Maximum retries	Configures the number of correct PIN attempts before the authentication fails. Default is 3.
Alphanumeric constraints	<p>Configures the alphanumeric requirements of the user defined PIN.</p> <p><b>Options:</b></p> <ul style="list-style-type: none"> <li>• Numbers and letters (default)</li> <li>• Letters only</li> <li>• Numbers only</li> </ul>

## Integrating with Kiosk Manager

### Support for storing and passing through the synchronization credentials with Kiosk Manager and Proximity Card integration:

When the Proximity Card authenticator's second factor is set to "User Defined PIN", the user's synchronization credentials can optionally be stored by the authenticator by configuring the [Secure Data Storage](#) feature. If stored in this manner, the credentials are then silently passed through to ESSO-LM after a user initiates a Kiosk Manager session by tapping their proximity card and entering the correct PIN. This feature prevents a double authentication when starting a Kiosk Manager session whereby the user authenticates with their proximity card and PIN and then is subsequently prompted by ESSO-LM to provide their synchronization username and password.

### Insufficient privileges for Guest User Accounts

Guest User accounts do not have sufficient privileges to perform operations required for successfully completing the ESSO-LM First Time Use wizard. Oracle recommends against using Guest Accounts as the kiosk account.

## Active Directory Technical Notes

An AD administrator must perform the following steps on the "CN=Users" container on the AD controller to grant read/write access to the Creator Owner user.

If the steps are not administered, users will not have sufficient rights to change their proximity card number. As a result, when a user enters the passphrase scenario to update their card information (lost card scenario), they get an error "Proximity card assigning failed."

1. Open Active Directory Users and Computers console on AD controller.
2. Right-click on the **Users** AD object (CN=Users).
3. Click **Properties** in pop-up menu.
4. Click the **Security** tab.
5. Click the **Add** button.
6. Under **Enter the object names to select**, type CREATOR OWNER.
7. Click the **Check Names** button to resolve the entry.
8. Click **OK**.
9. Under **Group or user names**: highlight **CREATOR OWNER**.
10. Click the **Advanced** button.
11. The Advanced Security Settings for Users window displays. Verify that **Allow inheritable permissions from the parent to propagate to this object and ...** checkbox is checked (set to TRUE).
12. Double-click the **CREATOR OWNER** user.

13. Set **Apply Onto** dropdown to **Child Objects** only.
14. Set the **Read All Properties** and **Write All Properties** checkboxes under **Allow** to checked (set to TRUE).
15. Apply all changes.

To use the proximity card authenticator with Active Directory, you must enable the storing of credentials under user objects:

1. Open the ESSO-LM Administrative Console.
2. Connect to the repository.
3. From the **Repository** menu, select **Enable Storing Credentials under User Objects** (AD only).

### ADAM Technical Notes

An ADAM administrator must perform the following steps on the "OU=People" container on the ADAM server to grant read/write access to the users.

1. Open ADAM Tools Command Prompt on ADAM server.
2. Execute the following command to give users 'Read' permission to the **People** container and its sub objects:

```
dscls.exe \\<hostname>:<port>\<adam container dn> /I:T /G <user/group/role DN>:GR
```

3. Execute the following command to give users 'Create Child' and 'Write Self' permissions to the **People** container and its sub objects:

```
dscls.exe \\<hostname>:<port>\<adam container dn> /I:T /G <user/group/role  
DN>:CCWS
```

### OmniKey Proximity Card Reader Technical Note

When using the OmniKey family proximity card readers, it is recommended that the driver be installed through Windows updates.

### Microsoft Visual C++ Technical Notes

Microsoft Visual C++ 2005 Redistributable Package (x86) is required for the Proximity Card authenticator. This can be downloaded from Microsoft's web site - <http://www.microsoft.com/Downloads/details.aspx?FamilyID=32bc1bee-a3f9-4c13-9c99-220b62a191ee&displaylang=en>.

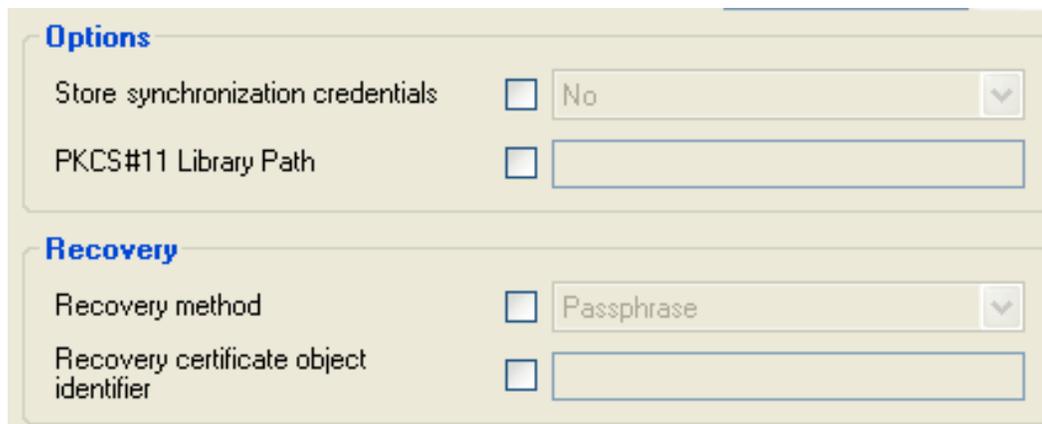
## Read-Only Smart Card

If you are using Read-Only Smart Cards, settings are available in the ESSO-LM Administrative Console. There are also steps that need to be taken if integrating with Kiosk Manager.

### Administrative Console Settings

The read-only smart card settings control special-case options for read-only smart card authentication. These settings are not required.

To access the smart card settings, click **Global Agent Settings > Live > Authentication > Read Only Smart Card**.



<p>Store synchronization credentials</p>	<p>Configure whether to store the user's synchronization repository credentials using Secure Data Storage. This setting should only be enabled when using Read-Only Smart Cards with Kiosk Manager.</p> <div style="border: 1px solid black; background-color: #ffffcc; padding: 5px;">  <b>Secure Data Storage</b> must be enabled and configured in order for this setting to work.         </div> <p>Options:</p> <ul style="list-style-type: none"> <li>• No (default)</li> <li>• Yes</li> </ul>
<p>PKCS# 11 Library Path</p>	<p>Use this setting to configure the path to the smart card middleware file which implements the PKCS# 11 standard. For sample paths, see the <a href="#">Smart Card Middleware Default Library Path Locations</a> section later in this document.</p> <div style="border: 1px solid black; background-color: #ffffcc; padding: 5px;">  This entry is only required if smart cards are being used with Kiosk Manager.         </div>
<p>Recovery method</p>	<p>Enables the use of the reset passphrase. The passphrase can be supplied either by the user (entering the passphrase in a dialog box) or by the newest non-default encryption certificate on the card itself.</p> <p>Options:</p> <ul style="list-style-type: none"> <li>• Passphrase (default)</li> <li>• Encryption certificate</li> </ul>
<p>Reset certificate object identifier</p>	<p>This is an optional setting. By default, the authenticator selects the most recent valid encryption certificate found on the card for the certificate-based passphrase feature. Use this setting to configure the object identifier that identifies the specific certificate to use for the passphrase feature. The authenticator searches the "Enhanced Key Usage" attribute of each certificate on the smart card for this Object Identifier.</p> <div style="border: 1px solid black; background-color: #ffffcc; padding: 5px;">  The <b>Recovery Method</b> option must be set to <b>Encryption certificate</b>.         </div>

## Smart Card Initialization

Prior to use with ESSO-LM, read-only smart cards must be initialized and contain a valid PIN and PKI certificate. If the smart cards are also to be used with Kiosk Manager, they must have a serial number.

ESSO-LM does not provide any smart card initialization, configuration, or administration services, so this step must be performed using a third-party Card Management System (CMS) or middleware administration utility compatible with your smart card.

## Integrating with Kiosk Manager

### **Support for storing and passing through the synchronization credentials with Kiosk Manager and Read-Only Smart Card integration:**

When using Read-Only Smart Card authenticator with Kiosk Manager, the user's synchronization credentials can optionally be stored by setting **Store Synchronization Credentials** to **Yes** and configuring the [Secure Data Storage](#) feature. If stored in this manner, the credentials are then silently passed through to ESSO-LM after a user initiates a Kiosk Manager session by inserting their read-only smart card into the reader and entering the correct PIN. This feature prevents a double authentication when starting a Kiosk Manager session whereby the user authenticates with their read-only smart card and PIN and then is subsequently prompted by ESSO-LM to provide their synchronization username and password.

### **Separate Authentication Prompts Appear for the Kiosk Manager Session and ESSO-LM when Read-Only Smart Card is the Primary Logon Method:**

In a Kiosk Manager environment that uses read-only smart cards as the primary logon method, users are prompted to authenticate separately to Kiosk Manager and ESSO-LM.

This occurs because a smart card authentication is only valid for the process that initiated it and cannot be shared between processes. This is a design characteristic of the smart card middleware and not Oracle software.

When the Kiosk Manager session starts, Kiosk Manager queries the smart card middleware for authentication and the user is prompted to authenticate via smart card and PIN. This authentication is valid for the Kiosk Manager process only; therefore, when the Kiosk Manager session is successfully created and ESSO-LM starts, the user is authenticated again, this time to ESSO-LM.

There is currently no workaround for this behavior.

## RSA SecurID

If you are using RSA SecurID authenticator, there are steps that need to be taken if integrating with Kiosk Manager and other technical notes about installing and using this authenticator.

### Installing the RSA SecurID Method

Before installing the RSA SecurID authentication method, the RSA middleware must be installed and configured. There are two middleware options for the RSA SecurID authenticator:

- **RSA Local Authentication Client (LAC)** - if using RSA LAC, you must install the **RSA SecurID** Logon Method in the ESSO-LM installer.
- **RSA Local Authentication Toolkit (LAT)** - if using RSA LAT, you must install the **RSA SecurID** Logon Method as well as the **Local Authentication Toolkit**, if not previously installed, in the ESSO-LM installer. Installing RSA LAT will prompt you to reboot your machine so that it can start the service.

After RSA LAT is installed, according to the RSA documentation on LAT, you must perform the following 2 steps:

1. You must get the `server.cer` file from your RSA Authentication Manager administrator and place it in the subdirectory of the main installation directory. For example: C:\Program Files\RSA Security\RSA Authentication Agent\Agenthost Autoreg Utility directory.
2. You must get the `sdconf.rec` file from your Authentication Manager administrator and place it in the system32 directory.



These notes are stated in RSA SecurID Local Authentication Toolkit document and also mentioned in *RSA Authentication Agent 6.1 for Microsoft Windows Installation and Administration Guide*.

Once RSA SecurID is installed, there are no specific settings that must be set in the ESSO-LM Administrative Console.

### Integrating with Kiosk Manager

When using the RSA SecurID authenticator with Kiosk Manager, you have to enable and configure [Secure Data Storage](#) in the ESSO-LM Administrative Console.

RSA SecurID authenticator uses the user's PIN rather than the repository password for the prepopulation of the synchronization dialog. Secure Data Storage is used to securely save the PIN which then is associated with the repository credentials on the server. See the [Secure Data Storage](#) section below to set it up.

#### **Support for storing and passing through the synchronization credentials with Kiosk Manager and RSA SecurID integration:**

When using RSA SecurID authenticator with Kiosk Manager, the user's synchronization credentials can optionally be stored by the authenticator by configuring the [Secure Data Storage](#) feature. If stored in this manner, the credentials are then silently passed through to ESSO-LM after a user initiates a Kiosk Manager session with a RSA SecurID token. This feature prevents a double authentication when starting a Kiosk Manager session whereby the user authenticates with their PIN and Tokencode and then is subsequently prompted by ESSO-LM to provide their synchronization username and password.

### **Microsoft Visual C++ Technical Note**

Microsoft Visual C++ 2005 Redistributable Package (x86) is required for the RSA SecurID authenticator. This can be downloaded from Microsoft's web site - <http://www.microsoft.com/Downloads/details.aspx?FamilyID=32bc1bee-a3f9-4c13-9c99-220b62a191ee&displaylang=en>.

### **PIN Mode Support Technical Note**

Due to an incompatibility between RSA Local Authentication Toolkit and Visual Studio 2005, the RSA SecurID authenticator does not support New PIN Mode for SID700 and SID800. A support case has been opened with RSA (# C0842539).

## Secure Data Storage

Secure data storage settings control the location for data storage. Secure data storage can be used for:

- The RSA SecurID authenticator in a Kiosk Manager environment.
- The Proximity Card authenticator in a Kiosk Manager environment when using “User Defined PIN” as second factor authentication.
- The Read-Only Smart Card authenticator in a Kiosk Manager environment.

 Secure Data Storage is supported in Active Directory and Active Directory Application Mode only.

When using Secure Data Storage, you must log onto Windows using a domain user account.

To access the secure data storage settings, click **Global Agent Settings > Live > Authentication > Secure Data Storage**.

Enable data storage	<input type="checkbox"/> No
Data storage location	<input type="checkbox"/> <input style="width: 150px;" type="text"/>

Enable data storage	Configures whether to securely store users' synchronization credentials within the repository. Options: <ul style="list-style-type: none"> <li>• No (default)</li> <li>• Yes</li> </ul>
Data storage location	Fully qualified path to the location in the repository where the data will be stored.

To enable secure data storage, perform the following:

1. Set **Enable Data Storage** to **Yes**.
2. Create a new Organizational Unit on the AD or ADAM repository that will serve as the location for data storage. The fully qualified distinguished name for this object should then be specified as the value of the **Data storage location** setting.
3. If using AD, grant FULL CONTROL permission to this Organizational Unit for Everyone. Apply this to **This object and all child objects**. For ADAM, grant General Access (GA) permission to this Organizational Unit and its sub objects for Everyone.

```
dscls.exe \\<hostname>:<port>\<adam container dn> /I:T /G "Everyone" :GA
```

## Smart Card

If you are using Smart Cards, settings are available in the ESSO-LM Administrative Console. There are also steps that need to be taken if integrating with Kiosk Manager and other technical notes about using this authenticator.

### Administrative Console Settings

The smart card settings control special-case options for smart-card authentication. These settings are not required.

To access the smart card settings, click **Global Agent Settings > Live > Authentication > Smart Card**.

**Options**

- Smart card library:  CSP
- Use default certificate for authentication:  No
- Store synchronization credentials:  No
- Store the PIN:  No
- PKCS#11 Library Path:  [Text Field]

**User interface**

- Window title:  [Text Field]
- Window subtitle:  [Text Field]

**Recovery**

- Recovery method:  Passphrase
- Recovery certificate object identifier:  [Text Field]

Smart Card Library	<p>Configures whether to use the Cryptographic Service Provider (CSP) or the PKCS # 11 library to perform cryptographic operations on the smart card. If you set this to PKCS # 11, you must enter the library path above in the PKCS # 11 Library Path.</p> <p>Options:</p> <ul style="list-style-type: none"> <li>• CSP</li> <li>• PKCS # 11</li> </ul> <div style="border: 1px solid black; background-color: #ffffcc; padding: 5px;">  Only set this to PKCS # 11 if using SafeSign/RaakSign middleware.         </div>
Use the default certificate for authentication	<p>Use the default logon certificate (provided by the administrator) on the card for authentication. If not enabled (the default), use (and create if necessary) the public or private keys in the SSO container on the card.</p> <p>Options:</p> <ul style="list-style-type: none"> <li>• No (default)</li> <li>• Yes</li> </ul>
Store Synchronization Credentials	<p>Configure whether to store the user's synchronization repository credentials on the card.</p>

	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">  Set to <b>Yes</b> if integrating with Kiosk Manager.         </div> <p>Options:</p> <ul style="list-style-type: none"> <li>• No (default)</li> <li>• Yes</li> </ul>
Store the PIN	<p>Whether to store the smart card PIN (and thus the Agent prompts for the PIN) or to require that the smart-card drivers request the PIN.</p> <p>Options:</p> <ul style="list-style-type: none"> <li>• No (default)</li> <li>• Yes</li> </ul>
PKCS# 11 Library Path	<p>Use this setting to configure the path to the smart card middleware file which implements the PKCS# 11 standard. For sample paths, see the <a href="#">Smart Card Middleware Default Library Path Locations</a> section below.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">  This entry is only required if the <b>Smartcard Library</b> setting is set to <b>PKCS#11</b>, or if smart cards are being used with Kiosk Manager.         </div>
Windows Title Name	<p>Use this setting to customize the Window subtitle name for this authenticator. This entry is not required.</p>
Windows Subtitle Name	<p>Use this setting to customize the Window title name for this authenticator. This entry is not required.</p>
Recovery method	<p>Enables the use of the reset passphrase. The passphrase can be supplied either by the user (entering the passphrase in a dialog box) or by the newest non-default encryption certificate on the card itself.</p> <p>Options:</p> <ul style="list-style-type: none"> <li>• Passphrase (default)</li> <li>• Encryption certificate</li> </ul>
Reset Certificate Object Identifier	<p>This is an optional setting. By default, the authenticator selects the most recent valid encryption certificate found on the card for the certificate-based passphrase feature. Use this setting to configure the object identifier that identifies the specific certificate to use for the passphrase feature. The authenticator searches the "Enhanced Key Usage" attribute of each certificate on the smart card for this Object Identifier.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">  The <b>Recovery Method</b> option must be set to <b>Encryption certificate</b>.         </div>

## Smart Card Initialization

Prior to use with ESSO-LM, smart cards must be initialized and contain a valid PIN. If ESSO-LM is configured to use smart card certificates, smart cards must contain a valid PKI certificate. If the smart cards are also to be used with Kiosk Manager, they must have a serial number.

ESSO-LM does not provide any smart card initialization, configuration, or administration services, so this step must be performed using a third-party Card Management System (CMS) or middleware administration utility compatible with your smart card.

## Integrating with Kiosk Manager

The following information applies when using the Smart Card authenticator with Kiosk Manager:

**Support for storing and passing through the synchronization credentials with Kiosk Manager and Smart Card integration:** When using Smart Card authenticator with Kiosk

Manager, the user's synchronization credentials can optionally be stored on the smart card by the authenticator. If stored in this manner, the credentials are then silently passed through to ESSO-LM after a user initiates a Kiosk Manager session by inserting their smart card into the reader and entering the correct PIN. This feature prevents a double authentication when starting a Kiosk Manager session whereby the user authenticates with their smart card and PIN and then is subsequently prompted by ESSO-LM to provide their synchronization username and password.

### **.NET Smart Cards**

Due to technical limitations with the .NET cards, when using .NET smart cards with Kiosk Manager, inserting the smart card when Kiosk Manager is locked always causes a new session to start. To unlock an existing session, click the **Unlock Existing Session** link.

### **Separate Authentication Prompts Appear for the Kiosk Manager Session and ESSO-LM when Smart Card is the Primary Logon Method:**

In a Kiosk Manager environment that uses smart cards as the primary logon method, users are prompted to authenticate separately to Kiosk Manager and ESSO-LM.

This occurs because a smart card authentication is only valid for the process that initiated it and cannot be shared between processes. This is a design characteristic of the smart card middleware and not Oracle software.

When the Kiosk Manager session starts, Kiosk Manager queries the smart card middleware for authentication and the user is prompted to authenticate via smart card and PIN. This authentication is valid for the Kiosk Manager process only; therefore, when the Kiosk Manager session is successfully created and ESSO-LM starts, the user is authenticated again, this time to ESSO-LM.

There is currently no workaround for this behavior.

### **HID Crescendo C200 and C700 smart cards**

When using HID Crescendo C200 or C700 as smart cards with Kiosk Manager, a smart card-only reader should be used. Using a dual function smart card and proximity card reader is unsupported. The HID Crescendo C200 mini-driver should be installed from Microsoft's update catalog - <http://test.catalog.update.microsoft.com/v7/site/search.aspx?q=umdf>.

### **Using SSO-generated Keys Technical Note**

When the **Use default certificate for authentication** (located in the ESSO-LM Administrative Console **Global Agent Settings > Authentication > Smart Card**) is set to **No**, users may be prompted to enter their PIN twice during the First Time Use (FTU) enrollment process.

This is normal and necessary in order to create the SSO keyset.

Subsequent authentications after FTU only prompt the user to enter their PIN once.

## Smart Card Middleware

These technical notes are in reference to known issues and considerations with Smart Card middleware.

### Gemplus Libraries 4.20 with ESSO-LM

Re-authentication events do not display the PIN dialog. When authenticating to ESSO-LM, the first authentication properly displays a PIN dialog and allows a successful authentication. Subsequent re-authentication events within a short period of time do not display the PIN dialog, preventing authentication from succeeding.

To work around this, restart the ESSO-LM process requesting authentication.

### Netmaker Net iD 4.6 with Kiosk Manager

When starting a new Kiosk Manager session, the user's synchronization credentials are not read off the card. After entering their PIN, users must then manually enter their synchronization credentials to start the session.

### RSA RAC 2.0 / Smartcard Middleware 2.0 with Kiosk Manager

RSA Middleware reports that no smart cards are present when Kiosk Manager is locked and a smart card is inserted into a reader. Sessions must be manually started. After Kiosk Manager is unlocked, authentication to ESSO-LM with smart cards will work as expected.

## Smart Card Middleware Default Library Path Locations

The following table provides the default installation paths for all supported smart card middleware.

These are sample paths to enter in the PKCS # 11 Library Path field located on the **Read Only Smart Card > Advanced** and **Smart Card > Advanced** panels:

### Smart Card

RSA Authentication Client 2.0 / Smartcard Middleware 2.0	C:\Program Files\RSA Security\RSA Authentication Client\Pkcs11.dll
NetMaker Net iD 4.6	iidp11.dll
SafeSign/RaakSign Standard 2.3	aetpkss1.dll
HID C700 middleware	aetpkss1.dll
GemSafe Libraries 4.2.0	C:\Program Files\Gemplus\GemSafe Libraries\BIN\GCLIB.DLL
Schlumberger Cyberflex Access 4.5	C:\Program Files\Schlumberger\Smart Cards and Terminals\Cyberflex Access Kits\v4\slbCk.dll
Axalto Access Client Software 5.2	C:\Program Files\Axalto\Access Client\v5\sltCk.dll

### Read-Only Smart Card

SafeSign Identity Client 2.2.0	aetpkss1.dll
Fujitsu mPollux DigiSign Client 1.3.2-34(1671)	C:\Program Files\Fujitsu Services\Fujitsu mPollux DigiSign Client\Cryptoki.dll

 The files above that are just file names and not the fully qualified path reside in the system directory so the full path is not necessary.

## Kiosk Manager Integration Notes

### **Domain Password Change**

This issue occurs when using proximity devices, smart cards, and read only smart cards.

If user's domain password is changed, the next time the user tries to start a session on a kiosk with the device within the lifetime period of the old password, depending on their sync repository, the following occurs:

- **Active Directory:** An error message displays saying "Unable to connect to network ...".
- **ADAM:** Kiosk Manager stops responding and requires a restart.

There are 2 workarounds to this issue:

1. Users can manually start a Kiosk Manager session by authenticating with a username and new password within the password lifetime period.
2. Administrators can change the lifetime period of an old password to decrease the probability that this issue will occur. Please refer to Microsoft Help and Support for more details - <http://support.microsoft.com/kb/906305>.

### **Hardware Reassignment**

If a hardware device, such as a smart card, is ever reassigned to another user, it is possible that Kiosk Manager will logon as the original user. This occurs because Kiosk Manager keeps a device-to-username mapping.

There is no work-around for this issue. It is strongly recommended that these devices not be reassigned to avoid this issue.

## Configuring the SoftID Helper

The SoftID Helper is an extension helper that adds SSO support for SecurID applications. This section describes how to install and configure the SoftID helper and enable RSA SecurID application templates.

### Pre-requisites

ESSO-LM supports the following combinations of software and hardware tokens for SoftID applications:

- RSA SecurID Software Tokens
- RSA Authentication Client and RSA SecurID SID800 Hardware Authenticator
- Both software and hardware tokens - if both are installed on the machine, ESSO-LM looks for the hardware token first, and if it cannot find the hardware token, it defaults to the software token.

One of the above combinations must be installed before installing and using the SoftID Helper.

### Install ESSO-LM

Install ESSO-LM with Authentication Manager and ESSO-LM with the SoftID helper. See the *ESSO-LM Installation and Setup Guide* for more information.

### Configuring RSA SecurID Application Templates

This example walks through setting up a new RSA SecurID application for an application called Login Tester.

1. Open the ESSO-LM Administrative Console.
2. Launch the application for which you are defining a template.
3. Right-click **Applications** and select **New Windows Application**. The Add Application dialog appears.

**Please select the application to add.**

Name: Login Tester

Application Type:

- Windows
- Web
- Host/Mainframe

RSA SecurID

Application: New Windows Application

< Back Finish Cancel Help

4. Enter the application **Name** and check the **RSA SecurID** check box. Click **Finish**. The Form Wizard appears.

**Form Type**  
Select the type of screen you want to configure:

- SecurID logon
- PIN change
- PIN confirmation
- PIN change success
- PIN change failure

< Back   Next >   Cancel   Help

5. Select the **SecurID Login** button. Click **Next**. As long as the application for which you are defining a template is running, the window title will appear in the next wizard panel.

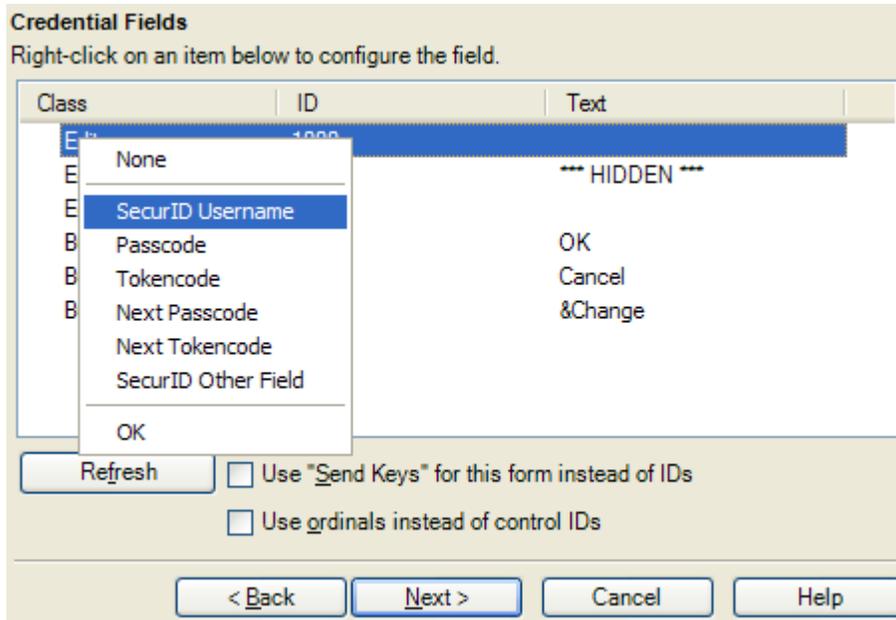
**Application Window**  
Choose the window you want to configure:

Window Title	Module	Window Class
AM_Install.flprj - MadCap Flare V...	Flare.exe	WindowsForms10.Win...
Form Wizard	SSOAdmin.exe	WindowsForms10.Win...
Login Tester	Login Tester.exe	#32770
Network Recording Player - Sec...	nbrplay.exe	WBX_NBRMainFrame
SoftIDFormWiz.tif - MadCap Cap...	Capture.exe	WindowsForms10.Win...
Windows Task Manager	taskmgr.exe	#32770

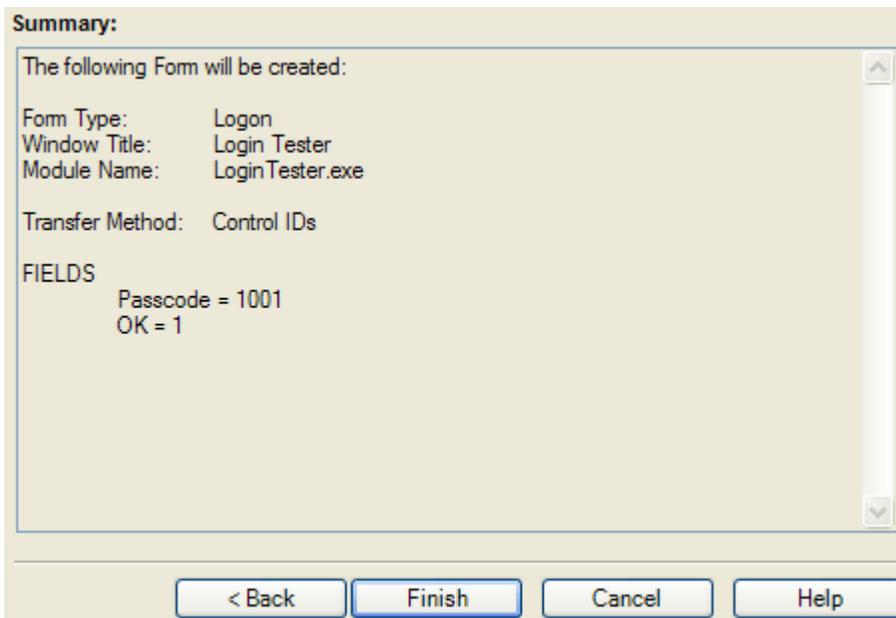
Refresh    Show hidden windows

< Back   Next >   Cancel   Help

6. Select the Window Title for your application. Click **Next**.



- On this dialog, you configure the **SecurID Username**, **Passcode**, and **OK** button fields as well as any other applicable fields for your application. Right-click on the class and select the fields. Click the **Help** button for more information on configuring the credential fields. Click **Next** when you are done. A Summary panel will appear.



- Review the summary. Click **Finish** when done.
- The Windows Logon Form appears. Change any other applicable settings and click **OK**.
- Export the template to the Agent. See the ESSO-LM Administrative Console help file for more information on exporting applications.

11. When the Agent is started, the user will go through the FTU Wizard. They must select **Authentication Manager** as the primary logon method.
12. When the application for which you defined a template is started, the Agent will first ask the user if they want to add credentials for the application. If the user selects **Yes**, the Agent will prompt the user to enter their credentials into the New Logon for this application.

Enter your logon information below:

User ID:

PIN:

Confirm:

Software Token:

Click Finish when done

13. The user must enter the **User ID, PIN** and select the **Software Token**. The user's PIN is set up through the RSA middleware prior to use with ESSO-LM. ESSO-LM automatically populates the Software Token field as it detects the serial number of the available token.
14. Click **Finish** when done. The Agent will log the user onto the RSA SecurID application every time the application is started.

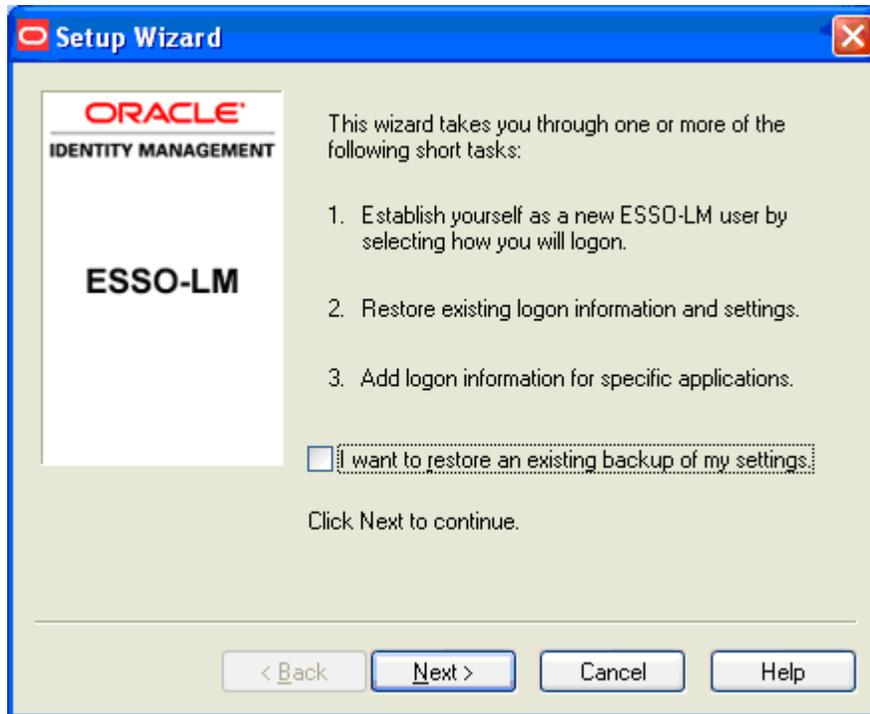
## First Time Use Scenarios

In the setup phase, the user will go through the normal ESSO-LM First Time Use (FTU) wizard until the Select Primary Logon Method dialog box is displayed.

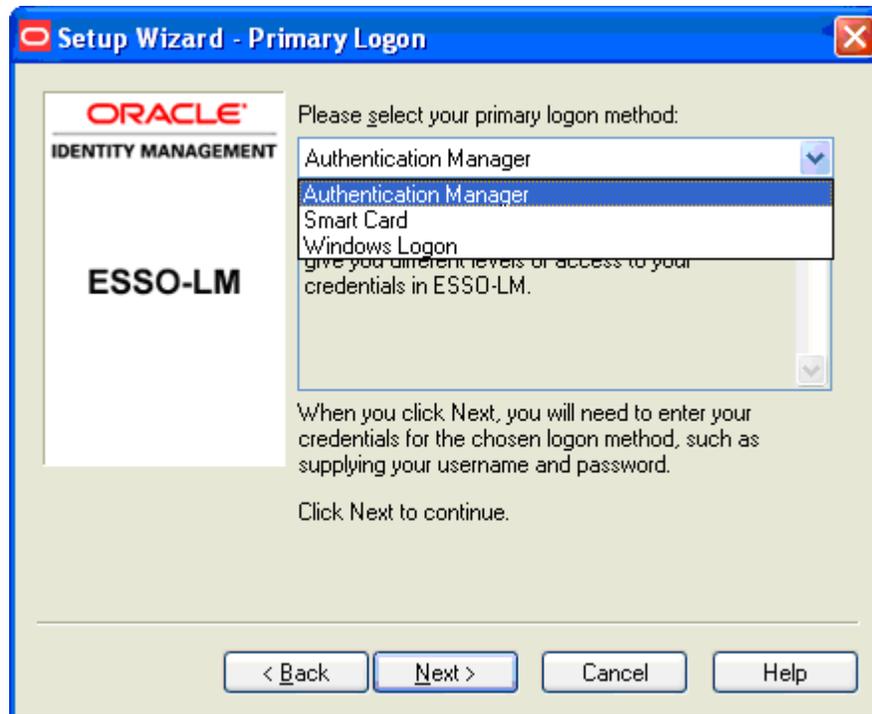
The behavior of this setup wizard is configured through the ESSO-LM Administrative Console.

### Setup Flow Example

1. The first dialog box in the Setup Wizard dialog box lists the setup tasks necessary for the local installation of ESSO-LM. Click **Next** to begin setup.



2. The dialog box lists the setup tasks necessary for your local installation of ESSO-LM, choosing your primary logon method and supplying the credentials for that method. Click **Next**.
3. The Primary Logon dialog box prompts you to select a logon method. Select your desired primary logon method. Only methods that are currently installed will appear in the drop-down box. Click **Next**.



4. Enroll in your selected primary logon method. For example, if a smart card authenticator is installed, you will see the dialog below. Clicking **Cancel** for a required authenticator cancels the Setup Wizard.



5. Insert your smart card. You are prompted to enter your PIN. Click **OK**. A successful message appears. Click **OK**.
6. If the passphrase option is enabled, you might be prompted to enter a passphrase with a minimum answer length of eight characters. Enter an answer, confirm (re-enter) it, and click **OK**.
7. The Setup Wizard indicates that the process is complete and ESSO-LM is ready for use. Click **Finish** to complete.