Wearable Installation and Configuration Guide

Nymi Connected Worker Platform with Evidian

v1.0

2022-05-16

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Preface

Nymi™ provides periodic revisions to the Nymi Connected Worker Platform. Therefore, some functionality that is described in this document might not apply to all currently supported Nymi products. The product release notes provide the most up to date information.

Purpose

This document is part of the `Connected Worker Platform` (CWP) documentation suite.

The Nymi Connected Worker Platform with Evidian Guides provides information about installing the Evidian components and configuration options based on your deployment. Separate guides are provided for Wearable, RFID-only, and mixed Wearable and RFID-only deployments.

Audience

This guide provides information to NES and Evidian Access Management Administrators. An NES and Evidian Access Management Administrator is the person in the enterprise that manages the `Connected Worker Platform` with Evidian solution in their workplace.

Revision history

The following table outlines the revision history for this document.

Table 1: Revision history

Version	Date	Revision history
1.0	May 16, 2022	First release of this document for CWP 1.3.

Related documentation

- **Nymi Connected Worker Platform Overview Guide**

  This document provides overview information about the `Connected Worker Platform` (CWP) solution, such as component overview, deployment options and supporting documentation information.
- **Nymi Connected Worker Platform NES Deployment Guide**

  This document provides the steps that are required to deploy the Nymi Enterprise Server (NES). This installation uses the `Nymi Token Service` to install certificates that enable communication between components. This document also provides information about deploying the Connected Worker Platform in a Citrix or RDP environment.
- **Nymi Connected Worker Platform Administration Guide**

This document provides information about how to use the NES Administrator Console to manage the Connected Worker Platform (CWP) system. This document describes how to set up, use and manage the Nymi Band™, and how to use the Nymi Band Application. This document also provides instructions on deploying the Nymi Band Application and Nymi Runtime components.

- **Nymi SDK for C Developer's Guide**

  This document provides information about how to develop Nymi-enabled Applications by using the Nymi API(NAPI).
- **Nymi SDK for WebSocket Developer's Guide**

  This document provides Nymi developers with an alternative way to utilize the functionality of the Nymi SDK, over a WebSocket connection managed by a web-based or other applications.
- **Nymi Connected Worker Platform Troubleshooting Guide**

  This document provides information about how to troubleshoot issues and the error messages that you might experience with the NES Administrator Console, the Nymi Enterprise Server deployment, the Nymi Band, and the Nymi Band Application.
- **Connected Worker Platform Release Notes**

  This document provides supplemental information about the Connected Worker Platform, including new features, limitations, and known issues with the Connected Worker Platform components.

How to get product help

If the Nymi software or hardware does not function as described in this document, you can submit a support ticket to Nymi, or email support@nymi.com

How to provide documentation feedback

Feedback helps Nymi to improve the accuracy, organization, and overall quality of the documentation suite. You can submit feedback by using support@nymi.com

Nymi Connected Worker Platform with Evidian Access Management Solution

The Nymi-Evidian solution extends the use of the Nymi Band. With Evidian Authentication Manager, a user can use their Nymi Band to lock and unlock a Windows desktop. With Evidian Single Sign On (SSO), a user can use their Nymi Band to perform MES authentication events. There are several supported deployment configurations in the Nymi-Evidian solution.

The Nymi Band supports two authentication methods in an Evidian environment:

- Wearable (NFC with Bluetooth)—During communications, tapping the Nymi Band on an NFC reader initiates the authentication, and then the Nymi Band is cryptographically authenticated over Bluetooth. This is the default authentication method.
- RFID-only—During communications, the Nymi Band is identified by using only the NFC UID without cryptographic authentication.

Nymi provides you with one or more *TokenManagerStructure.xml* files, based on your configuration needs. The *TokenManagerStructure.xml* file defines the supported authentication types and modules that implement the authentication modules. The contents of the TokenManagerStructure file are loaded on the EAM Controller and the default configuration is pushed by the EAM Controller to the EAM Clients. To override the default authentication method on a terminal, place a different version of the TokenManagerStructure file locally on the terminal.

The *TokenManagerStructure* file for the Nymi Band as a Wearable device differs from the *TokenManagerStructure* for the Nymi Band as an RFID-only device.

There are several supported deployment configurations in the Nymi-Evidian solution.

- Nymi Band configured as a wearable device
- Nymi Band configured as an RFID-only device
- Nymi Band configured as a mixed use device

Note: This document is specific to an Evidian configuration that uses Active Directory Lightweight Directory Services to provide data storage and retrieval support for directory-enabled applications.

Coexistence of Nymi-direct integrations and Evidian integrations

The `Connected Worker Platform` now supports the co-existence of Nymi-direct integration, and Evidian integration, within the same environment.

Nymi-direct integration supports:

- Nymi-enabled Application (NEAs) that make use of the Nymi SDK to perform application logons and electron signatures.
- Operating systems and applications that support the FIDO2 standard, to perform OS logon / unlock, application logon, and electronic signature.

Evidian integration supports:

- Evidian-integrated applications, which leverage Evidian Single Sign-on (SSO) support to perform application logins and/or electronic signatures.
- Evidian Windows logon, which makes use of Evidian to perform Windows session logon, unlock, and relock when the user is away from the Windows terminal.

In these Evidian integration scenarios, Nymi Bands are integrated with the EAM Client and EAM Controller.

You can configure Connected Worker Platform to support either Nymi-direct integration only (default), or to support both Nymi-direct integration and Evidian integration simultaneously.

Environment Configuration

The section outlines the configuration requirements for the enrollment terminal and the user terminals. Refer to the Nymi Connected Worker Platform NES Deployment Guide for details about NES requirements and the Nymi Connected Worker Platform Administration Guide for information about supported NFC readers.

User Terminal Requirements

The user terminal is a Windows 10 machine that operators use to perform MES authentication tasks. User terminals include local machines as well as machines that are connected to remotely through an RDP session or on a Citrix server.

The user terminal requirements differ depending on the type of user terminal:

User Terminal Type	Requirements
Local Wearable User Terminal	• `Nymi Bluetooth Endpoint` and the `Nymi Agent` software to support MES operations. • Evidian Enterprise Access Management (EAM) Client, with a valid Evidian license file • Nymi-supported NFC Reader • BLE Adapter (BLED112)
Remote Wearable User Terminal	• `Nymi Bluetooth Endpoint` software to support MES operations. • EAM Client on the Citrix server or remote session host, with a valid Evidian license file. • Network access to the centralized `Nymi Agent`.
Local RFID-only User Terminal	• EAM Client, with a valid Evidian license file • Nymi-supported NFC Reader.

Network Requirements

User Terminals require a connection to the enterprise domain and bidirectional communication through the following firewall ports:

- For an ADLDS configuration, The user terminal communicates with the listening port of the AD LDS service. When you use the Evidian quick installer as described in this document, the port defaults to 55000.
- For a centralized `Nymi Agent`, the EAM Client communicates with the `Nymi Agent` machine on default port 9120.

- For communications between the EAM Client and EAM Controller, communication occurs on port 3644.

Enrollment Terminal Requirements

- Evidian License File
- `Nymi Band Application`
- EAM Client
- Local Administrator access or Directory Administrator Access
- Connection to the enterprise domain
- BLE Adapter (BLED112)
- Bidirectional communication ports open on the firewall.
  - For an ADLDS configuration, The enrollment terminal communicates with the listening port of the AD LDS service. When you use the Evidian quick installer as described in this document, the port defaults to 55000.
  - For a centralized `Nymi Agent`, the enrollment terminal communicates with the `Nymi Agent` machine on port 9120.
  - For management of access points from the EAM Console, communications occurs on port 3644 on the access point.

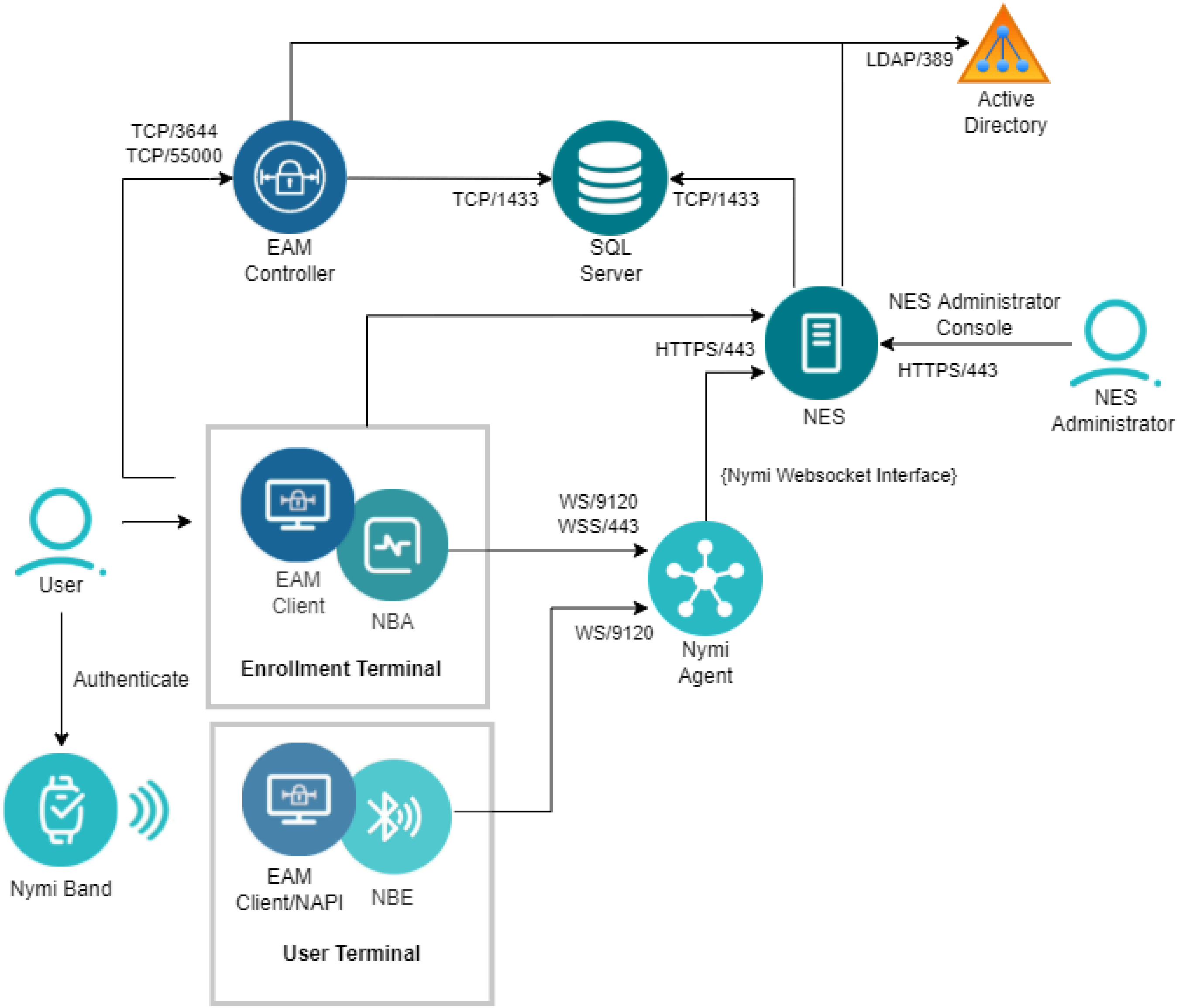
Using the Nymi Band as a Wearable device

This chapter provides information about deploying the Nymi Band as a wearable device in an CWP with Evidian environment.

Nymi recommends deploying Nymi Band as a wearable device in a CWP with Evidian environment.

Nymi-Evidian Architecture - Wearable Device

The following image represents the components in a Nymi-Evidian solution where the Nymi Band is used as a wearable device.



Enrollment Terminal

The Windows 7 64-bit or Windows 10 machine where users enroll their Nymi Band.

User Terminal

The workstation on which you install Nymi components and the Evidian Access Manager (EAM) client.

Nymi Band Application

A native Windows application that is used to register biometric, employee ID, and Nymi Band with the enterprise. The Evidian version of the `Nymi Band Application` integrates directly to the Evidian ecosystem and facilitates communication between NES and the Nymi Bands. The Nymi Connected Worker Platform Administration Guide provides more information about the `Nymi Band Application`.

Enterprise Access Management Client

The client-side Evidian software that provides users with a single sign-on (SSO) experience at the user terminal.

Nymi Enterprise Server

Management software for the Nymi Bands within the Nymi ecosystem. Nymi Enterprise Server (NES) ensures the validity of the hardware in the system. NES includes the `NES Administrator Console`, a web application that administrators can use to manage the Nymi Bands within the ecosystem.

Evidian Enterprise Access Management Controller

Evidian Enterprise Access Management (EAM) Controller allows centralization of User Access policy definition and audit events. Includes Evidian Enterprise SSO software that provides agile single sign-on (SSO). The EAM Console application provides the interface to perform management activities.

Corporate Directory

An Active Directory server that provides authentication services.

NFC Reader

Captures the NFC UID of the Nymi Band, which is used when an operator performs and SSO authentication event.

BLED112 Dongle

Nymi Band uses Bluetooth Low Energy (BLE) to interact with external components and services. Nymi Band BLE communication does not rely on Bluetooth security. All security is implemented using strong, standard-based cryptography. A BLE adapter (BLED112) is required on the enrollment terminal and user terminals.

Obtain the Required Software

Obtain the required software files or the fileshare link for the software package from your field support team member.

When you receive the zip file, download and extract the contents to a machine and folder that is accessible to the NES and EAM Controller hosts.

Install Server Software

In a Connected Worker Platform with Evidian deployment, there are two servers in the configuration, NES and the EAM Controller.

Installing and Configuring NES

You can install the NES software on the same server on which you plan to install the EAM Controller software. For deployments in a production environment, Nymi recommends that you install the NES and EAM Controller software on separate servers.

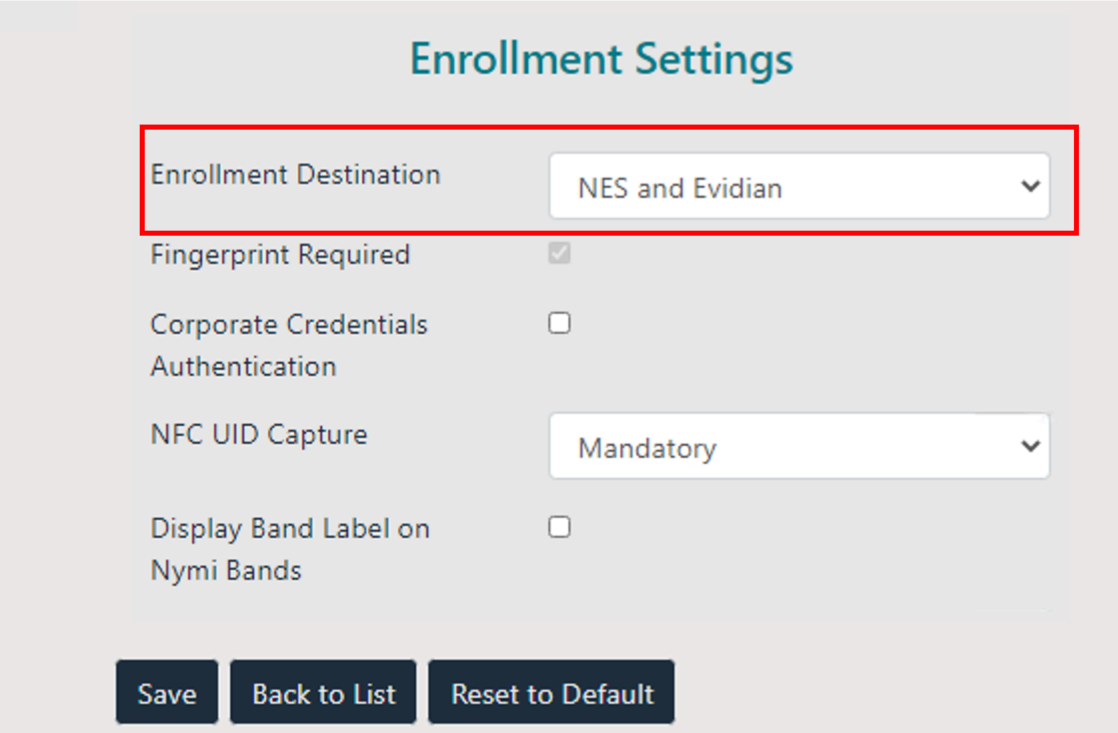
Note: Ensure that you configure NES with the HTTPS communication protocol.

The NES software is in the folder of software package that you obtained from the Nymi Solution Consultant. The Nymi Connected Worker Platform NES Deployment Guide provides more information about installing NES.

Enabling Evidian Enrollments

Enrollment in an Evidian environment requires you to enable the option **`NES and Evidian`** in the active NES policy.

1. Log in to the NES Administrator Console with an account that is an NES Administrator.
2. Click **`Policies`**.
3. Edit the active policy.
4. From the **`Enrollment Destination`** list, select the option **`NES and Evidian`**, as shown in the following figure, and then click **`Save`**.



Enrollment Settings

Enrollment Destination: NES and Evidian

Fingerprint Required: ☑

Corporate Credentials Authentication: □

NFC UID Capture: Mandatory

Display Band Label on Nymi Bands: □

`Figure 1: NES and Evidian enrollment option`

Installing the EAM Controller software

Install the EAM Controller software on a server.

Before you begin

Obtain a valid EAM license file.

About this task

For production deployments, it is recommended that you install the software on a dedicated server. For simplicity, this document assumes that the NES and EAM Controller software are installed on the same machine.

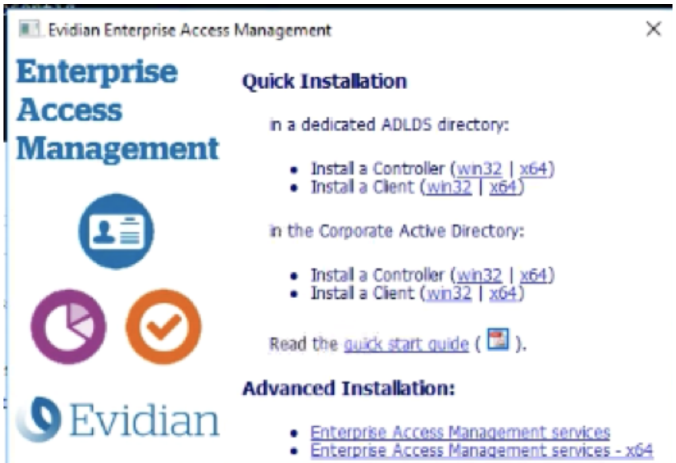
Note: The installation of the controller software requires that you restart the server.

Procedure

1. Log in to the server as a local administrator.

   For ADLDS deployments, the user must have schema rights to the Active Directory.
2. Download and extract the Evidian software package, *EAM-v10.0x.xxxxxxx.zip* to a directory on the server, (for example, the *Downloads* directory).
3. Copy the Evidian license file to the *Downloads* directory on the server.
4. Double-click the *C:\Downloads\EAM-v10.0x.xxxxxxx\Start.hta* file, and on the **`Open File – Security Warning window`**, click **`Run`**.

   Note: Note: If you run the *hta* file using Microsoft Explorer, which has enhanced security settings, you may experience issues. Create an exception, or alternatively, run the *.exe* file (for example, *ESSOControllerSetup-Dedicated.exe*) directly from *EAM-v10.0x.XXXX\QuickInstall.x64\Controller* folder and then proceed to step 7.
5. For ADLDS deployments, on the `Quick Installation` window, in the **`in a dedicated ADLDS directory`** section, click **`x64`** beside **`Install a Controller`**, as shown in the following figure.

   Evidian Enterprise Access Management

   Enterprise Access Management

   Quick Installation

   in a dedicated ADLDS directory:

   - Install a Controller (win32 | x64)
   - Install a Client (win32 | x64)

   in the Corporate Active Directory:

   - Install a Controller (win32 | x64)
   - Install a Client (win32 | x64)

   Read the quick start guide ( ).

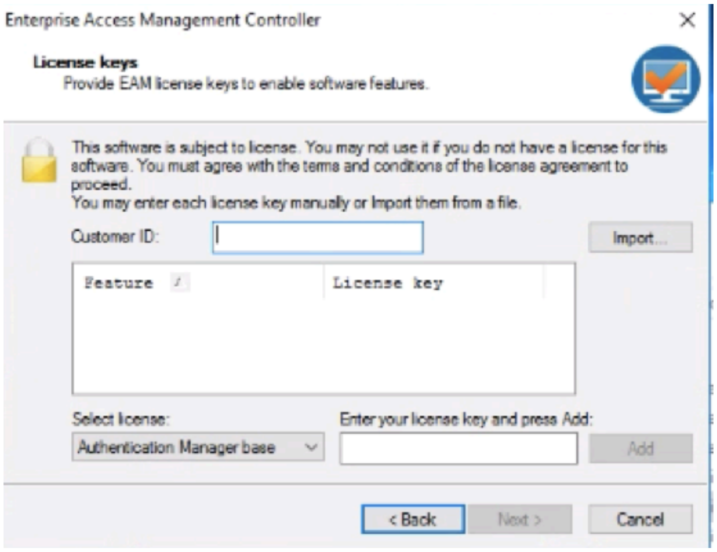
   Advanced Installation:

   - Enterprise Access Management services
   - Enterprise Access Management services - x64

6. On the `User Account Control` window, click **`Yes`**.
7. On the `Welcome to the EAM Controller installation assistant` window, click **`Next`**.
8. If the Microsoft Visual C++ 2012 Update 4 redistributable is not installed on this machine, you will see the `Prerequisites` window, click **`Next`**.

The Windows Installer window appears.

9. On the `License keys` window, click **`Import`**, as shown in the following figure.



Enterprise Access Management Controller

License keys

Provide EAM license keys to enable software features.

This software is subject to license. You may not use it if you do not have a license for this software. You must agree with the terms and conditions of the license agreement to proceed.
You may enter each license key manually or Import them from a file.

Customer ID:

Select license: Authentication Manager base

10. In the open window, select the license file in the *Downloads* directory, and the click **`Open`**.

    If the file cannot be found, ensure file type is selected as **`All Files *.*`**

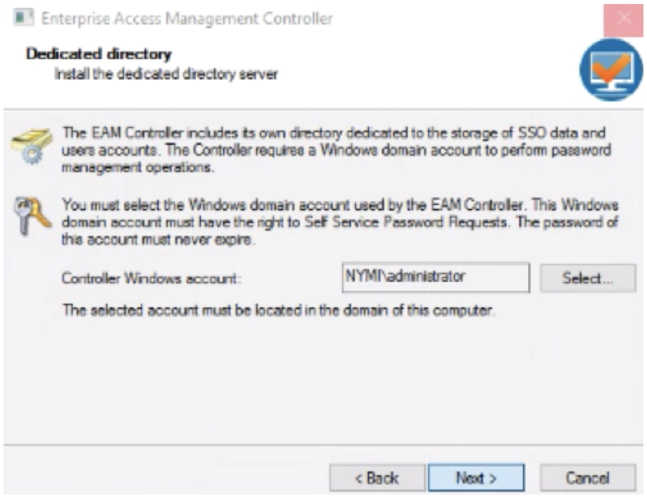
11. On the `EAM Controller configuration` window, click **`OK`**.
12. On the `License keys` window, click **`Next`**.
13. On the Storage for security objects window, click **`Next`**.
14. On the `Dedicated Directory` window, click **`Select`**.
15. In the `Dedicated directory` window, type the username and password for a domain account that will act as the dedicated EAM administrator.

    The account must have local administrator access to the server.

    Note: Select an account that has the option **`Password Never Expires`** in the AD properties of the user.

16. Click **`OK`**.

    The domain account displays in the **`Controller Windows account`** field, as shown in the following figure.



Enterprise Access Management Controller

Dedicated directory

Install the dedicated directory server

The EAM Controller includes its own directory dedicated to the storage of SSO data and users accounts. The Controller requires a Windows domain account to perform password management operations.

You must select the Windows domain account used by the EAM Controller. This Windows domain account must have the right to Self Service Password Requests. The password of this account must never expire.

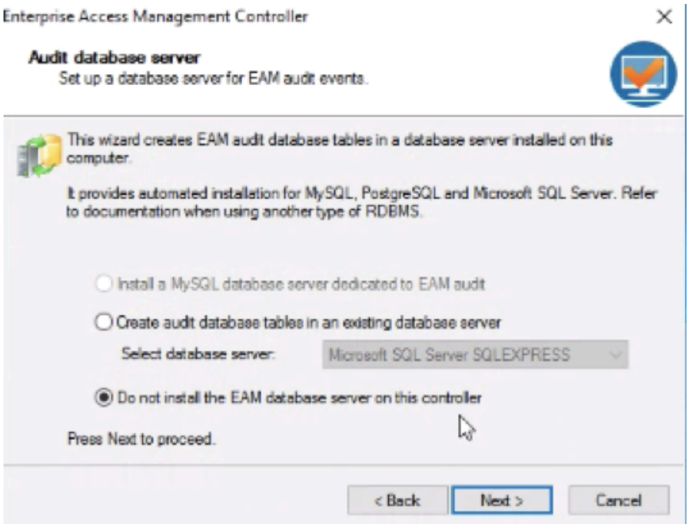
Controller Windows account: NYMI\administrator

The selected account must be located in the domain of this computer.

17.On the `Dedicated Directory` window, click **Next**.

A configuration progress window and a command prompt window appear. Do not close the command prompt window. When the configuration completes, the progress window closes.

18.On the `Audit database server` window, select **Do not install the EAM database server on this EAM Controller**, and then click **Next**.



Enterprise Access Management Controller

Audit database server

Set up a database server for EAM audit events.

This wizard creates EAM audit database tables in a database server installed on this computer.

It provides automated installation for MySQL, PostgreSQL and Microsoft SQL Server. Refer to documentation when using another type of RDBMS.

○ Install a MySQL database server dedicated to EAM audit

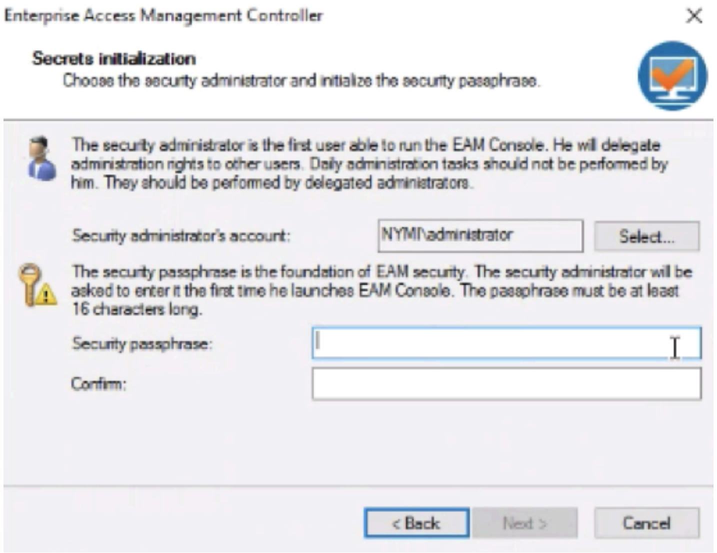
○ Create audit database tables in an existing database server

Select database server: Microsoft SQL Server SQLEXPRESS

● Do not install the EAM database server on this controller

Press Next to proceed.

19.On the `Secrets Initialization` window, in the **Security Passphrase** and **Confirm** fields, type a security passphrase, as shown in the following figure.



Enterprise Access Management Controller

Secrets initialization

Choose the security administrator and initialize the security passphrase.

The security administrator is the first user able to run the EAM Console. He will delegate administration rights to other users. Daily administration tasks should not be performed by him. They should be performed by delegated administrators.

Security administrator's account: NYMI\administrator

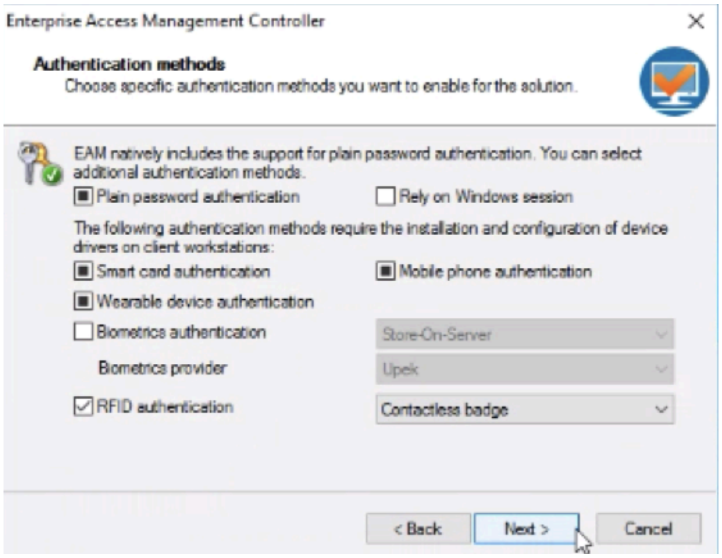
The security passphrase is the foundation of EAM security. The security administrator will be asked to enter it the first time he launches EAM Console. The passphrase must be at least 16 characters long.

Security passphrase:

Confirm:

Note: Ensure that you make a note of the passphrase as you will need to reference it when starting the EAM Console for the first time.

20. Click **Next**.
21. On the `Authentication methods` window, select **RFID authentication**, and leave the default selection **Contactless badge** from the drop-down list, as shown in the following figure. Click **Next**.



Enterprise Access Management Controller

Authentication methods

Choose specific authentication methods you want to enable for the solution.

EAM natively includes the support for plain password authentication. You can select additional authentication methods.

■ Plain password authentication □ Rely on Windows session

The following authentication methods require the installation and configuration of device drivers on client workstations:

■ Smart card authentication ■ Mobile phone authentication

■ Wearable device authentication

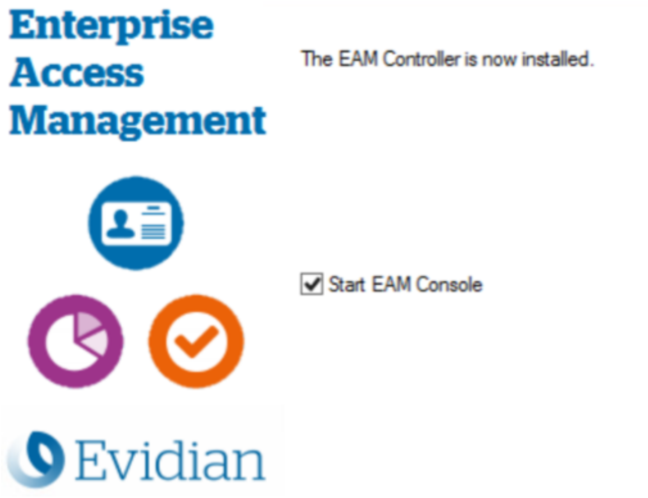
□ Biometrics authentication Store-On-Server

Biometrics provider Upek

☑ RFID authentication Contactless badge

22. On the `Software installation` window, click **Next**.

    The Windows Installer window appears, and the installation process begins.
23. On the window that displays **The EAM Controller is now installed**, select **Start EAM Console**, as shown in the following figure, and then click **Finish**.

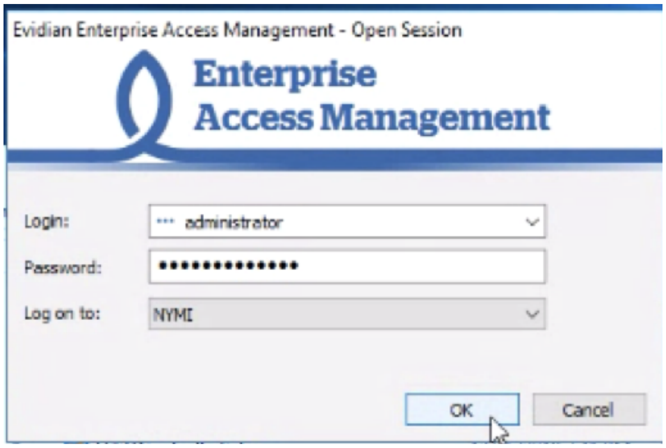


Enterprise Access Management

The EAM Controller is now installed.

☑ Start EAM Console

24. On the `Evidian Enterprise Access Management – Open Session` window, type your login and password and then select the domain to which you want to log on, as shown in the following figure. Click **OK**.



Evidian Enterprise Access Management - Open Session

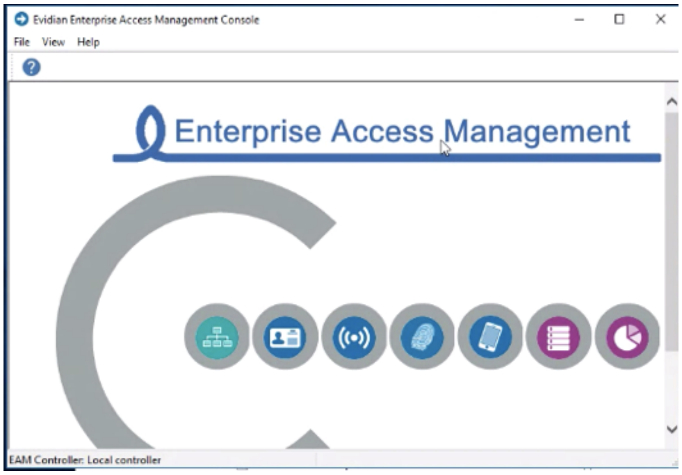
Enterprise Access Management

Login: administrator

Password: ••••••••••••••

Log on to: NYMI

25. On the `Administration Pass-phrase` window, type the 16-character passphrase that you created in the `Secrets Initialization` window, and then click **OK**.
The EAM Console launches, as shown in the following figure.


Evidian Enterprise Access Management Console
File View Help
Enterprise Access Management
EAM Controller: Local controller

What to do next

Install the Audit Database for the EAM Controller. Consider the following:

- You can install the Audit Database on the same SQL server that you use for NES.
- On the EAM Controller machine, ensure that the SQL service account has the right to log in locally and is a member of the local Administrators group.
- On the SQL server, ensure that the SQL browsing service is running.

The *Evidian EAM Installation Guide* provides detailed information about how to install and configure the audit database.

Obtaining the TokenManagerStructure file for the EAM Controller

Copy the *TokenManagerStructure-Nymi-Wearable.xml* file from the software package. The file is located in the *Evidian-Supplementary-Files* subdirectory. You will use this file to define the wearable as the default authentication method for the environment.

Defining the Authentication Method

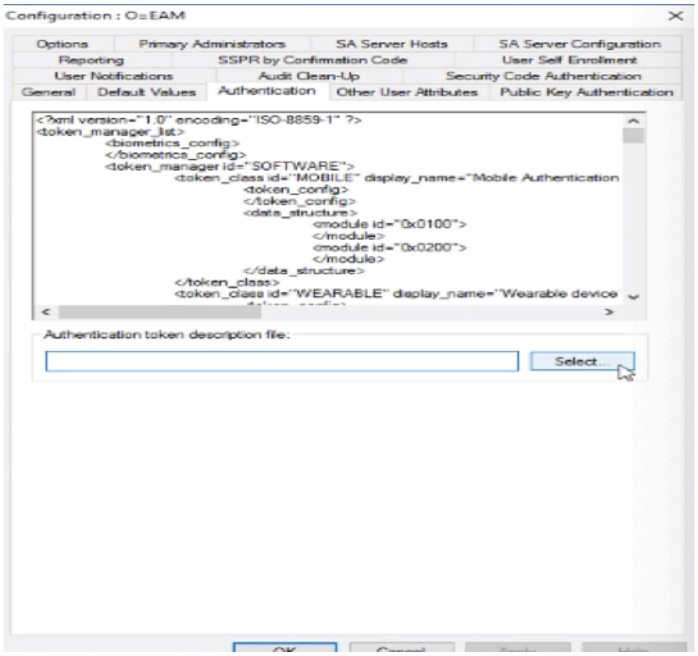
The Nymi Band uses an authentication method to communicate with the Evidian Authentication Manager and perform authentication tasks.

About this task

Perform the following steps to define the default authentication method that is used by the EAM Clients.

Procedure

1. On the EAM Console, from the **`File`** menu, select **`Configuration`**.
2. On the **`Authentication`** Tab, click the **`Select`** button, as shown in the following figure.



```
<?xml version="1.0" encoding="ISO-8859-1" ?>
<token_manager_list>
        <biometrics_config>
        </biometrics_config>
        <token_manager id="SOFTWARE">
                <token_class id="MOBILE" display_name="Mobile Authentication
                        <token_config>
                        </token_config>
                        <data_structure>
                                <module id="0x0100">
                                </module>
                                <module id="0x0200">
                                </module>
                        </data_structure>
                </token_class>
                <token_class id="WEARABLE" display_name="Wearable device
```

Authentication token description file:

3. In the `Open File` dialog, navigate to the directory that contains the TokenManagerStructure file, and then select the TokenManagerStructure file.
4. Click **`Open`**.
5. Click **`Apply`**, which will validate the structure of the file.
6. Click **`OK`**.
7. Close the `EAM Console` window.
8. Run *regedit* and navigate to *HKEY_LOCAL_MACHINE\SOFTWARE\Enatel\WiseGuard\FrameWork\Config*.
9. Edit the **`ManageAccessPoints`** key and change the value to `1`.
10. Restart the **`Enterprise Access Management Security Services`** service.

Install the Audit Database

EAM stores audit information in an audit database.

Consider the following:

- You can install the Audit Database on the same SQL server that you use for NES.
- On the EAM Controller machine, ensure that the SQL service account has the right to log in locally and is a member of the local Administrators group.
- On the SQL server, ensure that the SQL browsing service is running.

Creating the EAM Audit Database

The EAM installation package includes a SQL script that you can use in SSMS to create the audit database.

About this task

Perform the following steps to create a EAM audit database on an existing SQL server.

Procedure

1. From the EAM installation package, obtain the *MSSQLV2.sql* file from the *..\EAM.x64\TOOLS\WGSrvConfig\Support* directory.
2. Use SSMS to connect to the SQL server.
3. From the **`Tools`** menu, select **`New Query`**.
4. In the **`New Query`** window, copy and paste the contents of the click **`Execute`**.

Results

The eamaudit database appears in the **`Databases`** folder.

Configuring the EAM Controller to Use the Audit Database

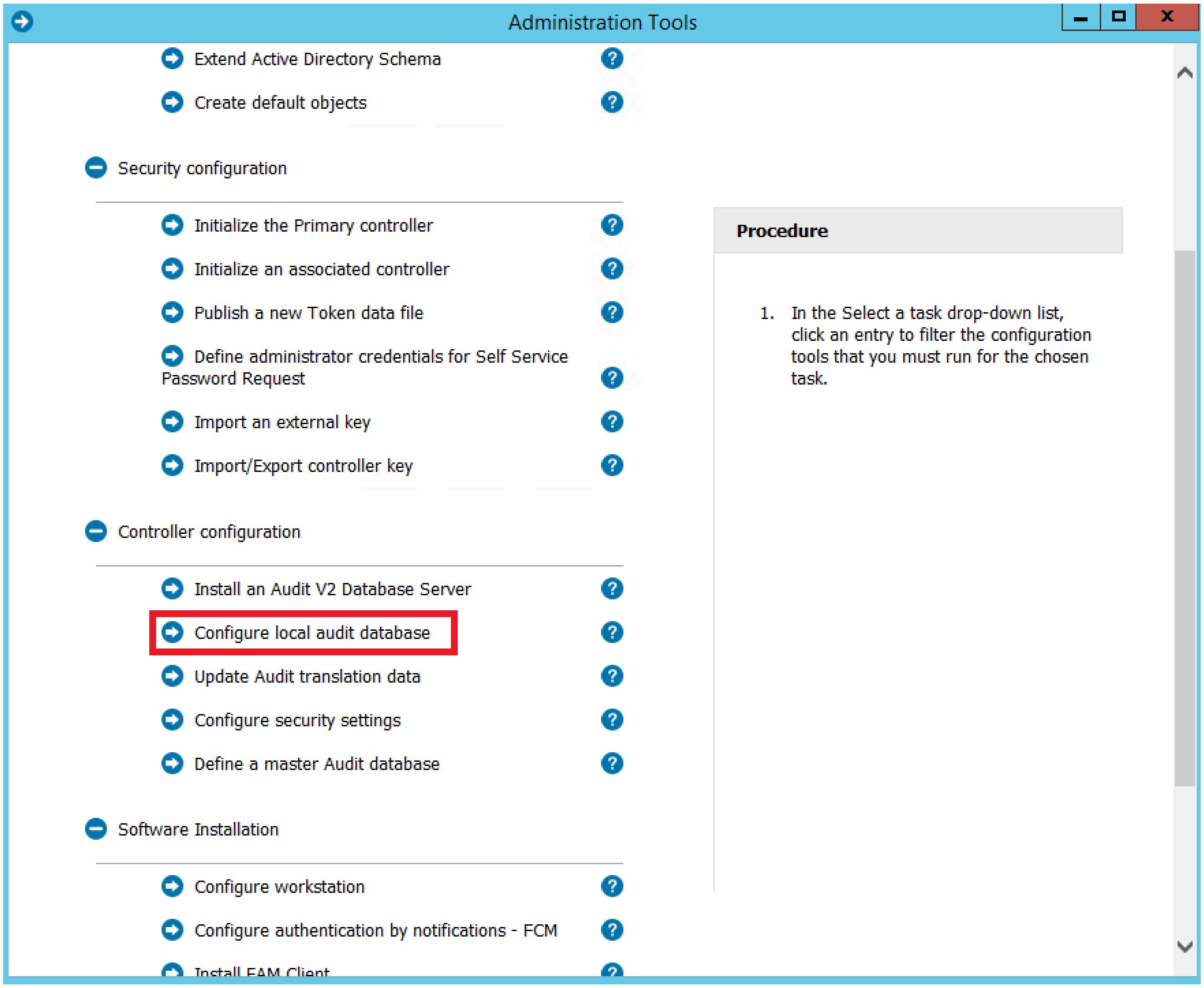
Install and configure the ODBC driver for SQL on the EAM Controller.

About this task

Perform the following steps on the EAM Controller

Procedure

1. Stop the **`Enterprise Access Management Security Server`** service.
2. Download and install the Microsoft OLE DB Driver for SQL.
3. Start the **`Enterprise Access Management Security Server`** service.
4. From the EAM installation package, navigate to the *..\EAM.x64\TOOLS\WGSrvConfig* folder.
5. Hold the **`Shift`** key, right-click *WGSRVConfig.exe*, and select **`Run as a different user`**.
6. In the `Run as a different user` window, specify the username and password of the SQL service account.
7. Under **`Controller Configuration`**, click **`Configure local audit database`**, as shown in the following figure.

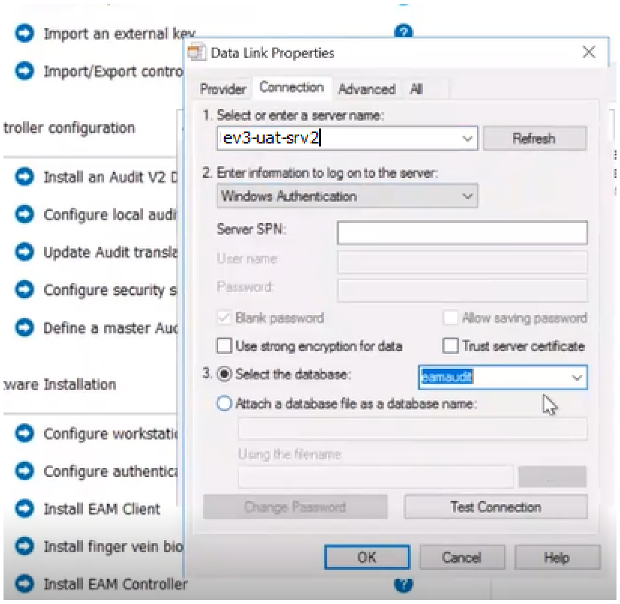

Administration Tools
Extend Active Directory Schema
Create default objects
Security configuration
Initialize the Primary controller
Initialize an associated controller
Publish a new Token data file
Define administrator credentials for Self Service Password Request
Import an external key
Import/Export controller key
Controller configuration
Install an Audit V2 Database Server
Configure local audit database
Update Audit translation data
Configure security settings
Define a master Audit database
Software Installation
Configure workstation
Configure authentication by notifications - FCM
Install EAM Client
Procedure

1. In the Select a task drop-down list, click an entry to filter the configuration tools that you must run for the chosen task.

Figure 2: Configure local audit database option

8. In the **Use existing corporate database** section, next to **Next to Data Source Name**, click the ellipses (...).
9. Select **Microsoft OLE DB Driver for SQL Server** .
10. Click **Next**.
11. In the **Data Link Properties**, perform the following actions:
    a) In the **Select or enter a server name** field, type the name of the SQL server.
    b) From the **Enter information to log on to the server** list, select the appropriate authentication method for your configuration.
    c) In **Step 3**, select **Select the database**.
    d) From the list, select **eamaudit**.

    The following figure provides an example of the Select the database window.



Data Link Properties

Provider | Connection | Advanced | All

1. Select or enter a server name: ev3-uat-srv2

2. Enter information to log on to the server: Windows Authentication

Server SPN:

User name:

Password:

☑ Blank password ☐ Allow saving password

☐ Use strong encryption for data ☐ Trust server certificate

3. ● Select the database: eamaudit

○ Attach a database file as a database name:

Using the filename

Figure 3: Select the database window

e) Click **Test Connection**

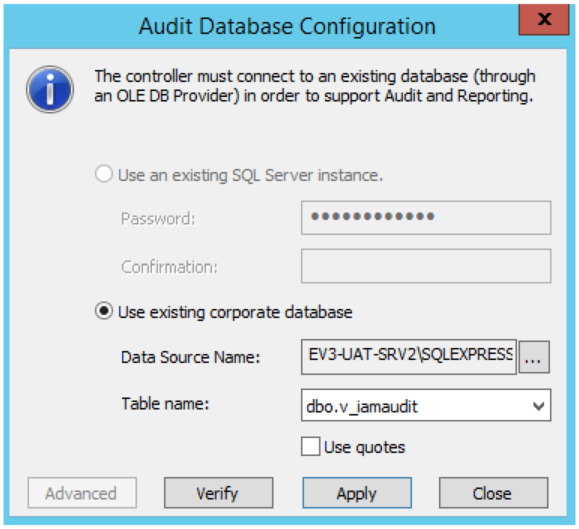
f) On the Test Connection Succeeded window, click **OK**.

g) Optionally, in **Step 2**, select the **Use strong encryption for data** and **Trust server certificate** options.

h) Click **Test Connection**.

i) On the Test Connection Succeeded window, click **OK**.

j) In the Credential to access the database window, specify the username and password of the SQL service account, and then click **OK**.
The Audit Database Configuration window appears with information about the database, as shown in the following figure.



Audit Database Configuration

The controller must connect to an existing database (through an OLE DB Provider) in order to support Audit and Reporting.

○ Use an existing SQL Server instance.

Password: ●●●●●●●●●●●●

Confirmation:

● Use existing corporate database

Data Source Name: EV3-UAT-SRV2\SQLEXPRESS

Table name: dbo.v_iamaudit

☐ Use quotes

Figure 4: Audit Database Configuration window

k) On the `Audit Database Configuration` window, click **`Close`**.
l) Click **`Verify`**.
m) On the `EAM Configuration` pop-up, click **`OK`**.

12. Close the `Administration Tools` window.

Modifying EAM Settings to Support Coexistence with other Solutions

With Evidian Authentication Manager is enabled, when an Evidian-integrated MES application is not waiting for an SSO operation and a user performs an NFC tap, the desktop locks.

About this task

If user terminals need to simultaneously support Evidian-integrated MES applications and Nymi-integrated MES applications , perform the following steps to modify the settings in the access point profile, to prevent unexpected desktop locks when performing an NFC tap in the Nymi-integrated MES application.

Perform the following steps in the EAM Console

Procedure

1. In the `Directory` view, expand **`EAM > Evidian Enterprise Access Management > User Access > AccessPoint Profiles > Default Access Point Profile`**.
2. On the **`Authentication`** tab, from the **`Default action when token removed`** list, select **`Do nothing`**.
3. Click **`Apply`**.

Results

A user cannot perform an NFC tap to lock the Windows session; however, the Windows session still locks when the Nymi Band deauthenticates or when the user is away from the user terminal.

Configuring Additional EAM Controller Administrators

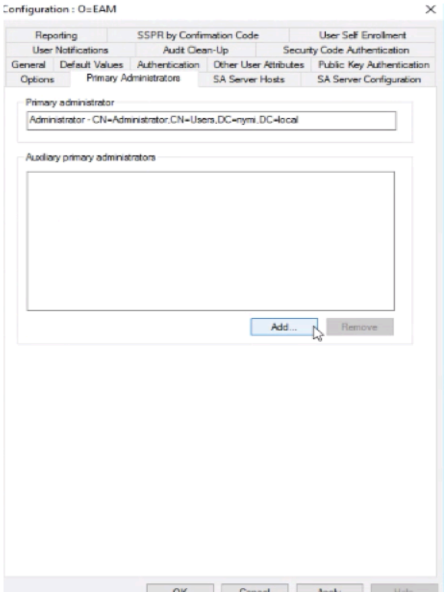
It is possible to add additional administrators to the EAM Controller.

About this task

By adding a secondary primary user, you have an additional user with access to the EAM Controller in the case where the primary user is locked out of the EAM Controller.

Procedure

1. Log into the EAM Console.
2. From the **`File`** menu, select **`Configuration`**, and then click the **`Primary Administrators`** tab.
3. Click **`Add`**, as shown in the following figure.


Configuration : O=EAM

Primary administrator: Administrator - CN=Administrator,CN=Users,DC=nymi,DC=local

4. In the `Select Users` window, select the **`Search`** tab.
5. In the **`Filter`** field, type the user name that you want to add, and then click **`Search`**.

   Note: You cannot use Active Directory groups, you can only add individual users.
6. Select the user, and then click **`OK`**.
7. Click **`Apply`**.
8. Click **`OK`**.
9. Close the EAM Console.

Install the Audit Database

EAM stores audit information in an audit database.

Consider the following:

- You can install the Audit Database on the same SQL server that you use for NES.
- On the EAM Controller machine, ensure that the SQL service account has the right to log in locally and is a member of the local Administrators group.
- On the SQL server, ensure that the SQL browsing service is running.

Creating the EAM Audit Database

The EAM installation package includes a SQL script that you can use in SSMS to create the audit database.

About this task

Perform the following steps to create a EAM audit database on an existing SQL server.

Procedure

1. From the EAM installation package, obtain the *MSSQLV2.sql* file from the ..*\EAM.x64\TOOLS\WGSrvConfig\Support* directory.
2. Use SSMS to connect to the SQL server.
3. From the **`Tools`** menu, select **`New Query`**.
4. In the **`New Query`** window, copy and paste the contents of the click **`Execute`**.

Results

The eamaudit database appears in the **`Databases`** folder.

Configuring the EAM Controller to Use the Audit Database

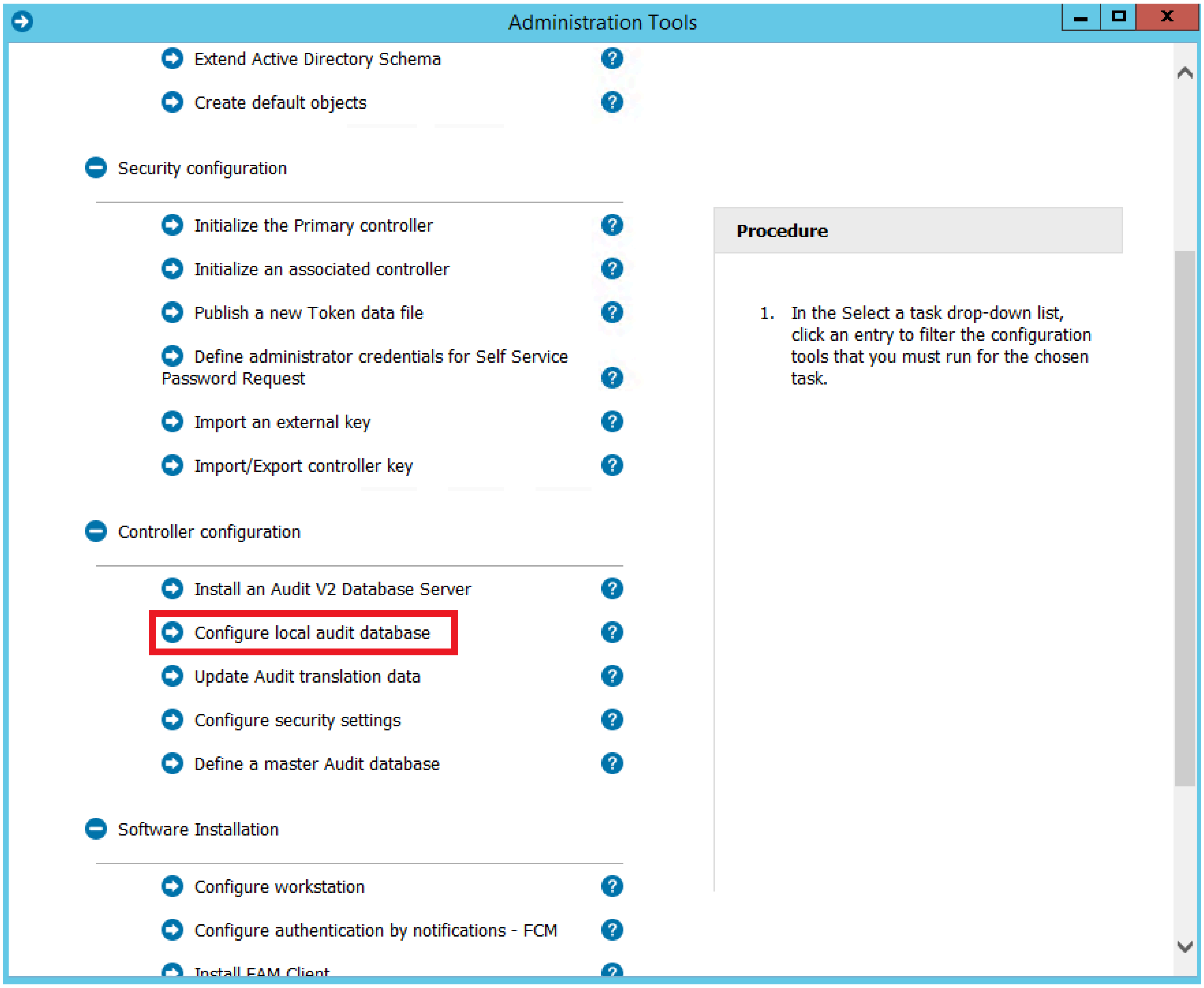
Install and configure the ODBC driver for SQL on the EAM Controller.

About this task

Perform the following steps on the EAM Controller

Procedure

1. Stop the **`Enterprise Access Management Security Server`** service.
2. Download and install the Microsoft OLE DB Driver for SQL.
3. Start the **`Enterprise Access Management Security Server`** service.
4. From the EAM installation package, navigate to the ..*\EAM.x64\TOOLS\WGSrvConfig* folder.
5. Hold the **`Shift`** key, right-click *WGSRVConfig.exe*, and select **`Run as a different user`**.
6. In the `Run as a different user` window, specify the username and password of the SQL service account.
7. Under **`Controller Configuration`**, click **`Configure local audit database`**, as shown in the following figure.


Administration Tools
Extend Active Directory Schema
Create default objects
Security configuration
Initialize the Primary controller
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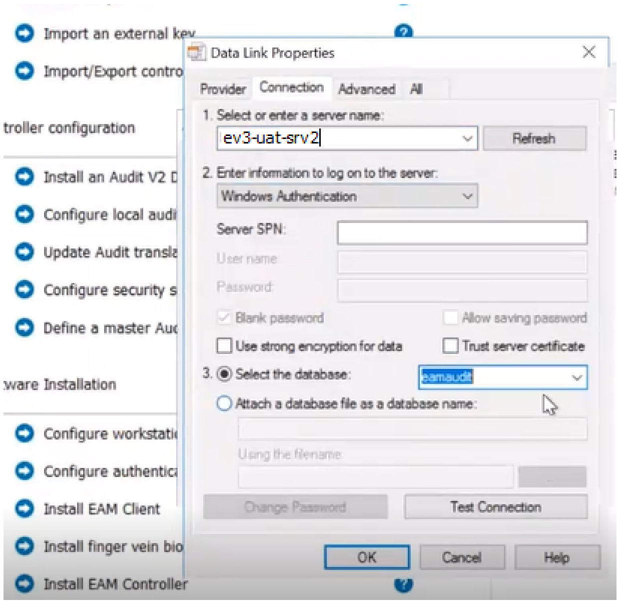
Configure security settings
Define a master Audit database
Software Installation
Configure workstation
Configure authentication by notifications - FCM
Install EAM Client
Procedure

1. In the Select a task drop-down list, click an entry to filter the configuration tools that you must run for the chosen task.

Figure 5: Configure local audit database option

8. In the **Use existing corporate database** section, next to **Next to Data Source Name**, click the ellipses (...).
9. Select **Microsoft OLE DB Driver for SQL Server** .
10. Click **Next**.
11. In the **Data Link Properties**, perform the following actions:
    a) In the **Select or enter a server name** field, type the name of the SQL server.
    b) From the **Enter information to log on to the server** list, select the appropriate authentication method for your configuration.
    c) In **Step 3**, select **Select the database**.
    d) From the list, select **eamaudit**.

    The following figure provides an example of the Select the database window.



1. Select or enter a server name: ev3-uat-srv2

2. Enter information to log on to the server: Windows Authentication

Server SPN:

User name:

Password:

☑ Blank password ☐ Allow saving password

☐ Use strong encryption for data ☐ Trust server certificate

3. ● Select the database: iamaudit

○ Attach a database file as a database name:

Using the filename

Figure 6: Select the database window

e) Click **Test Connection**

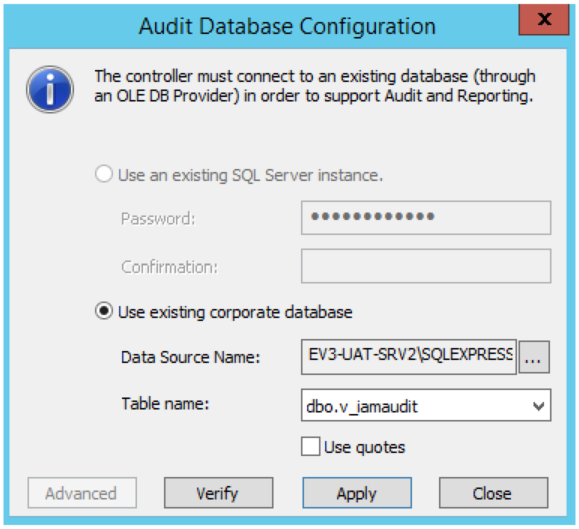
f) On the Test Connection Succeeded window, click **OK**.

g) Optionally, in **Step 2**, select the **Use strong encryption for data** and **Trust server certificate** options.

h) Click **Test Connection**.

i) On the Test Connection Succeeded window, click **OK**.

j) In the Credential to access the database window, specify the username and password of the SQL service account, and then click **OK**.
The Audit Database Configuration window appears with information about the database, as shown in the following figure.



The controller must connect to an existing database (through an OLE DB Provider) in order to support Audit and Reporting.

○ Use an existing SQL Server instance.

Password: ●●●●●●●●●●●●

Confirmation:

● Use existing corporate database

Data Source Name: EV3-UAT-SRV2\SQLEXPRESS ...

Table name: dbo.v_iamaudit

☐ Use quotes

Figure 7: Audit Database Configuration window

k) On the `Audit Database Configuration` window, click **`Close`**.

l) Click **`Verify`**.

m) On the `EAM Configuration` pop-up, click **`OK`**.

12. Close the `Administration Tools` window.

Installing and Configuring Software on the Enrollment Terminal

The enrollment terminal is the machine that you use to enroll Nymi Bands. This machine requires a connected Bluegiga Bluetooth Adapter(BLED 112).

This section provides information about installing the Evidian Nymi Band Application and the EAM Client software on the enrollment terminal.

Importing the Root CA certificate

Perform the following steps only if the Root CA issuing the NES TLS server certificate is not a Trusted Root CA (for example, if a self-signed TLS server certificate is used for NES). Install the Root CA on each user terminal to support the establishment of a connection with the NES host.

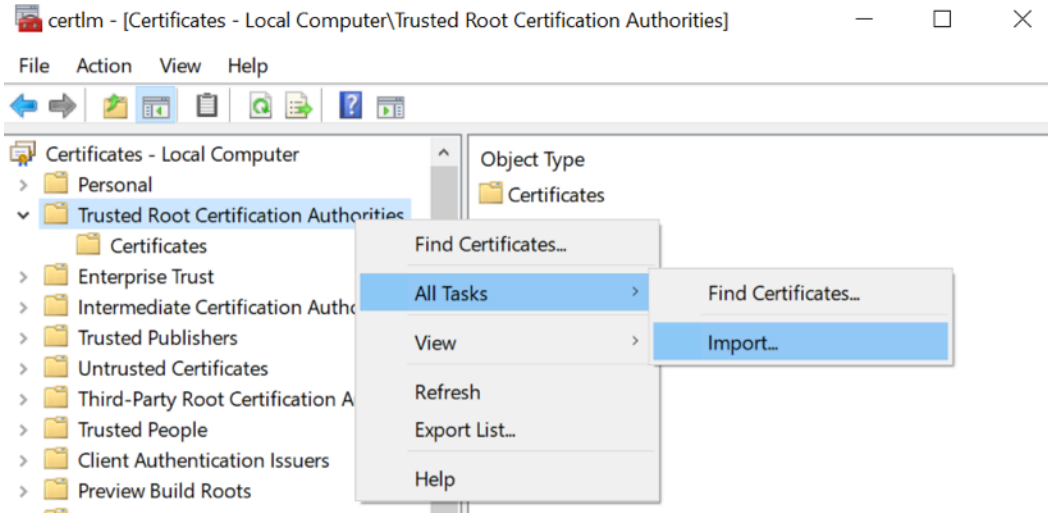
About this task

While logged into the user terminal as a local administrator, use the `certlm` application to import the root CA certificate into the Trusted Root Certification Authorities store. For example, on Windows 10, perform the following steps:

Procedure

1. In `Control Panel`, select **`Manage Computer Certificates`**.
2. In the `certlm` window, right-click **`Trusted Root Certification Authorities`**, and then select **`All Tasks > Import`**.

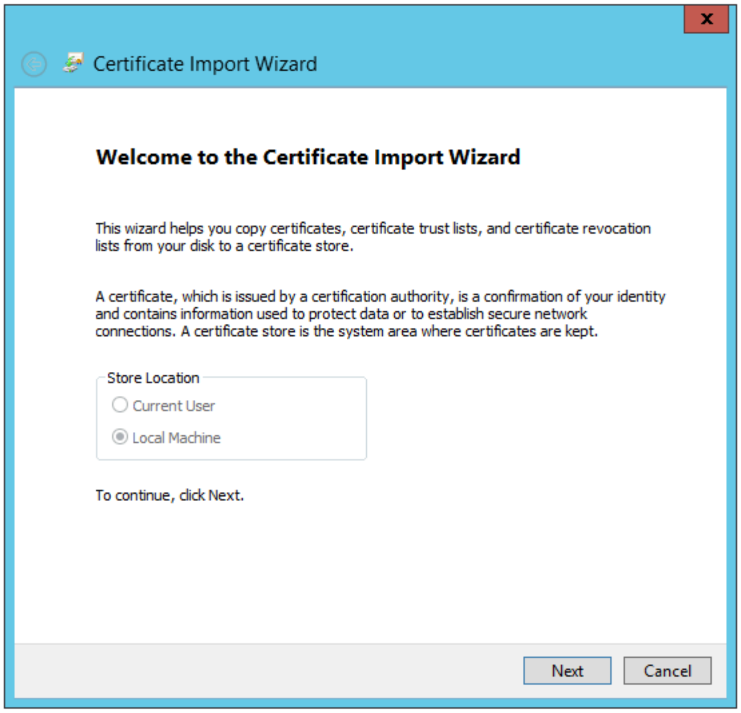
   The following figure shows the `certlm` window.


certlm - [Certificates - Local Computer\Trusted Root Certification Authorities]
File
Action
View
Help
Certificates - Local Computer
Personal
Trusted Root Certification Authorities
Certificates
Enterprise Trust
Intermediate Certification Autho
Trusted Publishers
Untrusted Certificates
Third-Party Root Certification A
Trusted People
Client Authentication Issuers
Preview Build Roots
Object Type
Certificates
Find Certificates...
All Tasks
View
Refresh
Export List...
Help
Find Certificates...
Import...

`Figure 8: certlm application on Windows 10`

3. On the `Welcome to the Certificate Import Wizard` screen, click **`Next`**.

   The following figure shows the `Welcome to the Certificate Import Wizard` screen.



Welcome to the Certificate Import Wizard

This wizard helps you copy certificates, certificate trust lists, and certificate revocation lists from your disk to a certificate store.

A certificate, which is issued by a certification authority, is a confirmation of your identity and contains information used to protect data or to establish secure network connections. A certificate store is the system area where certificates are kept.

Store Location

○ Current User

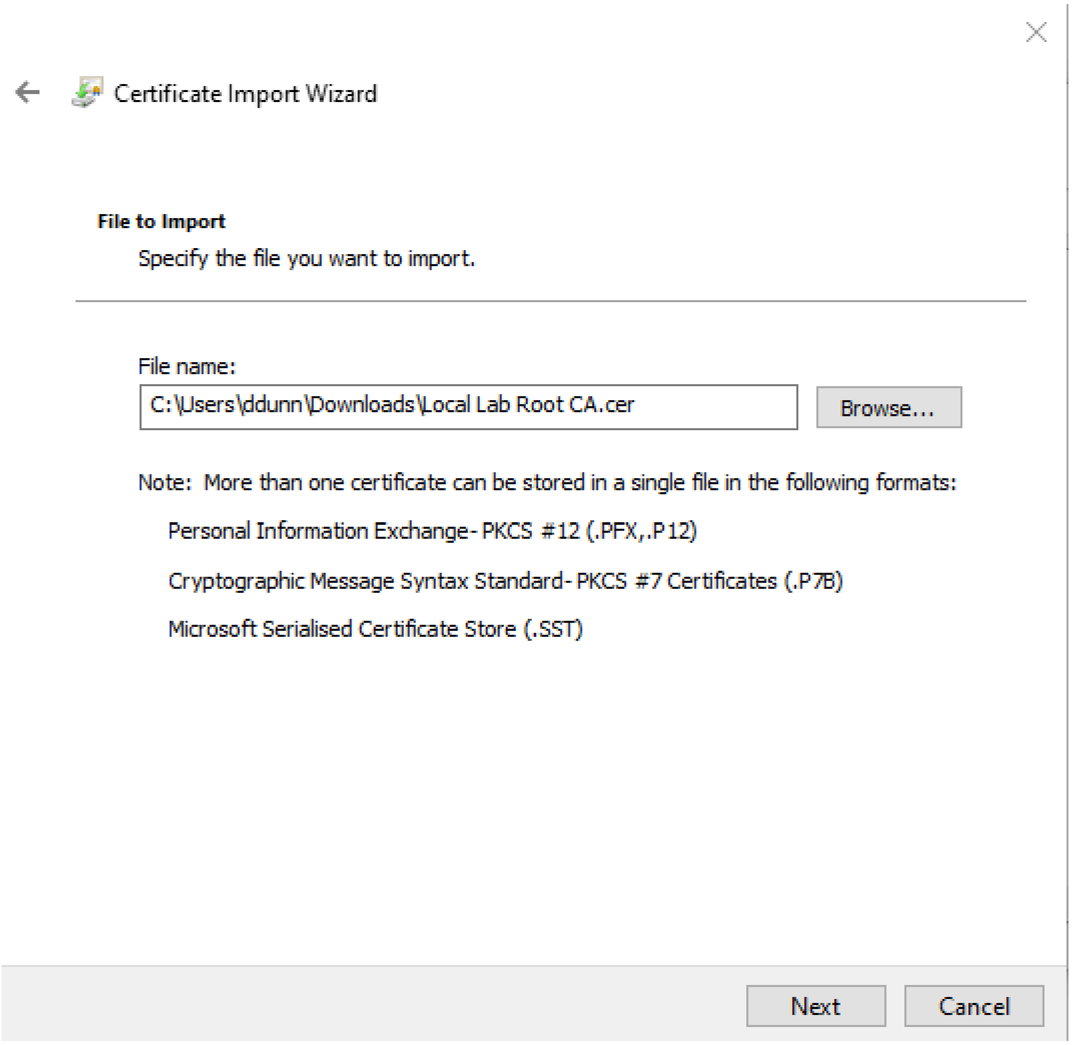
● Local Machine

To continue, click Next.

`Figure 9: Welcome to the Certificate Import Wizard screen`

4. On the `File to Import` screen, click **`Browse`**, navigate to the folder that contains the root certificate file, select the file, and then click **`Open`**.
5. On the `File to Import` screen, click **`Next`**.

   The following figure shows the `File to Import` screen.



File to Import

Specify the file you want to import.

File name:

C:\Users\ddunn\Downloads\Local Lab Root CA.cer

Note: More than one certificate can be stored in a single file in the following formats:

Personal Information Exchange- PKCS #12 (.PFX,.P12)

Cryptographic Message Syntax Standard- PKCS #7 Certificates (.P7B)

Microsoft Serialised Certificate Store (.SST)

Figure 10: File to Import screen

6. On the Certificate Store screen, accept the default value **Place all certificates in the following store** with the value **Trusted Root Certification Authorities**, and then click **Next**.
7. On the Completing the Certificate Import Wizard screen, click **Finish**.

Installing the Nymi Band Application

For information about installing the Nymi Band Application, see the Nymi Connected Worker Platform Administration Guide.

Note: On the Completing the Nymi Band Application Setup Wizard screen, before you click **Finish**, clear the **Launch Nymi Band Application** option.

Installing the EAM Client

Install the EAM Client on the enrollment terminal.

Before you begin

Before installing the EAM Client software:

- Complete the steps to configure the EAM Controller.
- Ensure that the machine is on the same domain as the EAM Controller.
- Obtain the Evidian license file from the Nymi Solution Consultant.
- Determine the Nymi Band use cases. To use the Nymi Band to unlock user terminals, you will configure the EAM Client with Authentication Manager. To use the Nymi Band for SSO activities only, you will configure the EAM Client with Windows Login.
-

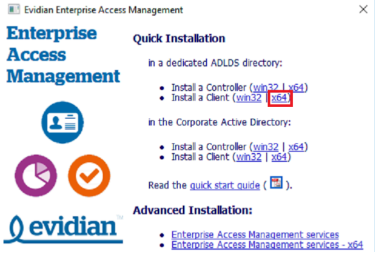
About this task

Perform the following steps on the enrollment terminal.

Procedure

1. Log in to the host as a Domain Administrator.
2. Download and extract the Evidian software package, *EAM-v10.0x.xxxxxxx.zip* to a directory on the host, for example, the *Downloads* directory.
3. Copy the license file to the *Downloads* directory on the host.
4. Double-click the *C:\Downloads\EAM-v10.0xxxxxxxx\Start.hta* file.

   Note: If you run the *hta* file using Microsoft Explorer, which has enhanced security settings, you may experience issues. Create an exception, or alternatively run the *.exe* file directly from *EAM-v10.01xxxxxx/QuickInstall.x64/Client/ESSOClientSetup-Dedicated.exe* Proceed to step 7.
5. On `the Open File – Security` warning window, click **`Run`**.
6. On the `Quick Installation` window, in the **`dedicated ADLDS Directory`** section, click **`x64`** beside **`Install a Client`**, as shown in the following figure.



Evidian Enterprise Access Management

Enterprise Access Management

Quick Installation

in a dedicated ADLDS directory:

- Install a Controller (win32 | x64)
- Install a Client (win32 | x64)

in the Corporate Active Directory:

- Install a Controller (win32 | x64)
- Install a Client (win32 | x64)

Read the quick start guide ( ).

Advanced Installation:

- Enterprise Access Management services
- Enterprise Access Management services - x64

7. On the `User Account Control` window, click **`Yes`**.
8. On the `Enterprise Access Management Wizard` window, click **`Next`**.
9. If the Microsoft Visual C++ 2012 Update 4 redistributable is not installed on this machine, you will see the `Prerequisites` window. Click **`Next`**. An installation progress window appears and installs the prerequisite software.
10. On the What do you want to do window, select **`including advanced parameters`**, leave the remaining default selections, and then click **`Next`**.
11. On the `Software Licenses` window, click **`Import`**.

12. In the `Open` window, select the license file, and then click **`Open`**.

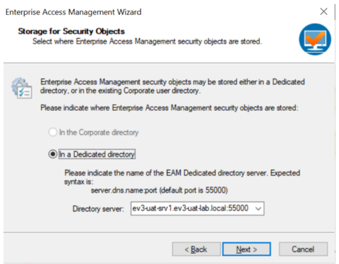
    If the file cannot be found, ensure file type is selected as **`All Files *.*`**

    The license stored in the registry is imported.

13. On the `Enterprise Access Management Wizard` screen, click **`OK`**.

14. On the `Storage for Security Objects` window, in the **`Directory Server`** field, type the FQDN and port of the server where the EAM Controller was installed. For example, `ev3-uat-srv1.ev3-uat-lab.local:55000`.

    The following figure provides an example of the window.



Enterprise Access Management Wizard

Storage for Security Objects
Select where Enterprise Access Management security objects are stored.

Enterprise Access Management security objects may be stored either in a Dedicated directory, or in the existing Corporate user directory.

Please indicate where Enterprise Access Management security objects are stored:

○ In the Corporate directory

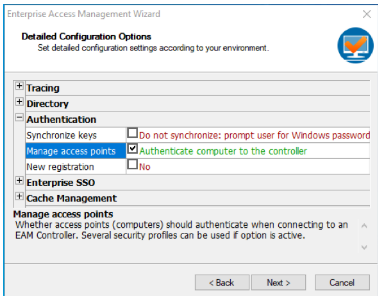
● In a Dedicated directory

Please indicate the name of the EAM Dedicated directory server. Expected syntax is:
server.dns.name:port (default port is 55000)

Directory server: ev3-uat-srv1.ev3-uat-lab.local:55000

15. Click **`Next`**.

16. On the `Detailed Configuration Options` window, expand **`Authentication`**, and then select **`Manage access points`**, as shown in the following figure.



Enterprise Access Management Wizard

Detailed Configuration Options
Set detailed configuration settings according to your environment.

Tracing	
Directory	
Authentication	
Synchronize keys	□ Do not synchronize: prompt user for Windows password
Manage access points	☑ Authenticate computer to the controller
New registration	□ No
Enterprise SSO	
Cache Management	

Manage access points
Whether access points (computers) should authenticate when connecting to an EAM Controller. Several security profiles can be used if option is active.

17. Click **`Next`**.

18. On the `Enterprise Access Management Client Modules` window, perform the following actions:

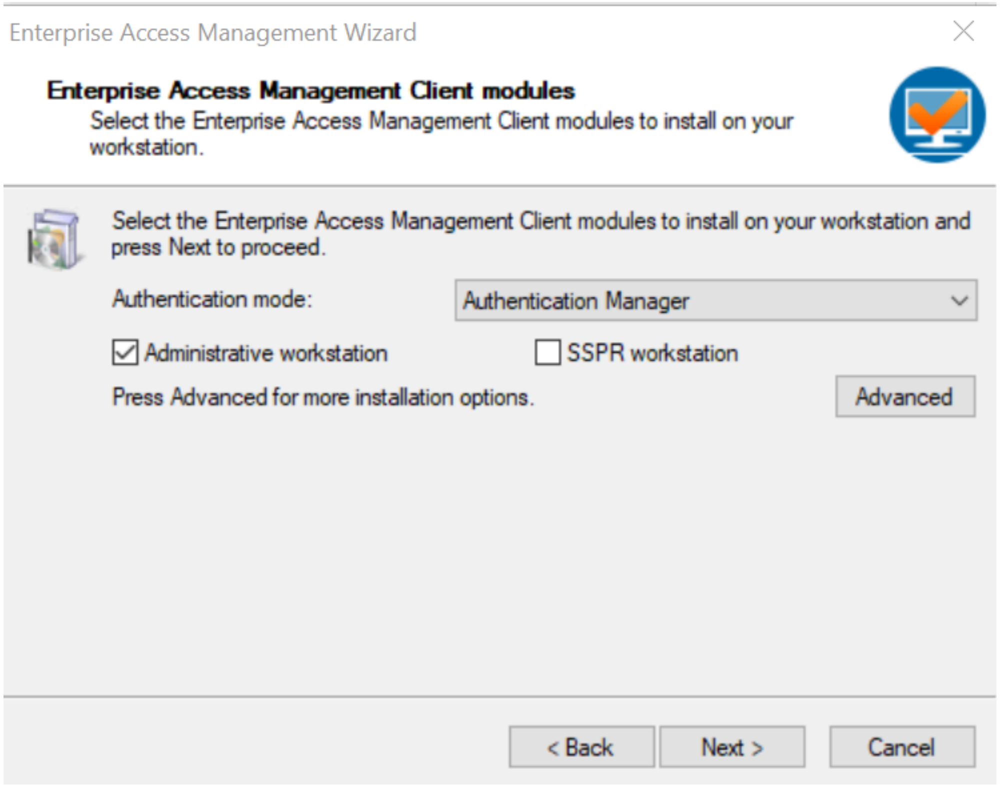
    a) From the Authentication Mode list:

    - Select **`Authentication Manager`** to use the Nymi Band to unlock the desktop and perform SSO authentication tasks on the computer.
    - Select **`Windows Login`** to use the Nymi Band to perform SSO authentication tasks on the computer only.

    b) Optionally, select **`Administrative Console`** to install the EAM Console on the enrollment terminal.

    c) Click **`Next`**.

    The following figure provides an example of the `Enterprise Access Management Client Modules` window.



Enterprise Access Management Wizard

Enterprise Access Management Client modules

Select the Enterprise Access Management Client modules to install on your workstation.

Select the Enterprise Access Management Client modules to install on your workstation and press Next to proceed.

Authentication mode: Authentication Manager

☑ Administrative workstation ☐ SSPR workstation

Press Advanced for more installation options.

19. On the `Enterprise Access Management Client installation` window, click **`Next`**. An installation progress window appears and installs the software.
20. On the `Restart Computer` screen, leave the default selection **`Do not restart the computer`**, and the click **`Finish`**.

Configuring the EAM client to use the Nymi Band Application

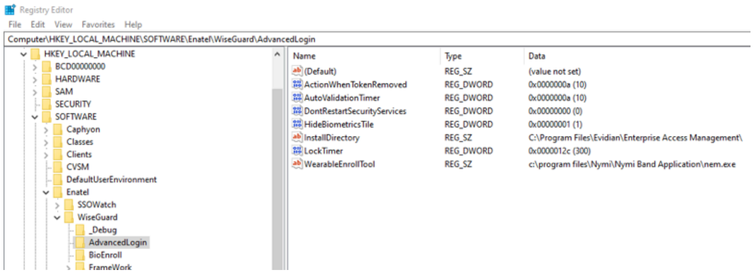
Create a registry entry to enable the EAM Client to use the `Nymi Band Application` to enroll the Nymi Band.

About this task

Perform the following steps in *regedit.exe*.

Procedure

1. In the HKLM\Software\Enatel\WiseGuard\AdvancedLogin key, create a new string value
2. In the **`Name`** field, type `WearableEnrollTool`.
3. Edit the string and in the value field, type `C:\Program Files\Nymi\Nymi Band Application\NEM.exe`,as shown in the following figure.



Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Enatel\WiseGuard\AdvancedLogin

Name	Type	Data
(Default)	REG_SZ	(value not set)
ActionWhenTokenRemoved	REG_DWORD	0x0000000a (10)
AutoValidationTimer	REG_DWORD	0x0000000a (10)
DontRestartSecurityServices	REG_DWORD	0x00000000 (0)
HideBiometricsTile	REG_DWORD	0x00000001 (1)
InstallDirectory	REG_SZ	C:\Program Files\Evidian\Enterprise Access Management\
LockTimer	REG_DWORD	0x0000012c (300)
WearableEnrollTool	REG_SZ	c:\program files\Nymi\Nymi Band Application\nem.exe

4. Navigate to *HKEY_LOCAL_MACHINE\Software\Nymi\NES*.

   Note: If this path does not exist, create the keys.
5. In the *NES* key, create a new string value.
6. In the **`Name`** field, type `URL`.
7. Edit the string and in the value field, type `https://`*`nes_server`*`/`*`nes_service_name`*

   Where:

   - *`nes_server`* is the Fully Qualified Domain name of the NES host.
   - *`nes_service_name`* is the services mapping name of the NES web application. The default value is nes.

     For example, https://ev3-uat-srv1/ev3-uat-lab.local/nes

     Note: The service mapping name for NES was defined during deployment.
   - Close *regedit.exe*.

Confirming the Runtime dll versions

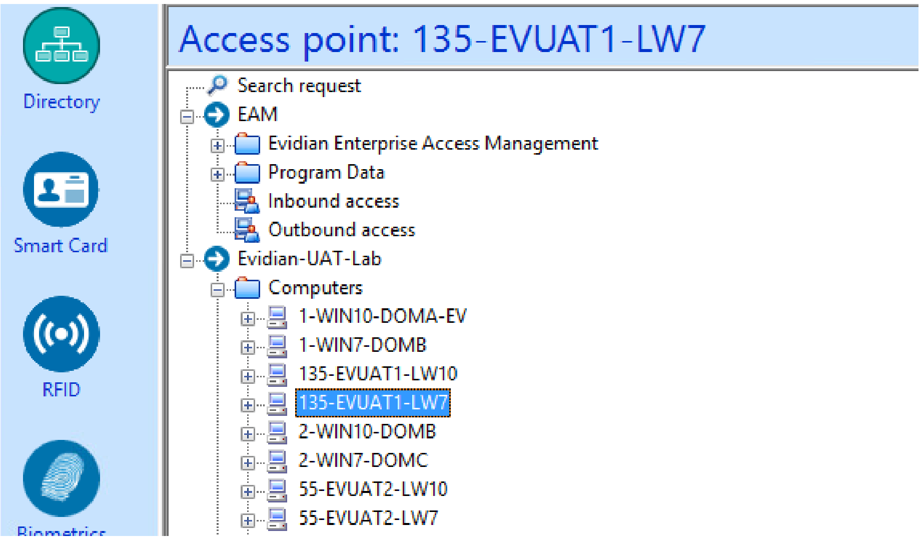
Review the `Connected Worker Platform` and EAM Client versions of the `Nymi Runtime` file to ensure that they are the same.

About this task

Procedure

1. From the `Windows Apps and Feature` applet, search for the `Nymi Runtime` application and make note of the version.
2. From Windows explorer, navigate to *C:\Program Files\Common Files\Evidian\WGSS*.
3. Right-click *nymi_api.dll* and select **`Properties`**. On the **`Details`** tab, confirm that the value in the product version matches the `Nymi Runtime` installation.
4. If the versions do not match, perform the following steps:
   a) Rename the *nymi_api.dll* in *C:\Program Files\Common Files\Evidian\WGSS*.
   b) Copy the *C:\Program Files\Nymi\Nymi Band Application\nymi_api.dll* to *C:\Program Files\Common Files\Evidian\WGSS*.
5. On the EAM Controller, log in to the EAM Console.
6. Select Account and access rights management .

7. In the left navigation pane, expand **`Domain > Computers`**, and then select the terminal, as shown in the following figure.



8. On the **`Actions`** tab, select **`Delete cache files`**, and then click **`Apply`**.
   The cache files are deleted on the terminal and the terminal desktop locks.

Logging into the terminal

If you installed the EAM Client with the Authentication Manager authentication mode, after you complete the configuration of the EAM Client, when the terminal locks, the Windows login screen appears with new options.

About this task

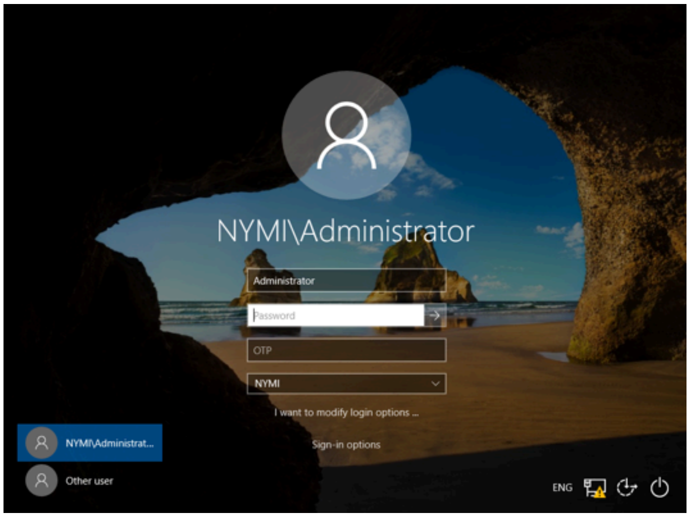
Perform the following steps to log in.

Note: On the first login, you cannot log in with an NFC tap.

Procedure

1. Press Ctrl-Alt-Delete.

   The `Windows Login` screen appears with additional options. The following figure provides an example of the login screen.



NYMI\Administrator

Administrator

NYMI

2. Log in to the computer with your username and password.
   The desktop appears.
3. Restart the terminal.

Configure the Evidian SSO for an MES Application

The following information provides setup and configuration information about how to configure single sign-on for MES applications.

Note: Before you perform the steps in this chapter, install the MES application on the enrollment terminal according to the instructions provided by the MES application vendor. After you complete the SSO configuration steps, you can uninstall the MES application.

Important: Follow each step in the order in which they appear.

Adding an SSO definition for a new target application

The SSO definition captures the login screen and credentials for the application.

About this task

Perform the following steps from the enrollment terminal.

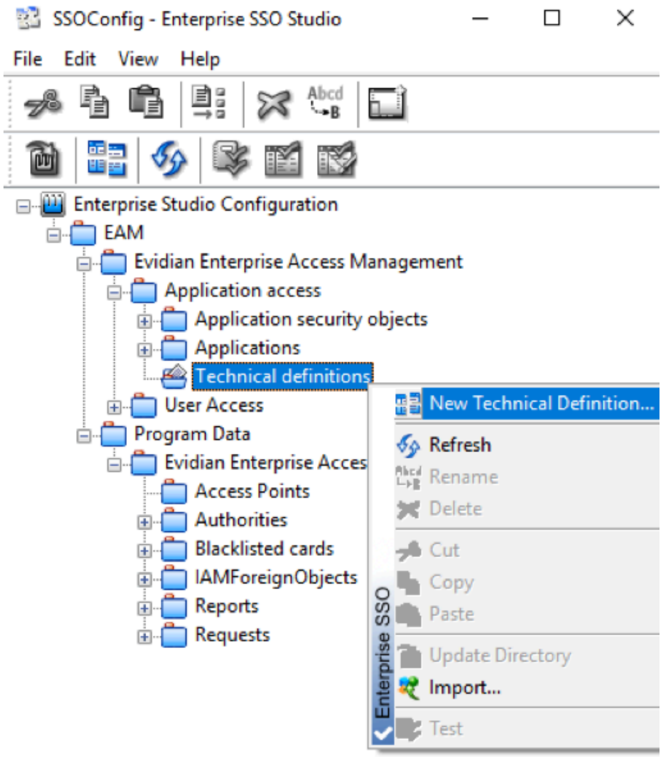
Note: For a web application, SSO detects the application based on the windows process that runs the application. If you run the application with more than one browser, create a new technical definition for each supported browser that will start the application, for example, Chrome, Microsoft Internet Explorer, Firefox, Opera etc.

.

Procedure

1. Log in as a user that is a EAM administrator.

2. Navigate to *C:\Program Files\Evidian\Enterprise Access Management* and double-click *SSOBuilder*.exe.
3. Enter the login credentials of an Evidian Administrator.
4. In the `SSO Config - Enterprise SSO Studio`, navigate to **`EAM > Evidian Enterprise Access Management > Application Access > Technical definitions`**.
5. Right-click **`Technical Definitions`** and select **`New Technical Definition`**, as shown in the following figure.



`Figure 11: Creating a New Technical Definition`

6. In the **`Properties`** tab, provide a name in the **`Technical Definition`** name field, and then click **`OK`**.
7. Right-click on the new technical definition that you just created and select **`New Window`**, as shown in the following figure.

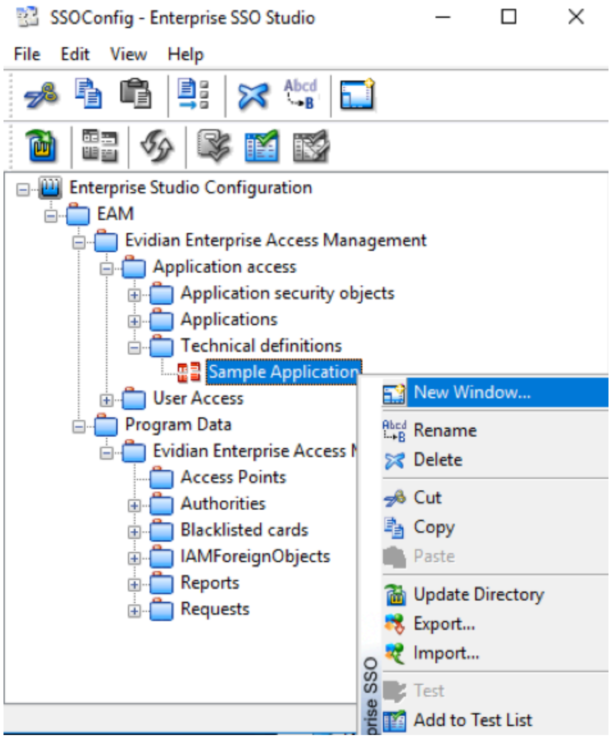
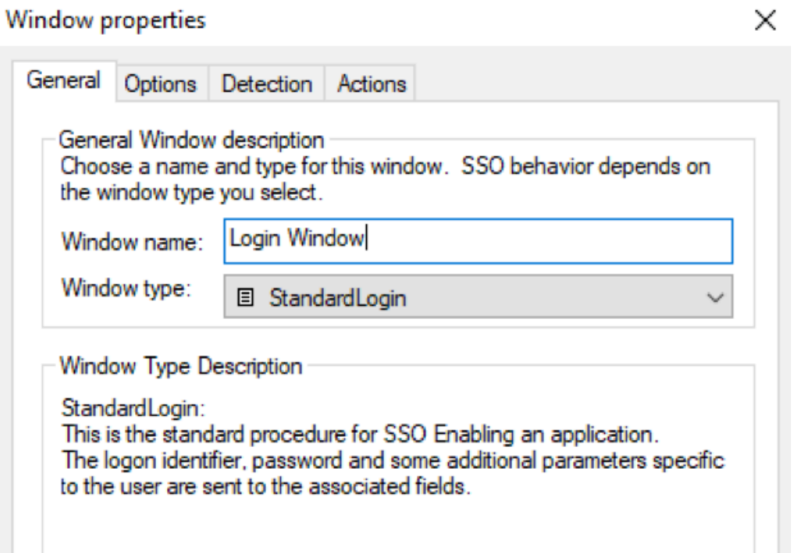


Figure 12: Creating a New Window for the Technical Definition

8. In the `Window properties` window, enter a name for the window, for example, `Login Window`, and from the **`Window Type`** list, select the appropriate windows type.



General Window description

Choose a name and type for this window. SSO behavior depends on the window type you select.

Window name: Login Window

Window type: StandardLogin

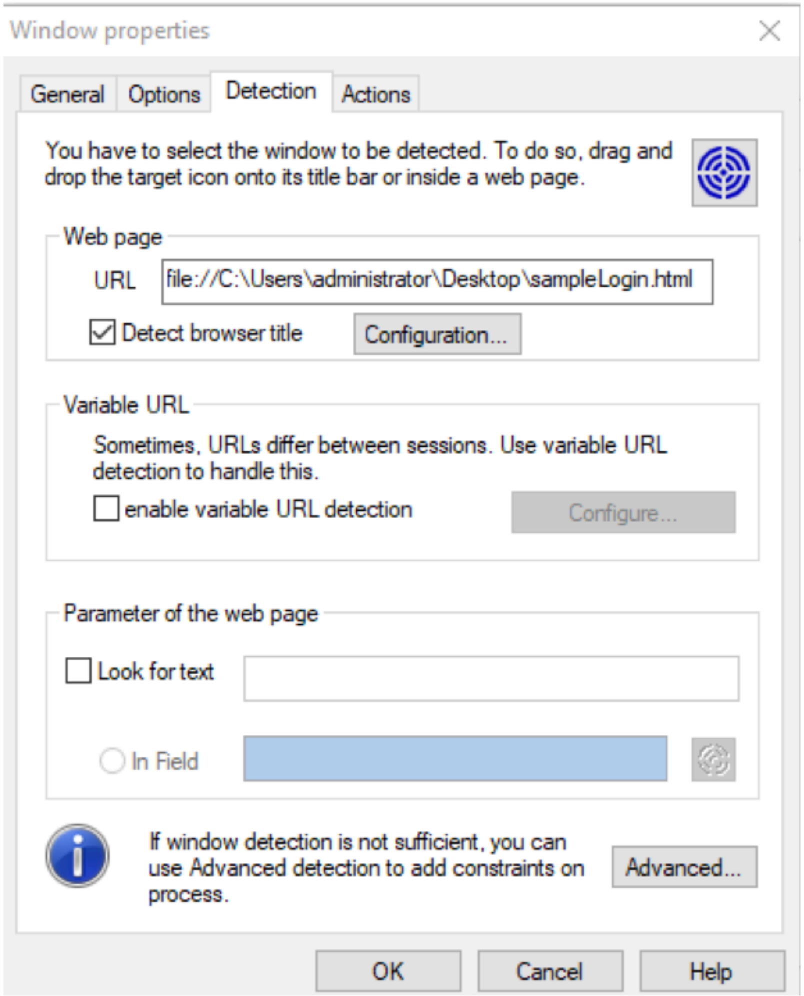
Window Type Description

StandardLogin:
This is the standard procedure for SSO Enabling an application.
The logon identifier, password and some additional parameters specific to the user are sent to the associated fields.

Figure 13: Naming the New Technical Definition Window

9. Open the application that will use Evidian SSO to enter the credentials. Ensure that the SSO builder and application windows are both visible on your desktop.

10.
In the **`Detection`** tab, click and drag the target icon onto the application window.
The following figure provides an example of the `Detection` window.



You have to select the window to be detected. To do so, drag and drop the target icon onto its title bar or inside a web page.

URL file://C:\Users\administrator\Desktop\sampleLogin.html

☑ Detect browser title

Sometimes, URLs differ between sessions. Use variable URL detection to handle this.

□ enable variable URL detection

□ Look for text

○ In Field

If window detection is not sufficient, you can use Advanced detection to add constraints on process.

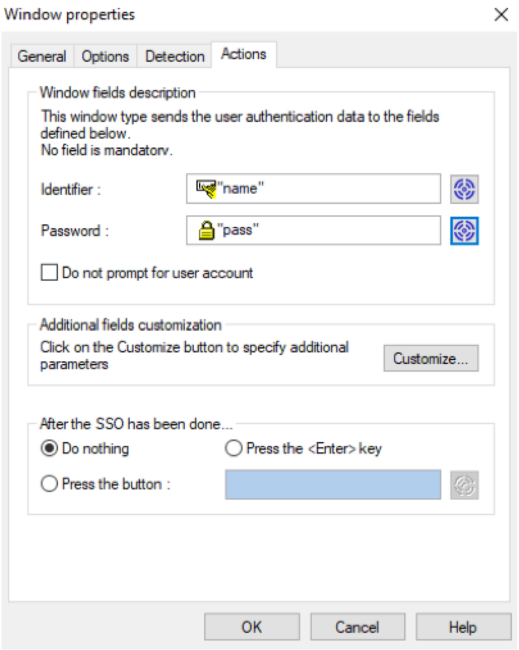
`Figure 14: New Technical Definition Detection window`

11. In the **`Actions`** Tab, perform the following actions:

a) Click and drag the target icon beside the **`Identifier`** field onto the **`Username`** entry field of the application.

b) Click and drag the target icon beside the **`Password`** field onto the **`Password`** entry field of the application.

The following figure provides an example of the **`Actions`** tab.



Window properties

Window fields description

This window type sends the user authentication data to the fields defined below.
No field is mandatorv.

Identifier : "name"

Password : "pass"

□ Do not prompt for user account

Additional fields customization

Click on the Customize button to specify additional parameters

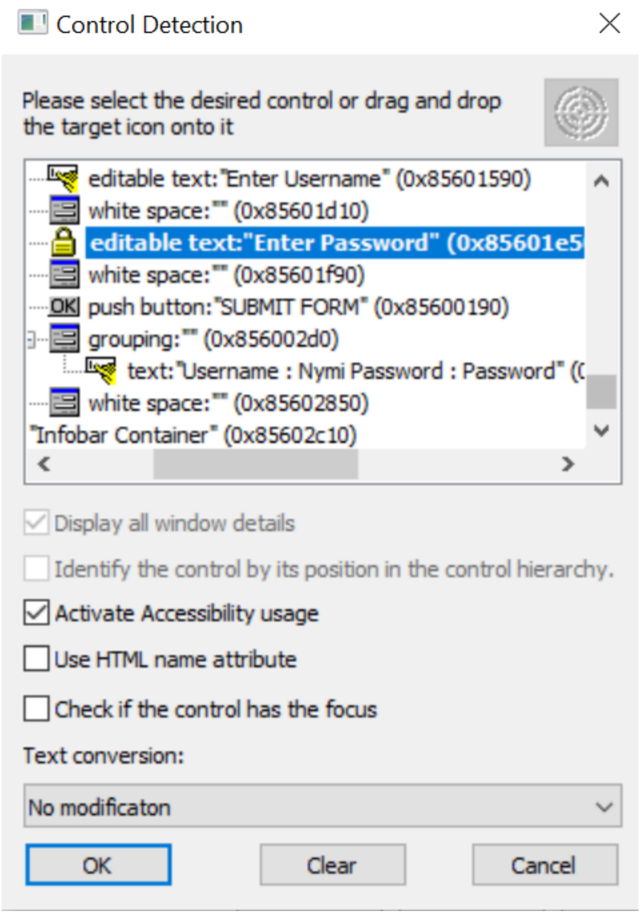
After the SSO has been done...

● Do nothing ○ Press the <Enter> key

○ Press the button :

Figure 15: New Technical Definition Actions tab

Note: If the target icon does not detect the field, double-click the Target icon (instead of clicking and dragging) to open a `Control Detection` window, and then select the desired target control, for example, an editable text option.



Please select the desired control or drag and drop the target icon onto it

```
editable text:"Enter Username" (0x85601590)
white space:"" (0x85601d10)
editable text:"Enter Password" (0x85601e5
white space:"" (0x85601f90)
push button:"SUBMIT FORM" (0x85600190)
grouping:"" (0x856002d0)
    text:"Username : Nymi Password : Password" (0
white space:"" (0x85602850)
"Infobar Container" (0x85602c10)
```

☑ Display all window details

☐ Identify the control by its position in the control hierarchy.

☑ Activate Accessibility usage

☐ Use HTML name attribute

☐ Check if the control has the focus

Text conversion: No modificaton

Figure 16: Detection window

12. In the **After the SSO has been done** section, select an option to perform after the SSO action has completed, for example, select **Press the button**, and then drag and drop the **Target** icon onto the button in the application that completes the login action such as a **Submit** button.
13. Click **OK** to save the configuration.
14. Right-click the newly created technical definition and click **Update Directory**, as shown in the following figure.

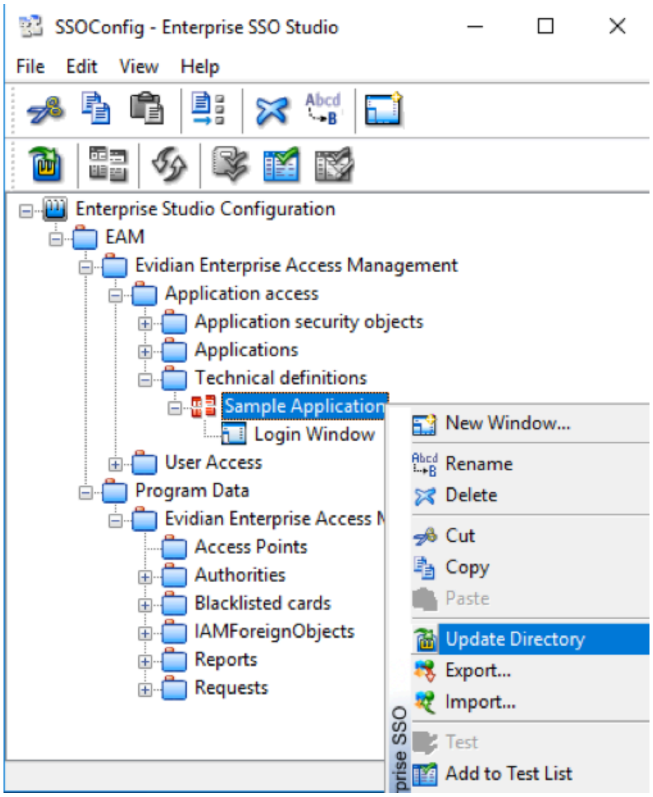


Figure 17: Update Directory with New Technical Definition

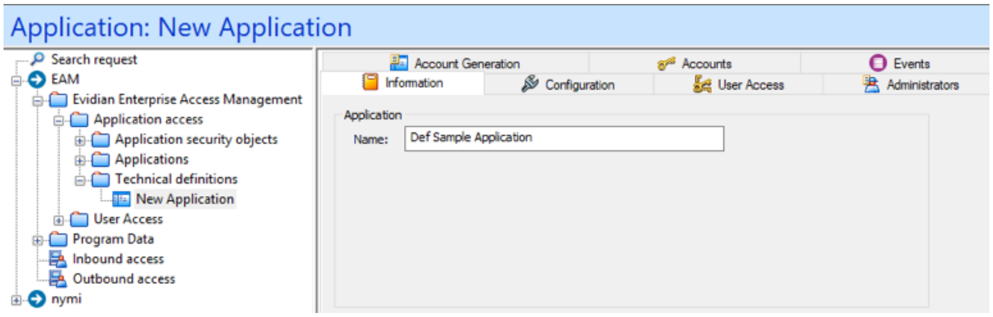
Configuring the SSO application in the EAM Console

After creating the technical definition for an MES application in SSO Builder, configure the EAM Controller to propagate the technical definition to user terminals in the environment.

About this task

Procedure

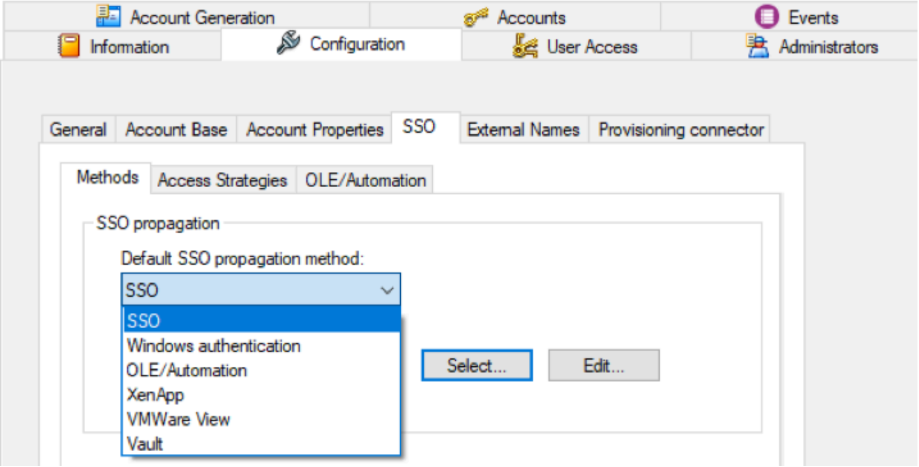
1. Launch the EAM Console, and log in using EAM administrator credentials.
2. Click on the **Account and Access Rights Management** icon.
3. Navigate to **EAM > Evidian Enterprise Access Management > Application Access**
4. Right-click **Technical definitions** and then select **New > Application**.
5. Provide an application name, as shown in the following figure, and then click **Apply**.



Name: Def Sample Application

Figure 18: New Application Name

6. In the **Configuration** tab, select the **SSO** tab.
7. On the **Methods** tab, from the **Default SSO propagation method** list, select **SSO**, as shown in the following figure.



Default SSO propagation method: SSO

Figure 19: Selecting Default SSO Propagation Method

8. Beside the **Technical definition** field, click **Select**.
9. In the **Select Technical Definition** window, expand **EAM > Evidian Enterprise Access Management > Application Access > Technical definitions**, and then select the new technical definition that was created with SSOBuilder, as shown in the following figure.

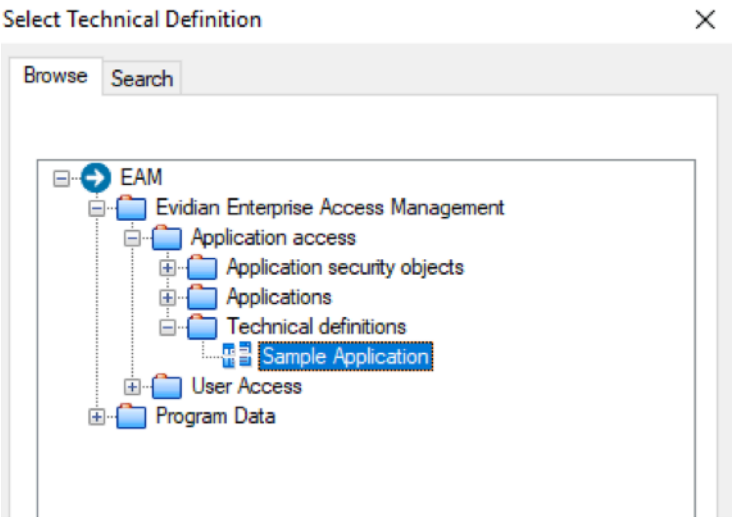


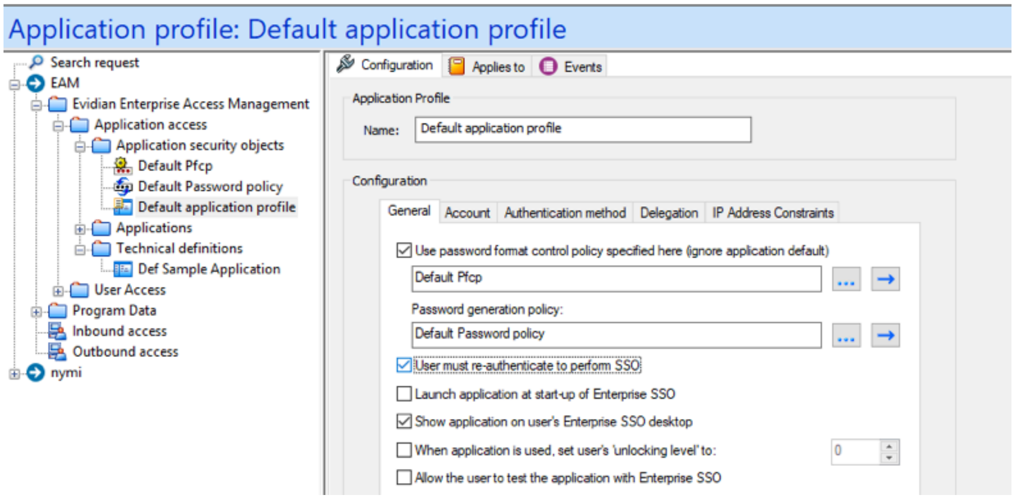
Figure 20: Selecting the Technical Definition

10.Click **OK**.

11.On the **SSO** tab, click **Apply** to save the configuration.

12.Navigate to **EAM > Evidian Enterprise Access Management > Application Access > Application security objects > Default application profile**.

13.Select **User must re-authenticate to perform SSO**, as shown in the following figure.



Name: Default application profile

☑ Use password format control policy specified here (ignore application default)

Default Pfcp

Password generation policy:

Default Password policy

☑ User must re-authenticate to perform SSO

☐ Launch application at start-up of Enterprise SSO

☑ Show application on user's Enterprise SSO desktop

☐ When application is used, set user's 'unlocking level' to: 0

☐ Allow the user to test the application with Enterprise SSO

Figure 21: User must re-authenticate to perform SSO

14.Click **Apply** to save.

15.Close the EAM Console.

Configuring SSO to use AD Credentials

By default, the configuration for a new technical definition uses separate credentials - not the credentials of the logged in user.

About this task

Perform the following steps to configure SSO to use the logged in AD credentials.

Procedure

1. In the EAM Console, navigate to the technical definition and in the **`Configuration`** Tab, select the **`Account Base`** tab.
2. Select the **`The application uses the primary account`** option.
3. In the **`Login format`** list, select the login format of the AD credentials.

Installing and Configuring Software on the User Terminals and for remote MES application integration over RDP or Citrix

An Operator uses a user terminal to perform an authentication event, such as an e-signature in an MES application that was developed with the Nymi API, and the EAM Client software.

The Nymi Evidian solution supports the use of the Nymi Band to perform authentication events on an MES application that is local to the user terminal or on a Citrix server/RDP session host that a user terminal connects to.

(Citrix/RDP environments only) Deploy a centralized Nymi Agent

Citrix and RDP environments make use of a centralized Nymi Agent .

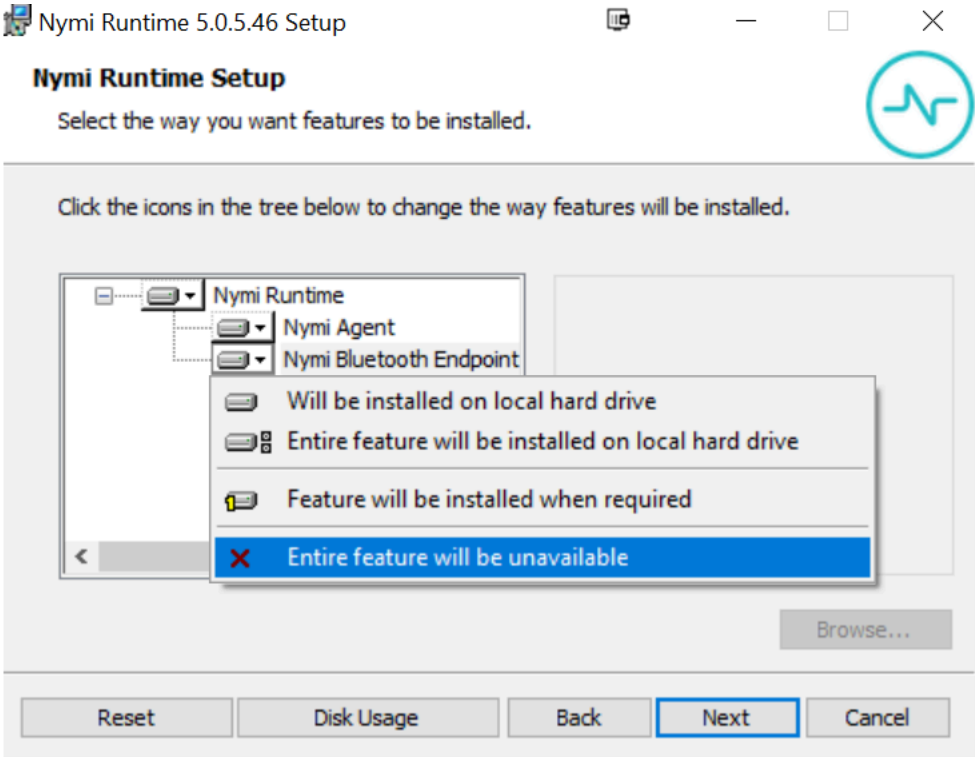
About this task

On one server in your environment, install the Nymi Agent software.

Procedure

1. Log in to the terminal, with an account that has administrator privileges.
2. Extract the `Nymi SDK` distribution package.
3. From the *..\nymi-sdk\windows\setup* folder, run the *Nymi Runtime Installer version.exe* file.
4. On the `Welcome` page, click **`Install`**.
5. On the `User Account Control` page, click **`Yes`**.
   The installation wizard appears. If the installation detects missing prerequisites, perform the steps that appear in the prerequisite wizards.
6. On the `Welcome to the Nymi Runtime Setup Wizard` page, click **`Next`**.
7. On the `Nymi Runtime Setup` window, expand **`Nymi Runtime`**.
8. Select **`Nymi Bluetooth Endpoint`**, and then select **`Entire feature will be unavailable`**.

   The following figure provides an example of the `Nymi Runtime Setup` window with option to make **`Nymi Bluetooth Endpoint`** unavailable.



Nymi Runtime 5.0.5.46 Setup

Nymi Runtime Setup

Select the way you want features to be installed.

Click the icons in the tree below to change the way features will be installed.

- Nymi Runtime
  - Nymi Agent
  - Nymi Bluetooth Endpoint

Will be installed on local hard drive

Entire feature will be installed on local hard drive

Feature will be installed when required

✕ Entire feature will be unavailable

Figure 22: Nymi Bluetooth Endpoint feature will be unavailable

9. Observe that **Nymi Bluetooth Endpoint** is not available, as shown in the following figure, and then click **Next**.

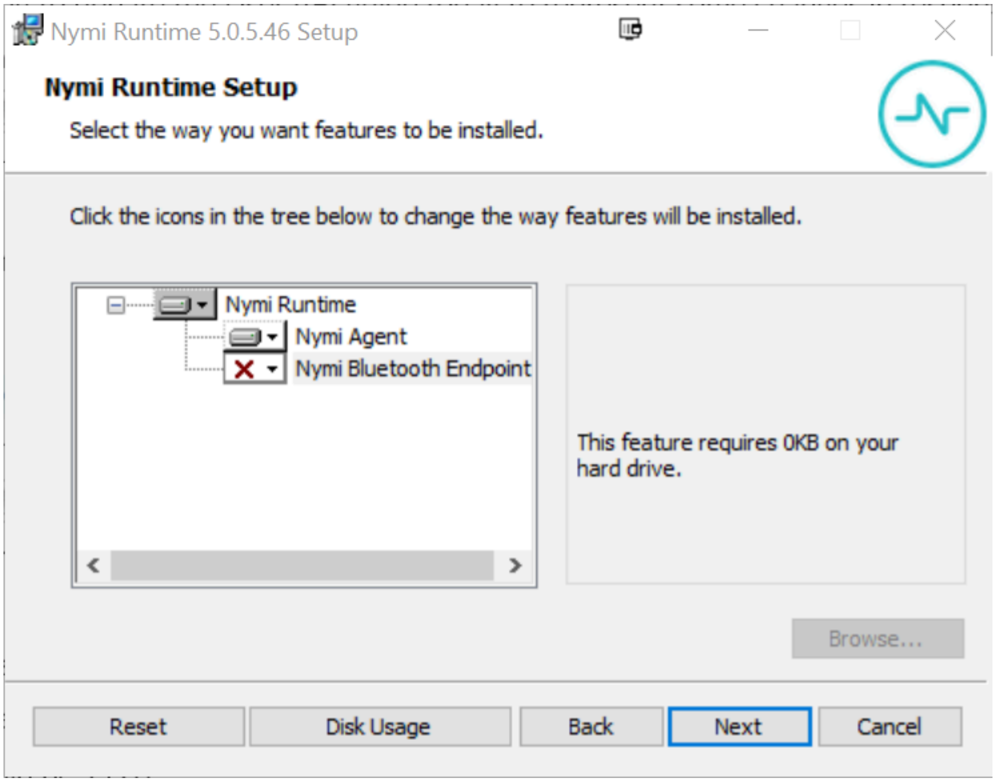

Nymi Runtime 5.0.5.46 Setup
Nymi Runtime Setup
Select the way you want features to be installed.
Click the icons in the tree below to change the way features will be installed.
Nymi Runtime
Nymi Agent
Nymi Bluetooth Endpoint
This feature requires 0KB on your hard drive.
Browse...
Reset
Disk Usage
Back
Next
Cancel

Figure 23: Nymi Bluetooth Endpoint feature is not available

10. On the `Service Account` window, click **`Next`**.
11. On the `Ready to install` page, click **`Install`**.
12. Click **`Finish`**.
13. On the `Installation Completed Successfully` page, click **`Close`**.

Importing the Root CA certificate

Perform the following steps only if the Root CA issuing the NES TLS server certificate is not a Trusted Root CA (for example, if a self-signed TLS server certificate is used for NES). Install the Root CA on each user terminal to support the establishment of a connection with the NES host.

About this task

While logged into the user terminal as a local administrator, use the `certlm` application to import the root CA certificate into the Trusted Root Certification Authorities store. For example, on Windows 10, perform the following steps:

Procedure

1. In `Control Panel`, select **`Manage Computer Certificates`**.
2. In the `certlm` window, right-click **`Trusted Root Certification Authorities`**, and then select **`All Tasks > Import`**.

   The following figure shows the `certlm` window.

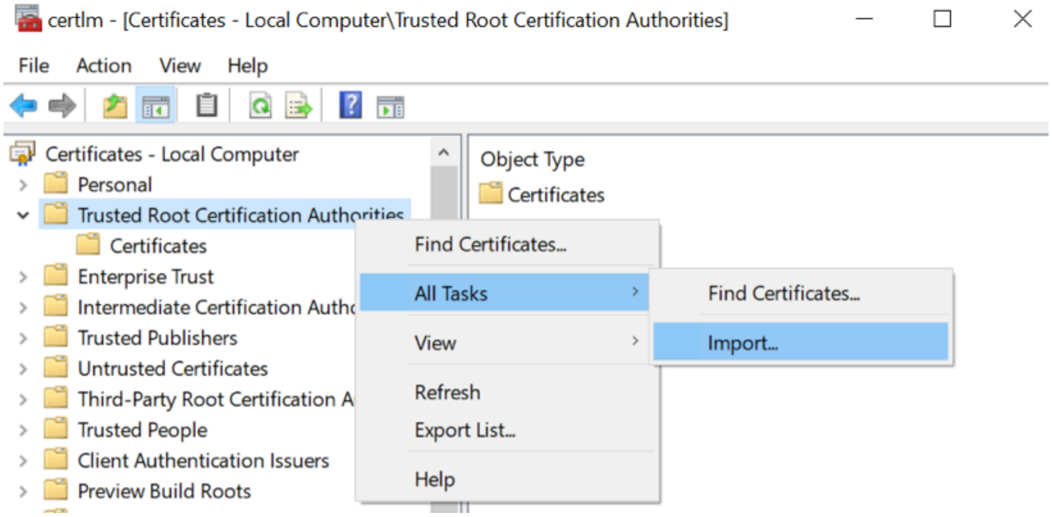
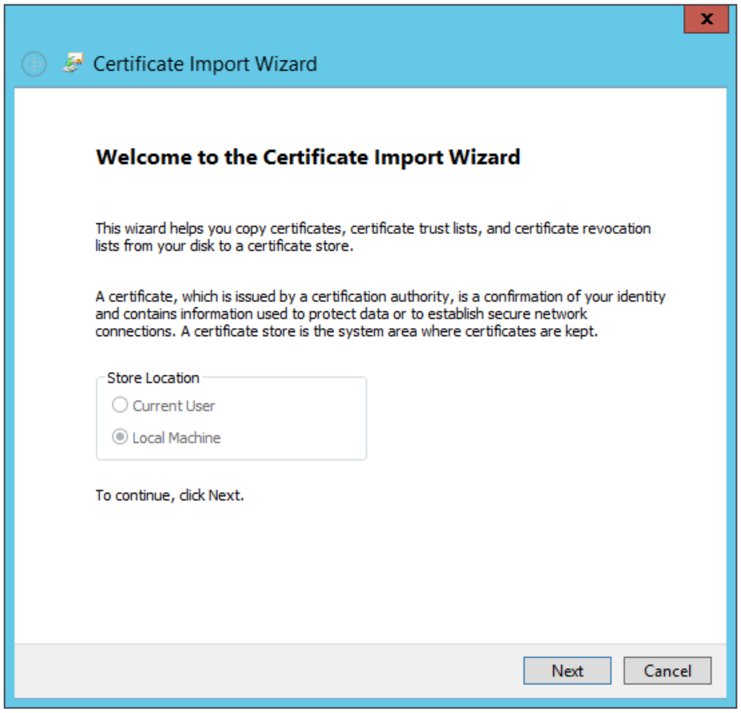

certlm - [Certificates - Local Computer\Trusted Root Certification Authorities]
File
Action
View
Help
Certificates - Local Computer
Personal
Trusted Root Certification Authorities
Certificates
Enterprise Trust
Intermediate Certification Autho
Trusted Publishers
Untrusted Certificates
Third-Party Root Certification A
Trusted People
Client Authentication Issuers
Preview Build Roots
Object Type
Certificates
Find Certificates...
All Tasks
View
Refresh
Export List...
Help
Find Certificates...
Import...

Figure 24: certlm application on Windows 10

3. On the `Welcome to the Certificate Import Wizard` screen, click **`Next`**.

   The following figure shows the `Welcome to the Certificate Import Wizard` screen.



Welcome to the Certificate Import Wizard

This wizard helps you copy certificates, certificate trust lists, and certificate revocation lists from your disk to a certificate store.

A certificate, which is issued by a certification authority, is a confirmation of your identity and contains information used to protect data or to establish secure network connections. A certificate store is the system area where certificates are kept.

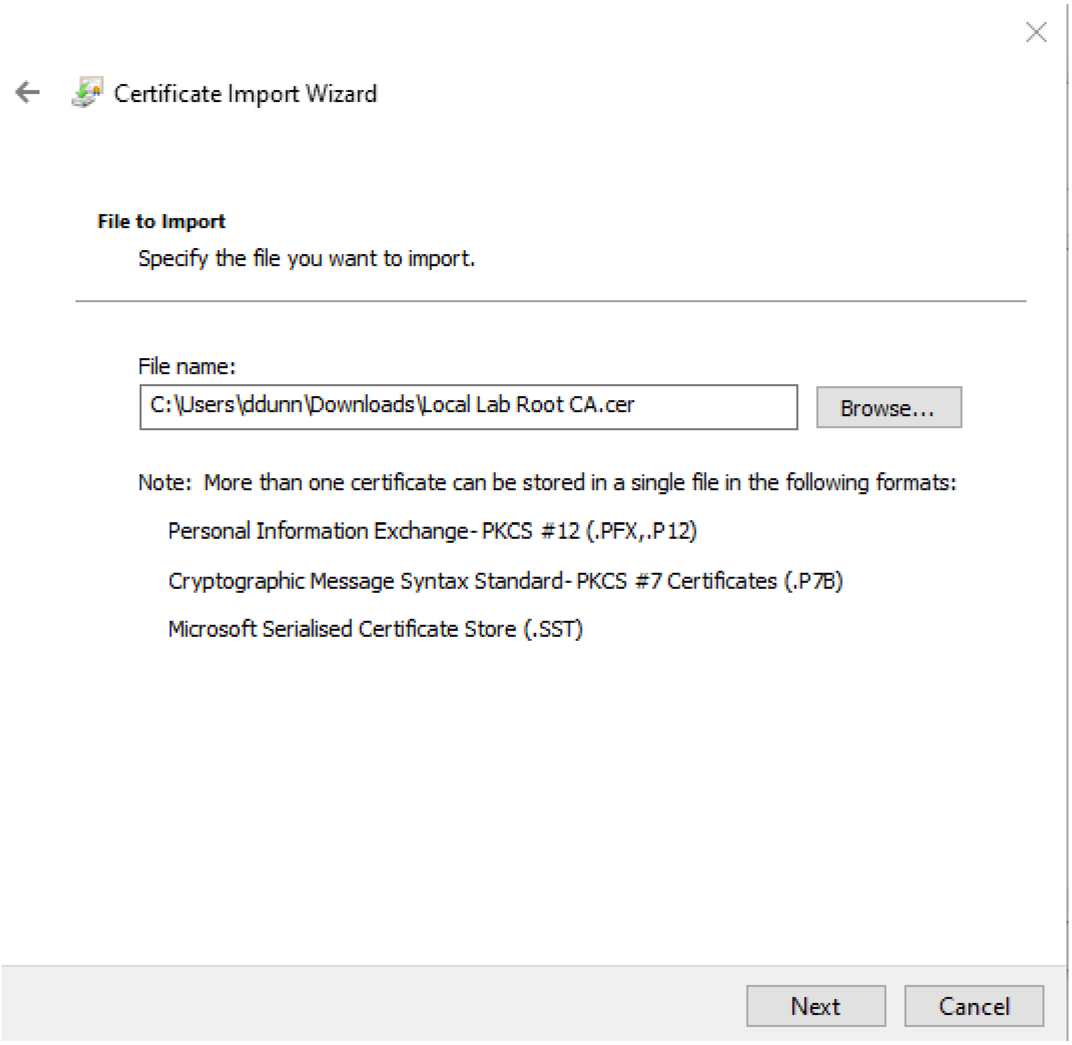
Store Location
○ Current User
● Local Machine

To continue, click Next.

Figure 25: Welcome to the Certificate Import Wizard screen

4. On the `File to Import` screen, click **`Browse`**, navigate to the folder that contains the root certificate file, select the file, and then click **`Open`**.
5. On the `File to Import` screen, click **`Next`**.

   The following figure shows the `File to Import` screen.



Certificate Import Wizard

File to Import

Specify the file you want to import.

File name:

C:\Users\ddunn\Downloads\Local Lab Root CA.cer

Note: More than one certificate can be stored in a single file in the following formats:

Personal Information Exchange- PKCS #12 (.PFX,.P12)

Cryptographic Message Syntax Standard- PKCS #7 Certificates (.P7B)

Microsoft Serialised Certificate Store (.SST)

Figure 26: File to Import screen

6. On the `Certificate Store` screen, accept the default value **`Place all certificates in the following store`** with the value **`Trusted Root Certification Authorities`**, and then click **`Next`**.
7. On the `Completing the Certificate Import Wizard` screen, click **`Finish`**.

Installing the Nymi Runtime software

The `Nymi Runtime` software is contained in the `Nymi API C Interface` distribution package and includes two separate components, the `Nymi Agent` and the `Nymi Bluetooth Endpoint`.

About this task

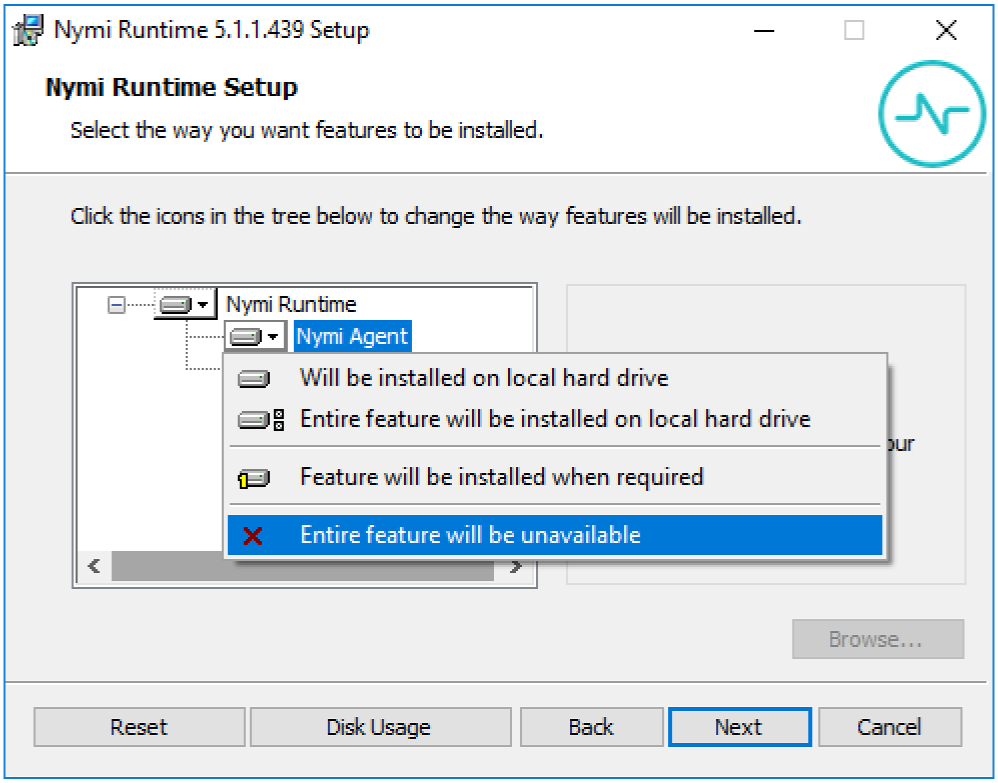
The `Nymi Runtime` components that a user terminal requires differs depending on how a user connects to the MES application, remotely or locally.

Procedure

1. Log in to the terminal, with an account that has administrator privileges.
2. Extract the `Nymi SDK` distribution package.
3. From the *..\nymi-sdk\windows\setup* folder, run the *Nymi Runtime Installer version.exe* file.
4. On the `Welcome` page, click **`Install`**.
5. On the `User Account Control` page, click **`Yes`**.
   The installation wizard appears. If the installation detects missing prerequisites, perform the steps that appear in the prerequisite wizards.
6. On the `Welcome to the Nymi Runtime Setup Wizard` page, click **`Next`**.
7. On the `Nymi Runtime Setup` window, perform one of the following actions:

- If the user will perform authentication tasks in a local MES application, click **`Next`**.
- If the user will perform authentication tasks in an MES application on a Citrix server or RDP session host:

  a. Select **`Nymi Agent`**, and then select **`Entire feature will be unavailable`**, as shown in the following figure.



Nymi Runtime 5.1.1.439 Setup

Nymi Runtime Setup

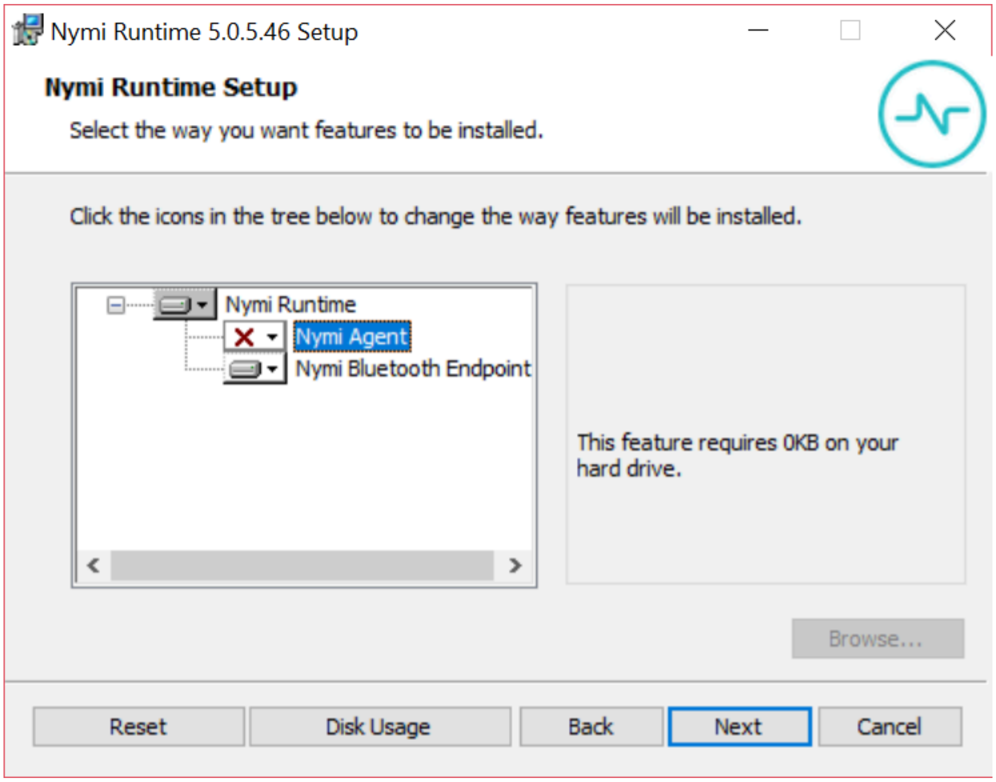
Select the way you want features to be installed.

Click the icons in the tree below to change the way features will be installed.

Nymi Runtime
Nymi Agent
Will be installed on local hard drive
Entire feature will be installed on local hard drive
Feature will be installed when required
Entire feature will be unavailable
Browse...
Reset
Disk Usage
Back
Next
Cancel

`Figure 27: Nymi Agent feature will be unavailable`

  b. Observe that **`Nymi Agent`** is not available, as shown in the following figure, and then click **`Next`**.



Nymi Runtime 5.0.5.46 Setup

Nymi Runtime Setup

Select the way you want features to be installed.

Click the icons in the tree below to change the way features will be installed.

This feature requires 0KB on your hard drive.

Figure 28: Nymi Agent feature is not available

c. Click **`Next`**.

8. On the `Service Account` window, click **`Next`**.
9. On the `Ready to install` page, click **`Install`**.
10. Click **`Finish`**.
11. On the `Installation Completed Successfully` page, click **`Close`**.

Installing the EAM Client

The machines on which you install the EAM Client depends on how the user accesses the MES application and how the user uses the Nymi Band.

About this task

- When the user accesses an MES application that you installed on the user terminal, install the EAM Client on the user terminal.
- When the user accesses an MES application on an RDP sessions host or Citrix server, install the EAM Client on the RDP sessions host or Citrix server.
- When a user uses the Nymi Band to unlock the user terminal, install the EAM Client on the user terminal.

Before installing the EAM Client software:

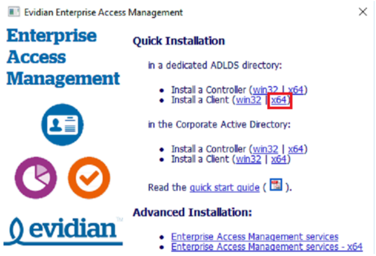
- Complete the steps to configure the EAM Controller.

- Ensure that the machine is on the same domain as the EAM Controller.
- Obtain the Evidian license file from the Nymi Solution Consultant.
- For RDP session hosts and Citrix servers, ensure that the host is configured with the FQDN.

Procedure

1. Log in to the host as a Domain Administrator.
2. Download and extract the Evidian software package, *EAM-v10.0x.xxxxxxx.zip* to a directory on the host, for example, the *Downloads* directory.
3. Copy the license file to the *Downloads* directory on the host.
4. Double-click the *C:\Downloads\EAM-v10.0xxxxxxxx\Start.hta* file.

   Note: If you run the *hta* file using Microsoft Explorer, which has enhanced security settings, you may experience issues. Create an exception, or alternatively run the *.exe* file directly from *EAM-v10.01xxxxxx/QuickInstall.x64/Client/ESSOClientSetup-Dedicated.exe* Proceed to step 7.
5. On `the Open File – Security` warning window, click **`Run`**.
6. On the `Quick Installation` window, in the **`dedicated ADLDS Directory`** section, click **`x64`** beside **`Install a Client`**, as shown in the following figure.

   Evidian Enterprise Access Management

   Enterprise Access Management

   Quick Installation

   in a dedicated ADLDS directory:

   - Install a Controller (win32 | x64)
   - Install a Client (win32 | x64)

   in the Corporate Active Directory:

   - Install a Controller (win32 | x64)
   - Install a Client (win32 | x64)

   Read the quick start guide ( ).

   Advanced Installation:

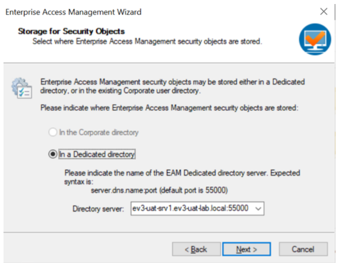
   - Enterprise Access Management services
   - Enterprise Access Management services - x64

7. On the `User Account Control` window, click **`Yes`**.
8. On the `Enterprise Access Management Wizard` window, click **`Next`**.
9. If the Microsoft Visual C++ 2012 Update 4 redistributable is not installed on this machine, you will see the `Prerequisites` window. Click **`Next`**. An installation progress window appears and installs the prerequisite software.
10. On the What do you want to do window, select **`including advanced parameters`**, leave the remaining default selections, and then click **`Next`**.
11. On the `Software Licenses` window, click **`Import`**.
12. In the `Open` window, select the license file, and then click **`Open`**.

    If the file cannot be found, ensure file type is selected as **`All Files *.*`**

    The license stored in the registry is imported.
13. On the `Enterprise Access Management Wizard` screen, click **`OK`**.
14. On the `Storage for Security Objects` window, in the **`Directory Server`** field, type the FQDN and port of the server where the EAM Controller was installed. For example, `ev3-uat-srv1.ev3-uat-lab.local:55000`.

    The following figure provides an example of the window.



Enterprise Access Management Wizard

Storage for Security Objects

Select where Enterprise Access Management security objects are stored.

Enterprise Access Management security objects may be stored either in a Dedicated directory, or in the existing Corporate user directory.

Please indicate where Enterprise Access Management security objects are stored:

○ In the Corporate directory

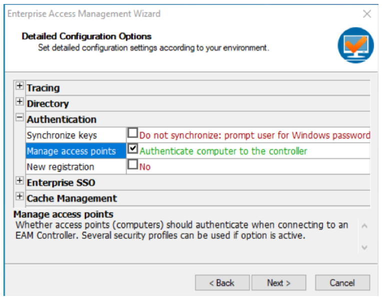
● In a Dedicated directory

Please indicate the name of the EAM Dedicated directory server. Expected syntax is:

server.dns.name:port (default port is 55000)

Directory server: ev3-uat-srv1.ev3-uat-lab.local:55000

15. Click **`Next`**.
16. On the `Detailed Configuration Options` window, expand **`Authentication`**, and then select **`Manage access points`**, as shown in the following figure.



Enterprise Access Management Wizard

Detailed Configuration Options

Set detailed configuration settings according to your environment.

Tracing

Directory

Authentication

Synchronize keys	□ Do not synchronize: prompt user for Windows password
Manage access points	☑ Authenticate computer to the controller
New registration	□ No

Enterprise SSO

Cache Management

Manage access points

Whether access points (computers) should authenticate when connecting to an EAM Controller. Several security profiles can be used if option is active.

17. Click **`Next`**.
18. On the `Enterprise Access Management Client Modules` window, perform the following actions:

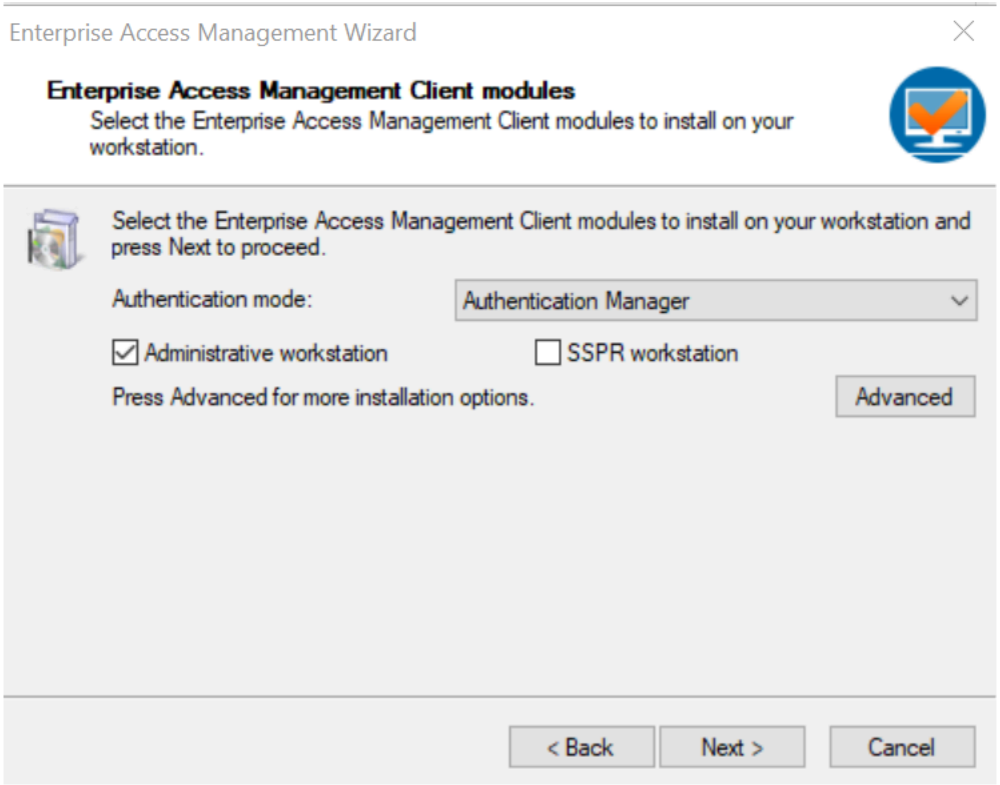
    a) From the Authentication Mode list:

    - Select **`Authentication Manager`** to use the Nymi Band to unlock the desktop and perform SSO authentication tasks on the computer.
    - Select **`Windows Login`** to use the Nymi Band to perform SSO authentication tasks on the computer only.

    b) Optionally, select **`Administrative Console`** to install the EAM Console on the enrollment terminal.

    c) Click **`Next`**.

    The following figure provides an example of the `Enterprise Access Management Client Modules` window.



Enterprise Access Management Wizard

Enterprise Access Management Client modules

Select the Enterprise Access Management Client modules to install on your workstation.

Select the Enterprise Access Management Client modules to install on your workstation and press Next to proceed.

Authentication mode: Authentication Manager

☑ Administrative workstation ☐ SSPR workstation

Press Advanced for more installation options.

19. On the `Enterprise Access Management Client installation` window, click **`Next`**. An installation progress window appears and installs the software.

20. On the `Restart Computer` screen, leave the default selection **`Do not restart the computer`**, and the click **`Finish`**.

Disabling Drive By Authentication

Perform the following steps on each user terminal to prevent a user from logging into a user terminal with a blank password.

About this task

Procedure

1. Open *regedit.exe*
2. Navigate to *HKEY_LOCAL_MACHINE\SOFTWARE\Enatel\WiseGuard\FrameWork*.
3. Right-click *Authentication*, and then select **`New > DWORD (32-bit) value`**
4. In the *Value* field, type `WearableNeedsRFID`.
5. Edit the value, and then in the **`Value data`** field, type `1`.
6. Click **`OK`**.
7. Close *Registry Editor*.

Setting the NES URL

Create a registry entry to enable the EAM Client to connect to NES.

About this task

Perform the following steps to define the NES URL.

Procedure

1. Open **`regedit.exe`**
2. Navigate to *HKEY_LOCAL_MACHINE\Software\Nymi\NES*.

   Note: If this path does not exist, create the keys.
3. In the *NES* key, create a new string value.
4. In the **`Name`** field, type `URL`.
5. Edit the string and in the value field, type `https://nes_server/nes_service_name`

   Where:

   - *`nes_server`* is the Fully Qualified Domain name of the NES host.
   - *`nes_service_name`* is the services mapping name of the NES web application. The default value is nes.

     For example, https://ev3-uat-srv1/ev3-uat-lab.local/nes

     Note: The service mapping name for NES was defined during deployment.
   - Close *regedit.exe*.

(Citrix server/RDP session host only) Configuring the EAM client to Communicate with the Centralized Nymi Agent

On the Citrix server/RDP session host, configure the EAM Client to communicate with the `Nymi Agent` server by performing the following steps.

Procedure

1. Run **`regedit.exe`** and navigate to **`HKLM\SOFTWARE\Enatel\WiseGuard\FrameWork\Authentication`**.
2. Create a new string named `NymiAgentUrl`, and then edit the string.
3. Update the **`Value`** data field with the port used to connect the centralized `Nymi Agent` over a WebSocket connection, in the following format:

   `ws://agent_fdqn:9120/socket/websocket`

(Citrix/RDP environments only) Configuring the User Terminals to Access Centralized Nymi Agent

On the user terminals that access the MES application on Citrix servers or RDP session hosts, configure the `Nymi Bluetooth Endpoint` to communicate with the `Nymi Agent` server by performing the following steps.

About this task

Procedure

1. Create a text file named *nbe.toml* in the *C:\Nymi\Bluetooth_Endpoint* directory, with the following line, which will point the User Terminal to the centralized `Nymi Agent`.
   `agent_url='ws://agent_FQDN:9120/socket/websocket'`
2. Restart the `Nymi Bluetooth Endpoint` service.

(Citrix Server only) Configuring Roaming Sessions

Create the following registry setting to allow users to access the Citrix server from multiple user terminals.

About this task

Perform the following steps on the Citrix server.

Procedure

1. Open **regedit.exe**.
2. Navigate to **HKEY_LOCAL_MACHINE > SYSTEM > CurrentControlSet > Control > Citrix > wfshell > TWI**.
3. Create a new String value named `LogoffCheckSysModules`.
4. Edit the new string value, and the **Value** field, type `ssoegine`
5. Click **OK**.
6. Close **regedit.exe**

Confirming the Runtime dll versions

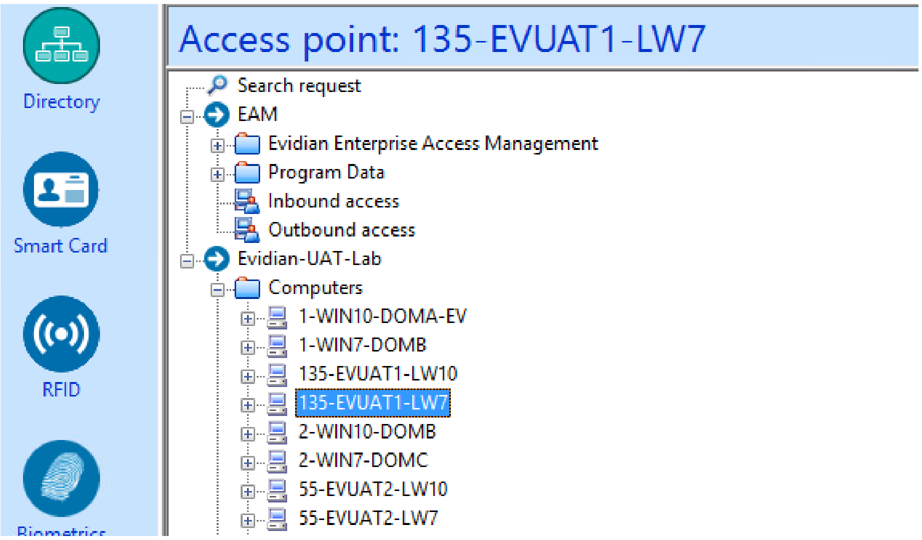
Review the `Connected Worker Platform` and EAM Client versions of the `Nymi Runtime` file to ensure that they are the same.

About this task

Procedure

1. From the `Windows Apps and Feature` applet, make note of the version.
2. From Windows explorer, navigate to *C:\Program Files\Common Files\Evidian\WGSS*.
3. Right-click *nymi_api.dll* and select **Properties**. On the **Details** tab, confirm that the value in the product version matches the `Nymi Runtime` installation.
4. If the versions do not match, perform the following steps:
   a) Rename the *nymi_api.dll* in *C:\Program Files\Common Files\Evidian\WGSS*.
   b) Copy the file *C:\Program Files\Nymi\Nymi Band Application\nymi_api.dll* to *C:\Program Files\Common Files\Evidian\WGSS*.

5. On the EAM Controller, log in to the EAM Console.
6. Select Account and access rights management .
7. In the left navigation pane, expand **`Domain > Computers`**, and then select the terminal, as shown in the following figure.



8. On the **`Actions`** tab, select **`Delete cache files`**, and then click **`Apply`**.

   The cache files are deleted on the terminal and the terminal desktop locks.

Logging into the terminal

If you installed the EAM Client with the Authentication Manager authentication mode, after you complete the configuration of the EAM Client, when the terminal locks, the Windows login screen appears with new options.

About this task

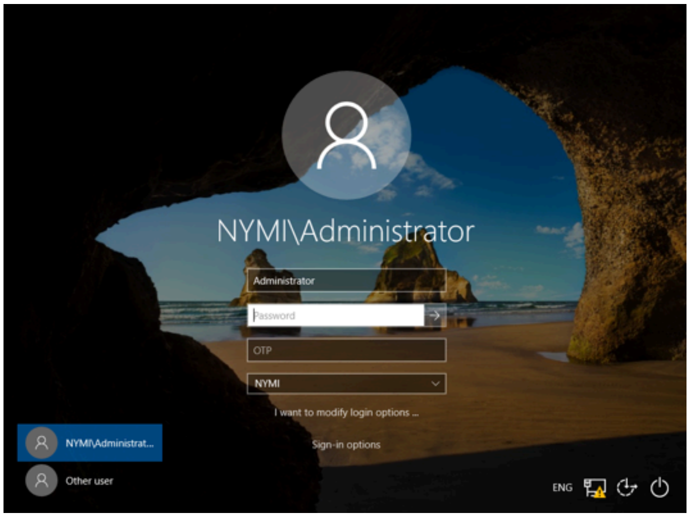
Perform the following steps to log in.

Note: On the first login, you cannot log in with an NFC tap.

Procedure

1. Press Ctrl-Alt-Delete.

   The `Windows Login` screen appears with additional options. The following figure provides an example of the login screen.



2. Log in to the computer with your username and password.
   The desktop appears.
3. Restart the terminal.

Installing the MES Application

Install and configure the MES application according to the MES documentation.

If the MES application instructs you to copy the *nymi_api.dll* file to a directory location, ensure that you copy the version from the Nymi SDK distribution package.

Updating User Terminal with new SSO Configuration

To enable the user terminal to use SSO and the Nymi Band with the MES application, refresh the eSSO application.

About this task

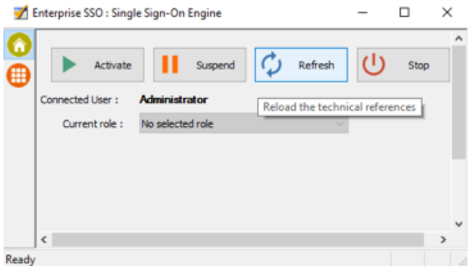
Perform the following steps on the machine on which you installed the MES application and the EAM Client software.

Procedure

1. On a User Terminal, open the Enterprise SSO (eSSO) by clicking on the taskbar icon
2. Click the **`Home`** icon, and then click **`Refresh`**.

   This enables the EAM Client to communicate to the EAM Controller to retrieve new technical definitions.

   The following figure shows the eSSO `Home` window.



Enterprise SSO : Single Sign-On Engine

Connected User : Administrator

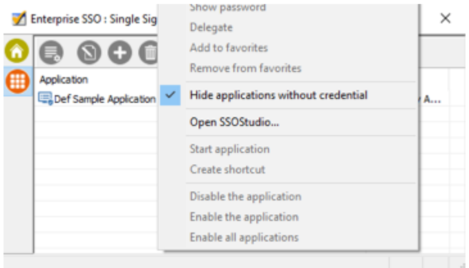
Current role : No selected role

Ready

Figure 29: eSSO application Home Window

3. On the **Account** tab, a new entry appears. If not, right-click the table and clear the **Hide application without credential** option.

   The following figure shows the **Account** tab.

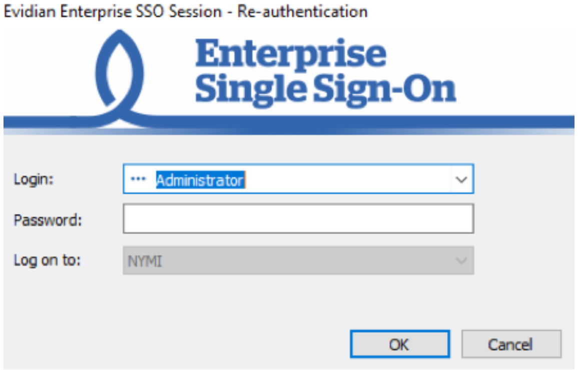


Enterprise SSO : Single Sig

Figure 30: eSSO Account tab

4. Navigate to your login page of the application.
5. If your application uses credentials that are separate from the LDAP credentials or Windows login, the Enterprise SSO – Security Data Collect window appears. In the **Username** and **Password** fields, type the credentials that are required by the application, and the click **OK**.

   The following figure provides an example of the login screen



Evidian Enterprise SSO Session - Re-authentication

Login: Administrator

Password:

Log on to: NYMI

Figure 31: SSO Login screen

6. Close the SSO application.

   If a Nymi Band is authenticated, you can now use your Nymi Band to perform authentication events in the SSO application.

Results

Note: Sometimes it may take several attempts to get the behaviour of the detect to work as desired. To update the configuration, on the User Terminal you can modify the Detection tab to be more generic using wildcards, or more specific using regex detection. Detection is application-specific. Depending upon your application, you may need to modify settings that are not specified in this document.

If you change the technical definition at a later time, it is necessary to right-click the technical definition and select **`Update Directory`** and delete the Evidian cache.

Configuring Support for Users in Multi Domain Environments

About this task

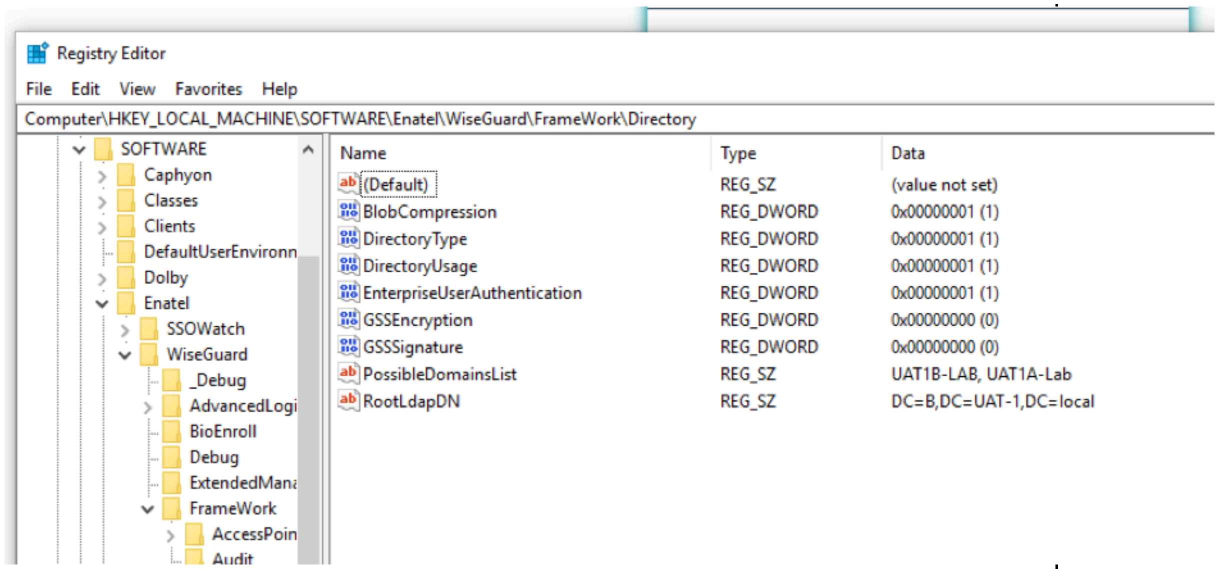
Perform the following steps when a user has enrolled their Nymi Band in a domain that is different from the domain where the user terminal is run.

Procedure

1. Run **`regedit`**.
2. In the *HKLM\Software\Enatel\WiseGuard\FrameWork\Directory*, right-click **`PossibleDomainsList`**, and then select **`Modify...`**
3. In the **`Value Data`** field, type the NETBIOS name for each domain that contains users, comma separated, that will log in to the user terminal.
4. Click **`OK`**.

`Example`

This example shows a user terminal that supports authentication tasks from Nymi Band users that are a member of domains UAT1B-Lab and UAT1A-Lab.



Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Enatel\WiseGuard\FrameWork\Directory

Name	Type	Data
(Default)	REG_SZ	(value not set)
BlobCompression	REG_DWORD	0x00000001 (1)
DirectoryType	REG_DWORD	0x00000001 (1)
DirectoryUsage	REG_DWORD	0x00000001 (1)
EnterpriseUserAuthentication	REG_DWORD	0x00000001 (1)
GSSEncryption	REG_DWORD	0x00000000 (0)
GSSSignature	REG_DWORD	0x00000000 (0)
PossibleDomainsList	REG_SZ	UAT1B-LAB, UAT1A-Lab
RootLdapDN	REG_SZ	DC=B,DC=UAT-1,DC=local

Figure 32: Configuring Multi-Domain Access

Enrolling a Nymi Band

Before a new user or an existing user (enrolled in NES prior to an Evidian intergation) can use a Nymi Band to perform authentication events with Evidian and Evidian-integrated MES applications, the user must enroll a Nymi Band by using the Nymi Band Application.

About this task

During the enrollment process for a new user, the process updates the NES and Evidian databases with enrollment information.

For a user account with a Nymi Band already enrolled on the NES server prior to an Evidian integration, the NES enrollment information is preserved and the process updates the Evidian database with enrollment information.

The user that will enroll the Nymi Band performs the following steps on the enrollment terminal.

Procedure

1. On the Windows Login screen, log in to the computer.
2. Log into the `Nymi Band Application` with the username and password of the user that will enroll the Nymi Band.
3. Follow the prompts in the `Nymi Band Application` to enroll the Nymi Band.

Results

Before the user can successfully use the Nymi Band, the user might need to login to the terminal with their username and password to retrieve information from the EAM Controller. The user can perform subsequent logins by using the Nymi Band.

Note: After enrollment, Nymi recommends that each user authenticate to the Nymi Band 10 times with success. If the number of authentication attempts that are required to get 10 successful authentications exceeds 15, review the information in the Nymi Connected Worker Platform Troubleshooting Guide for more information about how to troubleshoot Nymi Band authentication issues.

Manage the Nymi Band

This section provides information about administrative tasks related to the Nymi Band, that an EAM administrator can perform, including what to do when a user no longer needs the Nymi Band, what to do when a user loses their Nymi Band, how to assign a temporary Nymi Band to a user, and what do to when a user finds their lost Nymi Band.

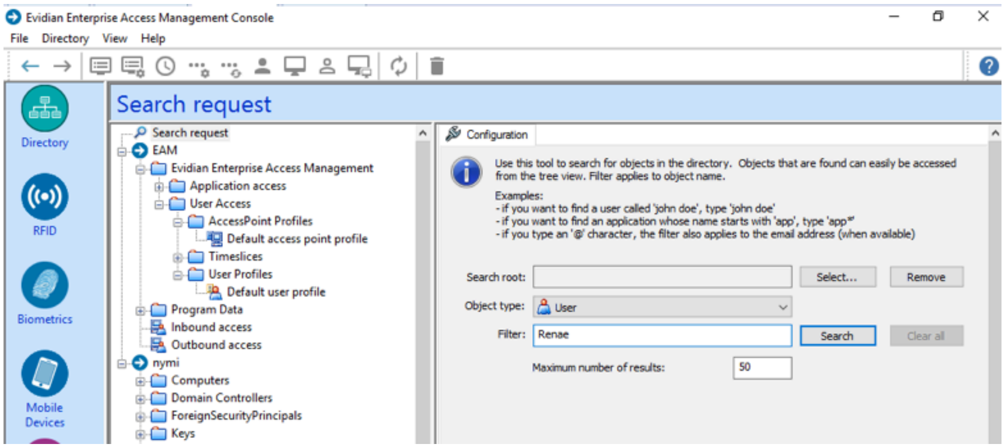
Viewing the Nymi Band Associated with a User

Perform the following steps to view information about the Nymi Band that is enrolled to a user.

Procedure

1. In the EAM Console, select the `Directory` panel.
2. Select the search request by changing the object type to `user` and then in the `Filter` field, type the username.

   The following figure shows the `Search request` window.



Use this tool to search for objects in the directory. Objects that are found can easily be accessed from the tree view. Filter applies to object name.

Examples:
- if you want to find a user called 'john doe', type 'john doe'
- if you want to find an application whose name starts with 'app', type 'app*'
- if you type an '@' character, the filter also applies to the email address (when available)

Search root:

Object type: User

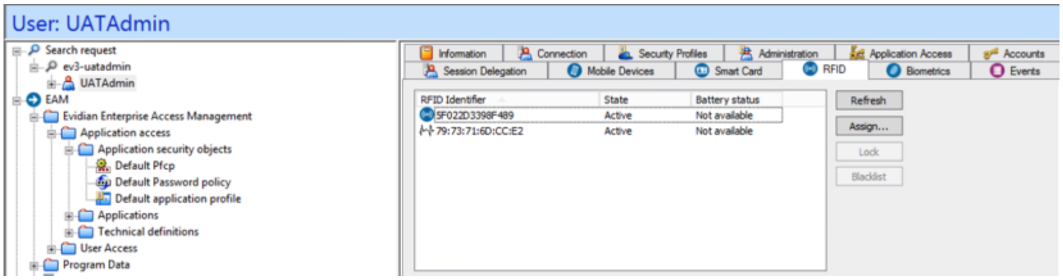
Filter: Renae

Maximum number of results: 50

Figure 33: Search request window

3. Click **Search**.
4. Select the user, and then select the **RFID** tab.

Figure 34: RFID tab for a user



RFID Identifier	State	Battery status
5F022D3398F489	Active	Not available
79:73:71:6D:CC:E2	Active	Not available

Two entries display, one for the user as an RFID entry and the other is a wearable entry.

Returning a Nymi Band

When a user no longer requires their Nymi Band, perform the following steps, which allows you to assign another user to the Nymi Band.

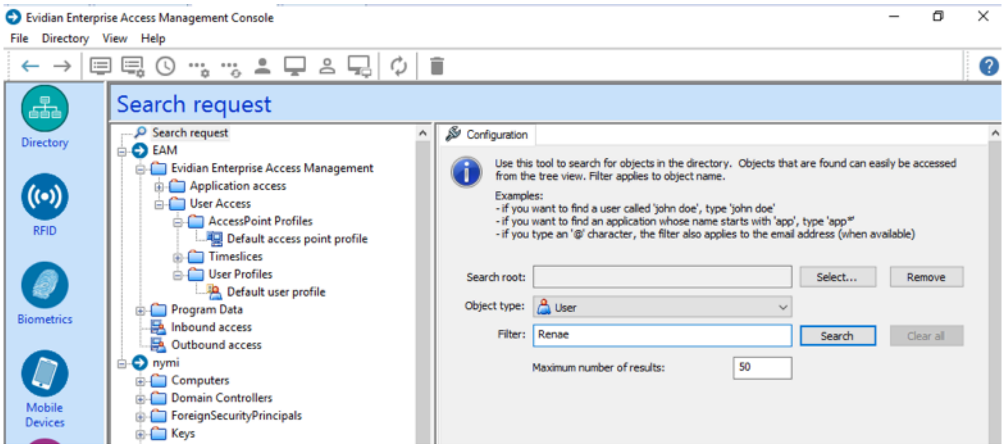
About this task

This procedure removes the association between the user and the Nymi Band in EAM and deletes the biometric data from the Nymi Band.

Procedure

1. Put the Nymi Band on a charger and then hold the bottom button down until the **`User Data Deleted`** icon appears.
   The biometric data of the user is removed from the Nymi Band.
2. In the EAM Console, select the **`Directory`** panel.
3. Select the search request by changing the object type to **`user`** and then in the **`Filter`** field, type the username.

   The following figure shows the `Search request` window.



Use this tool to search for objects in the directory. Objects that are found can easily be accessed from the tree view. Filter applies to object name.

Examples:
- if you want to find a user called 'john doe', type 'john doe'
- if you want to find an application whose name starts with 'app', type 'app*'
- if you type an '@' character, the filter also applies to the email address (when available)

Search root:

Object type: User

Filter: Renae

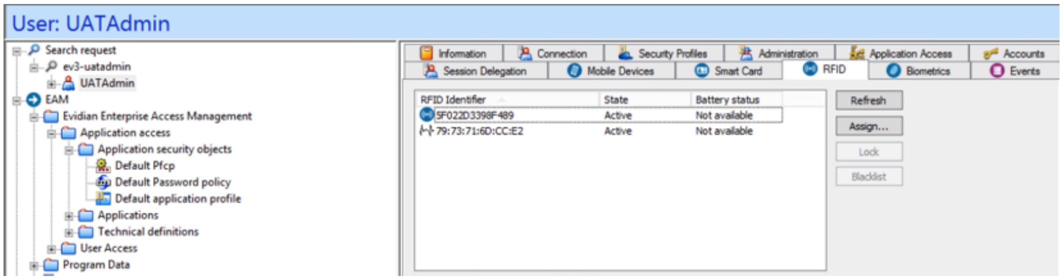
Maximum number of results: 50

`Figure 35: Search request window`

4. Click **`Search`**.

5. Select the user, and then select the **RFID** tab.

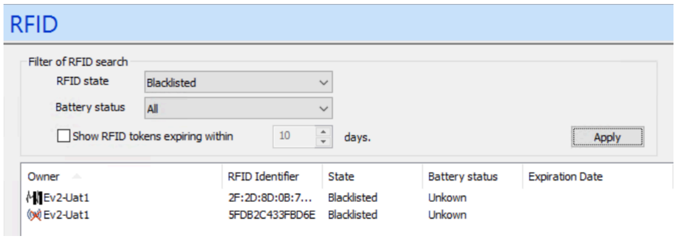
Figure 36: RFID tab for a user



RFID Identifier	State	Battery status
5F022D3398F489	Active	Not available
79:73:71:6D:CC:E2	Active	Not available

Two entries display, one for the user as an RFID entry and the other is a wearable entry.

6. Select the Wearable entry, and then click **Blacklist**.
7. On the Confirmation window, click **Yes**.
8. On the Confirmation window, click **Yes**.
The RFID and Wearable entries are blacklisted.
9. Select the wearable entry, and then click **Delete**.
10. On the Confirmation window, click **Yes**.
11. Select the RFID entry, and then click **Delete**.
12. In the left navigation pane, select **RFID**.
13. From the **RFID state** list, select **Blacklisted**, and then click **Apply**.
Two blacklisted entries appear for the user, one for the RFID and one for the Wearable, as shown in the following figure



RFID state: Blacklisted

Battery status: All

□ Show RFID tokens expiring within 10 days.

Owner	RFID Identifier	State	Battery status	Expiration Date
Ev2-Uat1	2F:2D:8D:0B:7...	Blacklisted	Unkown	
Ev2-Uat1	5FDB2C433FBD6E	Blacklisted	Unkown	

Figure 37: Blacklisted Nymi Band

14. Select the RFID entry, and then click **Delete**.
15. Select the Wearable entry, and then click **Delete**.

Removing the user association to the Nymi Band in NES

Perform the following steps to remove the Nymi Band association to the user in NES.

Procedure

1. In the NES Administrator Console, select **Search**.
2. In the **Search** page, select the **Users** Option.
3. In the **Search** field, type the full or partial username, first name, or last name of the user.
4. Click **Search**. The Search page displays the user, or a list of users that match the search criteria.

5. Select the Domain\username link of the user. to open the **`User Details`** page.
6. In the Nymi Band table, to the right of the Nymi Band that you want to delete, click **`Disconnect`**. On the Disconnect page, scroll down and then click **`Disconnect`**.
7. On the `Disconnect` screen, scroll to the bottom and select **`Disconnect`**.

Handling a lost Nymi Band

When a user loses their Nymi Band, perform the following steps to disable the Nymi Band in EAM and prevent another user from using the Nymi Band.

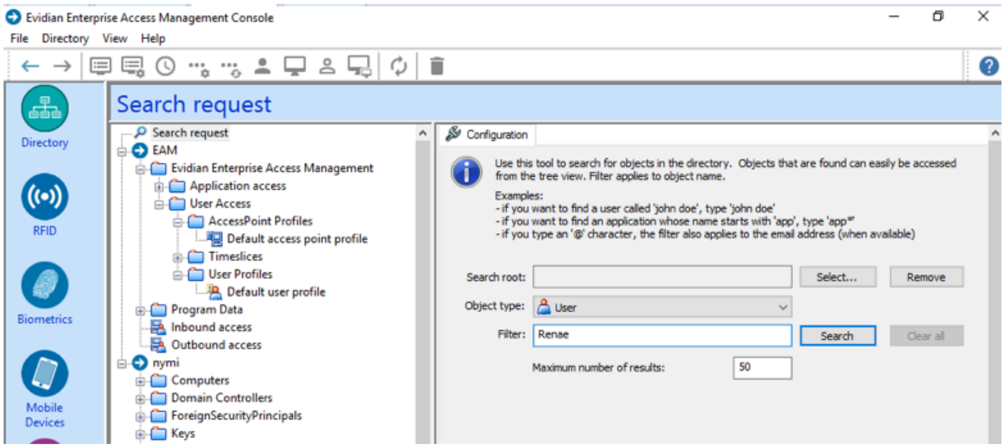
About this task

After completing these steps, enroll and assign a new Nymi Band to the user.

Procedure

1. In the EAM Console, select the **`Directory`** panel.
2. Select the search request by changing the object type to **`user`** and then in the **`Filter`** field, type the username.

   The following figure shows the `Search request` window.



Use this tool to search for objects in the directory. Objects that are found can easily be accessed from the tree view. Filter applies to object name.

Examples:
- if you want to find a user called 'john doe', type 'john doe'
- if you want to find an application whose name starts with 'app', type 'app*'
- if you type an '@' character, the filter also applies to the email address (when available)

Search root:

Object type: User

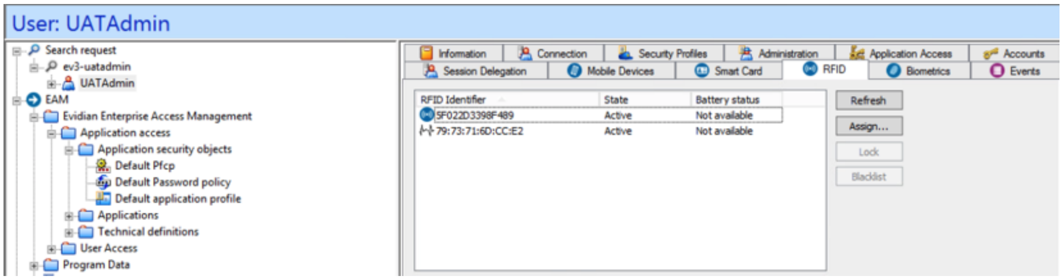
Filter: Renae

Maximum number of results: 50

`Figure 38: Search request window`

3. Click **`Search`**.
4. Select the user, and then select the **`RFID`** tab.

`Figure 39: RFID tab for a user`



RFID Identifier	State	Battery status
5F022D3398F489	Active	Not available
79:73:71:6D:CC:E2	Active	Not available

Two entries display, one for the user as an RFID entry and the other is a wearable entry.

5. Select the Wearable entry, and then click **Blacklist**.
6. On the Confirmation window, click **Yes**.
7. Select the wearable entry, and then click **Delete**.
8. On the Confirmation window, click **Yes**.

Results

The Nymi Band is blacklisted in EAM. If the another user attempts to use the Nymi Band for authentication tasks result in an error stating that the certificate on the Nymi Band has been revoked.

Note: After blacklisting the Nymi Band, do not delete Nymi Band from the user. If you delete the Nymi Band, another user can enroll the Nymi Band.

Removing the user association to the Nymi Band in NES

Perform the following steps to remove the Nymi Band association to the user in NES.

Procedure

1. In the NES Administrator Console, select **Search**.
2. In the **Search** page, select the **Users** Option.
3. In the **Search** field, type the full or partial username, first name, or last name of the user.
4. Click **Search**. The Search page displays the user, or a list of users that match the search criteria.
5. Select the Domain\username link of the user. to open the **User Details** page.
6. In the Nymi Band table, to the right of the Nymi Band that you want to delete, click **Disconnect**. On the Disconnect page, scroll down and then click **Disconnect**.
7. On the Disconnect screen, scroll to the bottom and select **Disconnect**.

Handling a found Nymi Band

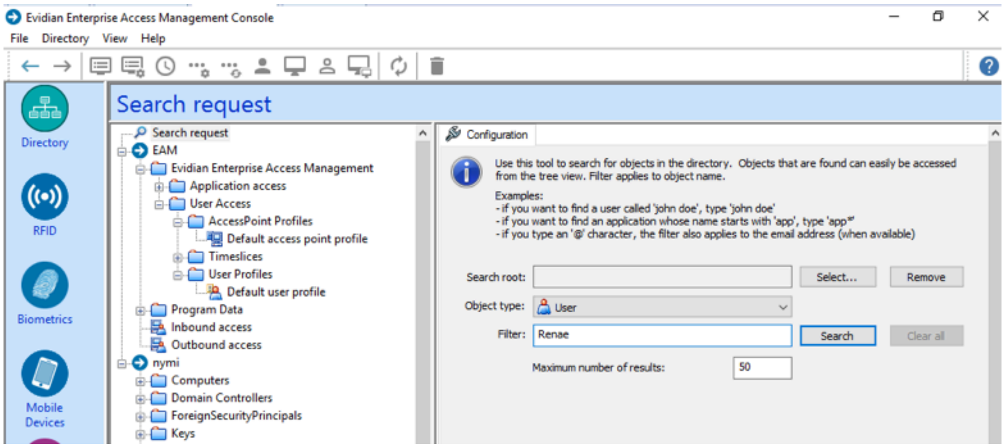
When you find a lost Nymi Band, perform the following steps to allow another user to use the Nymi Band.

About this task

Procedure

1. Put the Nymi Band on a charger and then hold the bottom button down until the **User Data Deleted** icon appears.
   The biometric data of the user is removed from the Nymi Band.
2. In the EAM Console, select the **Directory** panel.
3. Select the search request by changing the object type to **user** and then in the **Filter** field, type the username.

   The following figure shows the Search request window.



Use this tool to search for objects in the directory. Objects that are found can easily be accessed from the tree view. Filter applies to object name.

Examples:
- if you want to find a user called 'john doe', type 'john doe'
- if you want to find an application whose name starts with 'app', type 'app*'
- if you type an '@' character, the filter also applies to the email address (when available)

Search root:

Object type: User

Filter: Renae

Maximum number of results: 50

Figure 40: Search request window

4. Click **Search**.
5. Select the user, and then select the **RFID** tab.
6. Select the RFID device, and then click **Delete**.
7. Select the wearable device, and then click **Delete**.

Results

The Nymi Band is available for enrollment and assignment to a new user.

Removing the user association to the Nymi Band in NES

Perform the following steps to remove the Nymi Band association to the user in NES.

Procedure

1. In the NES Administrator Console, select **Search**.
2. In the **Search** page, select the **Users** Option.
3. In the **Search** field, type the full or partial username, first name, or last name of the user.
4. Click **Search**. The Search page displays the user, or a list of users that match the search criteria.
5. Select the Domain\username link of the user. to open the **User Details** page.
6. In the Nymi Band table, to the right of the Nymi Band that you want to delete, click **Disconnect**. On the Disconnect page, scroll down and then click **Disconnect**.
7. On the Disconnect screen, scroll to the bottom and select **Disconnect**.

Removing Evidian License from the Nymi Band User

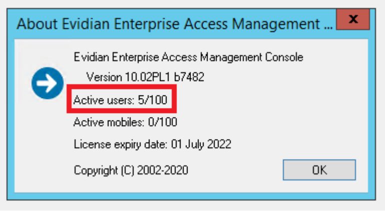
When you disable the user account in the Active Directory, the user account retains the Evidian license until you remove the SSO data for the user.

About this task

Perform the following steps in the EAM Console

Procedure

1. From the **Help** menu, select **About**.
   The About window displays the number of active Evidian users that use an Evidian license, as shown in the following figure.

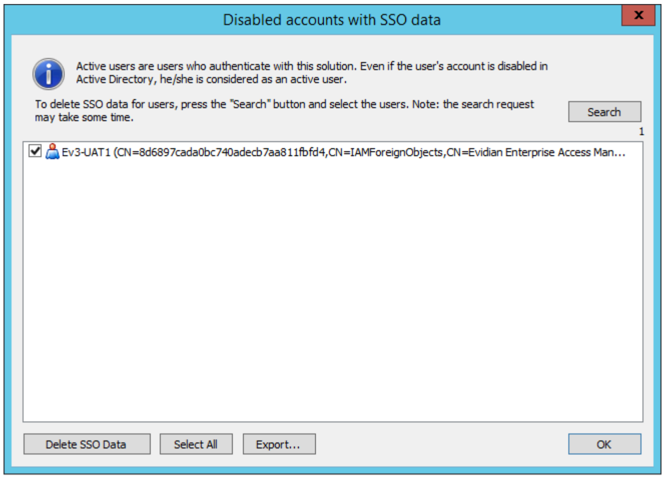


About Evidian Enterprise Access Management ...

Evidian Enterprise Access Management Console
Version 10.02PL1 b7482
Active users: 5/100
Active mobiles: 0/100
License expiry date: 01 July 2022
Copyright (C) 2002-2020

Figure 41: About window

2. Click **OK**.
3. From the **File** menu, select **SSO and Active Directory user accounts**.
4. In the Disabled Accounts with SSO Data window, click **Search**.
   The window displays a list of users that are disabled in Active Directory and have SSO data.
5. Select each user that no longer requires an Evidian license.
   The following figure provides an example of the Disabled Accounts with SSO Data with one user selected



Disabled accounts with SSO data

Active users are users who authenticate with this solution. Even if the user's account is disabled in Active Directory, he/she is considered as an active user.

To delete SSO data for users, press the "Search" button and select the users. Note: the search request may take some time.

1

☑ Ev3-UAT1 (CN=8d6897cada0bc740adecb7aa811fbfd4,CN=IAMForeignObjects,CN=Evidian Enterprise Access Man...

Figure 42: Disabled Accounts with SSO Data window

6. Click **Delete SSO data**.
   The user account disappears from the Disabled Accounts with SSO Data window.
7. Click **OK**.
8. From the **Help** menu, select **About**.
   The number of active Evidian users that use an Evidian license has decreased, as shown in the following figure.

Figure 43: About window

Results

The process to check the number of active users occurs once every 24 hours. The number of active user count does not update immediately.

Upgrading Nymi and Evidian Components

The Connected Worker Platform provides enhancements that support coexistence of Evidian-integrated MES applications and Nymi-integrated MES applications.

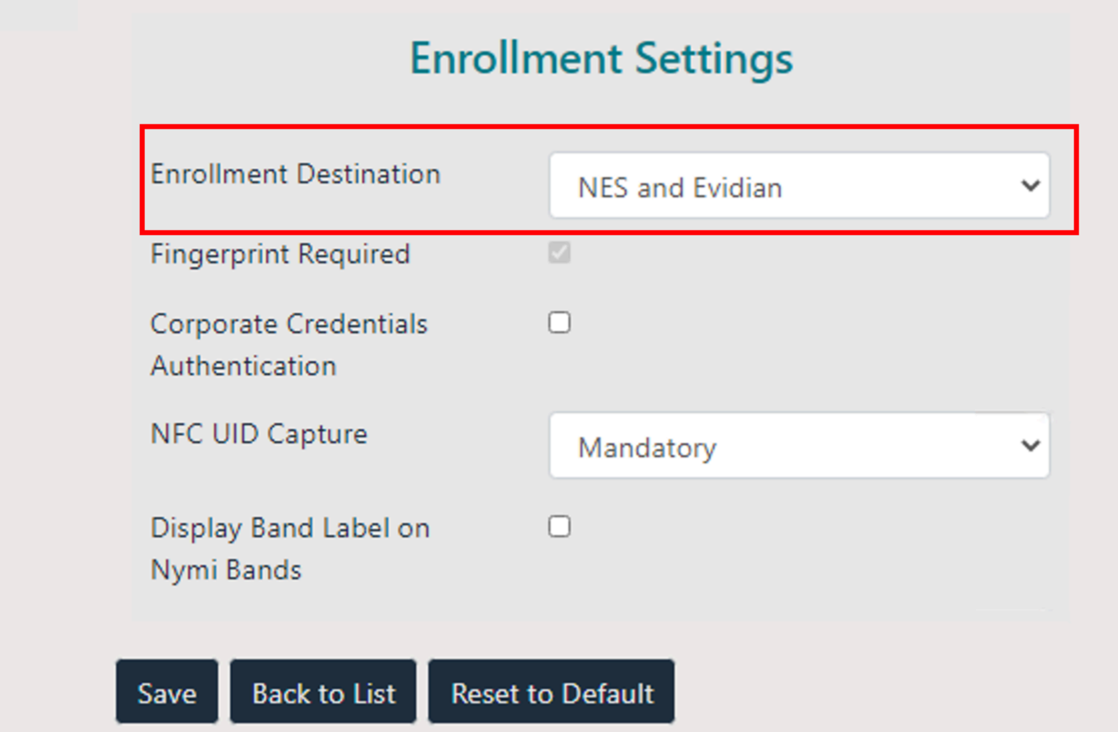
The section describes how to update the components in a Connected Worker Platform with Evidian solution and post update configuration changes that are required to allow existing users to use the Nymi Band to perform authentication events.

Upgrading the NES software

Upgrade the NES according to the instructions in the Nymi Connected Worker Platform Administration Guide.

If you upgrade from an NES 3.2.x or earlier version, perform the following steps to update the active policy to support Evidian enrollments.

1. Log in to the NES Administrator Console with an account that is an NES Administrator.
2. Click **Policies**.
3. Edit the active policy.
4. From the **Enrollment Destination** list, select the option **NES and Evidian**, as shown in the following figure, and then click **Save**.



Enrollment Settings

Enrollment Destination: NES and Evidian

Fingerprint Required ☑

Corporate Credentials Authentication □

NFC UID Capture: Mandatory

Display Band Label on Nymi Bands □

Figure 44: NES and Evidian enrollment option

Modifying EAM Settings to Support Coexistence with other Solutions

By default, when an Evidian-integrated MES application is not waiting for an SSO operation and a user performs an NFC tap, the desktop locks.

About this task

If user terminals need to simultaneously support Evidian-integrated MES applications and Nymi-integrated MES applications , perform the following steps to modify the settings in the access point profile, to prevent unexpected desktop locks when performing an NFC tap in the Nymi-integrated MES application.

Perform the following steps in the EAM Console

Procedure

1. In the `Directory` view, expand **`EAM > Evidian Enterprise Access Management > User Access > AccessPoint Profiles > Default Access Point Profile`**.
2. On the **`Authentication`** tab, from the **`Default action when token removed`** list, select **`Do nothing`**.
3. Click **`Apply`**.
4. Right-click **`Default Access Point Profile`** and select **`Update`**.

Results

A user cannot perform an NFC tap to lock the Windows session; however, the Windows session still locks when the Nymi Band deauthenticates or when the user is away from the user terminal.

Updating the TokenManagerStructure

The Connected Worker Platformsoftware package includes new TokenManagerStructure(TMS) files that support wearable and RFID authentication methods. When you upgrade Connected Worker Platform components, it is recommended that you replace any TokenManagerStructure file that you placed on a terminal to override the EAM Controller configuration, and the configuration on the EAM Controller.

About this task

The Evidian Supplementary Files directory in the Connected Worker Platform software package includes the following TMS files:

- *TokenManagerStructure-WEARABLE.xml*-To configure Nymi Bands to use wearable authentication.
- *TokenManagerStructure-RFID.xml*-To configure Nymi Bands to use RFID authentication.

Perform the following steps to replace the TMS configuration in your environment.

Procedure

1. Log in to the EAM Console as an EAM Administrator.
2. From the **File** menu, select **Configuration**.
3. On the **Authentication** tab, click **Select**, and then select the appropriate TMS file for your configuration.
4. Click **Apply**.
5. Click **OK**.
6. Launch **Services**.
7. Stop the `Enterprise Access Management Security Services` service.
8. Delete all files under *C:\Program Files\Common Files\Evidian\WGSS\CacheDir*.

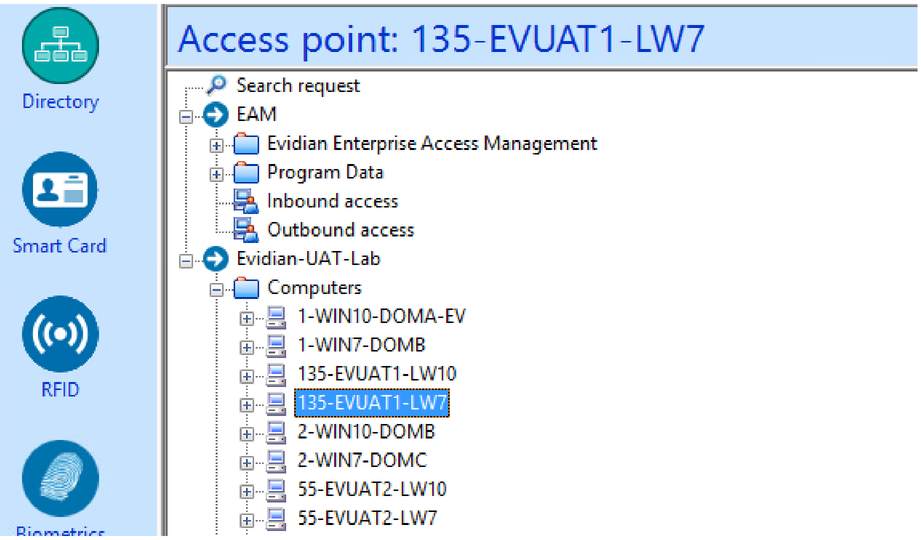
   Note: If you get a message that you cannot delete the files, hold the **Shift** key down when you press **Delete**.
9. Start `Enterprise Access Management Security Services` service.
10. For each terminal in the environment that overrides the EAM Controller authentication configuration, perform the following steps:

    a) Log in to the terminal.

    b) Rename the *TokenManagerStructure.xml* file in the *C:\Program Files\Common\Evidian\WGSS* directory.

    c) Copy the new TMS file from the Connected Worker Platform package into the *C:\Program Files \Common\Evidian\WGSS* directory.

    d) Rename the TMS file to *TokenManagerStructure.xml*.
11. On the EAM Controller, log in to the EAM Console.
12. Select Account and access rights management .
13. In the left navigation pane, expand **Domain > Computers**, and then select the terminal, as shown in the following figure.



14. On the **Actions** tab, select **Delete cache files**, and then click **Apply**.
    The cache files are deleted on the terminal and the terminal desktop locks.

Upgrading the Nymi Band Application on the Enrollment Terminal

An upgrade of the Nymi Band Application does not require you to remove the previous version of the software.

About this task

Perform the following steps on the enrollment terminal.

Procedure

1. Download the Nymi Band Application software to a directory on the network terminal. For example, *C:\Downloads*
2. Double-click the installation file *Nymi-Band-App-installer-v_version*, and then follow the prompts to update the software.

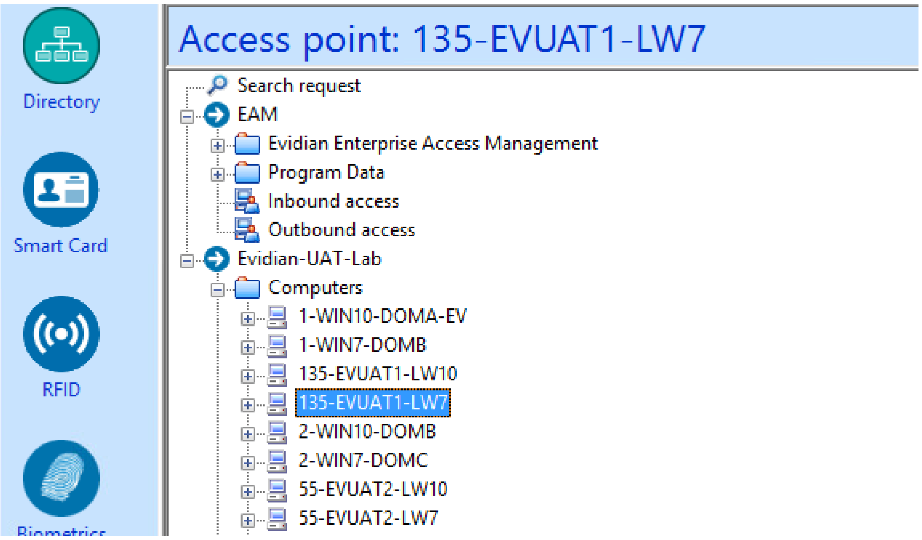
Confirming the Runtime dll versions

Review the Connected Worker Platform and EAM Client versions of the Nymi Runtime file to ensure that they are the same.

About this task

Procedure

1. From the Windows Apps and Feature applet, search for the Nymi Runtime application and make note of the version.
2. From Windows explorer, navigate to *C:\Program Files\Common Files\Evidian\WGSS*.
3. Right-click *nymi_api.dll* and select **Properties**. On the **Details** tab, confirm that the value in the product version matches the Nymi Runtime installation.
4. If the versions do not match, perform the following steps:
   a) Rename the *nymi_api.dll* in *C:\Program Files\Common Files\Evidian\WGSS*.
   b) Copy the *C:\Program Files\Nymi\Nymi Band Application\nymi_api.dll* to *C:\Program Files\Common Files\Evidian\WGSS*.
5. On the EAM Controller, log in to the EAM Console.
6. Select Account and access rights management .
7. In the left navigation pane, expand **Domain > Computers**, and then select the terminal, as shown in the following figure.



Access point: 135-EVUAT1-LW7

- Search request
- EAM
  - Evidian Enterprise Access Management
  - Program Data
  - Inbound access
  - Outbound access
- Evidian-UAT-Lab
  - Computers
    - 1-WIN10-DOMA-EV
    - 1-WIN7-DOMB
    - 135-EVUAT1-LW10
    - 135-EVUAT1-LW7
    - 2-WIN10-DOMB
    - 2-WIN7-DOMC
    - 55-EVUAT2-LW10
    - 55-EVUAT2-LW7

8. On the `Actions` tab, select `Delete cache files`, and then click `Apply`.
   The cache files are deleted on the terminal and the terminal desktop locks.

Upgrading Nymi Components on the User Terminals and Remote NEA hosts

Upgrade the `Nymi Runtime` and replace the *nymi_api.dll* for the NEAs. For user terminal that use a wearable configuration .

About this task

Perform the following steps after internal testing has verified the compatibility of the NEA with upgraded versions of the Nymi Components.

Procedure

1. Log in to the terminal, with an account that has administrator privileges.
2. Extract the `Nymi SDK` distribution package.
3. From the *..\nymi-sdk\windows\setup* folder, run the *Nymi Runtime Installer version.exe* file.
4. On the `Welcome` page, click **`Install`**.
5. On the `User Account Control` page, click **`Yes`**.
   The installation wizard appears. If the installation detects missing prerequisites, perform the steps that appear in the prerequisite wizards.
6. On the `Welcome to the Nymi Runtime Setup Wizard` page, click **`Next`**.
7. On the `Nymi Runtime Setup` window, click **`Next`**.
8. On the `Service Account` window, click **`Next`**.
9. On the `Ready to install` page, click **`Install`**.
10. Click **`Finish`**.

11. On the `Installation Completed Successfully` page, click **`Close`**.
12. Replace the *nymi_api.dll* file that is used by the MES application with the version of the file that is in the `Nymi API C Interface` distribution package.

Post Upgrade Tasks for Existing Users

This steps in this section only apply to upgrades from NES 3.2.1 and earlier.

After you upgrade all the components in the Connected Worker Platform with Evidian solution, additional steps are required to allow existing Nymi Band users to use the Nymi Band with Evidian. The procedure differs depending on where the Nymi Band was enrolled prior to upgrade.

Enrolling Existing Nymi Bands in Evidian

After you upgrade all the components in the Connected Worker Platform with Evidian solution, a user with a Nymi Band that was enrolled in NES prior to the upgrade, must log in to the Nymi Band Application on the enrollment terminal.

Before you begin

Ensure that the user is wearing their authenticated Nymi Band.

About this task

The Nymi Band Application detects that the user enrollment exists in the NES database and automatically updates the Evidian database with enrollment information.

Procedure

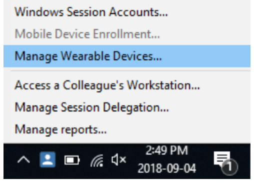
1. On the Windows Login screen, log in to the computer.
2. In the system tray, right-click the **`ESSO Credential Manager`**. The icon may be hidden behind the ^ (caret).

   If you do not see the icon, perform the following steps:

   a) Start the **`ESSO Credential Manager`** by double-clicking *C:\Program Files\Evidian \Enterprise Access Management\ESSOCredentialManager.exe*

   b) On the `Evidian Enterprise SSO – Open Session` window, log in with credentials of the user.

   c) Check the system tray for the icon.
3. Select **`Manage Wearable Devices...`**, as shown in the following figure.


Windows Session Accounts...
Mobile Device Enrollment...
Manage Wearable Devices...
Access a Colleague's Workstation...
Manage Session Delegation...
Manage reports...
2:49 PM
2018-09-04

`Figure 45: Manage Wearable Devices menu option`

4. On the **`Manage wearable devices`** window, click **Add...**.

5. On the login window, type the username and password of the user that will enroll the Nymi Band, and then click **OK**.
6. On the Authentication Manager window, click **Yes**, and then wait until the Nymi Band Application starts.
7. Log into the Nymi Band Application with the username and password of the user that will enroll the Nymi Band.

Results

The Nymi Band Application displays Saving user settings while their enrollment completes in the Evidian database. Close the Nymi Band Application when the enrollment completes.

Re-enrolling existing Nymi Band Users in Evidian

After you upgrade all the components in the Connected Worker Platform with Evidian solution, perform the following steps for all users that have a Nymi Band that was enrolled in Evidian prior to the upgrade.

- Delete the Nymi Band association for the user on the EAM Controller
- Delete the user data from the Nymi Band
- Re-enroll the Nymi Band

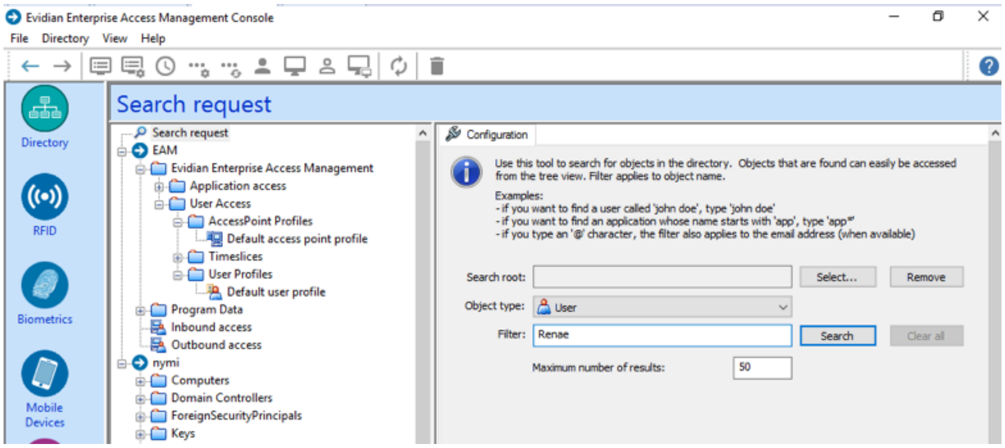
Deleting an RFID or Wearable Nymi Band

Perform the following steps to delete the association between and user and the Nymi Band.

Procedure

1. Put the Nymi Band on a charger and then hold the bottom button down until the **User Data Deleted** icon appears.
   The biometric data of the user is removed from the Nymi Band.
2. In the EAM Console, select the **Directory** panel.
3. Select the search request by changing the object type to **user** and then in the **Filter** field, type the username.

   The following figure shows the Search request window.



Use this tool to search for objects in the directory. Objects that are found can easily be accessed from the tree view. Filter applies to object name.

Examples:
- if you want to find a user called 'john doe', type 'john doe'
- if you want to find an application whose name starts with 'app', type 'app*'
- if you type an '@' character, the filter also applies to the email address (when available)

Search root:

Object type: User

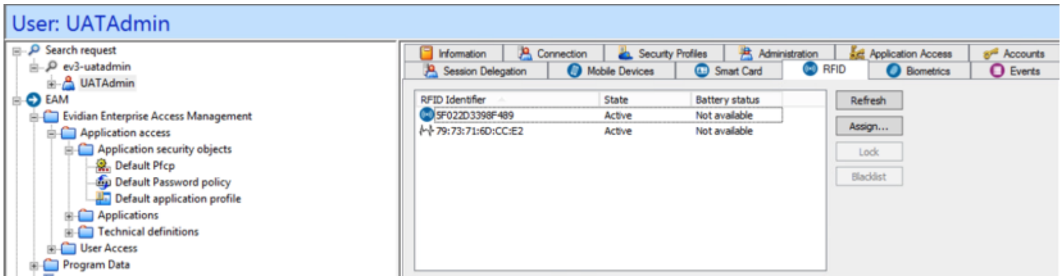
Filter: Renae

Maximum number of results: 50

Figure 46: Search request window

4. Click **Search**.
5. Select the user, and then select the **RFID** tab.

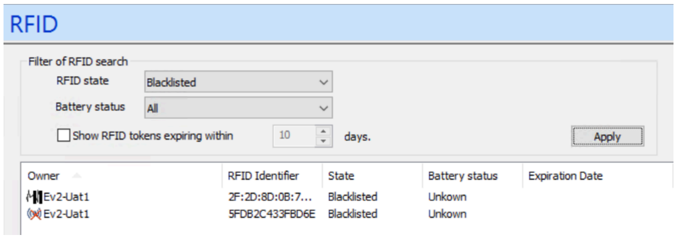
Figure 47: RFID tab for a user



RFID Identifier	State	Battery status
5F022D3398F489	Active	Not available
79:73:71:6D:CC:E2	Active	Not available

Two entries display, one for the user as an RFID entry and the other is a wearable entry.

6. Select the Wearable entry, and then click **Blacklist**.
7. On the `Confirmation` window, click **Yes**.
8. On the `Confirmation` window, click **Yes**.
   The RFID and Wearable entries are blacklisted.
9. Select the wearable entry, and then click **Delete**.
10. On the `Confirmation` window, click **Yes**.
11. Select the RFID entry, and then click **Delete**.
12. In the left navigation pane, select **RFID**.
13. From the **RFID state** list, select **Blacklisted**, and then click **Apply**.
    Two blacklisted entries appear for the user, one for the RFID and one for the Wearable, as shown in the following figure



RFID

Filter of RFID search

RFID state: Blacklisted

Battery status: All

□ Show RFID tokens expiring within 10 days.

Owner	RFID Identifier	State	Battery status	Expiration Date
Ev2-Uat1	2F:2D:8D:0B:7...	Blacklisted	Unkown	
Ev2-Uat1	5FDB2C433FBD6E	Blacklisted	Unkown	

Figure 48: Blacklisted Nymi Band

14. Select the RFID entry, and then click **Delete**.
15. Select the Wearable entry, and then click **Delete**.

Enrolling a Nymi Band

Before a new user or an existing user (enrolled in NES prior to an Evidian intergation) can use a Nymi Band to perform authentication events with Evidian and Evidian-integrated MES applications, the user must enroll a Nymi Band by using the Nymi Band Application.

About this task

During the enrollment process for a new user, the process updates the NES and Evidian databases with enrollment information.

For a user account with a Nymi Band already enrolled on the NES server prior to an Evidian integration, the NES enrollment information is preserved and the process updates the Evidian database with enrollment information.

The user that will enroll the Nymi Band performs the following steps on the enrollment terminal.

Procedure

1. On the Windows Login screen, log in to the computer.
2. Log into the `Nymi Band Application` with the username and password of the user that will enroll the Nymi Band.
3. Follow the prompts in the `Nymi Band Application` to enroll the Nymi Band.

Results

Before the user can successfully use the Nymi Band, the user might need to login to the terminal with their username and password to retrieve information from the EAM Controller. The user can perform subsequent logins by using the Nymi Band.

Note: After enrollment, Nymi recommends that each user authenticate to the Nymi Band 10 times with success. If the number of authentication attempts that are required to get 10 successful authentications exceeds 15, review the information in the Nymi Connected Worker Platform Troubleshooting Guide for more information about how to troubleshoot Nymi Band authentication issues.

Troubleshooting

This section provides information about how to enable logging and how to troubleshoot common issues.

Enabling Evidian Logging

Perform the following steps to enable logging in Evidian.

About this task

Leaving on the Debug On option is not recommended as it can generate a lot of log entries.

Procedure

1. Launch **`regedit.exe`**.
2. Navigate to *HKEY_LOCAL_MACHINE\SOFTWARE\Enatel\WiseGuard\*.
3. Rename *Debug* to *Debug_*.
4. Rename *_Debug* to *>Debug*.
5. Close *regedit.exe*.

Results

Logs files are generated in *C:\Program Files\Common Files\Evidian\WSGG\Logs*.

Troubleshooting Evidian Error Messages

Evidian Security Services seems to not be running

This error message appears when you start `Manage Wearable Devices`.

Cause

This error is a typical error when the EAM Client cannot communicate with the EAM Controller, for one of the following reasons:

- Poor network connection between the EAM Client and EAM Controller
- Technical Admin account has expired.

However, occasionally this can be caused when the password of the technical admin account has expired.

Resolution

To resolve the issue where the password of the technical admin account has expired, perform the following steps to reset the password for the security settings account.

1. Launch *WGSRVConfig.exe*, which is in the EAM Install package in the *..\EAM-v10.X \EAM.x64\TOOLS\* directory.
2. On the `Administration Tools`, select **`Configure security settings`**
3. Change the Directory and Access point account to the new login and password.

Wearable devices services are not available

This error message appears when you attempt to launch the `Nymi Band Application`.

Cause

The value for the `WearableEnrollTool` registry setting is incorrect.

Resolution

1. Launch *regedit.exe*.
2. Navigate to *HKLM\Software\Enatel\AdvancedLogin*.
3. Edit the *WearableEnrollTool* key and update the value with the correct path and file name for the *nem.exe*. For example, *C:\Program Files\Nymi\Nymi Band Application\nem.exe.*

Evidian License has Expired

This message appears when you use EAM.

Cause

The license on the EAM Client and the EAM Controller has expired.

Resolution

Obtain a new license file and perform the following actions:

1. Log in to the server with domain admin credentials (example: server = Ev-UAT-Srv1).
2. Launch *C:Program Files\Common Files\Evidian\WGSS\WGConfig.exe.*.
3. On the `Account Control` window, click **`Yes`**.
4. On the **`Configuration Assistant`**, select **`Enterprise Access Management`**, and then click **`Next`**.
5. On the `Software Licenses` window, click **`Import`**.
6. Navigate to the license file and then click **`OK`**.

   Note: If you prompt to replace the license keys, click **`Yes`**.
7. On the confirmation window, click **`OK`**.
8. Click **`Cancel`** to close the window.

EAM Security Services are not available

This error message appears on the `Window Login` screen.

Cause

The EAM Security Services service is not running.

Resolution

Start the service by performing the following actions:

1. Log into the machine with your username and password.
2. Open the **`Services`** applet, double-click **`Enterprise Access Management Security Services`**.
3. Ensure that the **`Startup Type`** is set to **`Automatic`**, and then click **`OK`**.
4. Start the **`Enterprise Access Management Security Services`** service. Ensure that the status of the service displays **Running**.

Nymi Band Enrollment Fails: Failed to Create Security Settings

Enrollment of the Nymi Band using the Nymi Band Application fails as security settings could not be created.

Cause

Network issues

The Nymi Band is already associated with another user in the EAM Controller.

Resolution

To resolve the issue when the Nymi Band is already associated with anotherr user, follow the instructions in the *Returning a Nymi Band* section to remove the Nymi Band association in the EAM Controller. Retry the enrollment using the Nymi Band Application.

.

User has two Active Bands after Enrollment

After completing enrollment of the Nymi Band using the Nymi Band Application, there are two Active Bands associated to the user in the EAM Console.

Cause

The association between the user and the previously issued Nymi Band was not removed in theEAM Controller.

Resolution

Follow *Returning a Nymi Band* to remove the outdated Nymi Band association in the EAM Controller.

Enrollment Succeeds But Nymi Band Does Not Appear in Manage Wearable Window

Enrollment completes but device does not appear in the `Manage Wearable` window. On the EAM Console in the properties of the user, the RFID tab does not display the device. In NES, in the properties of the user, the Nymi Band appears.

Cause

The Enrollmen Destination is not set to "Nes and Evidian" in the NES active policy.

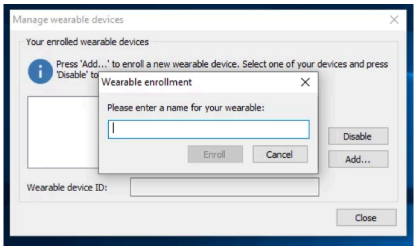
Resolution

To resolve this issue, perform the following steps:

1. Log in to the `NES Administrator Console` and edit the active policy.
2. Select the "Nes and Evidian" option for the **`Enrollment Destination`**.
3. Sign into the Nymi Band Application and complete the enrollment.

Wearable enrollment screen appears instead of the Nymi Band Application

When you click **`>Add`** in **`Wearable Device Manager`** and log in with your username and password, the `Wearable enrollment` window appears instead of the `Nymi Band Application`, as shown in the following figure.



Press 'Add...' to enroll a new wearable device. Select one of your devices and press 'Disable' to

Please enter a name for your wearable:

Figure 49: Wearable Enrollment window

Cause

Ensure that the registry key for the WearableEnrollTool is defined.

Resolution

1. Launch *regedit.exe*.
2. Navigate to *HKLM\Software\Enatel\AdvancedLogin*.
3. Edit the *WearableEnrollTool* key and update the value with the correct path and file name for the *nem.exe*. For example, *C:\Program Files\Nymi\Nymi Band Application\nem.exe.*

Cannot Unlock the Enrollment Terminal

An enrolled Nymi Band can lock a user terminal but cannot unlock the terminal.

Cause

The unlock function relies on the `Nymi Band Application` and the `Nymi Band Application` version of the *nymi_api.dll* file that is used by Evidian. The DLL used by Evidian must match the `Nymi Band Application` version.

Resolution

1. Ensure that the *nymi_api.dll* file has been copied from the *C:\Program Files\Nymi\Nymi Band Application* to *C:\Program Files\Common\Evidian\WGSS*.
2. Delete the Nymi certificate files by performing the following steps:

   a. Navigate to *C:\Windows\system32\config\systemprofile\appdata\roaming\Nymi\NSL\hVoGqxl8\*.
   b. Delete the *ksp* directory.
   c. Change the startup type of the **`Enterprise Access Management Security Services`** service to **`Disabled`**.
   d. Stop the **`Enterprise Access Management Security Services`** service.
   e. Log back into the computer.
   f. Change the startup type of the **`Enterprise Access Management Security Services`** service to **`Enabled`**.
   g. Start the **`Enterprise Access Management Security Services`** service.

Cannot Perform Authentication events With the Nymi Band After Closing SSO Authentication Window

In an Citrix/RDP session, if a user closes the SSO authentication window that appears when the they tap their Nymi Band against the NFC reader while in the MES application, the SSO authentication window does not appear on a subsequent Nymi Band tap.

Cause

The SSO process closes.

Resolution

Restart the Enterprise SSO application. For example:

- From the Windows search field, type `Enterprise SSO`, and then open the application. On the `Evidian Enterprise SSO - Open Session` window, type your username and password and then click **`OK`**.
- Log out of the remote session and then log back in. When the `Evidian Enterprise SSO - Open Session` window appears, tap the authenticated Nymi Band against the NFC reader.

Wearable device is unreachable. Please make sure it is on or activated

This error message appears when you attempt to tap to unlock a user terminal with an enrolled Nymi Band or when attempting to perform an SSO action.

Cause

- The ManageAccessPoint registry key is not configured correctly on the client.
- The environment uses a centralized Nymi Agentbut the Nymi Agent URL definition is incorrect.

Resolution

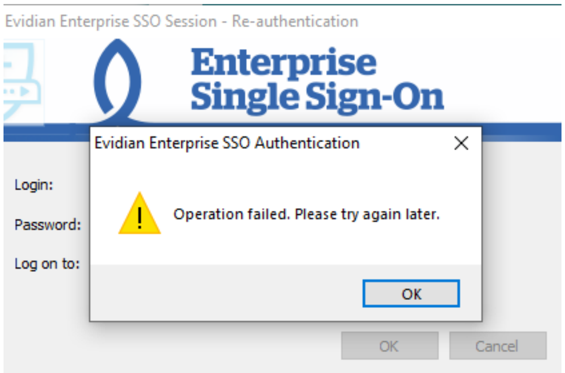
To resolve this issue, perform one of the followings on the EAM Client and the EAM Controller:

- Correct the **`ManageAccessPoint`** registry key EAM Client and the EAM Controller:.
  1. Run *regedit.exe*.
  2. Navigate to *HKLM\Software\Enatel\Wiseguard\FrameWork\Config\*.
  3. Edit the *ManageAccessPoints* registry key is set to `1`.
  4. Restart the **`Enterprise Access Management Security Services`** service.
- On the client, perform one of the following actions:
  - Correct the **`NymiAgentUrl`** registry key. *Configuring the EAM client to Communicate with the Centralized Nymi Agent provides more information.*
  - Correct the *nbe.toml* file. *Configuring the User Terminals to Access Centralized Nymi Agent*

Operation Failed. Please try again later

This error message appears when you perform a tap to perform an SSO action.

The following image provides an example of the error message.



Evidian Enterprise SSO Session - Re-authentication

Evidian Enterprise SSO Authentication

Operation failed. Please try again later.

Figure 50: Operation Failed. Please try again later

Cause

The initialization of the *nymi_api.dll* and retrieval of authentication token from Nymi AgentNES is taking longer than expected and does not complete within the default time period.

Resolution

To resolve this issue, install the latest supported version of EAM 10.02 PL2 or EAM 10.01.7125.10 and then define the following registry key on each machine that runs the MES application.

1. Run *regedit.exe*.
2. Navigate to *HKLM\Software\Enatel\Wiseguard\FrameWork\Authentication\*.
3. Create a new DWORD (32 bit value) registry key named *WearableDelay* with a value set to more than `2000` ms. Nymi recommends a value of 10000.

Your badge must be initialized with a PIN. Please type your password and then choose a pin for your badge

appears when you attempt to tap to unlock the enrollment terminal with an enrolled Nymi Band and when you perform an NFC tap with a Wearable Nymi Band to lock the terminal.

Cause

Misconfigured TokenManagerStructure file.

Resolution

Correct the TokenManagerStructure configuration on the EAM Controller or replace the *TokenManagerStructure.xml* on the terminal, and then delete the Evidian cache files.

ESSO Credential Manager icon does not appear in the system tray

ESSO Credential Manager ☑ icon does not appear in the system tray.

Cause

The ESSO Credential Manager application is not running. This can occur after you disable the **`Enterprise Access Manager Security Services`** service and then stop the service.

Resolution

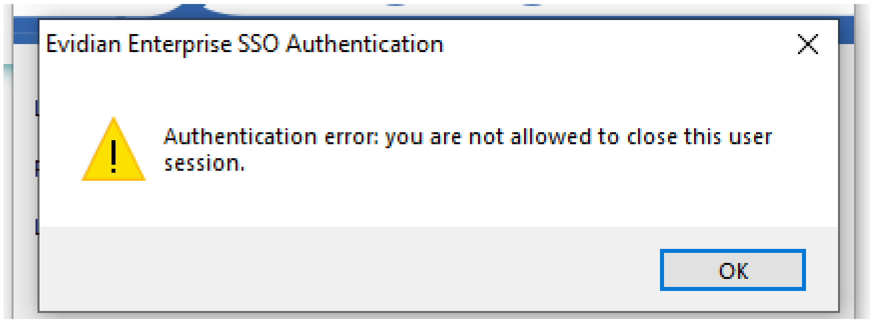
To resolve this issue, perform the following actions:

1. Navigate to *C:\Program Files\Evidian\Enterprise Access Management*.
2. Double-click *ESSOCredentialManager.exe*.
3. When prompted, log in with your username and password.

Authentication error: you are not allowed to close this user session

This error message appears when you tap your Nymi Band against the NFC reader to re-authenticate the SSO session.

The following figure provides an example of the error message.



Evidian Enterprise SSO Authentication

Authentication error: you are not allowed to close this user session.

Cause

The Nymi Band user is logged into the terminal but SSO was started with the EAM administrator username and password, and not the user account that is associated with the Nymi Band that is performing the MES authentication operation.

Resolution

1. Right-click **SSO** on the **`System Tray`** and then select **`Stop`**.
2. Right-click **SSO** on the **`System Tray`** and then select **`Start`**. When prompted, type the username and password of the user account that is associated with the Nymi Band that is performing the MES authentication operation.

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