Wearable Installation and Configuration Guide

Nymi Connected Worker Platform
v12.0
2025-01-23

Contents

3 - 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 *Connected Worker Platform 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
11.0	November 15, 2024	Eleventh release of this document. Updated to include: • Steps for NES configuration when you use CWP 1.18.0 and later. • Addition of how to delegate admin role to users. • Inclusion of Windows 11 support for clients. • Updates to the NES URL registry key type. • Changed service account from SQL service account to Evidian service account in the *Install Audit Database* section.
10.0	March 25, 2024	Tenth release of this document for CWP 1.3 and later releases. Updated to include: • New self-enrollment functionality that applies to CWP 1.16.0 and later • New registry key setting DoNotManageProcList for Citrix.

Version	Date	Revision history
9.0	February 29, 2024	Ninth release of this document for the CWP 1.3 and later releases. Updates include: • Updates to the *Post Deployment Considerations* chapter to include information about backup and recovery. • Reorganization of Evidian EAM Client installation content to group Evidian-specific registry key settings into a single table. • Updated content in the Creating the Access Point Profile sections to remove the reference to enable the option *Always authenticate on cache.*
8.0	February 26, 2024	Eighth release of this document for the CWP 1.3 and later releases. Updates include: • Changes to the Installing the Audit Database section.

Version	Date	Revision history
7.0	November 15, 2023	Seventh release of this document for the CWP 1.3 and later releases. Updates include: • Adjustments to the sequence of steps for Enrollment Terminal. • Change of name for section "Optimizing NFC Taps" to "Enabling NFC Taps" • Addition of information about how to propagate technical definition updates. • Updated the Installing EAM Controller section to include steps to create customized access point profile and user profile. • Updated installing and Configuring Software on the user terminals to include information about registry changes to prevent Active Directory users that do not use the Nymi with Evidian solution from seeing Evidian eSSO login windows. • Created *Post Deployment Considerations* chapter.
6.0	October 6, 2023	Sixth release of this document for the CWP 1.3 and later releases. Updates include: • Adjusted the sequence of steps for Enrollment Terminal. • Added new content related to Evidian components to the *Updating Nymi and Evidian Components* chapter. • Updated section *Optimizing NFC Taps* to include unsupported use case and where to set the registry keys.

Version	Date	Revision history
5.0	August 21, 2023	Fifth release of this document for the CWP 1.3 and later releases. Updates include: • New content that describes how to optimize NFC tap performance in a wearable configuration. • Revisions of the Updating chapter. • Details about support for Nymi Band taps on a Bluetooth adapter. • New appendix to document how change a user terminal from RFID-only mode to wearable mode.
4.0	June 19, 2023	Fourth release of this document for the CWP 1.3 and later releases. Updates include: • New content in the topic to create an SSO definition for a new target application. • New content that describes how to configure the username field for SSO. • New content that describes how to perform a delete user data operation for a found Nymi Band. • Corrected images sizes in some topics.
3.0	March 17, 2023	Third release of this document for the CWP 1.3 and later releases. Updates include: • Extensive updates to include more images.
2.0	January 13, 2023	Second release of this document for the CWP 1.3 and later releases. Updates include: • Changes to EAM client deployments.

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

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—Deployment Guide**

  This document provides the steps that are required to deploy the Connected Worker Platform solution.

  Separate guides are provided for authentication on iOS and Windows device.
- **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 Developer Guide—NymiAPI(Windows)**

  This document provides information about how to develop Nymi-enabled Applications by using the Nymi API(NAPI).
- **Nymi SDK Developer Guide—Webapi(Windows)**

  This document provides information about how to understand and develop Nymi-enabled Applications (NEA) on Windows by utilizing the functionality of the Nymi SDK, over a WebSocket connection that is managed by a web-based or other application.
- **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.
- **Nymi Connected Worker Platform with Evidian Troubleshooting Guide**

  This document provides overview information about how to troubleshoot issues that you might experience when using the Nymi solution with Evidian.
- **Nymi Connected Worker Platform—FIDO2 Deployment Guide**

  The Nymi Connected Worker Platform—FIDO2 Deployment Guide provides information about how to configure Connected Worker Platform and FIDO2 components to allow authenticated users to use the Nymi Band to perform authentication operations.
- **Connected Worker Platform with POMSnet Installation and Configuration Guide**

The Nymi Connected Worker Platform—POMSnet Installation and Configuration Guides provides information about how to configure the Connected Worker Platform and POMSnet components to allow authenticated users to use the Nymi Band to perform authentication operations in POMSnet.

- **Nymi Band Regulatory Guide**

  This guide provides regulatory information for the Generation 3 (GEN3) Nymi Band.
- **Third-party Licenses**

  The Nymi Connected Worker Platform—Third Party Licenses Document contains information about open source applications that are used in Nymi product offerings.

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

4 - 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 Evidian EAM Controller and the default configuration is pushed by the Evidian EAM Controller to the Evidian 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.

4.1 - 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 Evidian EAM Client and Evidian 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.

5 - Environment Configuration

The section outlines the configuration requirements for the enrollment terminal and the user terminals.

Refer to the *Nymi Connected Worker Platform—Deployment Guide* for details about NES requirements and Support NFC Readers for information about supported NFC readers.

5.1 - Active Directory Requirements

To prevent Active Directory(AD) accounts from using the Evidian Enterprise Access Management(EAM) solution and using one Evidian license, create one AD group that contains:

- AD user accounts that use the Nymi Band to complete authentication tasks
- AD user accounts that requires administrator access to Evidian EAM Management Console.

This group is referred to as an inclusion group and you will associate the inclusion group with an Evidian access point profile, that is assigned to user terminals where you will deploy the Evidian ESSOAgent software, as described later in this guide.

The first time that a user whose account is in the inclusion group logs into an Evidian EAM Client, the user is allocated one Evidian license.

Note: As you add new users to the Nymi with Evidian solution, ensure that you add their user account to the AD group.

5.2 - Evidian EAM Controller Requirements

Install the following software on the Evidian EAM Controller to support communications with the audit database.

- Microsoft OLE DB Driver for SQL
- Visual C++ redistributable for Visual Studio 2022 version 1434 or later (x64 and x86 versions)
- **Note:** When the installation completes, a server reboot is required.

5.3 - User Terminal Requirements

The user terminal is a Windows 10 (minimum build version 1607) or Windows 11 machine that operators use to perform MES authentication tasks. User terminals include local machines as well as machines that are connected 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. • Evidian 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	• Evidian 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 AD LDS 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 Evidian EAM Client communicates with the Nymi Agent machine on default port 9120.
- For communications between the Evidian EAM Client and Evidian EAM Controller, communication occurs on port 3644.

5.4 - Enrollment Terminal Requirements

- Windows 10 (minimum build version 1607) or Windows 11 operating system

- Evidian License File.
- Nymi Band Application.
- Evidian EAM Client.
- Local Administrator access or Directory Administrator Access.
- Connection to the enterprise domain.
- BLE Adapter (BLED112)
- Bidirectional communication ports open on the firewall.
    - 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 Evidian EAM Management Console, communications occurs on port 3644 on the access point.

5.5 - Bluetooth Tap Support

In a wearable configuration, users can perform a Nymi Band tap on the Nymi-supplied Bluetooth adapter (BLE tap) to complete authentication tasks.

BLE tap support is enabled by default when you deploy the following versions of software in your environment: requirements:

- Connected Worker Platform 1.8.1 or later
- Evidian Access Management version 10.03b8573-hotfix-2

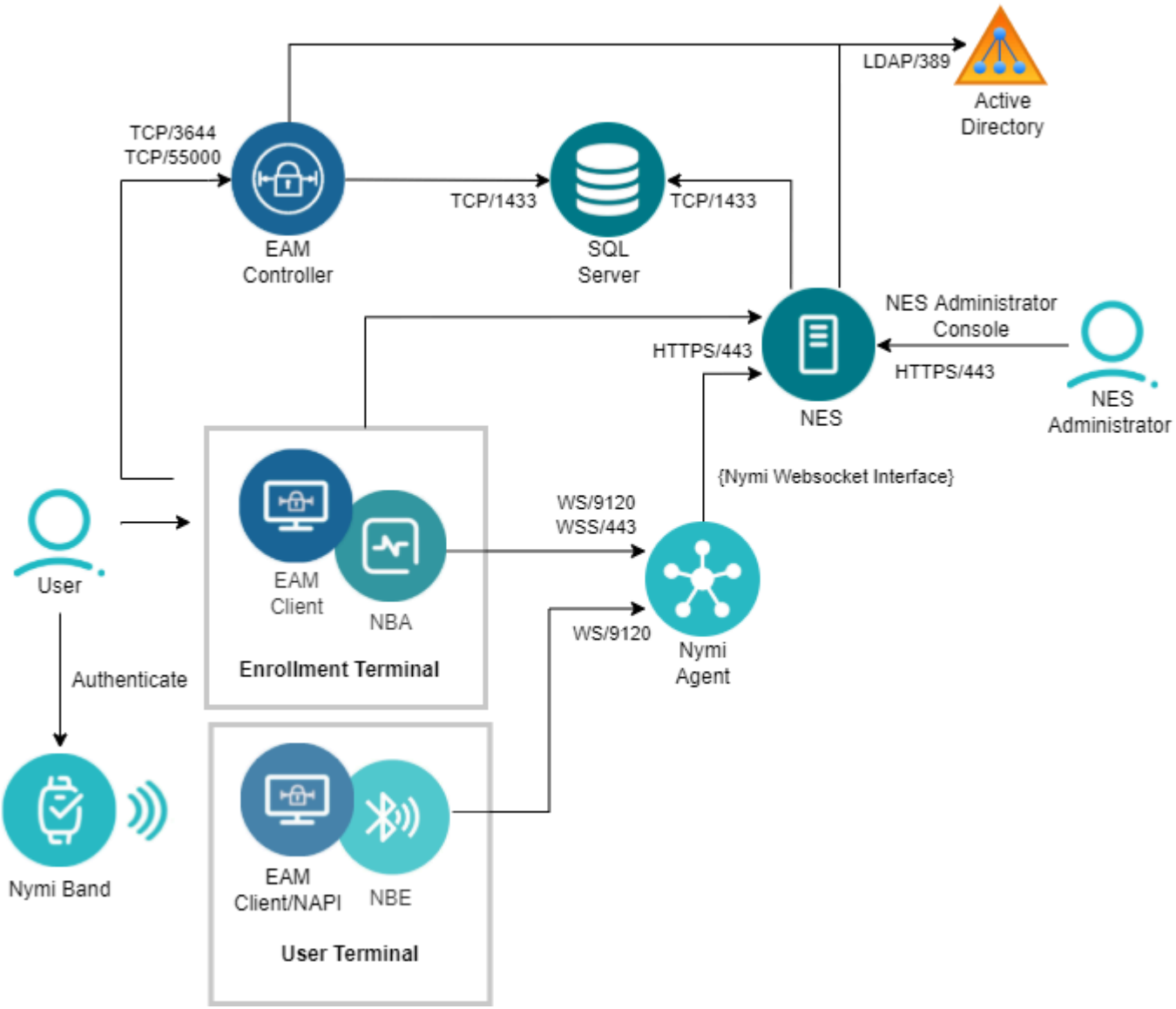
6 - Using the Nymi Band as a Wearable device

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.

6.1 - 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 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 Evidian EAM Management 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.

6.2 - Obtain the Required Software

Obtain the required software files or the Fileshare link for the software package from your Nymi Solution Consultant.

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

6.3 - Install Server Software

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

6.3.1 - Installing and Configuring Nymi Enterprise Server

You can install the Nymi Enterprise Server(NES) software on the same server on which you plan to install the Evidian EAM Controller software. For deployments in a production environment, Nymi recommends that you install the NES and Evidian 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—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. In CWP 1.18.0 and later in an IT/OT configuration, enable this option on the Enrollment NES or Registration NES to match your use case. For example, when you use Evidian in both IT and OT enable this option on the Enrollment NES and Registration NES.

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 / Registration Destination`** list, select the option **`NES and Evidian`**, as shown in the following figure, and then click **`Save`**.

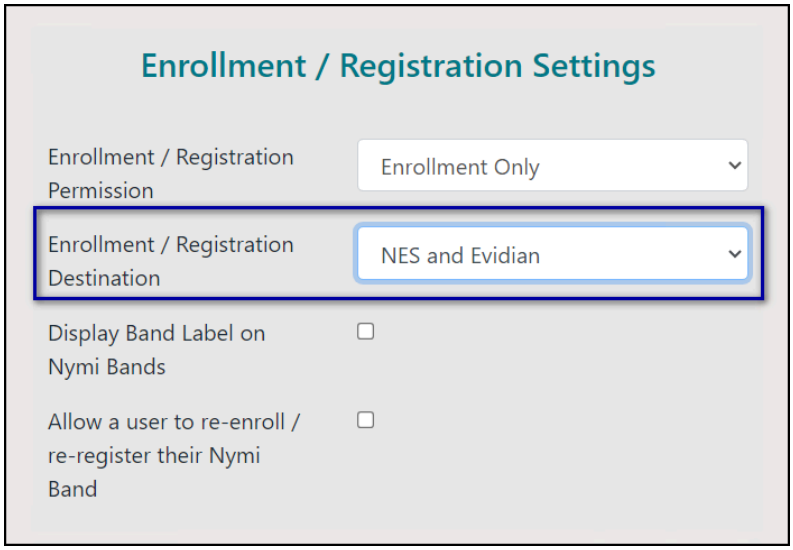


Figure 1: NES and Evidian enrollment option

Note: In CWP 1.17.0 and earlier the list name is **`Enrollment Destination`**.

6.3.2 - Installing and Configuring the Evidian EAM Controller software

Install the Evidian EAM Controller software on a server.

Before you begin

Obtain a valid EAM license file.

About this task

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

Note: The installation of the Evidian EAM Controller software requires that you restart the server.

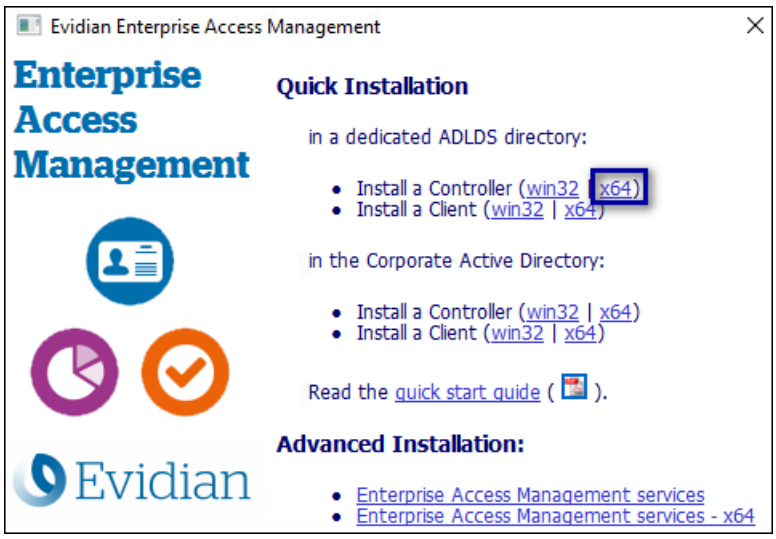
Procedure

1. Log in to the server as a local administrator.
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. Double-click the *C:\Downloads\EAM-v10.0x.xxxxxxx\Start.hta* file, and on the **`Open File – Security Warning window`**, click **`Run`**.

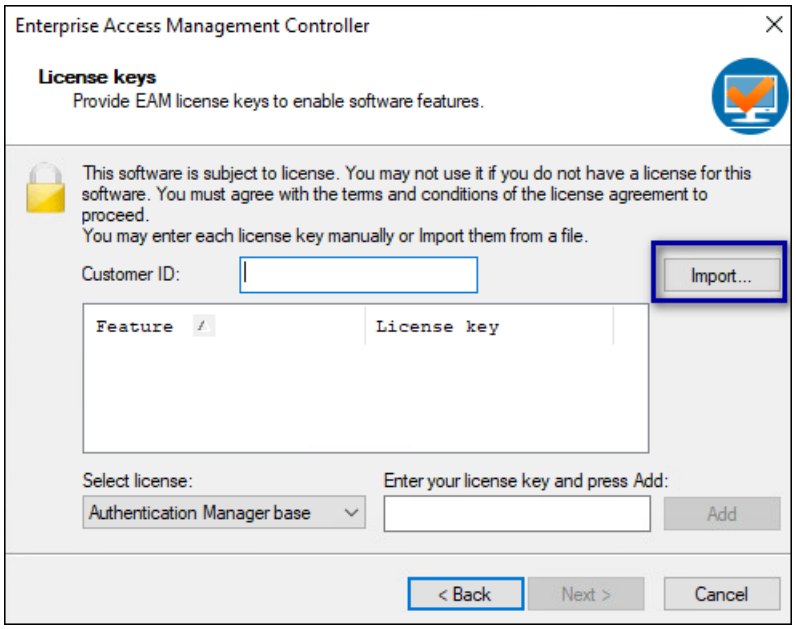
   Note: Note: If you run the *hta* file using Microsoft Explorer, which has enhanced security settings, you may experience issues. Create an exception, or alternatively, run the *.exe* file

(for example, *ESSOControllerSetup-Dedicated.exe*) directly from *EAM-v10.0x.XXXX \QuickInstall.x64\Controller* folder and then proceed to step 7.

4. 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.



5. On the `User Account Control` window, click **`Yes`**.
6. On the `Welcome to the EAM Controller installation assistant` window, click **`Next`**.
7. On the `License keys` window, click **`Import`**, as shown in the following figure.



8. In the `Open` window, select the license file in the *Downloads* directory, and the click **`Open`**.
   If you do not see the file, select **`All Files *.*`** from the file type list.
9. On the `EAM Controller configuration` window, click **`OK`**.

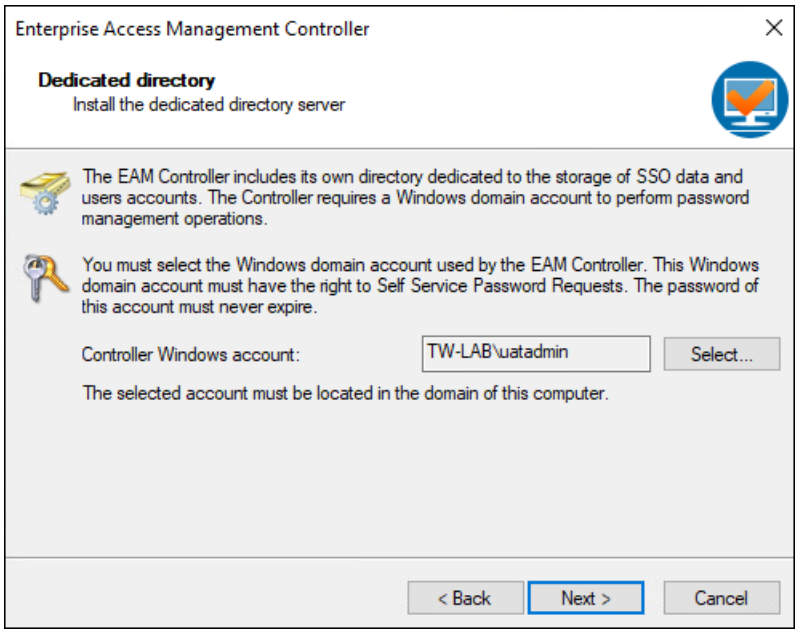
10. On the `License keys` window, click **`Next`**.
11. On the Storage for security objects window, click **`Next`**.
12. On the `Dedicated Directory` window, click **`Select`**.
13. In the `Dedicated directory` window, type the username and password for a domain account that will act as the dedicated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

    Specify an account that matches the following requirements:

    - Local administrator access to the server
    - Password never expires

14. Click **`OK`**.

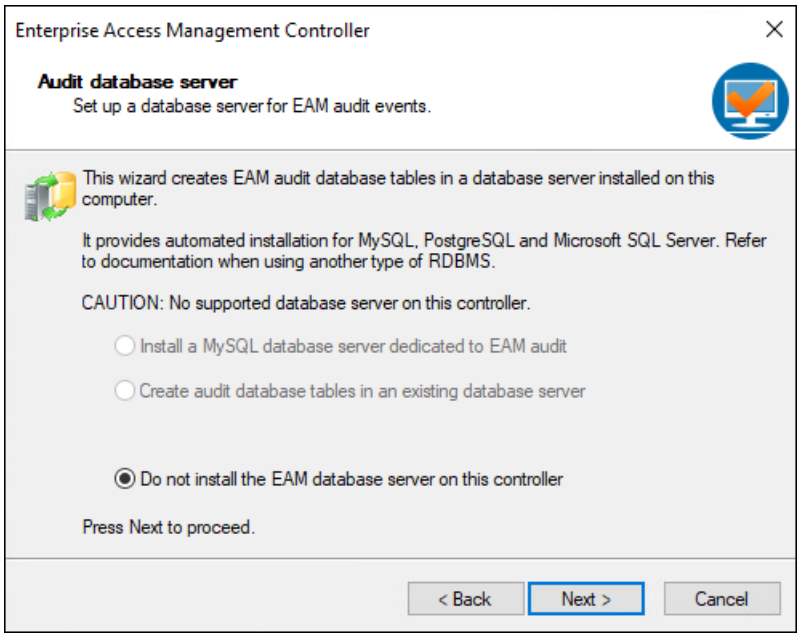
    The domain account displays in the **`Controller Windows account`** field, as shown in the following figure.



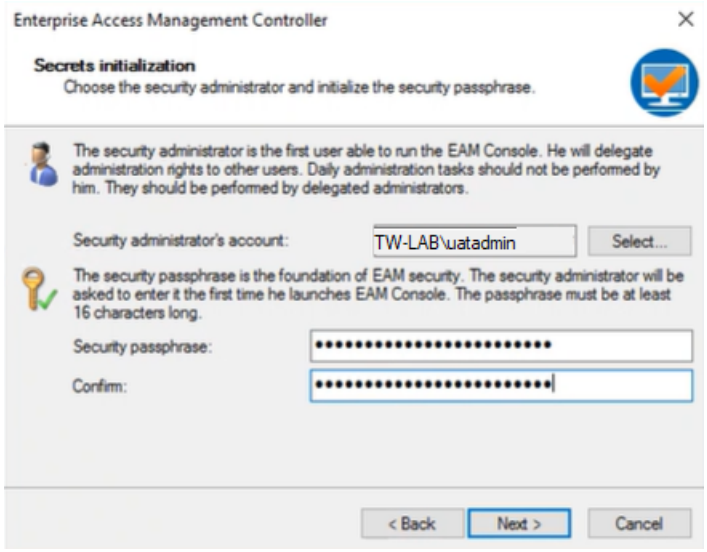
15. On the `Dedicated Directory` window, click **`Next`**.

    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.

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



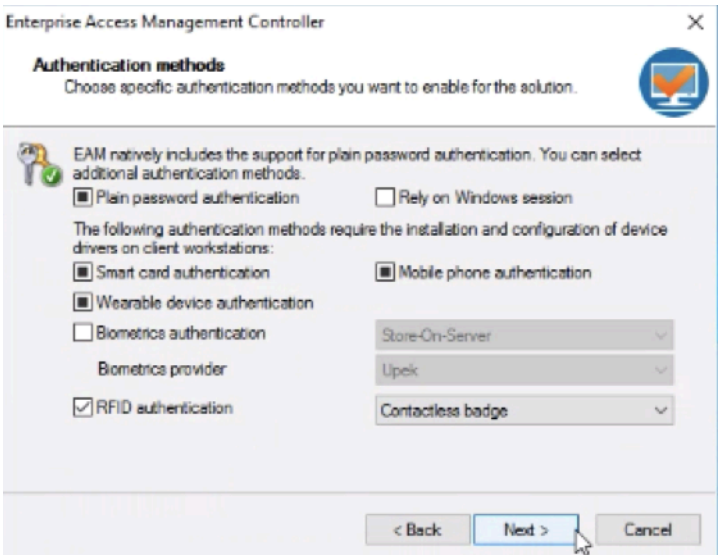
17. On the `Secrets Initialization` window, in the **`Security Passphrase`** and **`Confirm`** fields, type a security passphrase, as shown in the following figure.



Note: Ensure that you make a note of the passphrase. The first time each EAM administrator connects to the Evidian EAM Management Console for the first time, the user is prompted to type the passphrase.

18. Click **`Next`**.

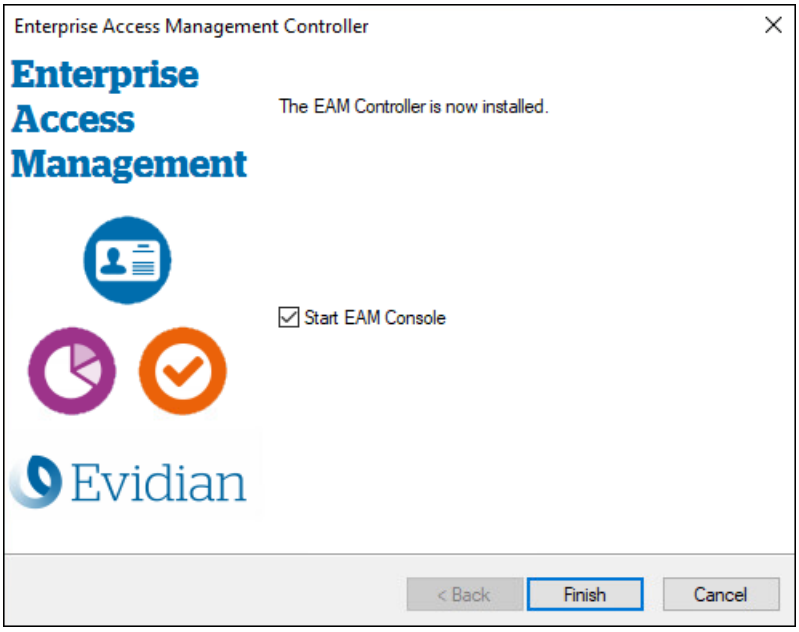
19. On the `Authentication methods` window, select **`RFID authentication`**, and leave the default selection **`Contactless badge`** from the drop-down list, as shown in the following figure. Click **`Next`**.



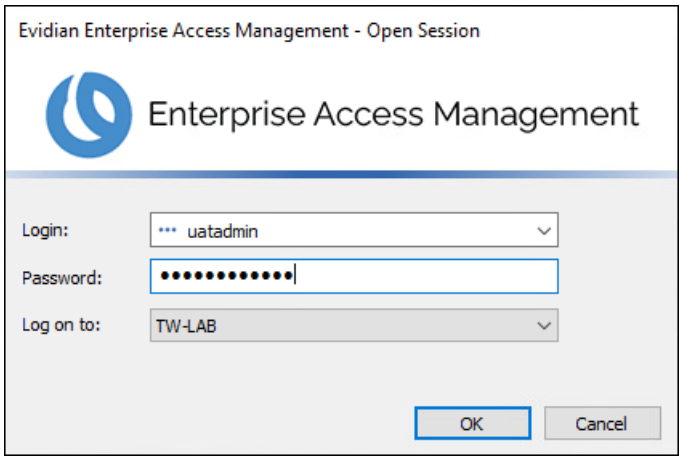
20. On the `Software installation` window, click **`Next`**.

The Windows Installer window appears, and the installation process begins.

21. 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`**.

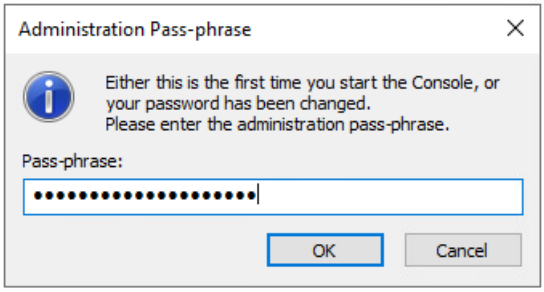


22. On the `Evidian Enterprise Access Management – Open Session` window, type your EAM administrator username and password, and then select the domain to which you want to log on, as shown in the following figure. Click **`OK`**.



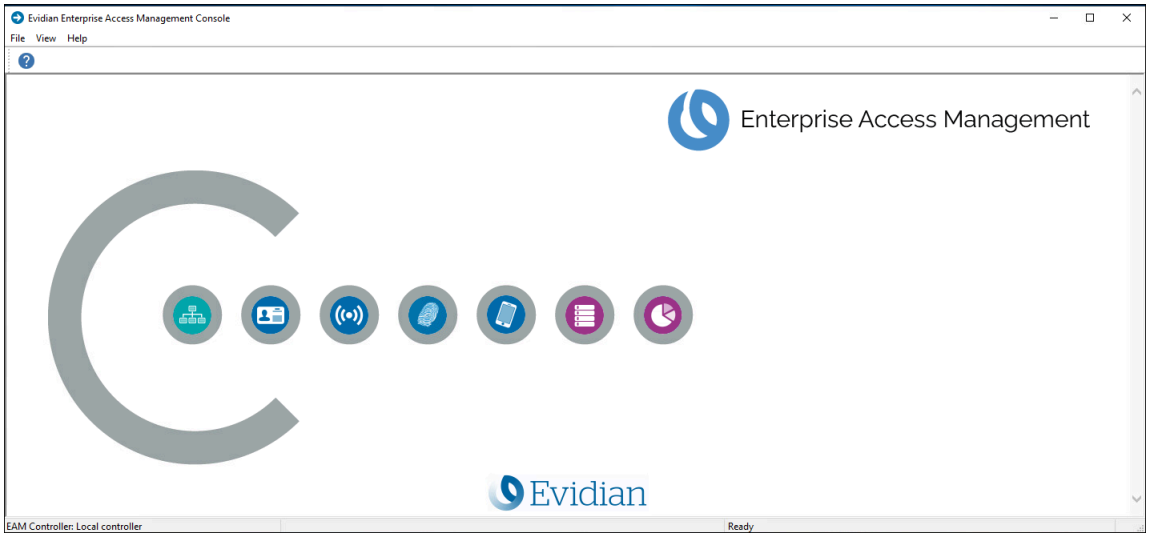
23. On the `Administration Pass-phrase` window, type the 16-character passphrase that you created in the `Secrets Initialization` window, and then click **OK**.

The following figure provides an example of the `Administration Pass-phrase` window.



Results

The Evidian EAM Management Console launches, as shown in the following figure.



6.3.2.1 - Obtaining the TokenManagerStructure file for the Evidian EAM Controller

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

6.3.2.2 - Defining the Authentication Method and Enabling Manage Access Points

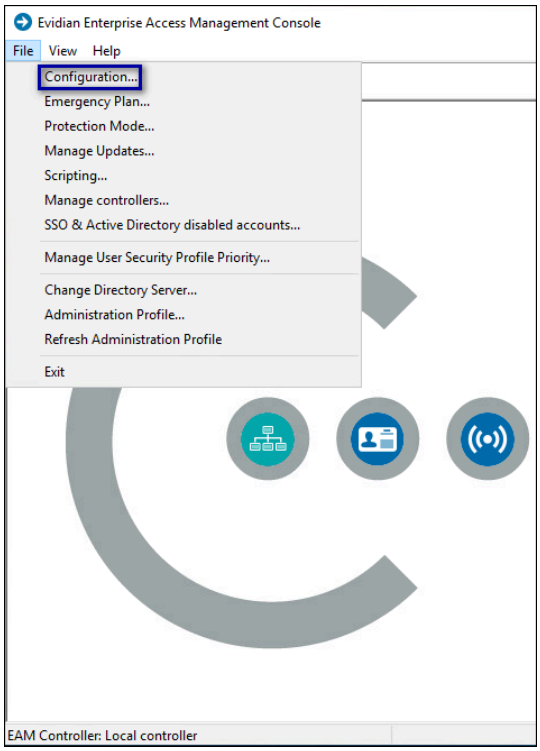
The Nymi Band uses an authentication method to communicate with the Evidian Authentication Manager and perform authentication tasks.

About this task

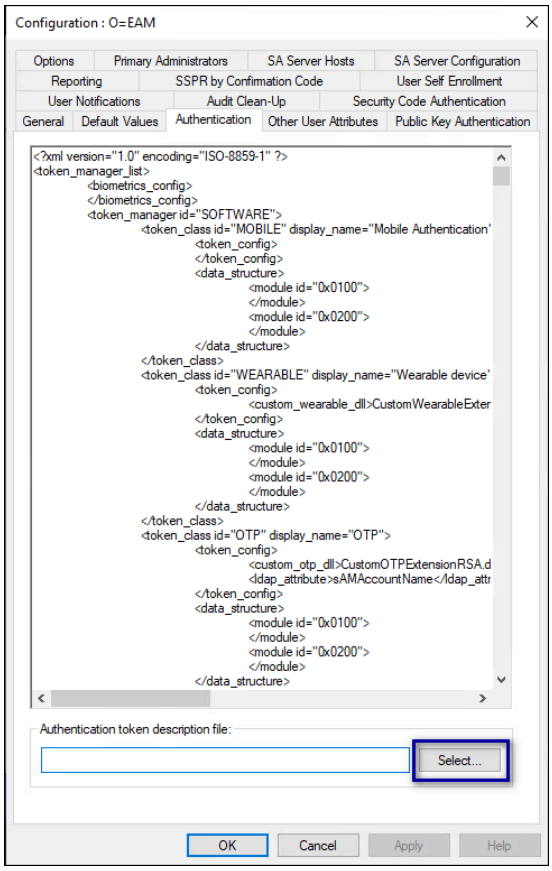
Perform the following steps to define the default authentication method that is used by the Evidian EAM Clients.

Procedure

1. On the Evidian EAM Management Console, from the **`File`** menu, select **`Configuration`**, as shown in the following figure.



2. On the **`Authentication`** Tab, click the **`Select`** button, as shown in the following figure.



3. In the `Open File` dialog, navigate to the directory that contains the TokenManagerStructure file, select the TokenManagerStructure file, and then click **`Open`**.
4. Click **`Apply`**, which will validate the structure of the file.
5. Click **`OK`**.
6. Close the `EAM Console` window.
7. Run *regedit* and navigate to *HKEY_LOCAL_MACHINE\SOFTWARE\Enatel\WiseGuard \FrameWork\Config*.
8. Edit the **`ManageAccessPoints`** key and change the value to ***`1`***, as shown in the following figure.

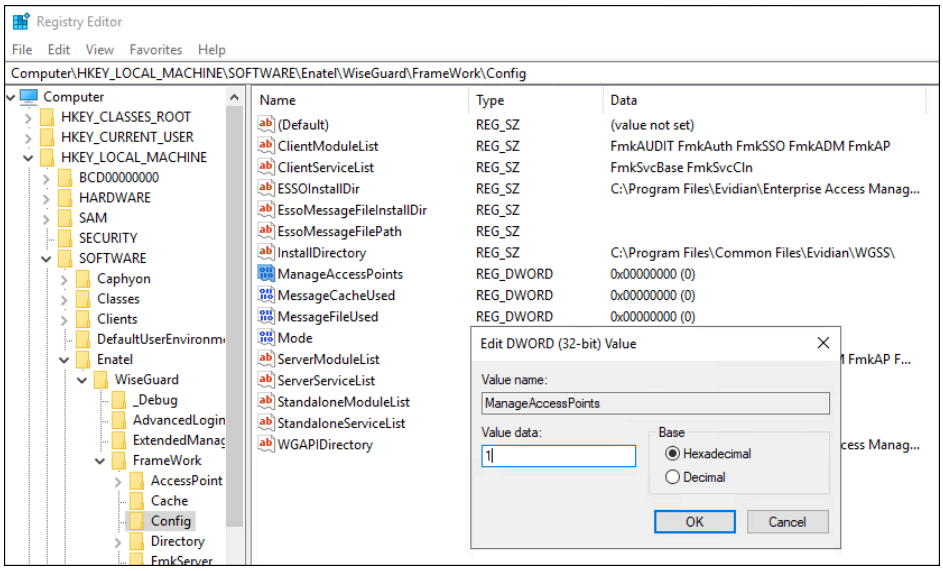


Figure 2: Manage Access Points Registry Setting

9. Click **OK**.
10. Restart the **Enterprise Access Management Security Services** service.

6.3.2.3 - Creating the Access Point Profile for Wearable Mode

Perform the following steps to create an access point profile that supports wearable mode.

About this task

Nymi recommends that you modify the access point profile to change the following behaviour:

- To reduce the amount of time that it takes to complete an authentication task with the Nymi Band, you can configure the user terminals to cache login information.
- To prevent the Evidian software from loading unnecessary authentication methods, select only the authentication methods that the Nymi with Evidian solution requires.
- To use the inclusion group.

Procedure

1. From the Evidian EAM Management Console, expand **EAM > Evidian Enterprise Access Management > User Access**.
2. Right-click **AccessPoint Profiles**, and then select **New > Access Point Security Profile**, as shown in the following figure.

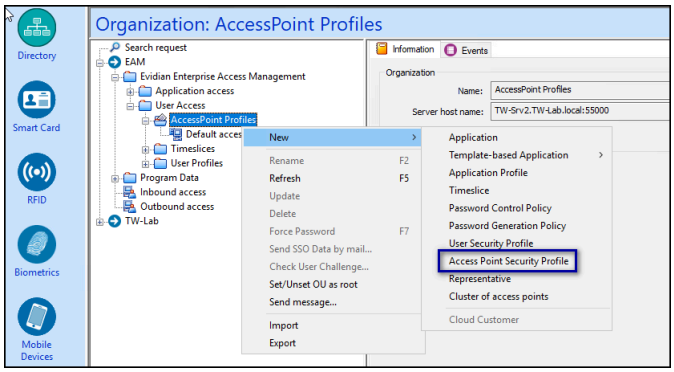


Figure 3: New Access Point Profile menu option

3. In the **`Name`** field, type ***Wearable-only***.
4. In the **`Authorized authentication methods`** section, ensure that only the following methods are selected:

   - Password
   - RFID Pcsc
   - Wearable

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

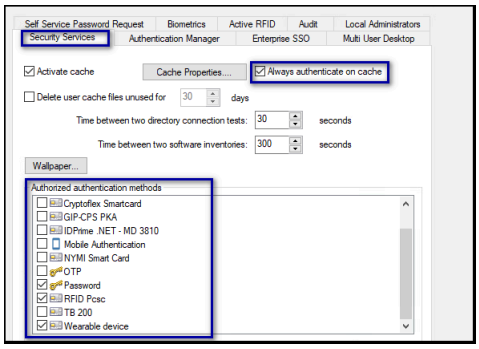


Figure 4: Access Point Profile Configuration tab

5. Click **`Apply`**.
6. >On the **`Configuration`** tab, select the **`Authentication Manager`** tab, and then click **`Manage Accounts`**.
7. Click **`Add`**.
8. In the `Select Group` window, expand you domain, select **`Users`**, and then select the AD inclusion group, and then click **`OK`**.
9. In the **`Group`** table, select the inclusion group, and then click **`Change meaning`**.
   The value in the **`Meaning`** column for the group in the group table changes to **`Included`**.

   The following figure provides an example of the **`Group`** table.

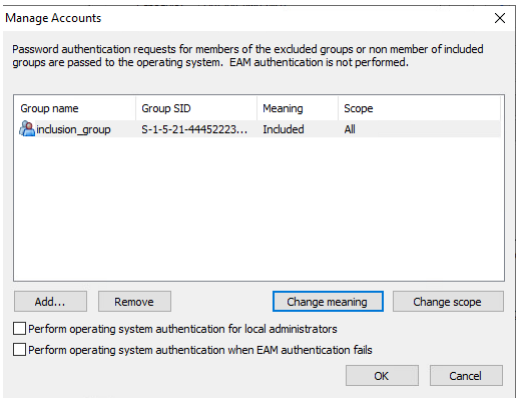


Figure 5: Inclusion Group table

10. For deployments that use Authentication Manager only, select the following options:
    - Perform operating system authentication for local administrators.
    - Perform operating system authentication when EAM fails.

    Note: Authentication Manager is module that you install on client machines that allow user to tap their Nymi Band to log into the Windows desktop.
11. Click **OK**.
12. Click **Apply**.

Assigning the Access Point Profiles to User Terminals

To ensure that Assign the access point profile to each user terminal on which you will install the Evidian EAM Client software, including Citrix/RDP servers.

Before you begin

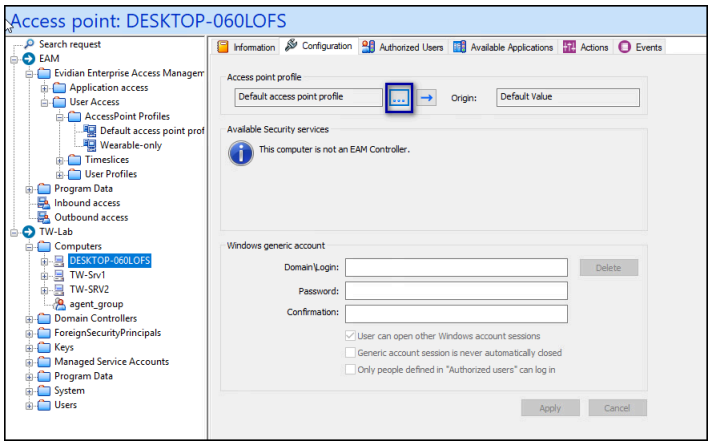
Assign the wearable profile to the enrollment terminal machine.

About this task

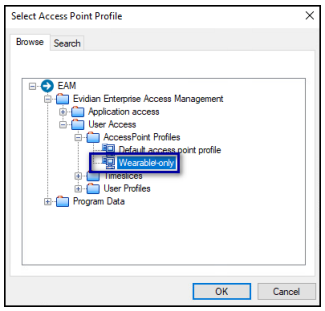
Perform the following steps in the Evidian EAM Management Console.

Procedure

1. From the left navigation panel, expand **your_domain > Computers**, and then select the groups of machines on which you will install the Evidian EAM Client.
2. On the **Security Profiles** tab, in **Access Point Profiles** section, the click the ellipses (...), as shown in the following figure.



3. In the **`Select Access Point`** pop-up, expand **`EAM > Evidian Enterprise Access Management > User Access > Access Point Profiles`**, and then select the access point profile that you created.



4. Click **`OK`**.
5. On the `Configuration` tab, click **`Apply`**.

6.3.2.4 - Creating the User Profile for Wearable

User Profiles provide you with the ability to configure Evidian behaviour for multiple user accounts.

About this task

Perform the following steps in the on all user profiles for users that use their Nymi Bands in the wearable configuration.

Procedure

1. From the **`Directory`** window, navigate to **`EAM > Enterprise Access Management`**.
2. Right-click **`User Profiles`**, and then select **`New > User Security Profile`**.
3. In the **`Name`** field, type ***Wearable-only.***
4. On the **`Authentication`** tab, in the **`User authentication methods`** section, ensure that only the following methods are selected:
   - Password

- RFID Pcsc
- Wearable

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

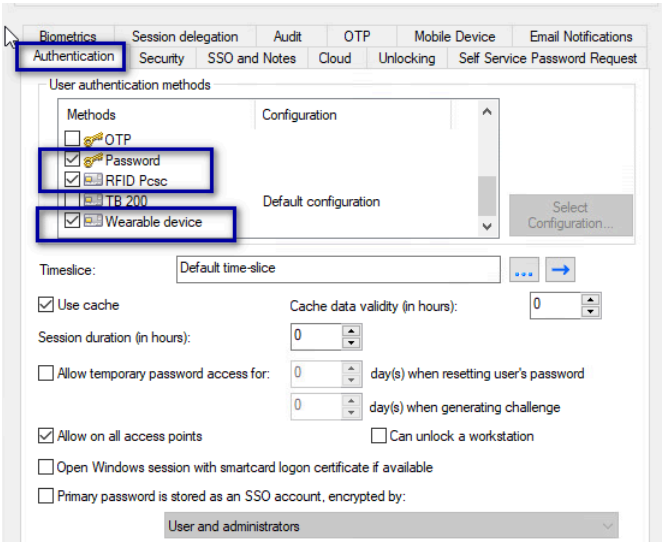


Figure 6: User Profile Authentication tab

5. Click **`Apply`**.

Assigning Users to the Wearable User Profile

Perform the following steps for each user that will use their Nymi Band in Wearable mode.

Procedure

1. In the left navigation pane of the Evidian EAM Management Console, navigate to **`your_domain > Users`**, and then select the user.
2. On the **`Security Profiles`** tab, click the ellipses(...), as shown in the following figure.
3. On the `Select User Profile` pop up, expand **`EAM > Evidian Enterprise Access Management > User Access > User Profiles`**, and the select the user profile, as shown in the following figure.

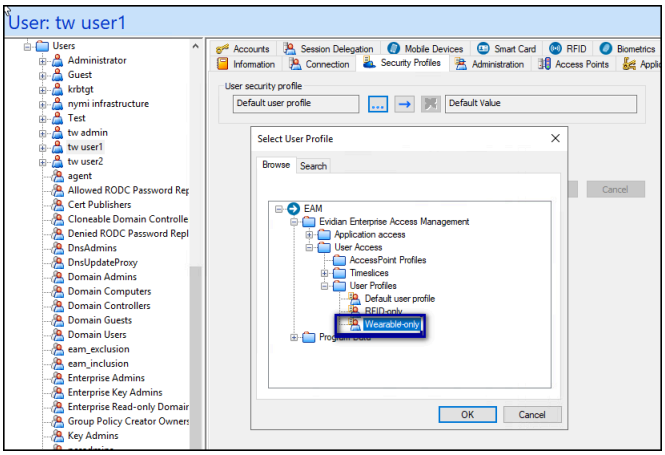


Figure 7: Select Wearable User Profile

4. Click **OK**.
5. On the **Security Profiles** tab, click **Apply**.
6. In the left navigation pane of the Evidian EAM Management Console, navigate to **your_domain > Users**, and then select the user.

6.3.2.5 - Modifying EAM Settings to Support Coexistence with other Solutions

If 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 in the Evidian EAM Management Console to modify the settings in the access point profile, to prevent unexpected desktop locks when performing a Nymi Band tap in the Nymi-integrated MES application.

Procedure

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

Results

A user cannot perform an 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.

6.3.2.6 - Configuring Additional EAM Primary Administrators

Nymi strongly advises you to add additional administrators to the Evidian EAM Controller.

About this task

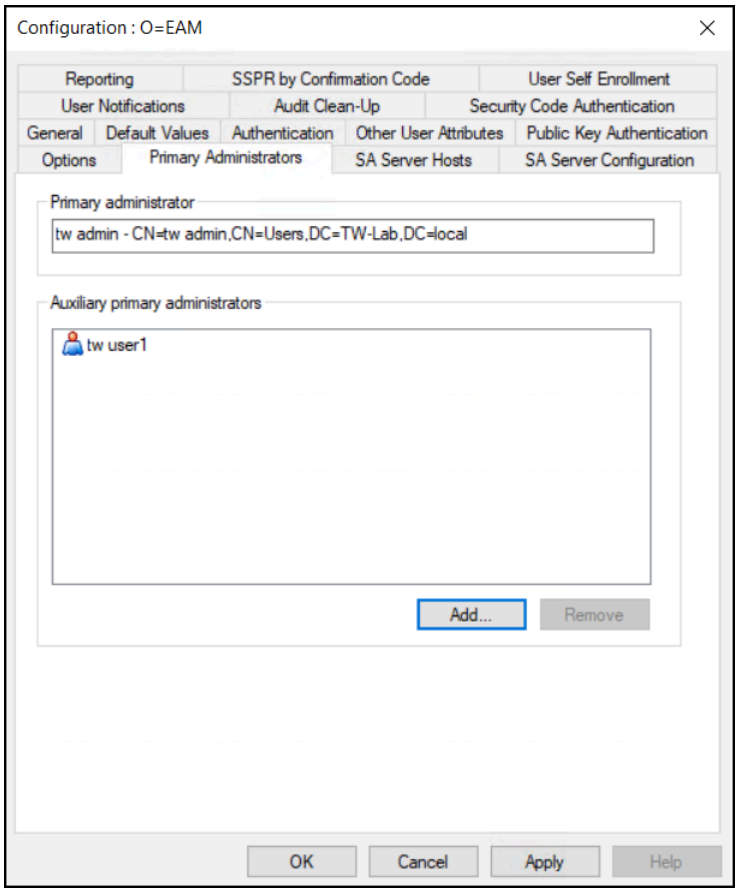
By adding at least one additional auxiliary primary user, you ensure that you have full access to the Evidian EAM Controller in the case where the primary administrator is locked out of the Evidian EAM Controller, for example, if the password of the primary administrator changes.

Procedure

1. Log into the Evidian EAM Management Console and click **`Accounts and access rights management`**  .
2. From the **`File`** menu, select **`Configuration`**, and then click the **`Primary Administrators`** tab.
3. Click **`Add`**.
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`**.

   The following figure provides an example of the screen with one auxiliary primary administrator.



7. Click **`Apply`**.
8. Click **`OK`**.
9. Close the Evidian EAM Management Console.

6.3.2.7 - Delegating an Administrator Role to a User

You can delegate the privileges to a user, to allow them limited access to the Evidian EAM Management Console.

Procedure

1. Log into the Evidian EAM Management Console with a user account that is a primary EAM administrator.
2. Click on the **`Account and Access Rights Management`** icon.
3. In the Evidian EAM Management Console, select the **`Directory`** panel.
4. 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.

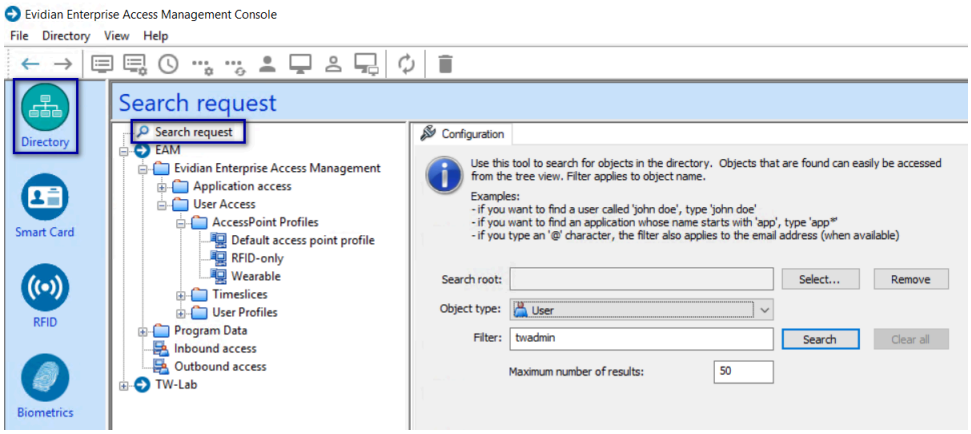


Figure 8: Search request window

5. Click **`Search`**.
6. Select the user from the search results.
7. On the **`Administration`** tab, click **`Delegate`**, as shown in the following figure.

Figure 9: Delegate option

8. In the **`Administration Profiles`** section, click **`Add`**.

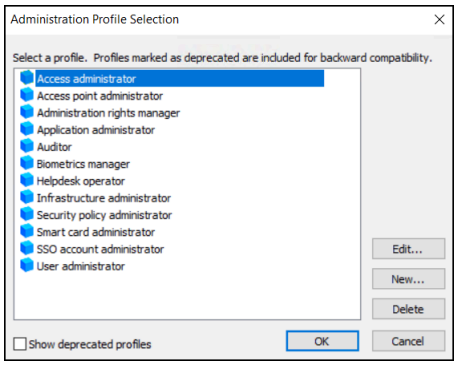


Figure 10: Add Administration Profiles

9. In the **`Administration Profiles Selection`** window, select **`Access administrator`**, as shown in the following figure.

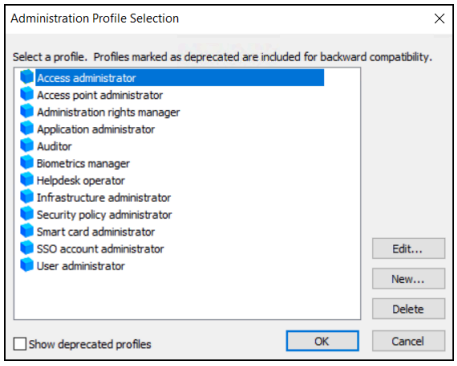


Figure 11: Administration Profiles Selection window

10. Click **`OK`**.
11. On the **`Administration`** tab, click **`Apply`**.

6.3.2.8 - Enabling LDAPS Support on the Evidian EAM Controller

Evidian Authentication Manager and Enterprise SSO 10.0 evolution 2 patch level 3 and later supports LDAPS on AD LDS.

Before you begin

Install LDAPS on AD LDS. Microsoft provides more information.

About this task

Perform the following steps on the Evidian EAM Controller.

Procedure

1. Run *regedit.exe*.
2. Navigate to *HKEY_LOCAL_MACHINE\SOFTWARE\Enatel\WiseGuard\FrameWork*.
3. Right-click *WGDirectory*, and then select **`New > DWORD (32-bit) value`**
4. In the **`Value`** file, type ***SSL***.

5. Double-click the **SSL** key, and in the **Value data** field, type ***1***.
6. In the *ServerList* key, confirm that the path to the AD LDS instance with the secure port appears. For example, ***srv-ssl.ssl.lan:636.***.
7. Close `Registry Editor`.

6.3.3 - 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 Evidian EAM Controller machine, ensure that the Evidian service account has the right to log in locally and is a member of the local Administrators group.
- Assign the Evidian service account db_owner rights to the Audit Database.
- On the SQL server, ensure that the SQL browsing service is running.

6.3.3.1 - 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 *MSSQLV2.sql* file.

Results

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

What to do next

Ensure that the SQL service account has db_create access to the audit database.

6.3.3.2 - Configuring the Evidian EAM Controller to Use the Audit Database

Before you begin

Download the following dependency software:

- Visual C++ Redistributable for Visual Studio 2015-2022 x64 version 14.34 or later

- Visual C++ Redistributable for Visual Studio 2015-2022 x86 version 14.34 or later
- Microsoft OLE DB Driver for SQL (x64)

Note: The x64 installer for Microsoft OLE DB Driver installs both the 64-bit and 32-bit driver, the x64 installer for the Microsoft Visual C++ Redistributable does not install the 32-bit binaries. You must install both the x86 and x64 versions of the Visual C++ redistributable package before you install the Microsoft OLE DB Driver for SQL (x64) package. The installation of the dependency software might require a reboot.

About this task

Perform the following steps on the Evidian EAM Controller.

Procedure

1. Run `Registry Editor` and perform the following steps:
   a) Navigate to *HKEY_LOCAL_MACHINE\SOFTWARE\Enatel\WiseGuard\FrameWork \AuditSrv*
   b) Create a new DWORD (32-bit) value named *UseSQLServerSyntax*.
   c) Edit the key and in the **`Value Data`** field, type ***1***
   d) Click **`OK`**.
   e) Close `Registry Editor`.
2. Stop the **`Enterprise Access Management Security Server`** service.
3. Install the dependency software in the following order:
   - Visual C++ Redistributable for Visual Studio 2015-2022 x86 version 14.34 or later
   - Visual C++ Redistributable for Visual Studio 2015-2022 x64 version 14.34 or later
   - Microsoft OLE DB Driver for SQL (x64)
4. Start the **`Enterprise Access Management Security Server`** service.
5. From the EAM installation package, navigate to the *..\EAM.x64\TOOLS\WGSrvConfig* folder.
6. Hold the **`Shift`** key, right-click *WGSRVConfig.exe*, and select **`Run as a different user`**.
7. In the `Run as a different user` window, specify the username and password of domain user has local administrator privileges.
8. Under **`Controller Configuration`**, click **`Configure local audit database`**, as shown in the following figure.

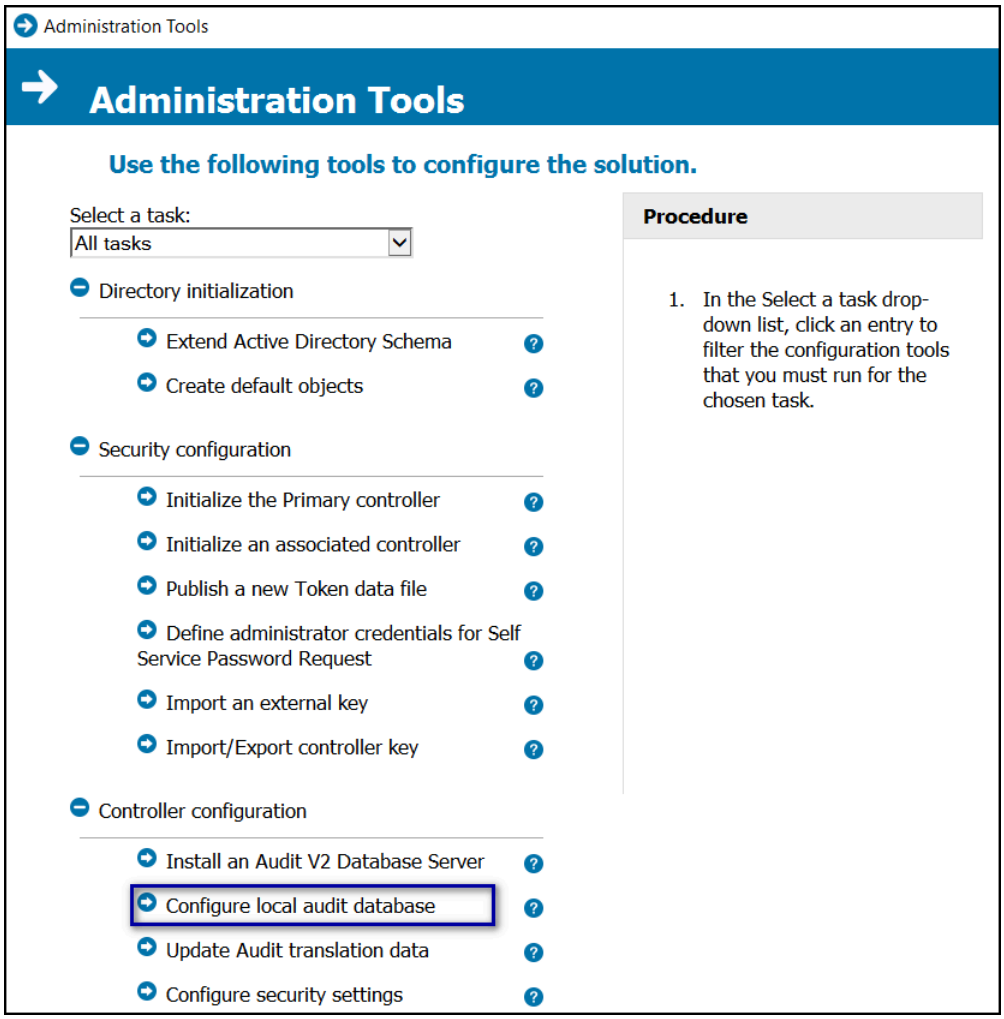


Figure 12: Configure local audit database option

9. In the **`Use existing corporate database`** section, next to **`Next to Data Source Name`**, click the ellipses (...).
10. Select **`Microsoft OLE DB Driver for SQL Server`** , as shown in the following figure.

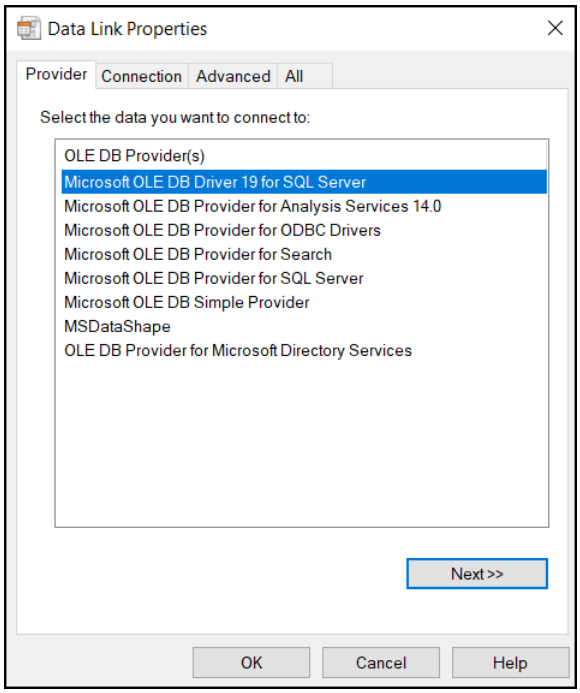


Figure 13: Microsoft OLE DB Driver for SQL Server driver option

11. Click **Next**.
12. In the **Data Link Properties**, perform the following actions:
    a) In the **Select or enter a server name** field, type FDQN of the SQL server.
    b) From the **Enter information to log on to the server** list, select one of the following options; the appropriate authentication method for your configuration.
        - If the SQL server uses Windows Authentication, select **Windows authentication**.
        - If the SQL server uses SQL Authentication, select **SQL authentication** and then type the username and password of the SQL account and select then **Allow saving password**.
    c) In the **Step 3** section, enable **Select the database**.
    d) From the list, select the EAM audit database.(**eamaudit**).

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

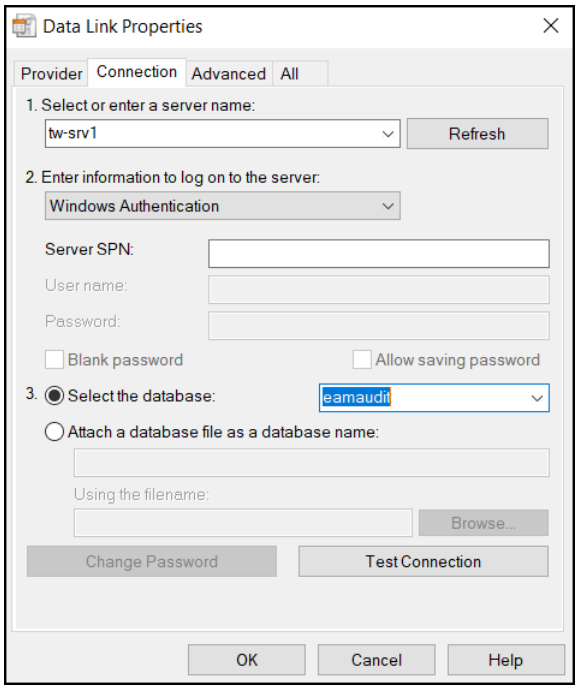


Figure 14: Select the database window

e) Click **`Test Connection`**.

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

g) Click **`OK`**.

h) On the `Credential to access the database` window, specify the username and password of the SQL account, and then click **`OK`**, as shown in the following figure.

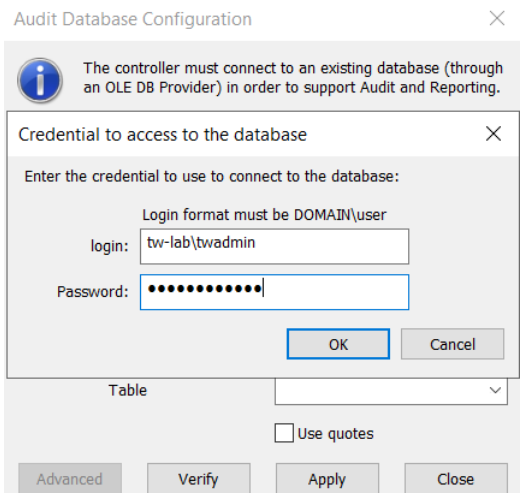


Figure 15: Credential to access the database window

The `Audit Database Configuration` window appears with information about the database.

i) On the `Audit Database Configuration` window, click **`Verify`**, as shown in the following figure.

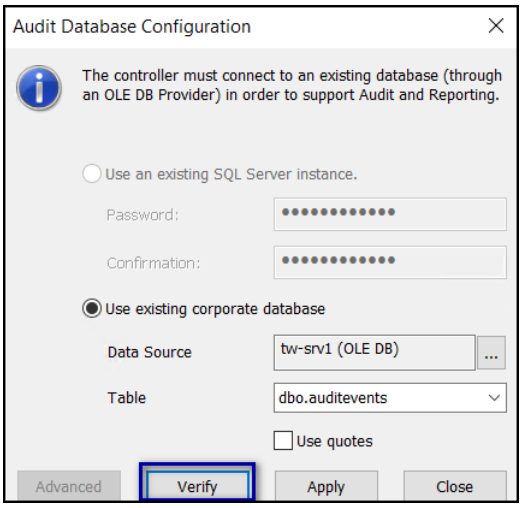


Figure 16: Audit Database Configuration window

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

k) Click **`Close`**.

13. On the `Administration Tools` window, in the click **`Update Audit translation data`**, as shown in the following figure.

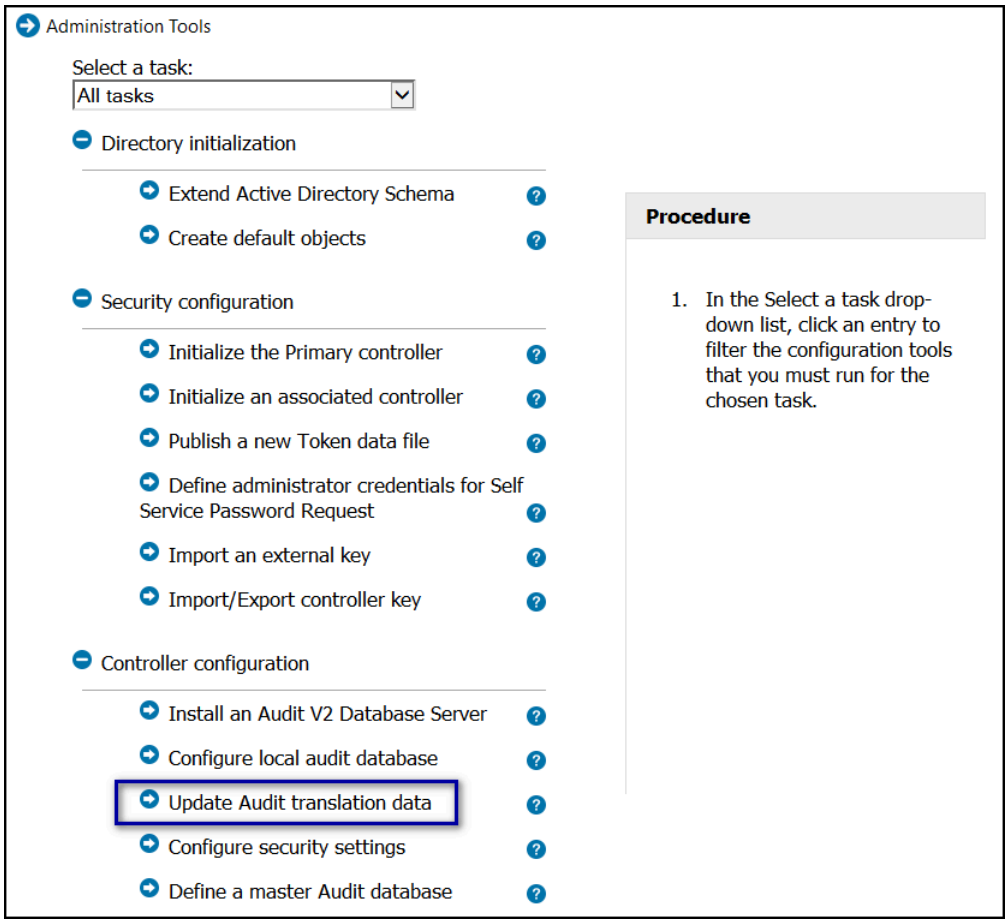


Figure 17: Update Audit translation data window

14. On the `Insert/Update Audit Metadata` window, perform one of the following actions:

- If you have a local and a central (master) database, select both the **`Import translations in local database`** and **`Import translations in master database`** options.
- If you only have a local database, select **`Import translations in local database`**.

The following figure provides an example of the `Insert/Update Audit Metadata` window.

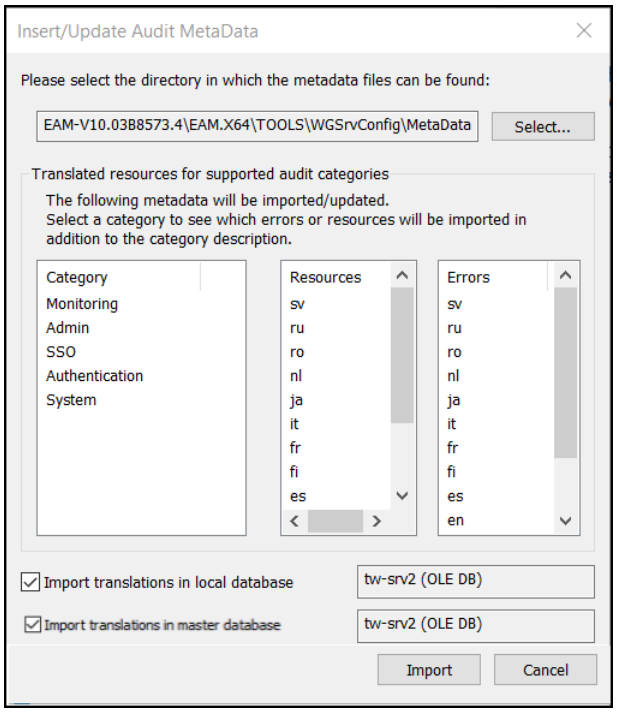


Figure 18: Update Audit translation data window

15. Click **`Import`**, and on the `EAM Configuration` pop-up, click **`OK.`**
16. Close the `Administration Tools` window.
17. Restart the **`Enterprise Access Management Security Services`** service.

What to do next

Launch Evidian EAM Management Console and click the **`Audit Reports`** button. Click **`Apply`**.

Customizing Audit Report Output

By default, Evidian audit queries and reports display user identification with a object GUID to protect user privacy. You can configure the audit queries and reports to display the AD username instead of the object GUID.

About this task

Perform the following steps in the Evidian EAM Management Console.

Procedure

1. From the **`File`** menu, select **`Configuration`**.
2. On the **`Other User Attributes`** tab, change the value in the **`Audit Attribute`** field from ***ObjectGUID*** to ***SAMAccountName***, as shown in the following figure.

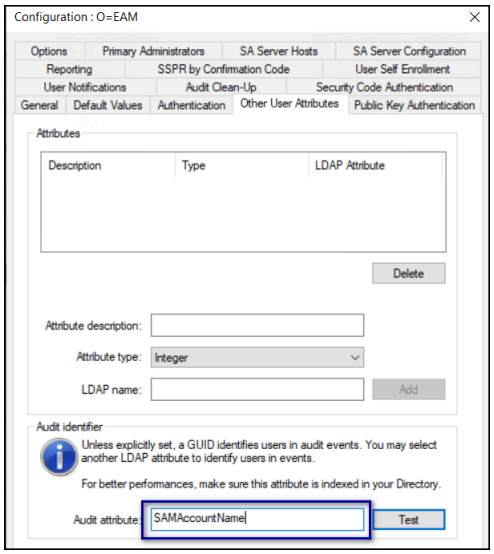


Figure 19:

3. Click **`Test`**. A popup appears with 10 random usernames in your directory, as shown in the following figure.

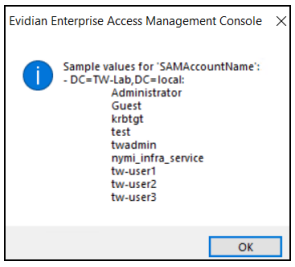


Figure 20:

4. Click **`OK`**.
5. Click **`Apply`**.
6. Click **`OK`**.
7. Stop the **`Enterprise Security Services`** service.
8. Navigate to the *C:\Program Files\Common Files\Evidian\WGSS\CacheDir* folder.
9. Select all the files, hold the **`Shift`** key down, and then select **`Delete`**, when prompted, click **`Yes`** to delete all files.
10. Start the **`Enterprise Security Services`** service.

6.4 - 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 Evidian EAM Client software on the enrollment terminal.

Note: Starting with CWP 1.19.0, you can silently install and configure the Nymi and Evidian client software. The application is in a folder named *ClientInstaller*. This feature requires advanced Connected Worker Platform knowledge. Contact your Nymi Solution Consultant to use the silent installer.

6.4.1 - Importing the Root CA certificate

Perform the following steps only if the Root CA issuing the TLS server certificate is not a Trusted Root CA, for example, when you use a self-signed TLS server certificate).

Before you begin

Install the Root CA on the following machines:

- All user terminals, including user terminals that run Nymi-Enabled Applications
- Enrollment terminal
- Centralized Nymi Agent

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.

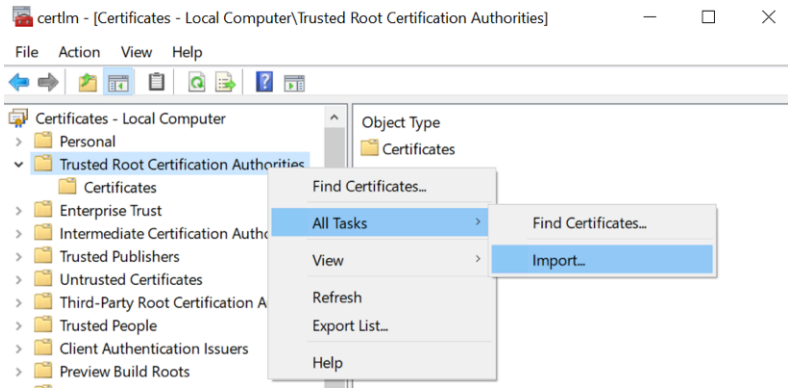


Figure 21: certlm application on Windows 10

3. On the `Welcome to the Certificate Import Wizard` screen, click **`Next`**.
   The following figure shows the `Welcome to the Certificate Import Wizard` screen.

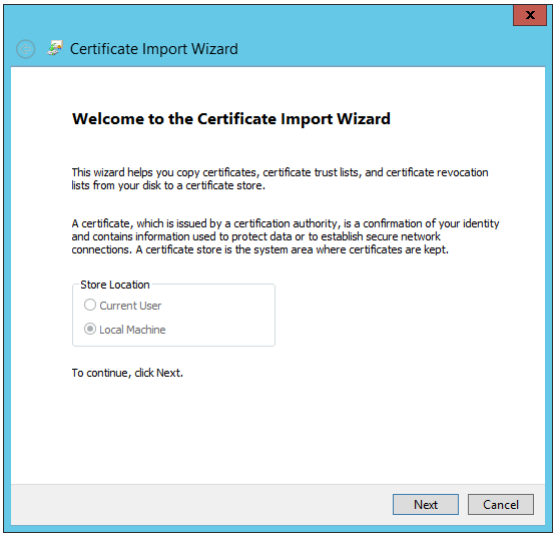


Figure 22: Welcome to the Certificate Import Wizard screen

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.

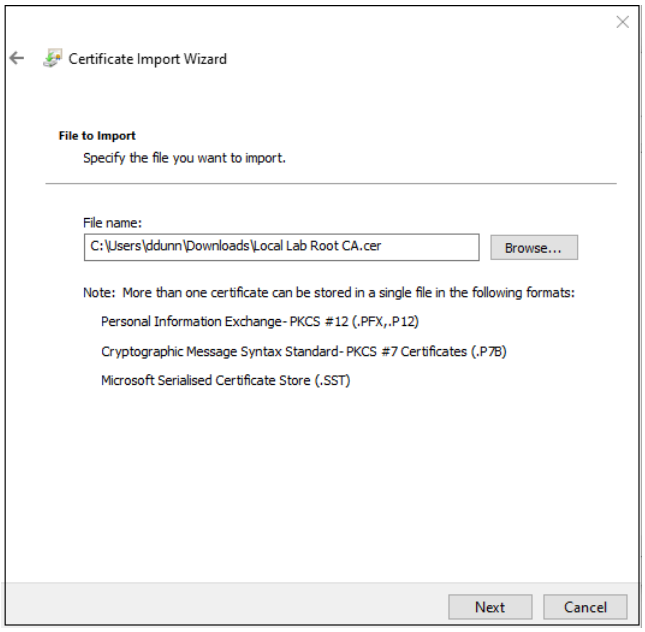


Figure 23: File to Import screen

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`**.

6.4.2 - 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.

6.4.3 - (Optional) Configuring the Communication Protocol

If you use the enrollment terminal to also access NEAs, perform the following steps to disable the legacy protocol.

About this task

Note: After you set this environment variable, user terminals cannot communicate with Nymi Bands that use pre-CWP 1.15.x firmware

Procedure

1. In the Windows search field, type ***env***, and then from the pop-up menu, select **`Edit the System Environment Variables`**.
2. Click **`Environment Variables`**.
3. In the **`System Variables`** section, click **`New`**, and the perform the following actions:
   a) In the **`Variable Name`** field, type *NYMI_NEA_SUPPORT_LEGACY_MODE*
   b) In the **`Variable Value`** field, type ***0***.
   The following figure provides an example of the new variable.

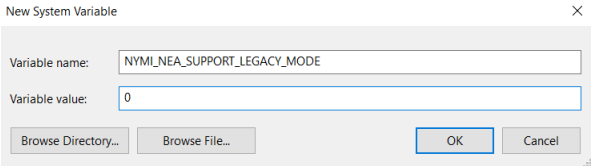


Figure 24: New System Variable window

   c) Click **`OK`**.

6.4.4 - Installing the Evidian EAM Client

Install the Evidian EAM Client on the enrollment terminal.

Before you begin

Before installing the Evidian EAM Client software:

- Complete the steps to configure the Evidian EAM Controller.
- Ensure that the machine is on the same domain as the Evidian EAM Controller.
- Obtain the Evidian license file from the Nymi Solution Consultant.

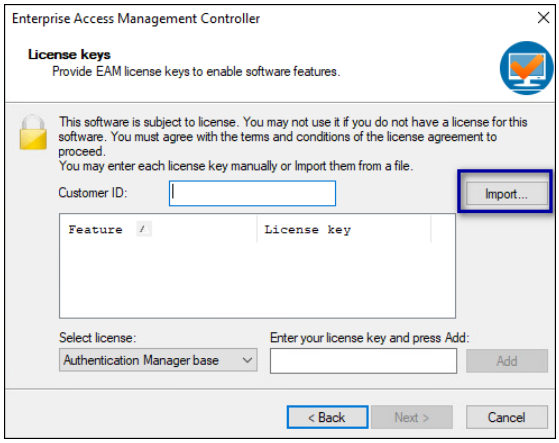
About this task

Perform the following steps on the enrollment terminal.

Procedure

1. Log in to the user terminal with an account that has Local Administrator access.
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. Double-click the *C:\Downloads\EAM-v10.0xxxxxxxx\EAMx64\Tools\WGConfig\WGConfig.exe* file.
4. On the `User Access Control` window, click **`Yes`**.
5. On the `Welcome to the Configuration Assistant` window, click **`Next`**.
6. If the required Microsoft Visual C++ Redistributable software is not installed on the server, the `Prerequisites` window appears. Click **`Next`** to install the software.
   The Windows Installer window appears.

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



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

   If you do not see the file, select **`All Files *.*`** from the file type list.

9. On the `Installation mode` window, leave the default option **`with a controller`** selected, and then click **`Next`**.

   The following figure provides an example of the `Installation mode` window.

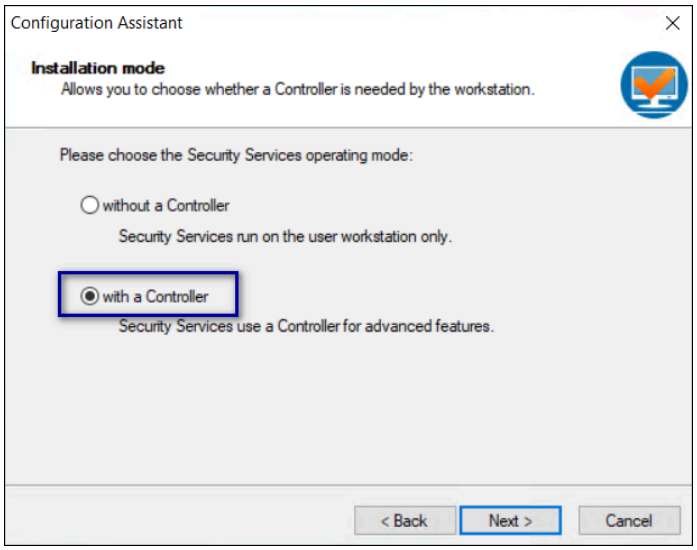


Figure 25: Installation mode window

10. On the `Users directory` window, leave the default option **`Microsoft Active Directory`** selected, and then click **`Next`**.

    The following figure provides an example of the `Users directory` window.

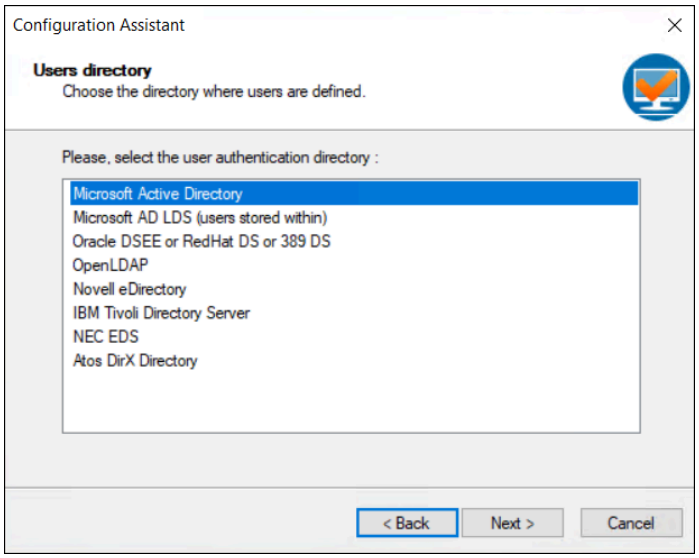


Figure 26: Users directory window

11. On the `Security repository` window, select the option **`Integrated with AD LDS: the security data is stored in an AD LDS server`**, and then click **`Next`**.

    The following figure provides an example of the `Security repository` window.

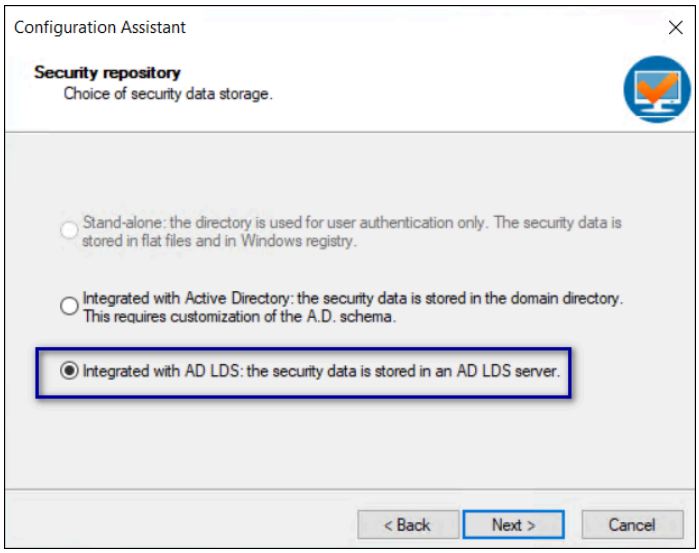


Figure 27: Security repository window

12. On the `LDAP Configuration` window, perform the following action:

    a) In the **`Name/address`** field, type the FQDN of the Evidian EAM Controller, and in the **`Port`** field, type ***55000***.

    b) Click **`Add`**.

    c) Leave the default option **`Use a dedicated naming context for the Evidian Enterprise Access Management data`** selected, and then in the **`Evidian Enterprise Access Management data context`** field, type ***O=EAM***.

    The following figure provides an example of the `LDAP Configuration` window.

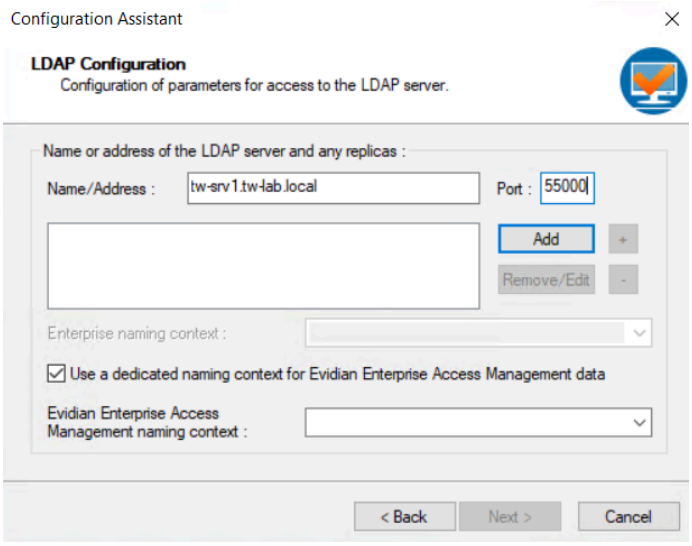


Figure 28: LDAP Configuration

d) Click **`Next`**.

13. On the `Access-point management` window, select **`Manage access points`**, as shown in the following figure, and then click **`Next`**.

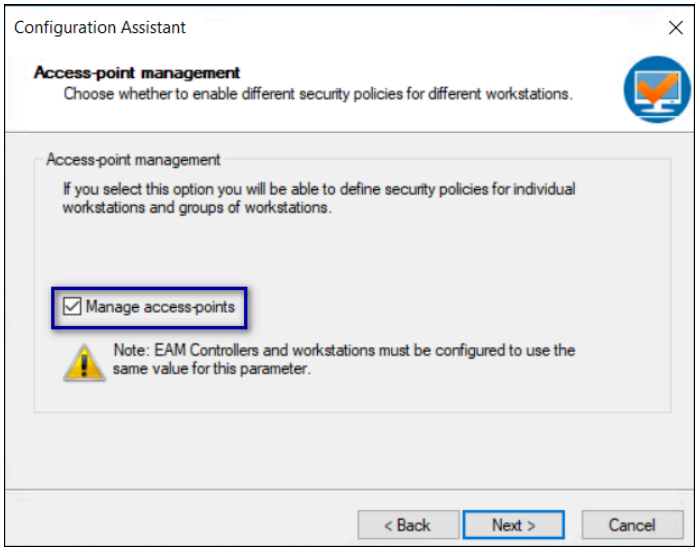


Figure 29: Access-point management window

14. On the `Restart Computer` window, leave the default selection **`Do not restart the computer`**, as shown in the following figure, and the click **`Finish`**.

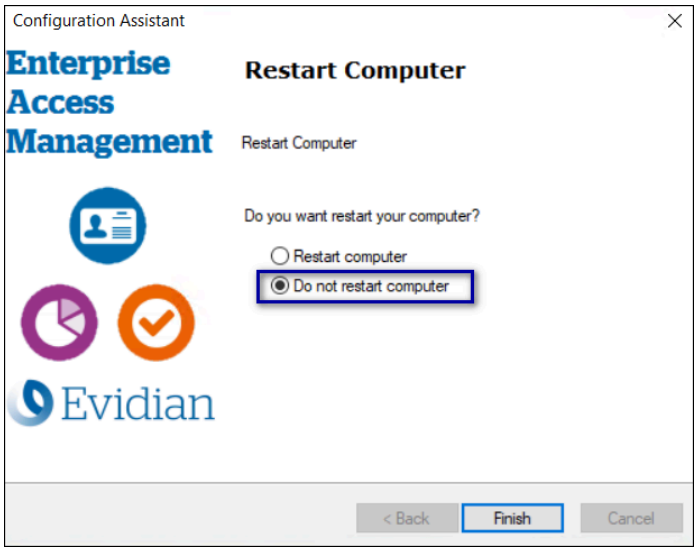


Figure 30: Restart Computer window

15.

6.4.5 - Installing the Evidian SSO Agent

The Evidian SSO Agent installation software provides you with the ability to install required and optional features such as Authentication Manager, the Evidian SSO Engine, the Evidian EAM Management Console and language support.

Before you begin

- Complete the steps to configure the Evidian EAM Controller.
- Determine the Nymi Band use cases. To use the Nymi Band to unlock user terminals, you will configure the Evidian EAM Client with Authentication Manager. To use the Nymi Band for SSO activities only, you will configure the Evidian EAM Client with Windows Login only.

About this task

Procedure

1. Install the required version of the Microsoft Visual C++ redistributable by double-clicking *C:\Downloads\EAM-v10.0xxxxxxxx\EAMx64\INSTALL\VCRedist_x64.msi*.

   Note: If the required version of Microsoft Visual C++ redistributable is already installed on the server, a pop-up screen briefly appears, and then disappears.
2. Double-click the *C:\Downloads\EAM-v10.0xxxxxxxx\EAMx64\INSTALL\ESSOAgent.msi* file.
3. On the `Enterprise Access Management Client Installation`, click **`Next`**.
4. On the `License Agreement` window, click **`I accept the license agreement`**, and then click **`Next`**.

   The following figure shows the `License Agreement` window.

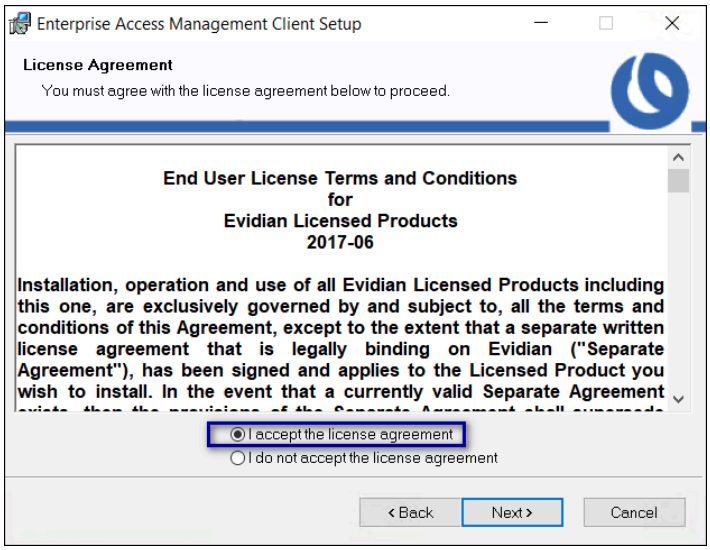


Figure 31: License Agreement window

5. On the `Destination Folder` window, accept the default, and then click **`Next`**.

   The following figure shows the `Destination Folder` window.

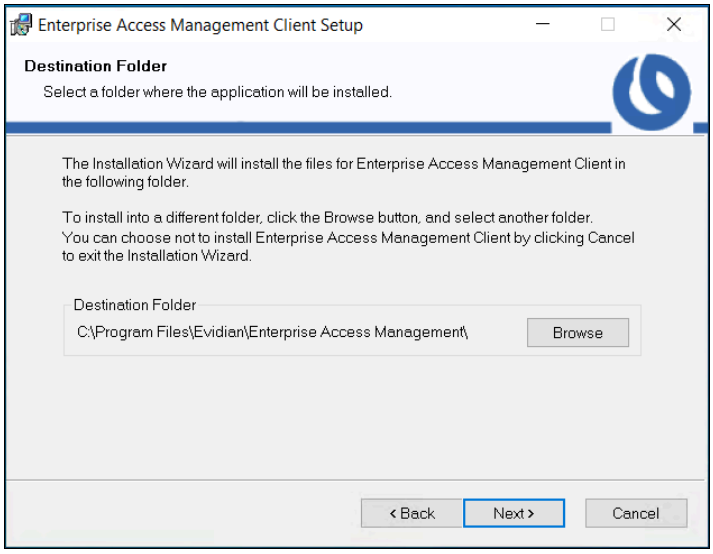


Figure 32: Destination Folder window

6. On the `Select Installation Type` window, select **`Custom`**, and then click **`Next`**.

   The following figure shows the `Select Installation Type` window.

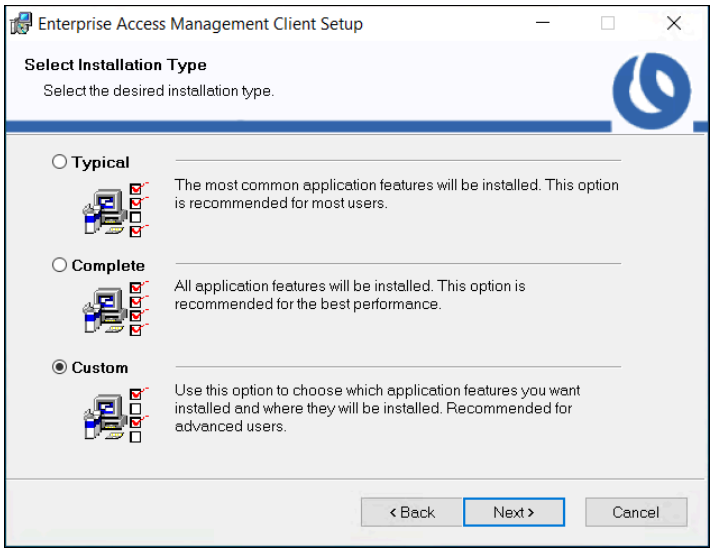
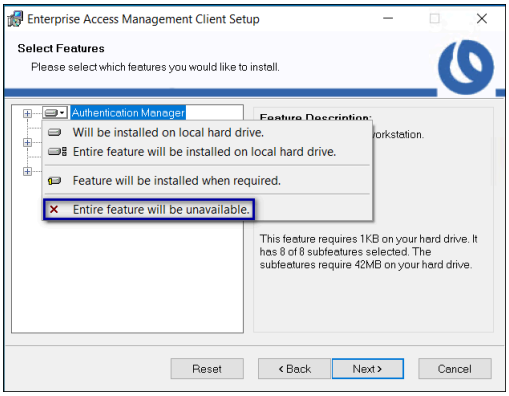
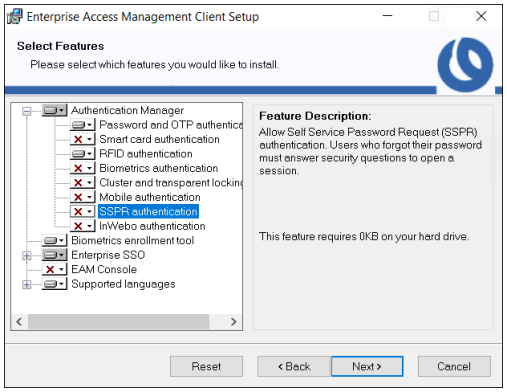


Figure 33: Select Installation Type window

7. On the `Select features` window, for **`Authentication Manager`** perform one of the following actions based on your Nymi Band use case:

   Note: Unless otherwise noted, leave the default option for a feature.

Option	Description
Do not use the Nymi Band to log into terminal.	Select **`Authentication Manager`**, and then select **`Entire feature will be unavailable`**. 
Use the Nymi Band to log into terminal	Expand **`Authentication Manager`**. For each of the following features: • Smart card authentication • Biometrics authentication • Cluster and transparency • Mobile authentication • SSPR authentication • InWebo authentication

Option	Description
	Select the feature, and then select **Entire feature will be unavailable**, as shown in the following figure.  The only features to install are **Password and OTP authentication** and **RFID authentication**.

8. Click **Biometric enrollment tool**, and then select **Entire feature will be unavailable**, as shown in the following figure.

   The following figure shows the `Select Features` window.

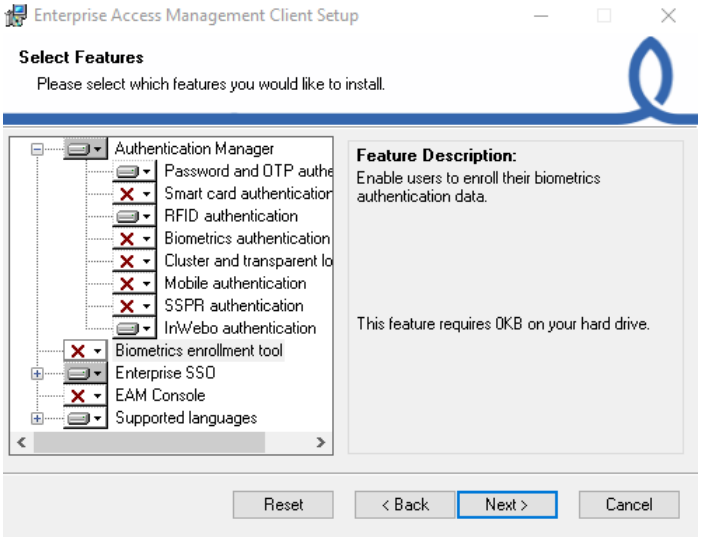


Figure 34: Select Features - Authentication Manager options and without Biometric enrollment tool

9. If you removed the **Authentication Manager** feature, and want the SSO Login window to open with the username of the user that logged into Windows, select **Integrate with Windows**, and then select **Entire feature will be installed on local hard drive**, as shown in the following figure.

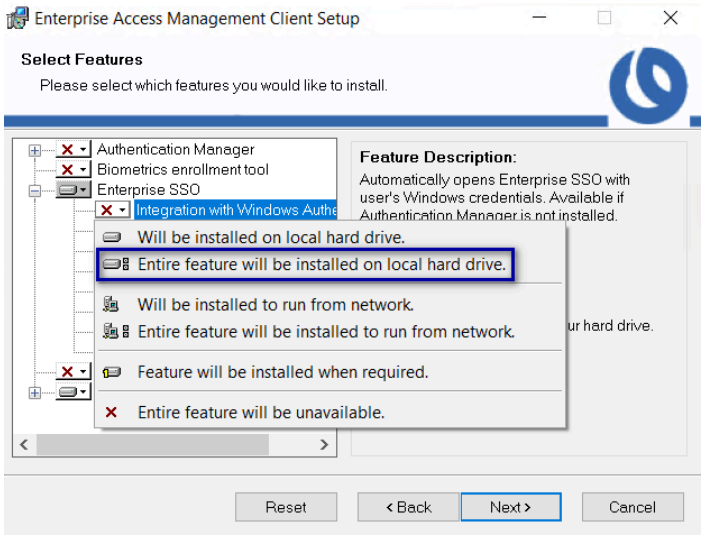
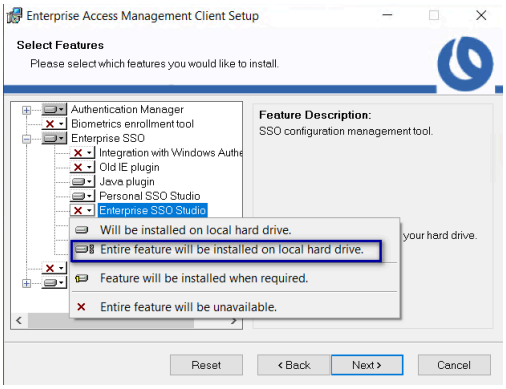
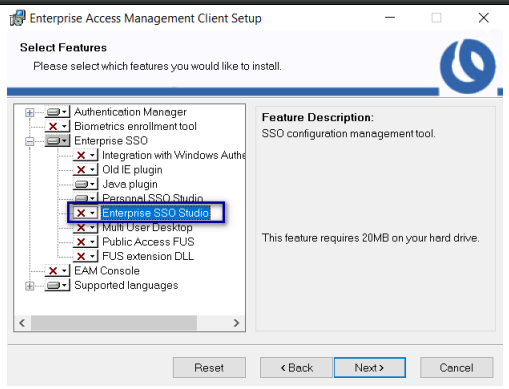
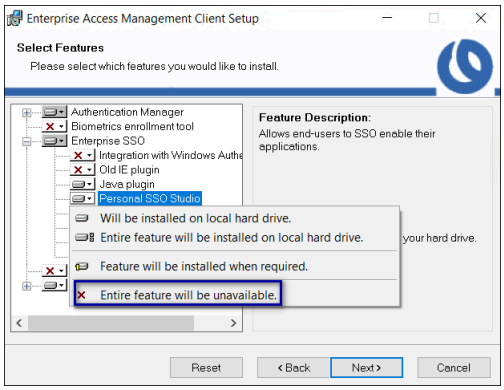


Figure 35: Integrate with Windows

10. For **`Enterprise SSO`**, perform one of the following actions based on your Nymi Band use case:

Note: Unless otherwise noted, leave the default option for a feature.

Option	Description
Use the Nymi Band for SSO	Click **`Enterprise SSO Studio`**, and then select **`Entire feature will be installed on local hard drive`**, as shown in the following figure. 
Use the Nymi Band for Windows login only	Leave the default **`Enterprise SSO`** configuration, as shown in the following figure.

Option	Description
	
All use cases	Click **`Personal SSO Studio`**, and then select **`Entire feature will be unavailable`**, as shown in the following figure. 

11. Select **`EAM Console`**, and then select **`Entire feature will be installed on local hard drive`**, as shown in the following figure.

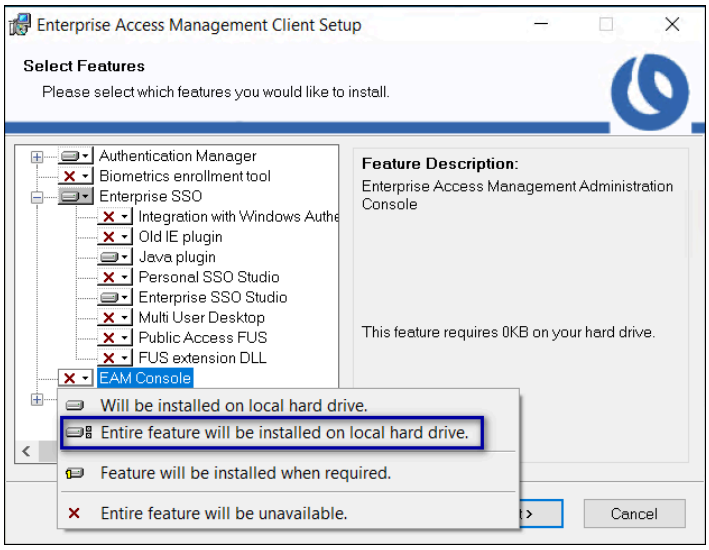


Figure 36: Install EAM Console Feature

12. Click **`Next`**.
13. On the `Ready to install the application` window, click **`Next`**, as shown in the following figure.

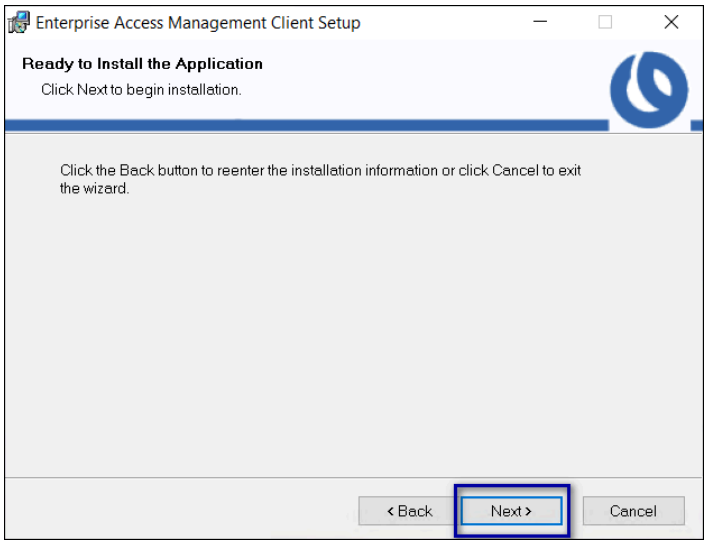


Figure 37: Ready to install the application

14. On the `User account control` pop-up, click **`Yes`**, as shown in the following figure.

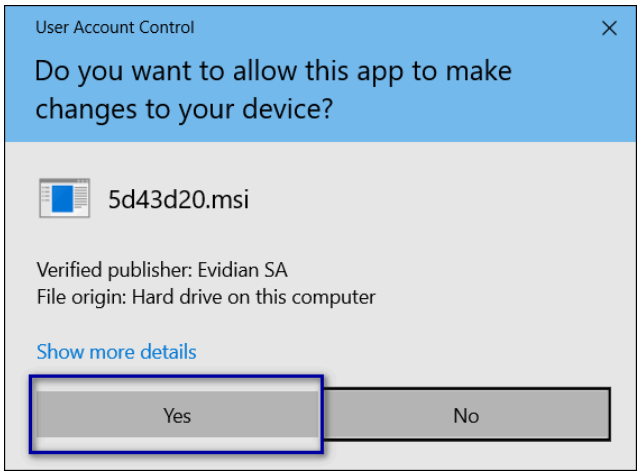


Figure 38: User account control

15. On the `Enterprise Access Management Client has been successfully installed` window, click **`Finish`**, as shown in the following figure.

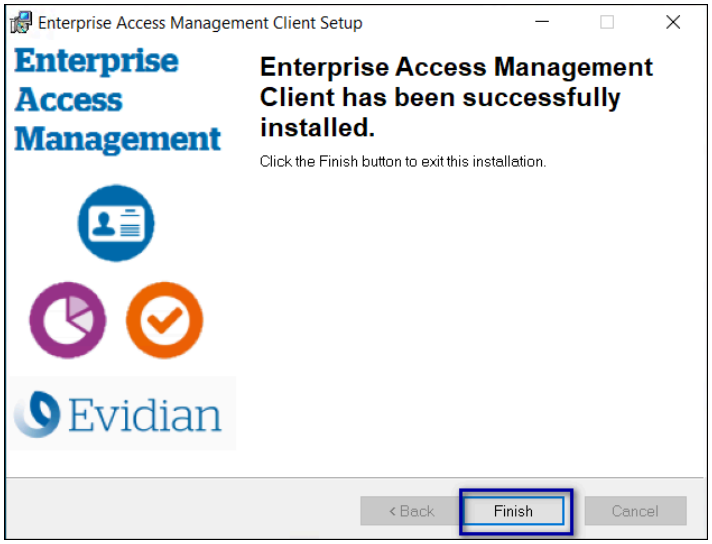


Figure 39: Evidian Client Installation Success window

16. In the Windows System Tray, click on the Enterprise SSO (eSSO) icon.
17. Click the **`Home`** icon, and then click **`Refresh`**, as shown in the following figure.

    The Evidian EAM Client contacts the Evidian EAM Controller to retrieve new technical definitions.

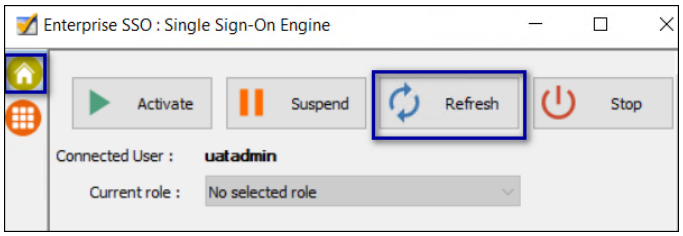
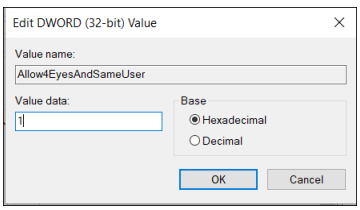


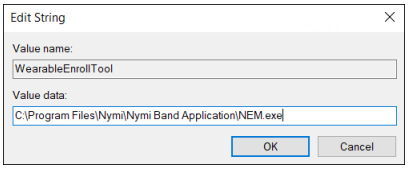
Figure 40: eSSO application Home Window

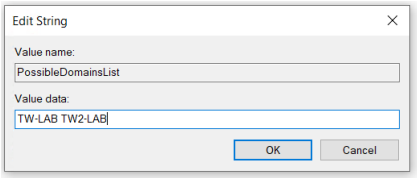
6.4.6 - Defining Evidian EAM Client Registry Keys

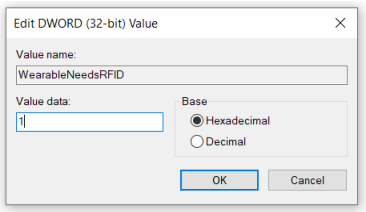
The Nymi with Evidian solution requires several registry keys on the Evidian EAM Clients to configure features and optimize performance.

Purpose	Affected Components	Registry Setting
Required Registry Key Settings for the Nymi with Evidian solution		
Enable the Evidian EAM Client to connect to Nymi Enterprise Server(NES)	All Evidian EAM Clients, including Citrix/RDP servers.	Create the following registry key on all Evidian EAM Clients, including Citrix/RDP servers. • **Location:** *HKLM\Software\Nymi\NES* • **Type:** String • **Name:** URL • **Value:** ***https://nes_server/instance*** Where: • *nes_server* is the Fully Qualified Domain name of the NES host. • *instance* is the services mapping name of the NES web application. The default value is nes. For example, https://tw-srv1.tw-lab.local/nes **Note:** The service mapping name for NES was defined during deployment.

Purpose	Affected Components	Registry Setting
Prevent the appearance of the `Enterprise SSO` Login window for user who are not in the inclusion group.	All Evidian EAM Clients, including the Citrix/RDP servers. **Note:** Do not set this registry key with the Evidian EAM 10.03b8573 Hotfix 9 and later.	If the *Integrate with Windows Authentication* module is enabled and a generic account is not used for Windows login, set the following registry keys: Key #1: • **Location:** *HKLM\Software\Enatel\SSOWatch\CommonConfig* • **Type:** DWORD 32-bit • **Name:** ***StopSSOEngineOnOTPFailed*** • **Value:** 1 Key #2: • **Location:**: *HKLM\Software\Enatel\WiseGuard\AdvancedLogin* • **Type:** DWORD 32-bit • **Name:** ***StartSSOEngine*** • **Value:** 1 If the *Integrate with Windows Authentication* and *Authentication Manager* modules are not enabled, set the following registry key: • **Location:**: *HKLM\Software\Enatel\SSOWatch\CommonConfig* • **Type:** DWORD 32-bit • **Name:** ***DisplayErrorMessageAtStartup*** • **Value:** 0
Configure the user terminal to prevent the SSO login screen from populating the username field with the user that logged into the user terminal.	All Evidian EAM Clients where users log into the user terminal with a generic account and when the work flows require sign offs by more than one user.	Create the following registry key • **Location:**: *HKLM\SOFTWARE\Enatel\WiseGuard\SSOWatch\CommonConfig* • **Type:** DWORD 32-bit • **Name:** ***Allow4EyesAndSameUser*** • **Value:** ***1*** 

Purpose	Affected Components	Registry Setting
Prevent user self-enrollment of a Nymi Band and other NFC devices	All Evidian EAM Clients, including the enrollment terminal Citrix/RDP servers.	Create the following registry key: • **Location:** *HKLM\Software\Enatel\Wiseguard\FrameWork\Authentication* • **Type:** DWORD 32-bit • **Name:** ***RFIDSelfEnrollAllowed*** • **Value:** ***0***
Configure the Evidian EAM Client to avoid the use of the LsaLogonUser function and improve Nymi Band tap response times.	All Evidian EAM Clients, including Citrix/RDP servers and the enrollment terminal.	Create the following registry key: • **Location:** *HKLM\SOFTWARE\Enatel\WiseGuard\Framework\Directory* • **Type:** DWORD 32-bit • **Name:** ***CallLsaLogonUserAfterLogon*** • **Value:** ***0***
Configure enrollment terminal to access Nymi Band Application	Enrollment terminal	Create the following registry key: • **Location:** *HKLM\Software\Enatel\WiseGuard\AdvancedLogin* • **Type:** String • **Name:**WearableEnrollTool • **Value:** *C:\Program Files\Nymi\Nymi Band Application\NEM.exe* 
Use Case Specific Registry Key Settings		

Purpose	Affected Components	Registry Setting
Optimize NFC taps	All Evidian EAM Clients including Citrix/RDP servers and the enrollment terminal, where you perform Nymi Band taps on an NFC reader. **Note:** Ensure that you define these registry keys with Evidian EAM 10.03b8573 Hotfix 12 and later.	Key #1 • **Location:HKLM\SOFTWARE\Enatel\WiseGuard\FrameWork\Authentication** • **Type:** DWORD 32-bit • **Name:** ***NymiIntentDiscardNfc*** • **Value:** 0 Key #2 • **Location:HKLM\SOFTWARE\Enatel\WiseGuard\FrameWork\Authentication** • **Type:** DWORD 32-bit • **Name:** ***NymiIntentDiscardPcsc*** • **Value:** 1
Support multiple domains, where users enroll their Nymi Bands in a domain that is different from the user terminal domain.	All Evidian EAM Clients including Citrix/RDP servers and the enrollment terminal.	Edit the *HKLM\Software\Enatel\WiseGuard\FrameWork\Directory\PossibleDomainList.* In the **`Value Data`** field, type the NETBIOS name for each domain that contains users, that will log in to the user terminal. **Note:** Separate each domain with a space, as shown in the following example. 

Purpose	Affected Components	Registry Setting
Prevent a user from logging into the machine by specifying a username without specifying a password, to avoid the situation where a user types the username of another user into the login window, and the other user is nearby an wearing an authenticated Nymi Band. The user can log in without requiring the password of the other user.	All Evidian EAM Clients where a user taps to login. **Note:** Do not set registry key with Evidian EAM 10.03b8573 Hotfix 12 and later. If you set this registry key with Evidian EAM 10.03b8573 Hotfix 12 and later, you cannot use the BLE Tap functionality.	Create the following registry key: • **Location:** *HKLM\SOFTWARE\Enatel\WiseGuard\FrameWork\Authentication* • **Type:** DWORD 32-bit • **Name:** ***WearableNeedsRFID*** • **Value:** ***1*** 
Registry Key Settings Specific to Citrix/RDP environments		
Configure the Evidian EAM Client to communicate with the Nymi Agent server.	All Citrix/RDP servers	Create the following registry key: • **Location:** *HKLM\SOFTWARE\Enatel\WiseGuard\FrameWork\Authentication\CommonConfig* • **Type:** String • **Name:** ***NymiAgentUrl*** • **Value:** ***ws://agent_fdqn:9120/socket/websocket*** Where *agent_fdqn* is the Fully Qualified Domain Name of the centralized Nymi Agent server.

Purpose	Affected Components	Registry Setting
Configure Citrix roaming sessions, to ensure that when a published MES application closes, the Citrix session is logged off.	All Citrix servers	Create/Update the following registry keys: Registry Key #1 Edit the following registry key and append the following files to the ValueData field. • **Location:** *HKLM\SYSTEM\CurrentControlSet\Control\Citrix\wfshell\TWI* • **Type:** String • **Name:** ***LogoffCheckSysModules*** • **Value:** ***ssoengine.exe, ESSOCredentialManager.exe*** Registry Key #2 • **Location:** *HKLM\SOFTWARE\Policies\Enatel\SSOWatch\CommonConfig* or *HKLM\SOFTWARE\Enatel\SSOWatch\CommonConfig* • **Type:** DWORD 32-bit • **Name:** ***DoNotManageProcList*** • **Value:** ***1***
Performance Specific Registry Key Settings		
Increase the time that the Evidian EAM Client waits for the initialization of the *nymi_api.dll* and retrieval of authentication token from NES to complete.	All Evidian EAM Clients, including Citrix/RDP servers and the enrollment terminal.	Create the following registry key: • **Location:** *HKLM\Software\Enatel\Wiseguard\FrameWork\Authentication* • **Type:** DWORD 32-bit • **Name:** ***WearableDelay*** • **Value:** ***10000***

6.4.7 - Enabling LDAPS Support on the Enrollment Terminal

Evidian Authentication Manager and Enterprise SSO 10.0 evolution 2 patch level 3 and later supports LDAPS on AD LDS.

Before you begin

Install LDAPS on AD LDS. Microsoft provides more information.

About this task

Perform the following steps on the Enrollment Terminal.

Procedure

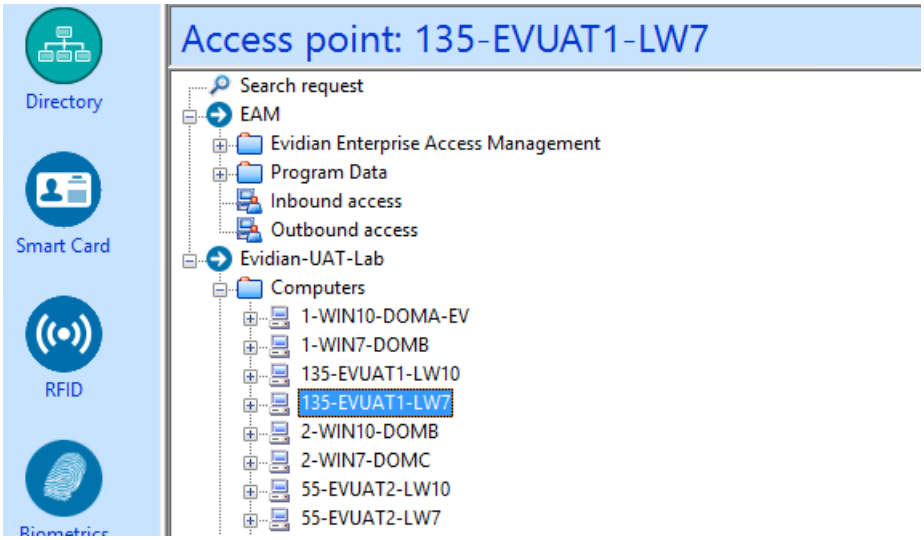
1. Run *regedit.exe*.
2. Navigate to *HKEY_LOCAL_MACHINE\SOFTWARE\Enatel\WiseGuard\FrameWork*.
3. Right-click *WGDirectory*, and then select **`New > DWORD (32-bit) value`**
4. In the **`Value`** file, type ***SSL***.
5. Double-click the **`SSL`** key, and in the **`Value data`** field, type ***1***.
6. In the *ServerList* key, confirm that the path to the AD LDS instance with the secure port appears. For example, ***srv-ssl.ssl.lan:636.***.
7. Close `Registry Editor`.

6.4.8 - Replacing the Nymi DLL File

Replace the *nymi_api.dll* file that the Evidian EAM Client uses with the version used by the Nymi Band Application.

Procedure

1. Rename the *nymi_api.dll* file in *C:\Program Files\Common Files\Evidian\WGSS*.
2. Copy the *C:\Program Files\Nymi\Nymi Band Application\nymi_api.dll* file to *C:\Program Files\Common Files\Evidian\WGSS*.
3. Log in to the Evidian EAM Management Console.
4. Click **`Account and access rights management`**  .
5. In the left navigation pane, expand **`Domain > Computers`**, and then select the terminal, as shown in the following figure.



6. 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.

6.4.9 - Logging into the terminal

If you installed the Evidian SSOAgent with the Authentication Manager authentication mode, when the terminal locks, the Windows login screen appears with new options.

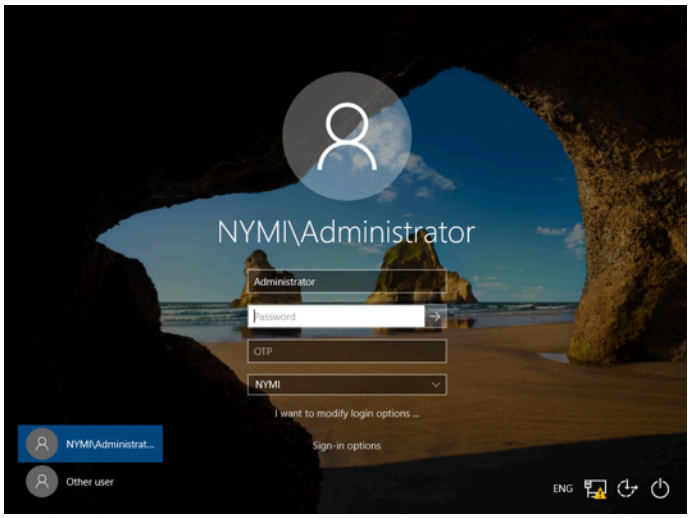
About this task

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.

6.4.10 - Validating the EAM Client Installation

After you log into the computer, validate that the Evidian EAM Client can connect to the Evidian EAM Controller and that the EAM client can retrieve certificates from NES.

- Open the system tray and confirm hover over the **`ESSO Credential Manager`** icon. Confirm that the status that appears is **Connected Mode**, as shown in the following figure.

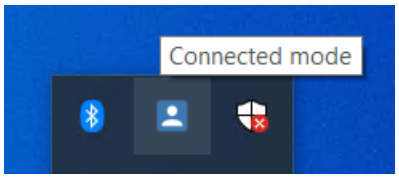
  

  Figure 41: ESSO Credential Manager connected mode

  If the status that appears is **Disconnected Mode**, the Evidian EAM Client cannot establish a connection with the Evidian EAM Controller, refer to the Nymi Connected Worker Platform with Evidian Troubleshooting Guide for more information.
- Navigate to *C:\Windows\System32\config\systemprofile\AppData\Roaming\Nymi\NSL \random_string\ksp*, and confirm that you see at least 20 files, as shown in the following figure. If you see 9 files only, refer to the Nymi Connected Worker Platform with Evidian Troubleshooting Guide for more information.

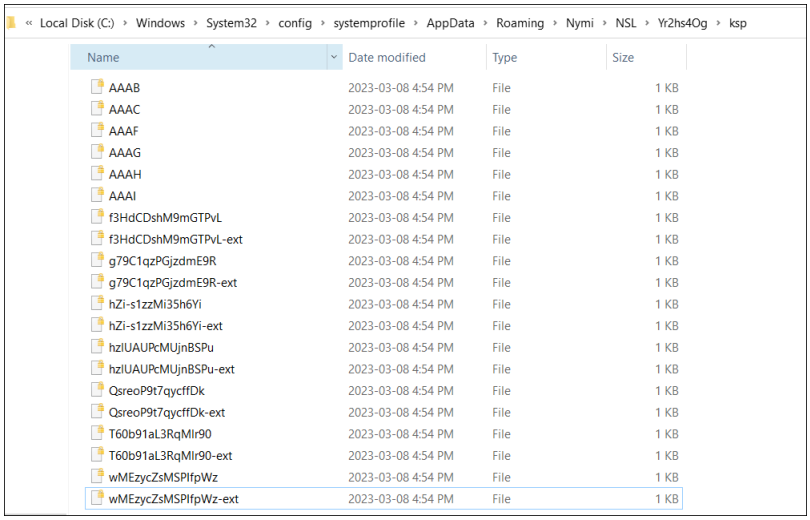


Figure 42: Certificates Folder

6.5 - 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.

6.5.1 - Adding an SSO definition for a new target application

To use the Nymi Band with Evidian to perform authentication tasks, use `Enterprise SSO Studio` to create SSO technical definition and training Evidian SSO to operate with the MES application. The SSO definition captures the login screen and credentials for the MES 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. On the `Enterprise SSO Studio` login window, type the login credentials of an EAM Administrator.
4. In the `SSO Config - Enterprise SSO Studio`, navigate to **`EAM > Evidian Enterprise Access Management > Application Access > Technical definitions`**, as shown in the following figure.

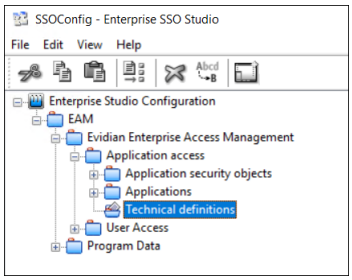


Figure 43: Technical Definition object

5. Right-click **`Technical Definitions`** and select **`New Technical Definition`**, as shown in the following figure.

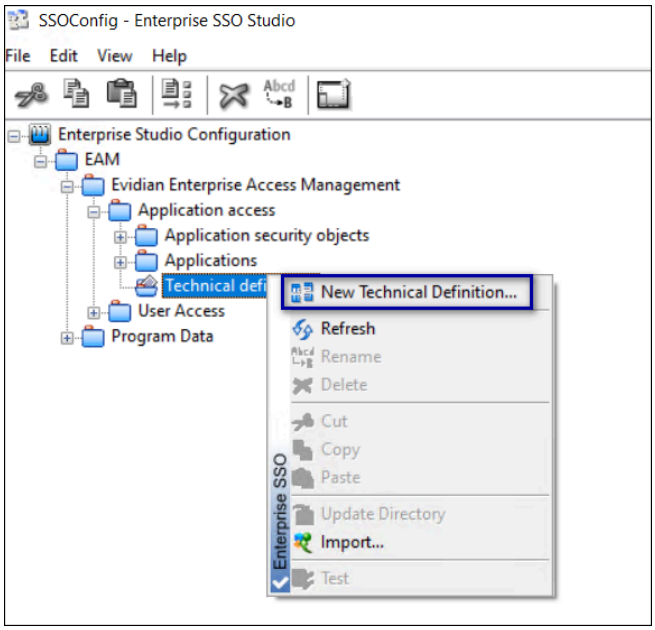
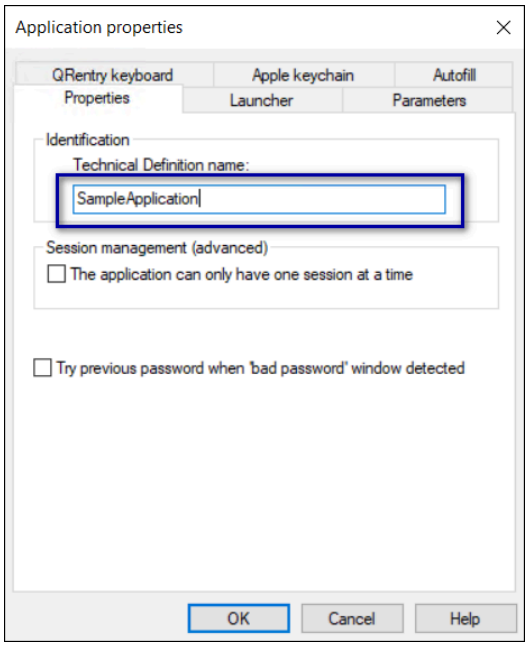


Figure 44: Creating a New Technical Definition

6. In the **`Properties`** tab, provide a name in the **`Technical Definition`** name field, and then click **`OK`**.

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



7. Right-click on the new technical definition that you just created and select **New Window**, as shown in the following figure.

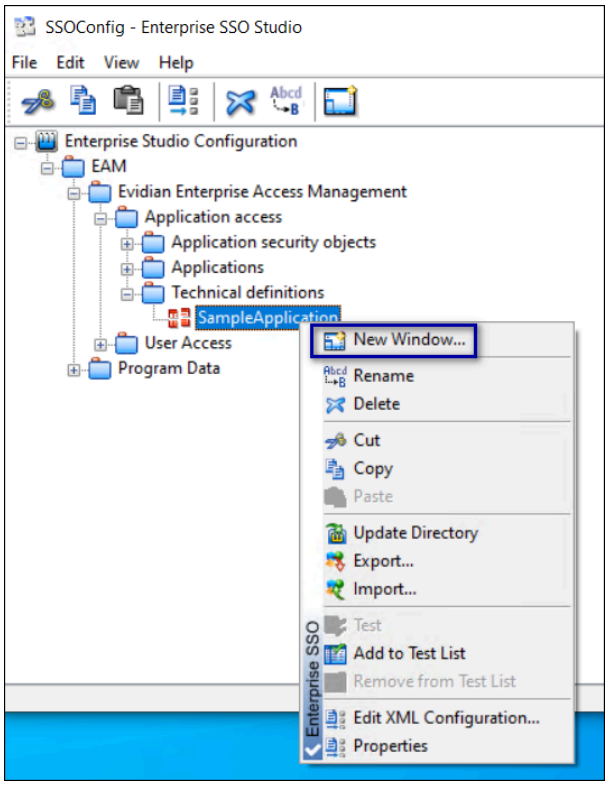


Figure 45: Creating a New Window for the Technical Definition

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.

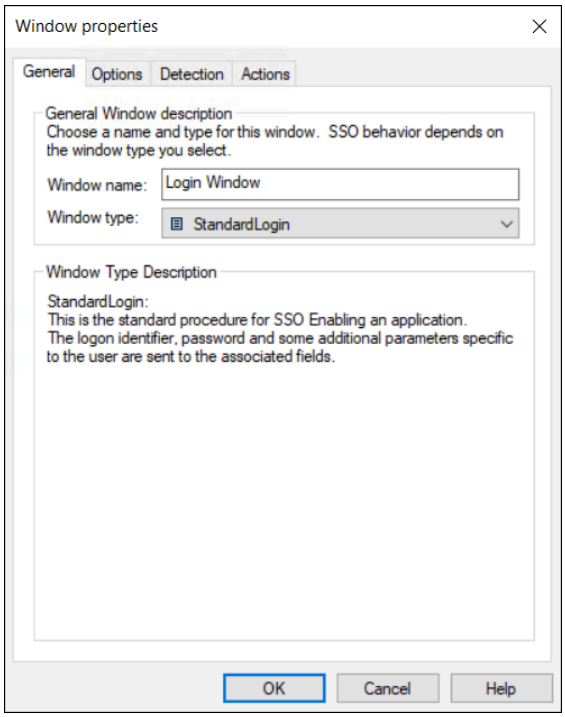


Figure 46: Naming the New Technical Definition Window

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

   The following figure provides an example of the SSO Builder and an MES application window.

10. On the **`Detection`** tab, click and drag the target icon  onto the application window.

    The following figure provides an example of the `Detection` window.

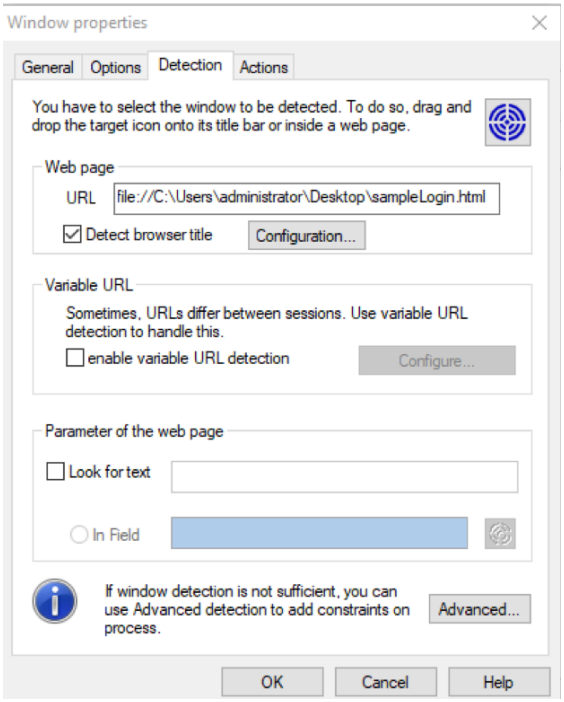


Figure 47: New Technical Definition Detection window

The URL for the webpage appears in the **URL** field.

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.

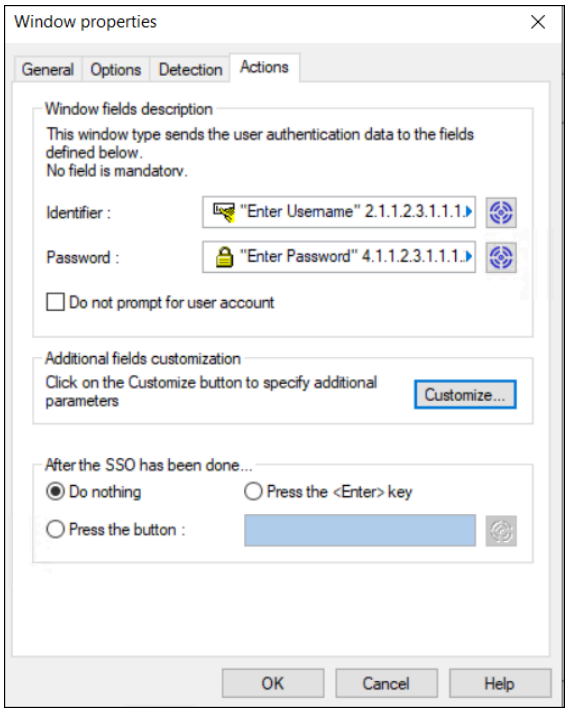


Figure 48: New Technical Definition Actions tab

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.

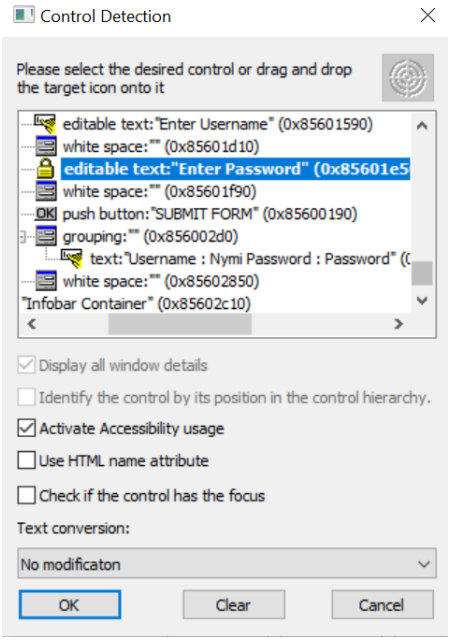


Figure 49: Detection window

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. Optional, for MES applications that require 2 different users to perform an e-signature to complete a task, perform the following actions:
    a) Right-click on the form that requires the sign-offs and then select **`Properties`**, as shown in the following figure.

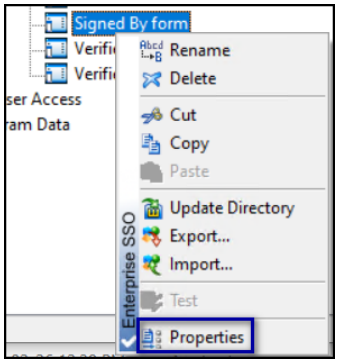


Figure 50: Properties

    b) On the `Window properties` window, from the **`Actions`** tab, click **`Script Editor`**, as shown in the following figure.

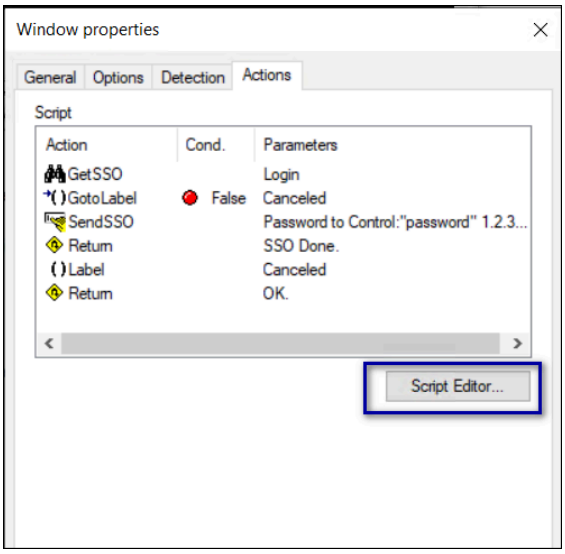


Figure 51: Script Editor option

c) On the `Custom Script Editor` window, select **`GetSSO`**, and then select the option **`Perform SSO as a difference user`**, as shown in the following figure.

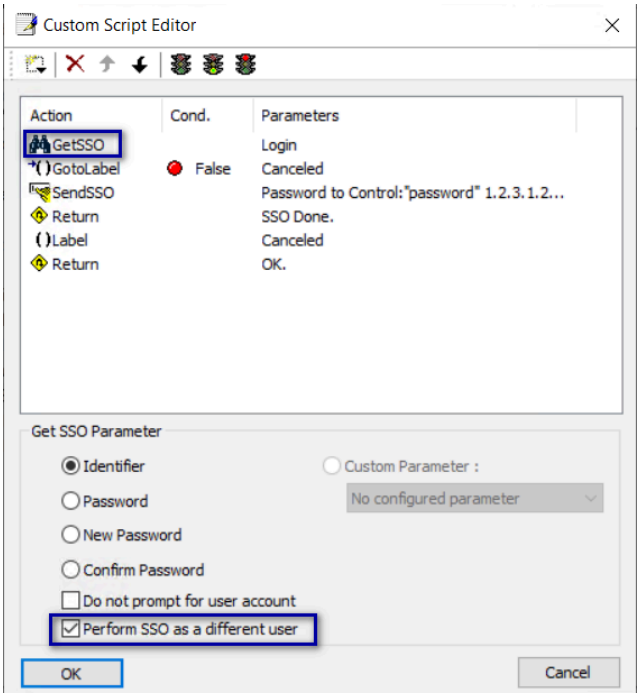


Figure 52: Custom Script Editor window

d) Click **`OK`**.

e) On the `Window properties` window, click **`OK`**.

15. Right-click the newly created technical definition and click **`Update Directory`**, as shown in the following figure.

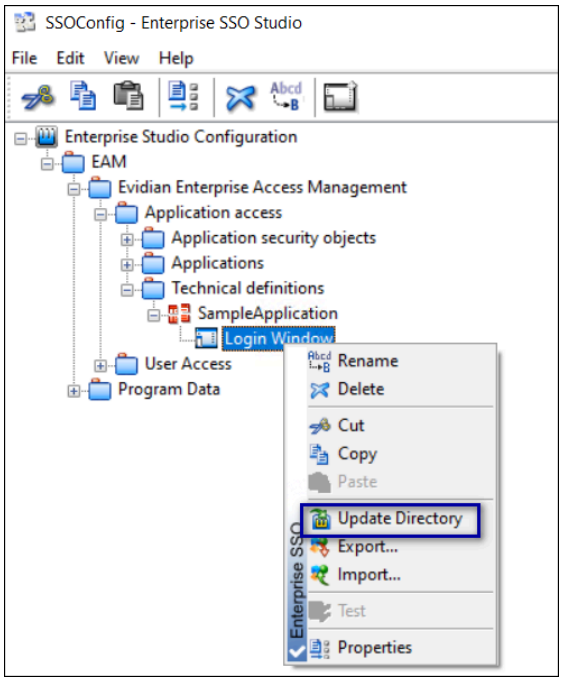


Figure 53: Update Directory with New Technical Definition

16. Close `SSO Builder`.

6.5.2 - Configuring the SSO application in the Evidian EAM Management Console

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

About this task

Procedure

1. Launch the Evidian EAM Management Console, and log in as an EAM administrator.
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`**, as shown in the following figure.

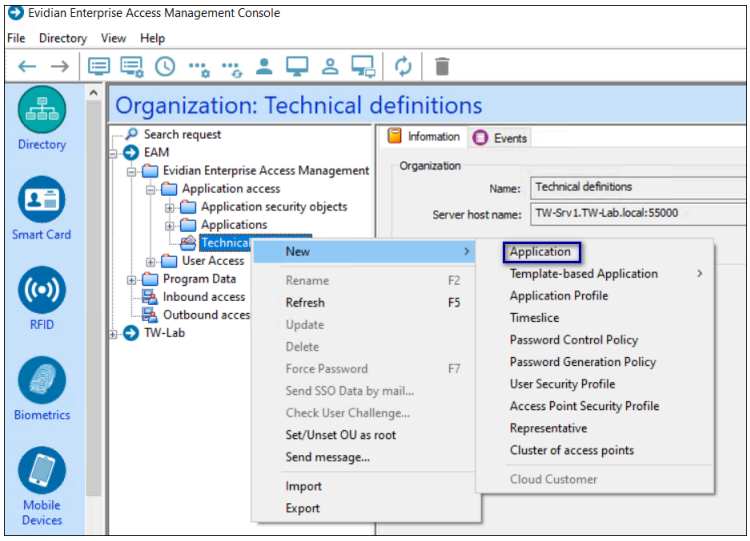


Figure 54: New Application menu option

5. Provide an application name, and then click **`Apply`**.

   The following figure provides an example of a new application.

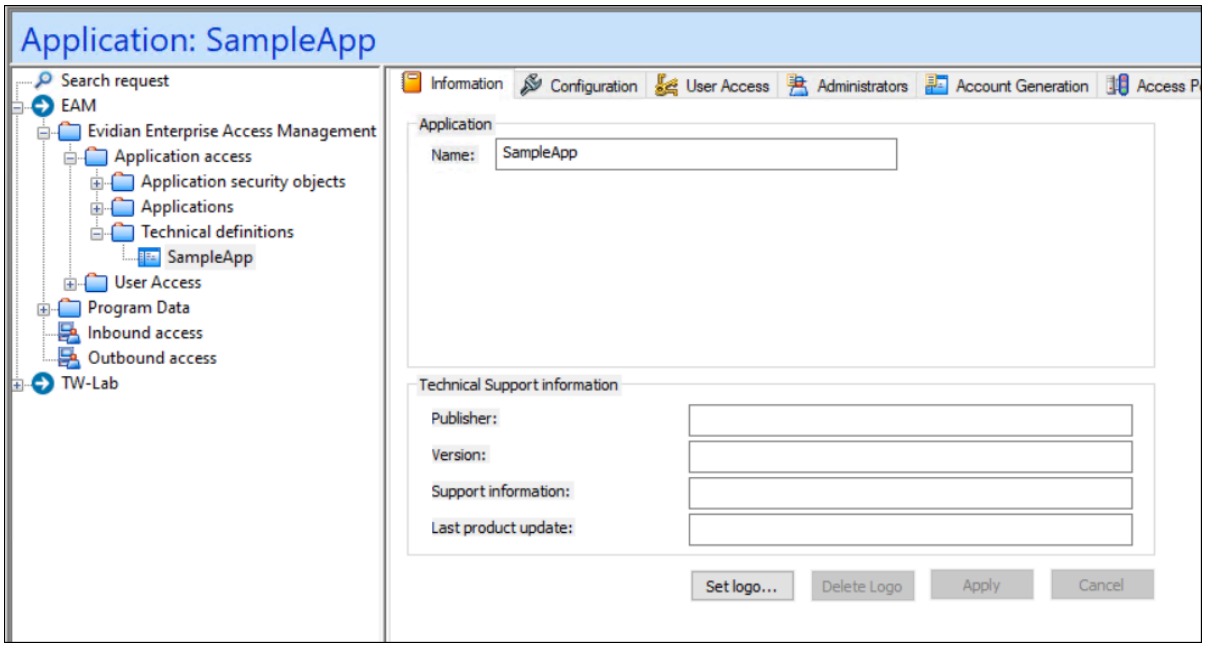


Figure 55: New Application Name

6. If the MES use the credentials of the logged in AD user, perform the following steps:
   a) In the Evidian EAM Management Console, navigate to the technical definition and in the **`Configuration`** tab, select the **`Account Base`** tab.
   b) Select the **`The application uses the primary account`** option.
   c) In the **`Login format`** list, select the login format of the AD credentials.
   d) Click **`Apply`**.

The following figure provides an example of the `Account Base` window.

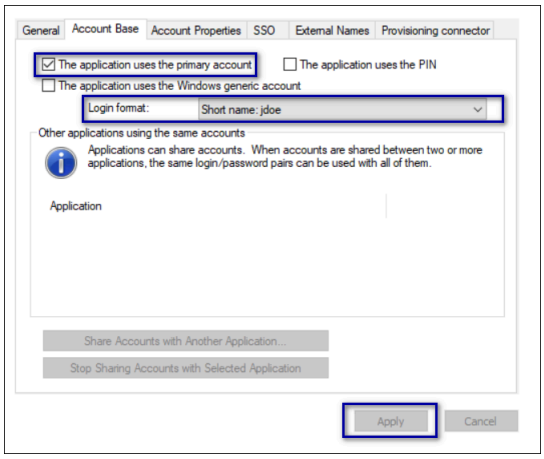


Figure 56: Account Base window

7. In the **`Configuration`** tab, select the **`SSO`** tab, and then on from the **`Methods`** tab, from the **`Default SSO propagation method`** list, select **`SSO`**, as shown in the following figure.

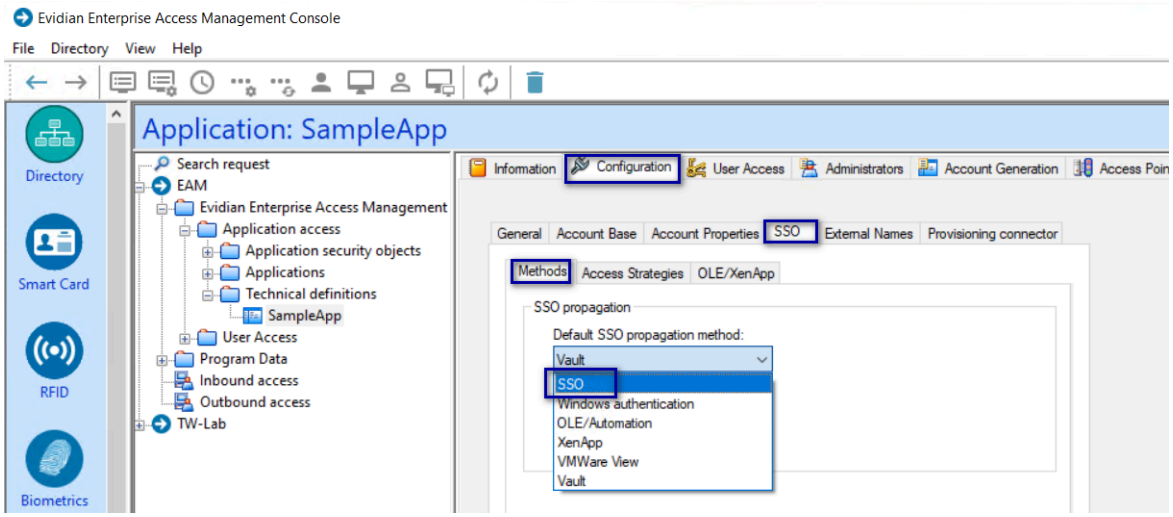
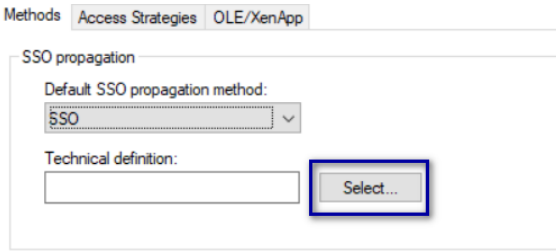


Figure 57: Selecting Default SSO Propagation Method

8. Beside the **`Technical definition`** field, click **`Select`**, as shown in the following figure.

Figure 58: Select button



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.

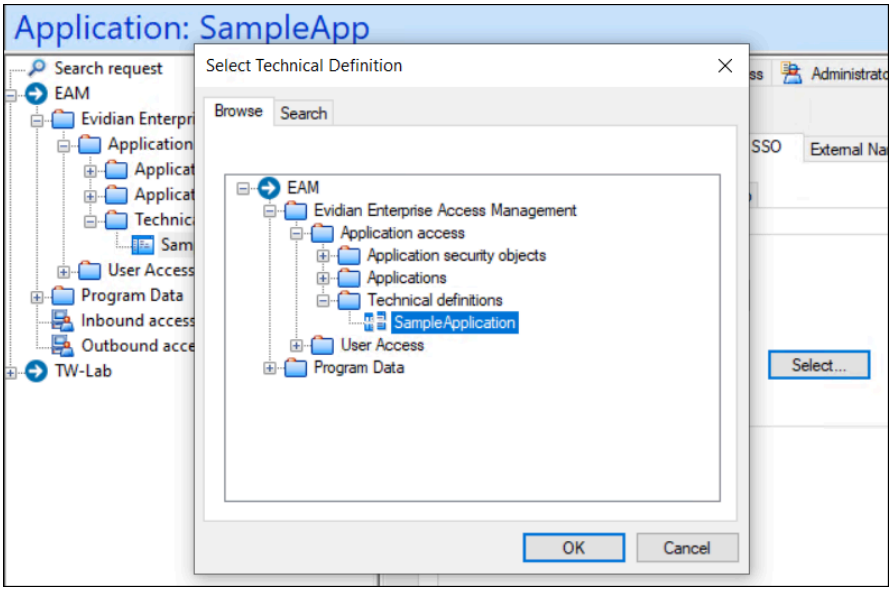


Figure 59: Selecting the Technical Definition

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`**. Select **`User must re-authenticate to perform SSO`**, as shown in the following figure, and then click **`Apply`**.

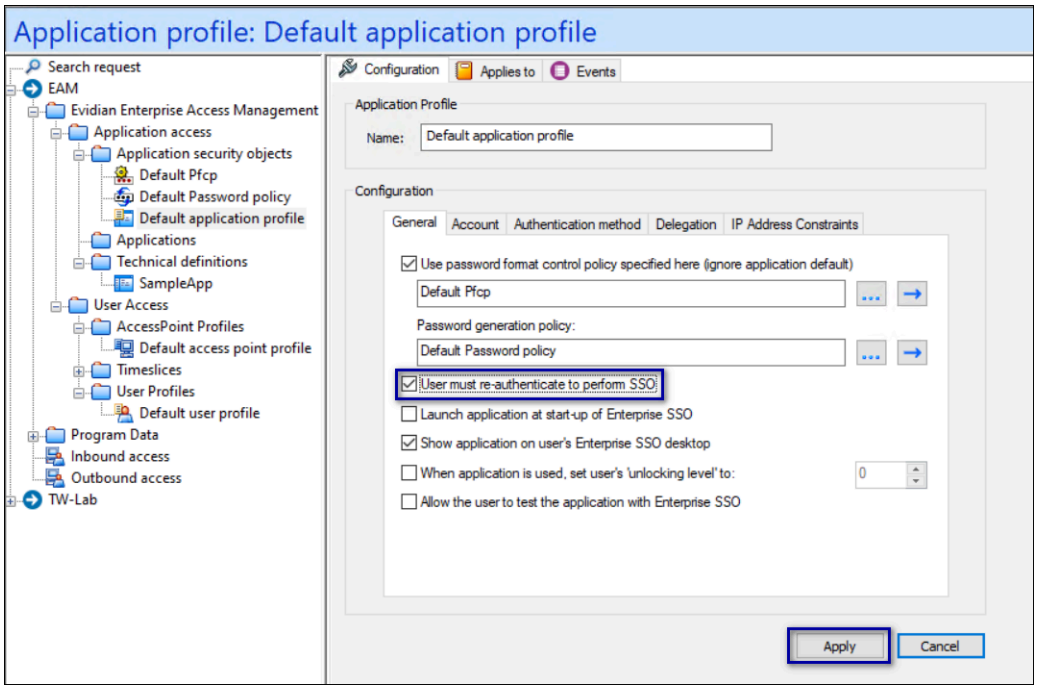


Figure 60: User must re-authenticate to perform SSO

13. Close the Evidian EAM Management Console.

6.6 - 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 SDK, and the Evidian EAM Client software.

The Nymi with 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.

Note: Starting with CWP 1.19.0, you can silently install and configure the Nymi and Evidian client software. The application is in a folder named *ClientInstaller*. This feature requires advanced Connected Worker Platform knowledge. Contact your Nymi Solution Consultant to use the silent installer.

6.6.1 - (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. Create a backup copy of the *C:\Nymi\Bluetooth_Endpoint\nbe.toml* file.
3. Extract the Nymi SDK distribution package.
4. From the *..\nymi-sdk\windows\setup* folder, right-click the *Nymi Runtime Installer version.exe* file, and select **`Run as administrator`**.
5. On the `Welcome` page, click **`Install`**.
6. 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.
7. On the `Welcome to the Nymi Runtime Setup Wizard` page, click **`Next`**.
8. On the `Nymi Runtime Setup` window, expand **`Nymi Runtime`**.
9. 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.

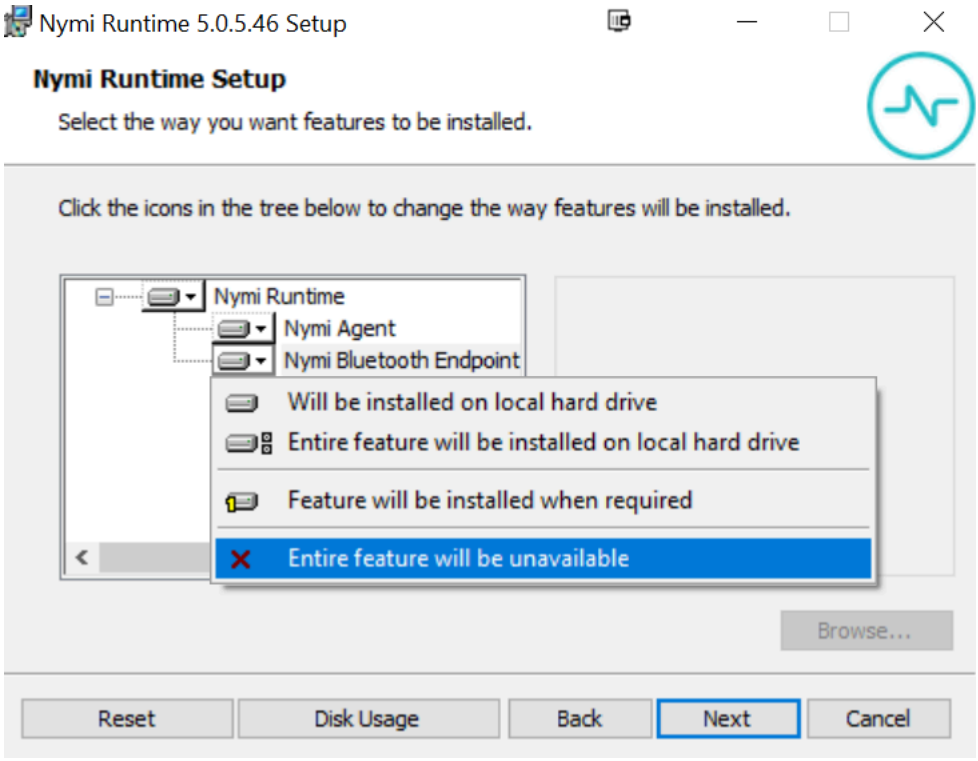


Figure 61: Nymi Bluetooth Endpoint feature will be unavailable

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

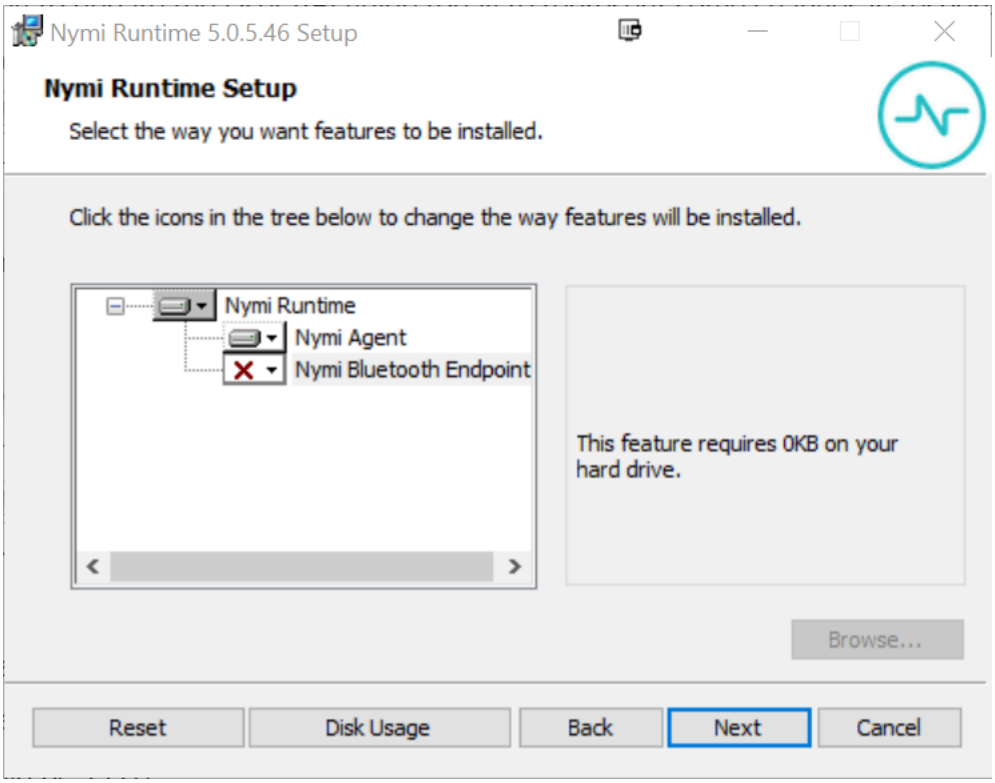


Figure 62: Nymi Bluetooth Endpoint feature is not available

11. On the `Service Account` window, perform one of the following actions to choose the account that starts the service:

    - Accept the default service account NTAuthority\LocalService, click **`Next`**.
    - For non-English Windows Operating Systems, choose the LocalSystem account from the drop list, and then click **`Next`**.
    - For non-English Windows Operating Systems and for Nymi WebAPI configurations where you install the centralized Nymi Agent on the NES server, choose the LocalSystem account from the drop list, and then click **`Next`**.

    Note: The service account must have permission to run as a service. Enable Service Log On provides more information about how to modify the local policy to enable this permission for the service account.

    The following figure shows the `Service Account` window.

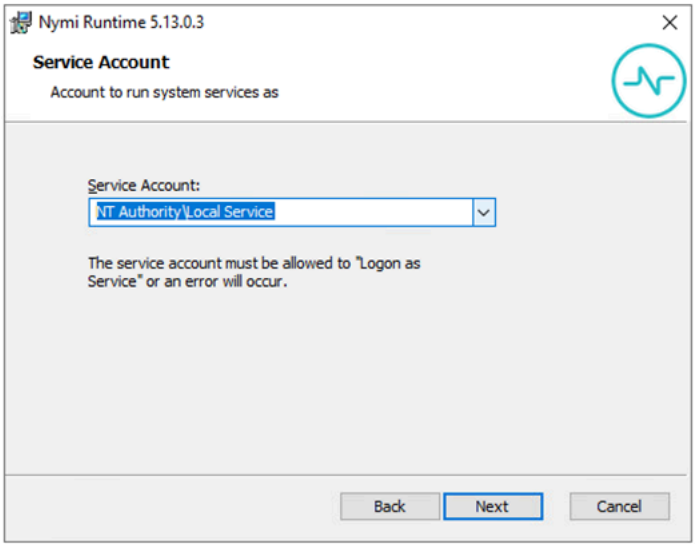


Figure 63: Nymi Runtime Service Account window

12. On the `(Optional) Nymi Infrastructure Service Account`, click **`Next`**.

    Only deployments that use web-based Nymi-enabled Applications(NEAs) with a centralized Nymi Agent require you to configure the Nymi Infrastructure Service Account.

13. On the `(Optional) Nymi Infrastructure Service Account` window, specify the username and password of the Nymi Infrastructure Service Account. When you specify the username, include the domain name, for example *tw-lab\nymi_infra_service_acct*. Refer to *Appendix—Record the CWP Variables* for the service account name.

    The following figure shows the `Nymi Infrastructure Service Account` window.

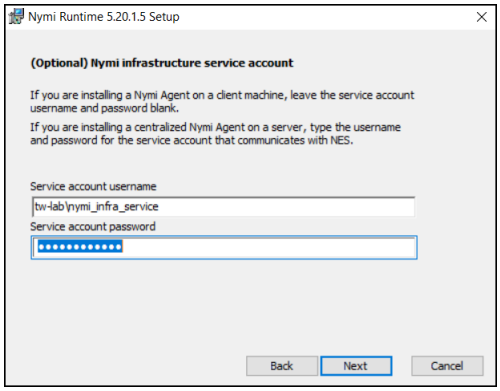


Figure 64: Nymi Infrastructure Service Account window

    The installer creates the following files in the *C:\Nymi\NymiAgent\certs* folder:

- credentials-contains the encrypted credentials for the Nymi Infrastructure Service Account
- Private key, which is used to encrypt the credentials.
- Public key, which is used to encrypt the credentials.

14. On the `Ready to install` page, click **`Install`**.
15. Click **`Finish`**.
16. On the `Installation Completed Successfully` page, click **`Close`**.

6.6.2 - Importing the Root CA certificate

Perform the following steps only if the Root CA issuing the TLS server certificate is not a Trusted Root CA, for example, when you use a self-signed TLS server certificate).

Before you begin

Install the Root CA on the following machines:

- All user terminals, including user terminals that run Nymi-Enabled Applications
- Enrollment terminal
- Centralized Nymi Agent

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.

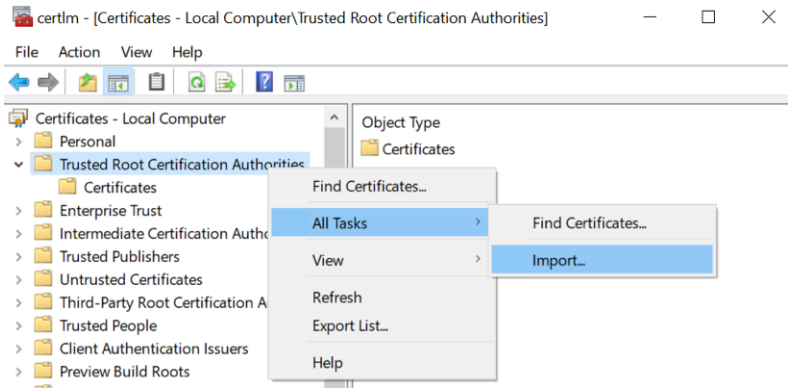


Figure 65: certlm application on Windows 10

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

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

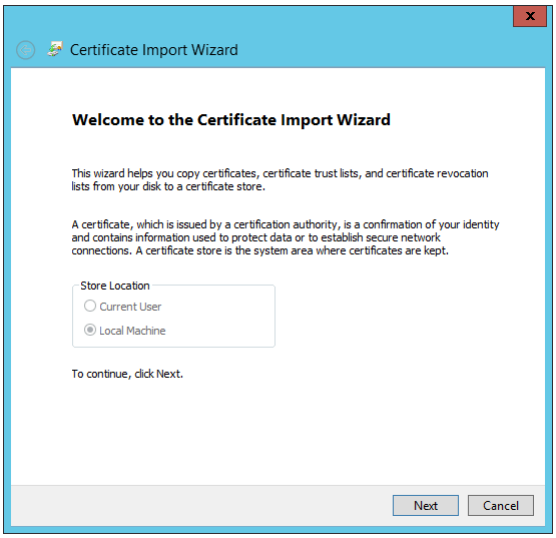


Figure 66: Welcome to the Certificate Import Wizard screen

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.

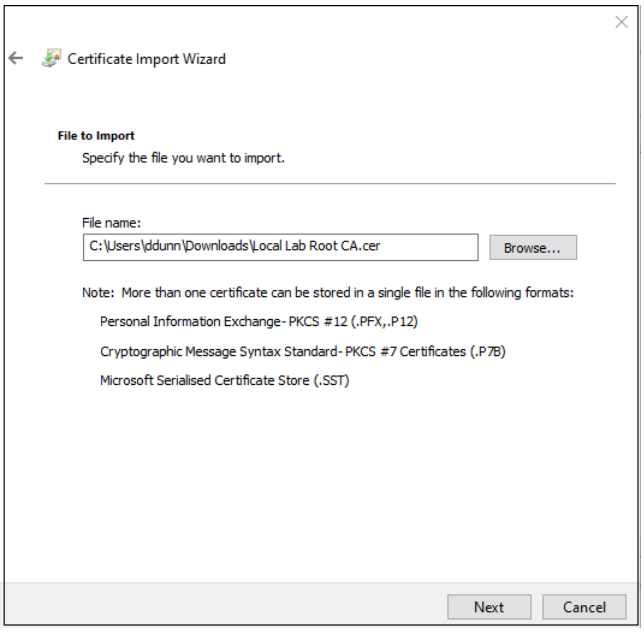


Figure 67: File to Import screen

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`**.

6.6.3 - 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. Create a backup copy of the *C:\Nymi\Bluetooth_Endpoint\nbe.toml* file.
3. Extract the Nymi SDK distribution package.
4. From the *..\nymi-sdk\windows\setup* folder, right-click the *Nymi Runtime Installer version.exe* file, and select **`Run as administrator`**.
5. On the `Welcome` page, click **`Install`**.
6. 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.
7. On the `Welcome to the Nymi Runtime Setup Wizard` page, click **`Next`**.
8. 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, and then click **`Next`**.

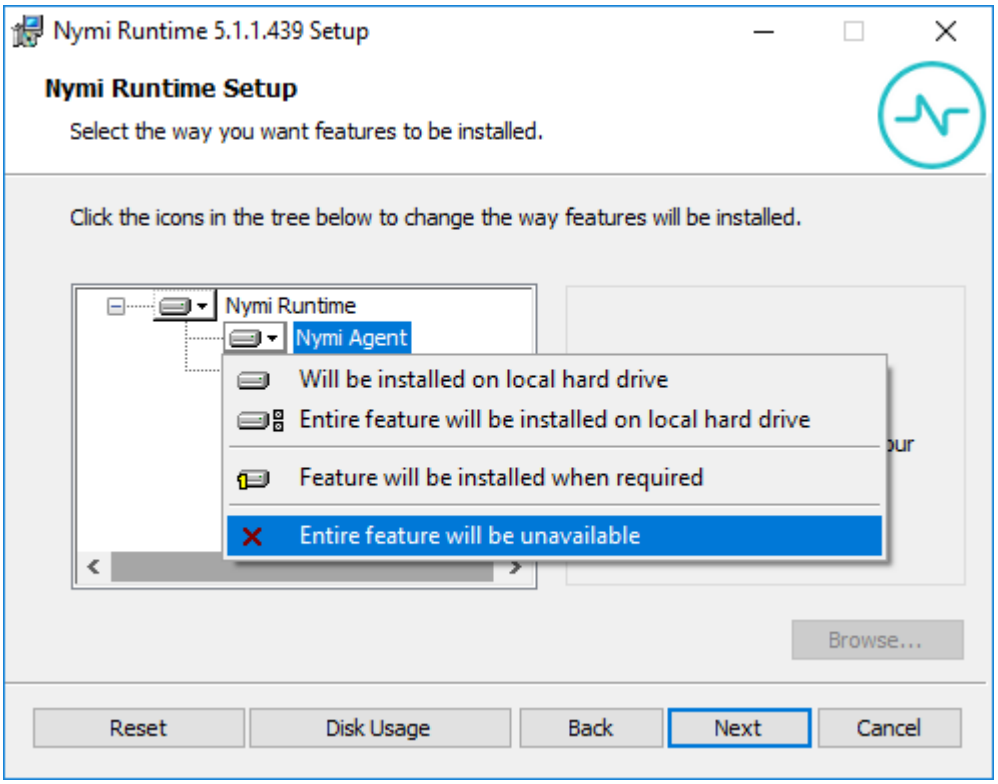


Figure 68: Nymi Agent feature will be unavailable

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

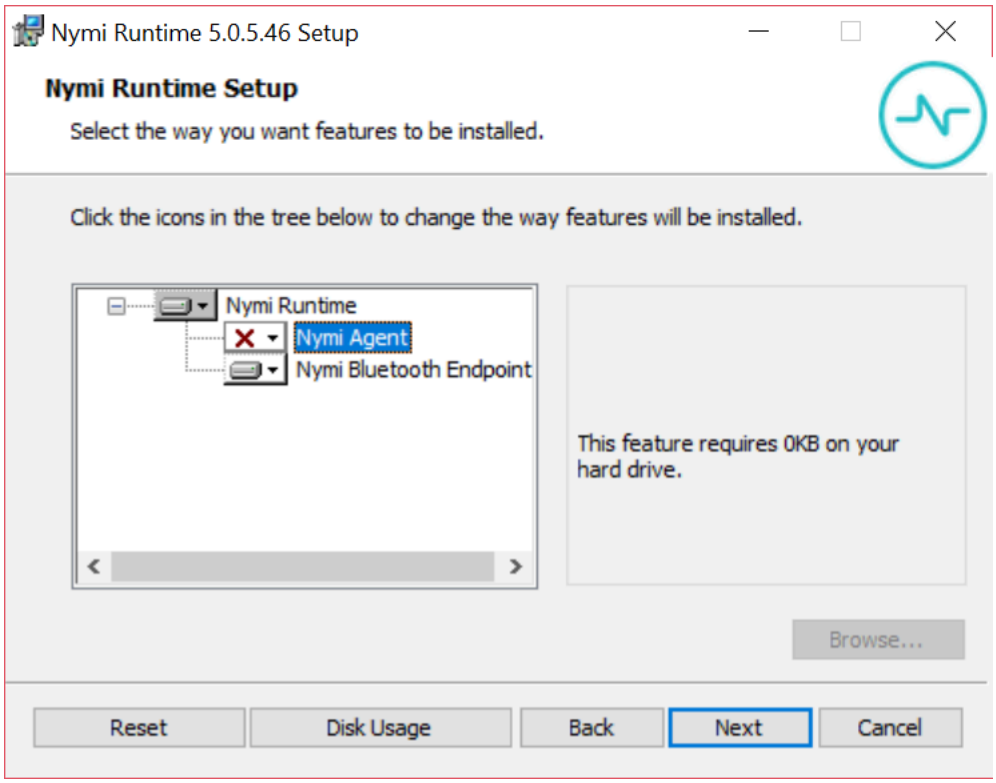


Figure 69: Nymi Agent feature is not available

c. Click **Next**.

9. On the Service Account window, perform one of the following actions to choose the account that starts the service:
   - Accept the default service account NTAuthority\LocalService, click **Next**.
   - For non-English Windows Operating Systems, choose the LocalSystem account from the drop list, and then click **Next**.
10. On the (Optional) Nymi Infrastructure Service Account, click **Next**.

    Only deployments that use web-based Nymi-enabled Applications(NEAs) with a centralized Nymi Agent require you to configure the Nymi Infrastructure Service Account.
11. On the Ready to install page, click **Install**.
12. Click **Finish**.
13. On the Installation Completed Successfully page, click **Close**.

What to do next

Confirm that the status of the Nymi Bluetooth Endpoint service is running.

6.6.4 - IGEL Only - Handling Slow Tap Response in Remote Session

In some scenarios users might experience delayed responses to Nymi Band taps on an NFC reader in a Nymi-Evidian configuration.

To resolve this issue, on the IGEL edit the *All_Regions.ini* file and decrease the value defined for the `ReadersStatusPollPeriod` variable.

6.6.5 - Installing the Evidian EAM Client

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

About this task

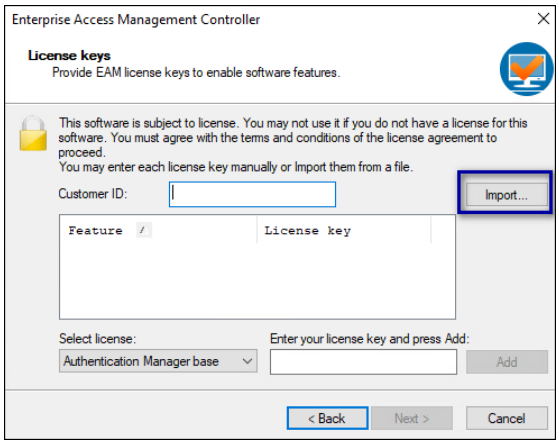
- When the user accesses an MES application that you installed on the user terminal, install the Evidian EAM Client on the user terminal.
- When the user accesses an MES application on an RDP sessions host or Citrix server, install the Evidian EAM Client on the RDP sessions host or Citrix server.
- When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

Before installing the Evidian EAM Client software:

- Complete the steps to configure the Evidian EAM Controller.
- Ensure that the machine is on the same domain as the Evidian 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 user terminal with an account that has Local Administrator access.
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. Double-click the *C:\Downloads\EAM-v10.0xxxxxxxx\EAMx64\Tools\WGConfig\WGConfig.exe* file.
4. On the `User Access Control` window, click **`Yes`**.
5. On the `Welcome to the Configuration Assistant` window, click **`Next`**.
6. If the required Microsoft Visual C++ Redistributable software is not installed on the server, the `Prerequisites` window appears. Click **`Next`** to install the software.
   The Windows Installer window appears.
7. On the `License keys` window, click **`Import`**, as shown in the following figure.



8. In the `Open` window, select the license file in the *Downloads* directory, and the click **`Open`**.
   If you do not see the file, select **`All Files *.*`** from the file type list.
9. On the `Installation mode` window, leave the default option **`with a controller`** selected, and then click **`Next`**.
   The following figure provides an example of the `Installation mode` window.

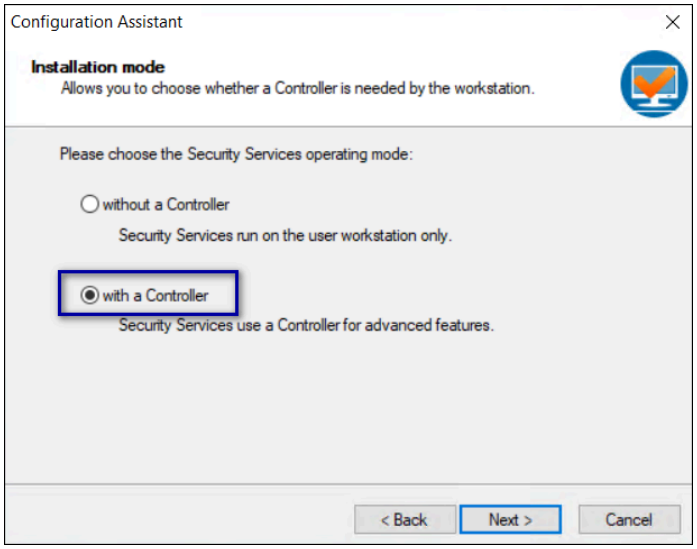


Figure 70: Installation mode window

10. On the `Users directory` window, leave the default option **`Microsoft Active Directory`** selected, and then click **`Next`**.
    The following figure provides an example of the `Users directory` window.

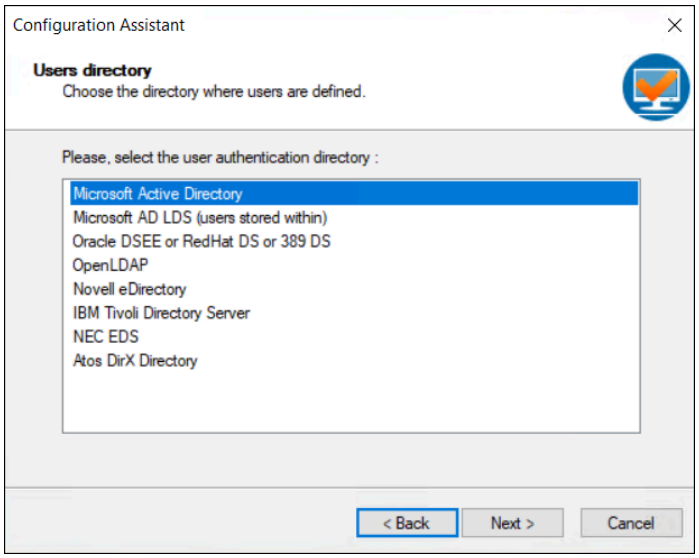


Figure 71: Users directory window

11. On the `Security repository` window, select the option **`Integrated with AD LDS: the security data is stored in an AD LDS server`**, and then click **`Next`**.

    The following figure provides an example of the `Security repository` window.

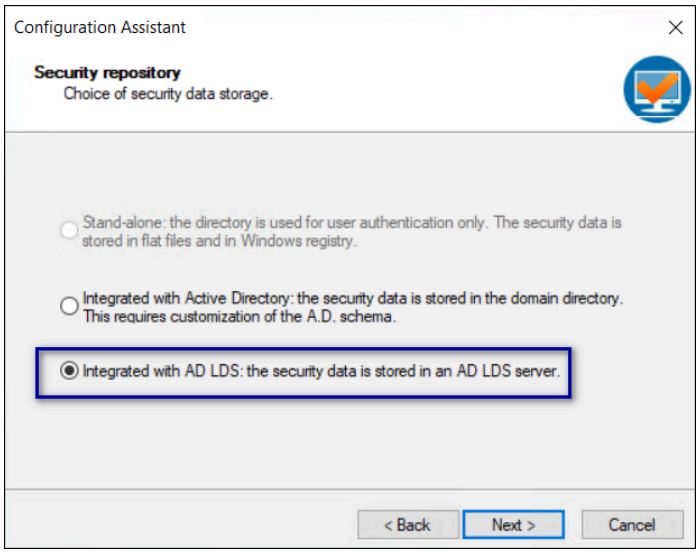


Figure 72: Security repository window

12. On the `LDAP Configuration` window, perform the following action:

    a) In the **`Name/address`** field, type the FQDN of the Evidian EAM Controller, and in the **`Port`** field, type ***55000***.

    b) Click **`Add`**.

    c) Leave the default option **`Use a dedicated naming context for the Evidian Enterprise Access Management data`** selected, and then in the **`Evidian Enterprise Access Management data context`** field, type ***O=EAM***.

    The following figure provides an example of the `LDAP Configuration` window.

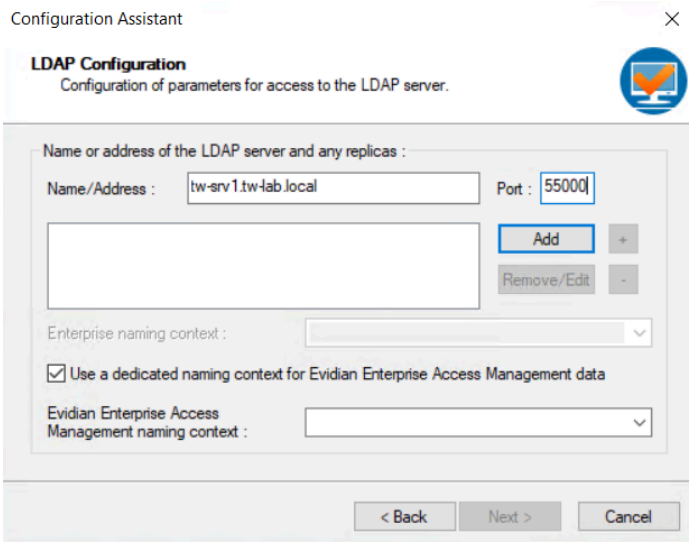


Figure 73: LDAP Configuration

d) Click **Next**.

13. On the Access-point management window, select **Manage access points**, as shown in the following figure, and then click **Next**.

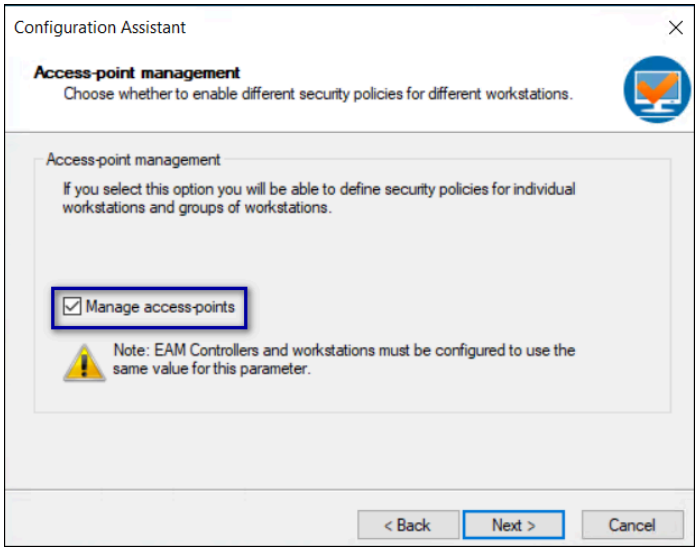


Figure 74: Access-point management window

14. On the Restart Computer window, leave the default selection **Do not restart the computer**, as shown in the following figure, and the click **Finish**.

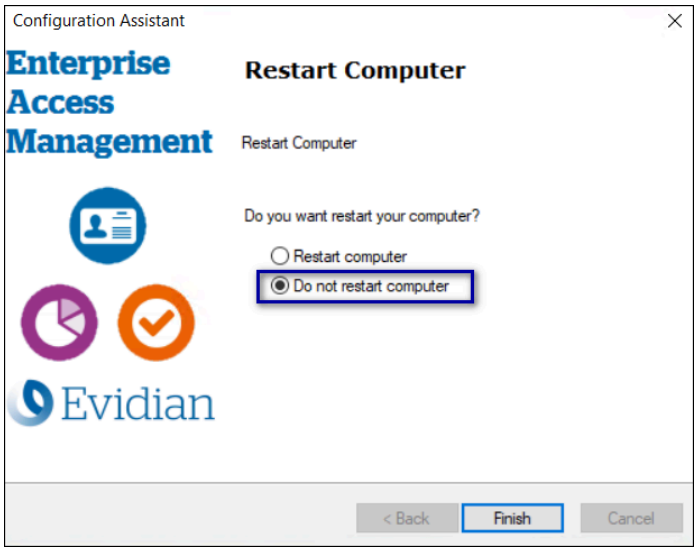


Figure 75: Restart Computer window

6.6.6 - Installing the Evidian SSO Agent

Perform the following steps on the user terminal to install the Evidian Single Sign On (SSO) Agent.

About this task

Procedure

1. Install the required version of the Microsoft Visual C++ redistributable by double-clicking *C:\Downloads\EAM-v10.0xxxxxxxx\EAMx64\INSTALL\VCRedist_x64.msi*.

   Note: If the required version of Microsoft Visual C++ redistributable is already installed on the server, a pop-up screen briefly appears, and then disappears.
2. Double-click the *C:\Downloads\EAM-v10.0xxxxxxxx\EAMx64\INSTALL\ESSOAgent.msi* file.
3. On the `Enterprise Access Management Client Installation`, click **`Next`**.
4. On the `License Agreement` window, click **`I accept the license agreement`**, and then click **`Next`**.

   The following figure shows the `License Agreement` window.

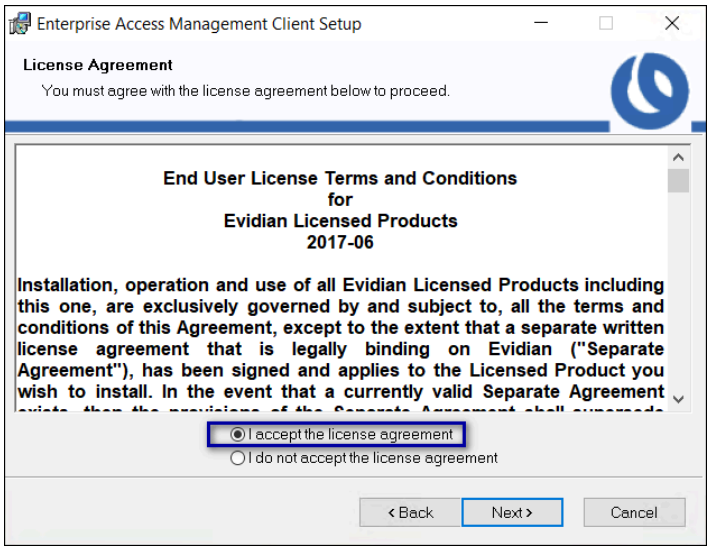


Figure 76: License Agreement window

5. On the `Destination Folder` window, accept the default, and then click **`Next`**.

   The following figure shows the `Destination Folder` window.

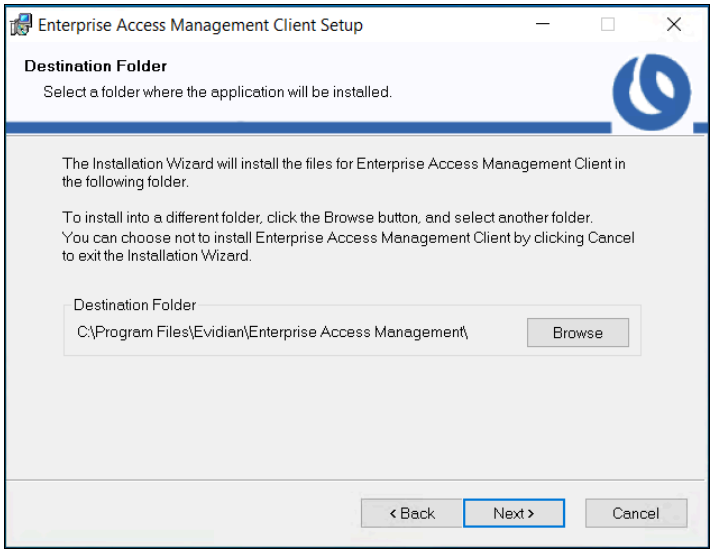


Figure 77: Destination Folder window

6. On the `Select Installation Type` window, select **`Custom`**, and then click **`Next`**.

   The following figure shows the `Select Installation Type` window.

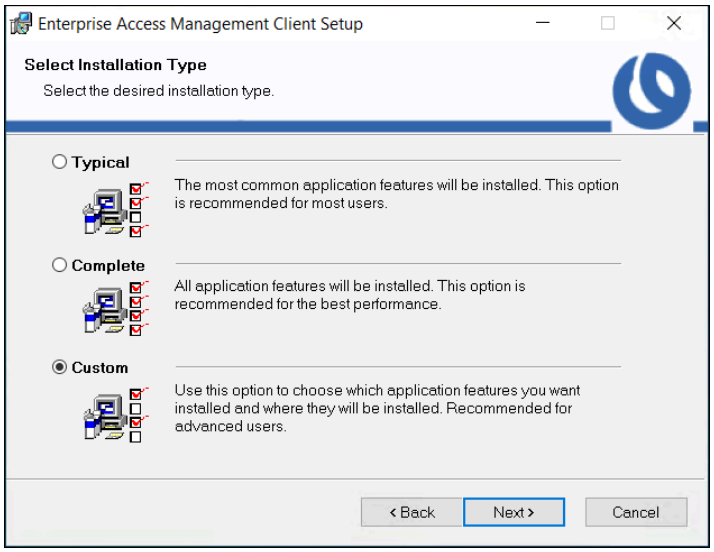
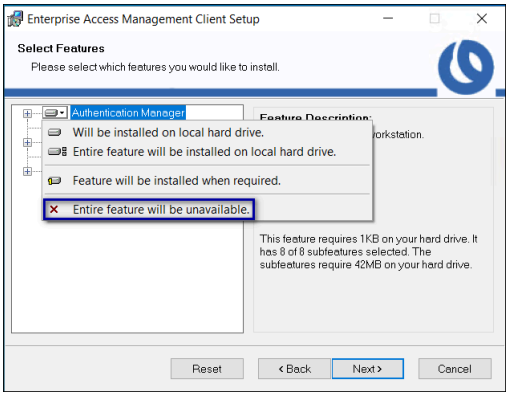
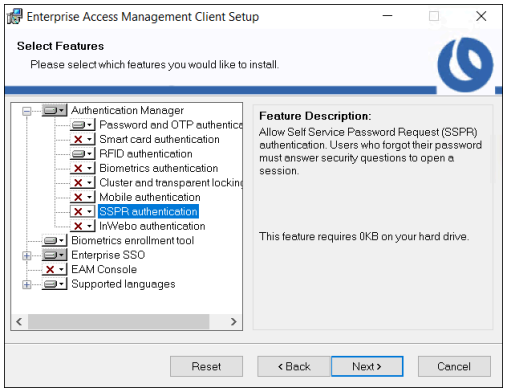


Figure 78: Select Installation Type window

7. On the `Select features` window, for **`Authentication Manager`** perform one of the following actions based on your Nymi Band use case:

   Note: Unless otherwise noted, leave the default option for a feature.

Option	Description
Do not use the Nymi Band to log into terminal.	Select **`Authentication Manager`**, and then select **`Entire feature will be unavailable`**. 
Use the Nymi Band to log into terminal	Expand **`Authentication Manager`**. For each of the following features: • Smart card authentication • Biometrics authentication • Cluster and transparency • Mobile authentication • SSPR authentication • InWebo authentication

Option	Description
	Select the feature, and then select **Entire feature will be unavailable**, as shown in the following figure.  The only features to install are **Password and OTP authentication** and **RFID authentication**.

8. Click **Biometric enrollment tool**, and then select **Entire feature will be unavailable**, as shown in the following figure.

   The following figure shows the `Select Features` window.

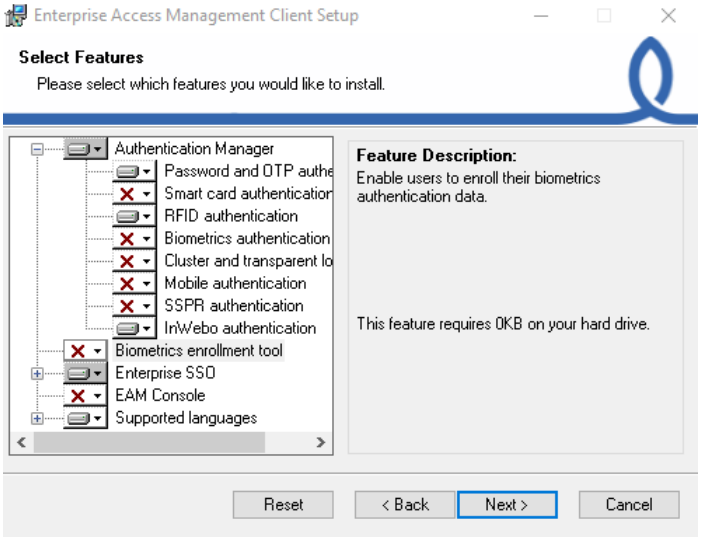


Figure 79: Select Features - Authentication Manager options and without Biometric enrollment tool

9. If you removed the **Authentication Manager** feature, and want the SSO Login window to open with the username of the user that logged into Windows, select **Integrate with Windows**, and then select **Entire feature will be installed on local hard drive**, as shown in the following figure.

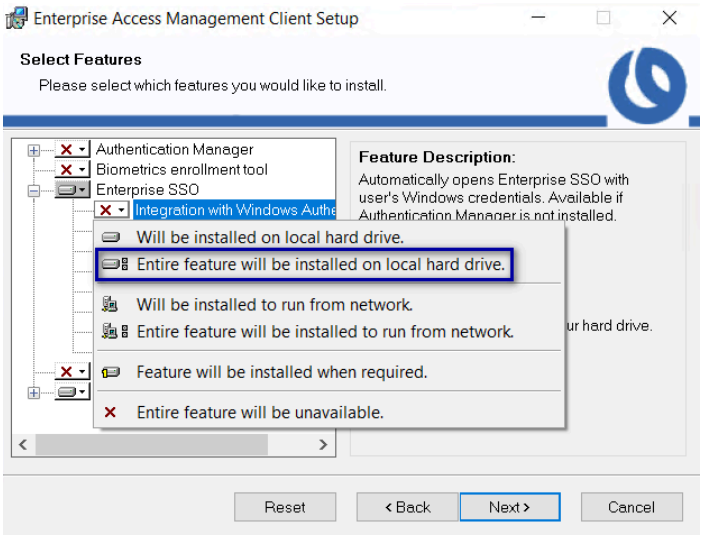
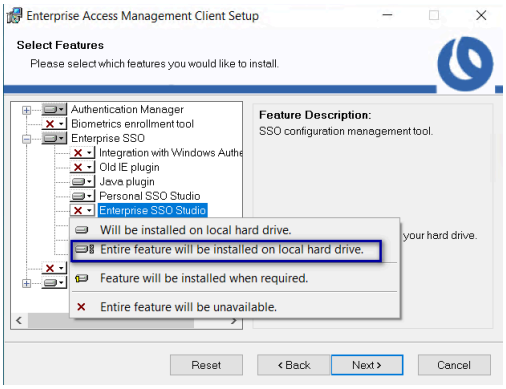
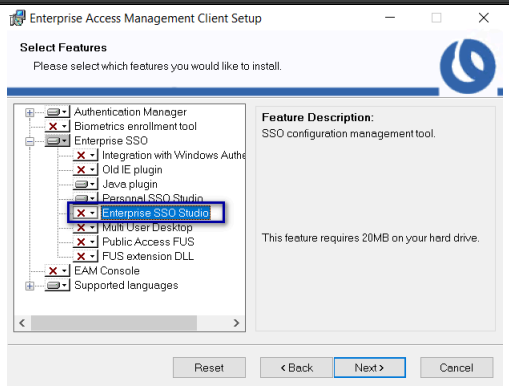
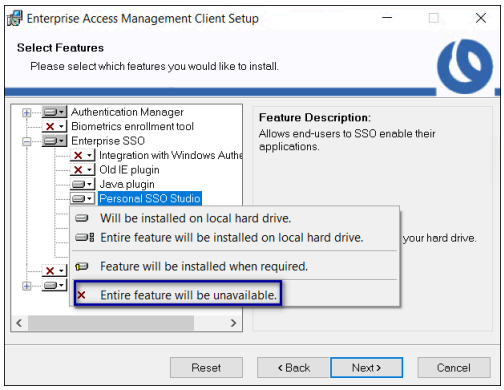


Figure 80: Integrate with Windows

10. For **`Enterprise SSO`**, perform one of the following actions based on your Nymi Band use case:

Note: Unless otherwise noted, leave the default option for a feature.

Option	Description
Use the Nymi Band for SSO	Click **`Enterprise SSO Studio`**, and then select **`Entire feature will be installed on local hard drive`**, as shown in the following figure. 
Use the Nymi Band for Windows login only	Leave the default **`Enterprise SSO`** configuration, as shown in the following figure.

Option	Description
	
All use cases	Click **Personal SSO Studio**, and then select **Entire feature will be unavailable**, as shown in the following figure. 

11. Select **EAM Console**, and then select **Entire feature will be installed on local hard drive**, as shown in the following figure.

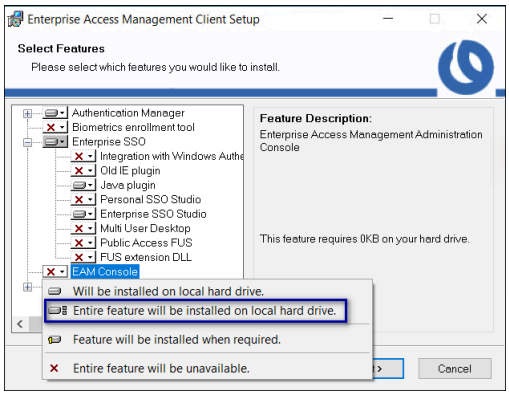


Figure 81: Install EAM Console Feature

12. Click **Next**.
13. On the `Ready to install the application` window, click **Next**, as shown in the following figure.

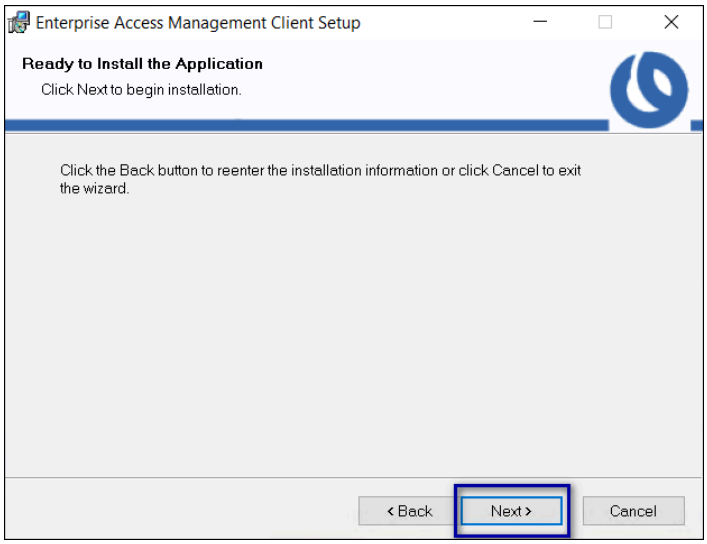


Figure 82: Ready to install the application

14. On the `User account control` pop-up, click **`Yes`**, as shown in the following figure.

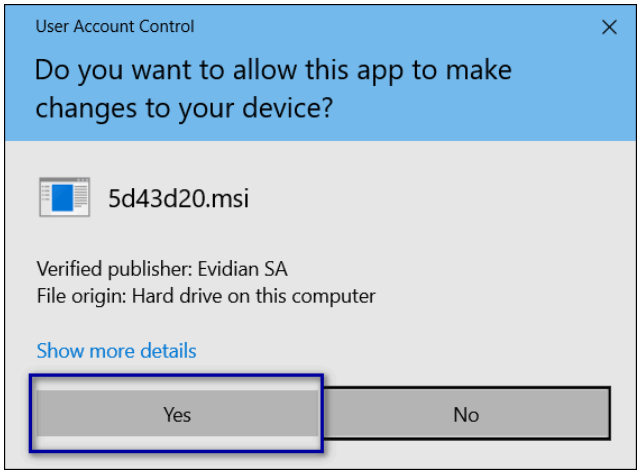


Figure 83: User account control

15. On the `Enterprise Access Management Client has been successfully installed` window, click **`Finish`**, as shown in the following figure.

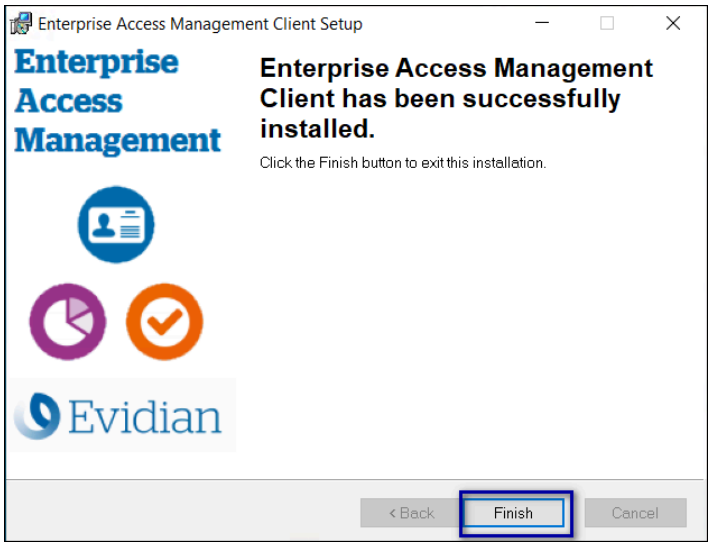


Figure 84: Evidian Client Installation Success window

16. In the Windows System Tray, click on the Enterprise SSO (eSSO) icon.
17. Click the **Home** icon, and then click **Refresh**, as shown in the following figure.

    The Evidian EAM Client contacts the Evidian EAM Controller to retrieve new technical definitions.

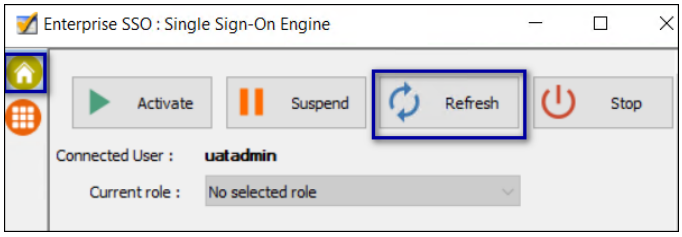
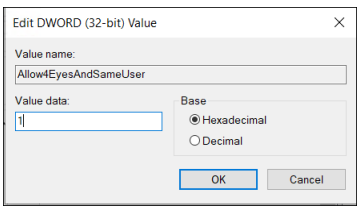


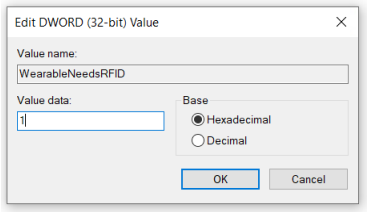
Figure 85: eSSO application Home Window

6.6.7 - Defining Evidian EAM Client Registry Keys

The Nymi with Evidian solution requires several registry keys on the Evidian EAM Clients to configure features and optimize performance.

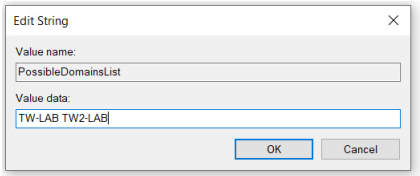
Purpose	Affected Components	Registry Setting
Required Registry Key Settings The Nymi with Evidian solution		

Purpose	Affected Components	Registry Setting
Prevent the appearance of the `Enterprise SSO` Login window for user who are not in the inclusion group.	All Evidian EAM Clients, including the Citrix/RDP servers. **Note:** Do not set this registry key with the Evidian EAM 10.03b8573 Hotfix 9 and later.	If the *Integrate with Windows Authentication* module is enabled and a generic account is not used for Windows login, set the following registry keys: Key #1: • **Location:** *HKLM\Software\Enatel \SSOWatch\CommonConfig* • **Type:** DWORD 32-bit • **Name:** ***StopSSOEngineOnOTPFailed*** • **Value:** 1 Key #2: • **Location:**: *HKLM\Software\Enatel \WiseGuard\AdvancedLogin* • **Type:** DWORD 32-bit • **Name:** ***StartSSOEngine*** • **Value:** 1 If the *Integrate with Windows Authentication* and *Authentication Manager* modules are not enabled, set the following registry key: • **Location:**: *HKLM\Software\Enatel \SSOWatch\CommonConfig* • **Type:** DWORD 32-bit • **Name:** ***DisplayErrorMessageAtStartup*** • **Value:** 0
Configure the user terminal to prevent the SSO login screen from populating the username field with the user that logged into the user terminal.	All Evidian EAM Clients where users log into the user terminal with a generic account and when the work flows require sign offs by more than one user.	Create the following registry key • **Location:**: *HKLM\SOFTWARE \Enatel\WiseGuard\SSOWatch \CommonConfig* • **Type:** DWORD 32-bit • **Name:** ***Allow4EyesAndSameUser*** • **Value:** ***1*** 

Purpose	Affected Components	Registry Setting
Prevent user self-enrollment of a Nymi Band and other NFC devices	All Evidian EAM Clients, including the enrollment terminal Citrix/RDP servers.	Create the following registry key: • **Location:** *HKLM\Software\Enatel\Wiseguard\FrameWork\Authentication* • **Type:** DWORD 32-bit • **Name:** ***RFIDSelfEnrollAllowed*** • **Value:** ***0***
Prevent a user from logging into the machine by specifying a username without specifying a password, to avoid the situation where a user types the username of another user into the login window, and the other user is nearby an wearing an authenticated Nymi Band. The user can log in without requiring the password of the other user.	All Evidian EAM Clients where a user taps to login. **Note:** Do not set registry key with Evidian EAM 10.03b8573 Hotfix 12 and later. If you set this registry key with Evidian EAM 10.03b8573 Hotfix 12 and later, you cannot use the BLE Tap functionality.	Create the following registry key: • **Location:** *HKLM\SOFTWARE\Enatel\WiseGuard\FrameWork\Authentication* • **Type:** DWORD 32-bit • **Name:** ***WearableNeedsRFID*** • **Value:** ***1*** 
Configure the Evidian EAM Client to avoid the use of the LsaLogonUser function and improve Nymi Band tap response times.	All Evidian EAM Clients, including Citrix/RDP servers and the enrollment terminal.	Create the following registry key: • **Location:** *HKLM\SOFTWARE\Enatel\WiseGuard\Framework\Directory* • **Type:** DWORD 32-bit • **Name:** ***CallLsaLogonUserAfterLogon*** • **Value:** ***0***

Purpose	Affected Components	Registry Setting
Enable the Evidian EAM Client to connect to Nymi Enterprise Server(NES)	All Evidian EAM Clients, including Citrix/RDP servers.	Create the following registry key on all Evidian EAM Clients, including Citrix/RDP servers. • **Location:** *HKLM\Software\Nymi\NES* • **Type:** String • **Name:** URL • **Value:** ***https://nes_server/instance*** Where: • *nes_server* is the Fully Qualified Domain name of the NES host. • *instance* is the services mapping name of the NES web application. The default value is nes. For example, https://tw-srv1.tw-lab.local/nes **Note:** The service mapping name for NES was defined during deployment.
Prevent the EAM client from retrieving Cloud-related configuration data.	All Evidian EAM Clients, including the enrollment terminal Citrix/RDP servers.	Create the following registry key: • **Location:**: *HKLM\SOFTWARE\Enatel\WiseGuard\FrameWork\Directory* • **Type:** DWORD (32-bit) • **Name:** ***GetCloudConfigDataOnlyInCloudMode*** • **Value:** ***1***
Registry Key Settings for Citrix/RDP environments		
Configure the Evidian EAM Client to communicate with the Nymi Agent server.	All Citrix/RDP servers	Create the following registry key: • **Location:** *HKLM\SOFTWARE\Enatel\WiseGuard\FrameWork\Authentication\CommonConfig* • **Type:** String • **Name:** ***NymiAgentUrl*** • **Value:** ***ws://agent_fdqn:9120/socket/websocket*** Where *agent_fdqn* is the Fully Qualified Domain Name of the centralized Nymi Agent server.

Purpose	Affected Components	Registry Setting
Configure Citrix roaming sessions, to ensure that when a published MES application closes, the Citrix session is logged off.	All Citrix servers	Create/Update the following registry keys: Registry Key #1 Edit the following registry key and append the following files to the ValueData field. • **Location:** *HKLM\SYSTEM\CurrentControlSet\Control\Citrix\wfshell\TWI* • **Type:** String • **Name:** ***LogoffCheckSysModules*** • **Value:** ***ssoengine.exe, ESSOCredentialManager.exe*** Registry Key #2 • **Location:** *HKLM\SOFTWARE\Policies\Enatel\SSOWatch\CommonConfig* or *HKLM\SOFTWARE\Enatel\SSOWatch\CommonConfig* • **Type:** DWORD 32-bit • **Name:** ***DoNotManageProcList*** • **Value:** ***1***
Use Case Specific Registry Key Settings		
Optimize NFC taps	All Evidian EAM Clients including Citrix/RDP servers and the enrollment terminal, where you perform Nymi Band taps on an NFC reader. **Note:** Ensure that you define these registry keys with Evidian EAM 10.03b8573 Hotfix 12 and later.	Key #1 • **Location:HKLM\SOFTWARE\Enatel\WiseGuard\FrameWork\Authentication** • **Type:** DWORD 32-bit • **Name:** ***NymiIntentDiscardNfc*** • **Value:** 0 Key #2 • **Location:HKLM\SOFTWARE\Enatel\WiseGuard\FrameWork\Authentication** • **Type:** DWORD 32-bit • **Name:** ***NymiIntentDiscardPcsc*** • **Value:** 1

Purpose	Affected Components	Registry Setting
Support multiple domains, where users enroll their Nymi Bands in a domain that is different from the user terminal domain.	All Evidian EAM Clients including Citrix/RDP servers and the enrollment terminal.	Edit the *HKLM\Software\Enatel \WiseGuard\FrameWork\Directory \PossibleDomainList.* In the **`Value Data`** field, type the NETBIOS name for each domain that contains users, that will log in to the user terminal. **Note:** Separate each domain with a space, as shown in the following example. 
For use with DeltaV	All Evidian EAM Clients, including the enrollment terminal Citrix/RDP servers.	Create the following registry keys in *HKLM\Software\Enatel\SSOWatch \CommonConfig*: Key #1 • **Type:** DWORD 32-bit • **Name: *NoCacheFields*** • **Value: *1*** Key #2 • **Type:** DWORD 32-bit • **Name: *CheckUIAutomationFieldPresence*** • **Value: *2*** Key #3 • **Type:** DWORD 32-bit • **Name: *DoNotStopCustomScriptOnCancel*** • **Value: *1*** Key #4 • **Type:** DWORD 32-bit • **Name: *SupportMultipleDesktops*** • **Value: *1***

Purpose	Affected Components	Registry Setting
Set when the Integrate with Windows Authentication and Authentication Manager modules are not enabled on the client	All Evidian EAM Clients, including the enrollment terminal.	• **Location:***HKEY_LOCAL_MACHINE\SOFTWARE\Enatel\SSOWatch\CommonConfig* • **Type:** DWORD 32-bit • **Name:** ***DisplayErrorMessageAtStartup*** • **Value:** ***0***
Performance Registry Key Settings		
Increase the time that the Evidian EAM Client waits for the initialization of the *nymi_api.dll* and retrieval of authentication token from NES to complete.	All Evidian EAM Clients, including Citrix/RDP servers and the enrollment terminal.	Create the following registry key: • **Location:** *HKLM\Software\Enatel\Wiseguard\FrameWork\Authentication* • **Type:** DWORD 32-bit • **Name:** ***WearableDelay*** • **Value:** ***10000***

6.6.8 - Silent Installations of Evidian EAM Client and SSO Engine

For environments with a large number of user terminals, you can use enterprise tools to deploy the software and registry key settings from a central location.

When designing your strategy, export the following registry keys:

- *HKEY_LOCAL_MACHINE\Software\Nymi\NES*, which defines the `NES_URL`.
- *HKEY_LOCAL_MACHINE\Software\Enatel*, which defines the Evidian EAM Client configuration.
- *HKEY_LOCAL_MACHINE\Software\Evidian*, which contains Evidian license information.

6.6.9 - (Citrix/RDP environments only) Configuring Citrix/RDP Clients to Access the 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.

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.

6.6.10 - Replacing the Nymi DLL File

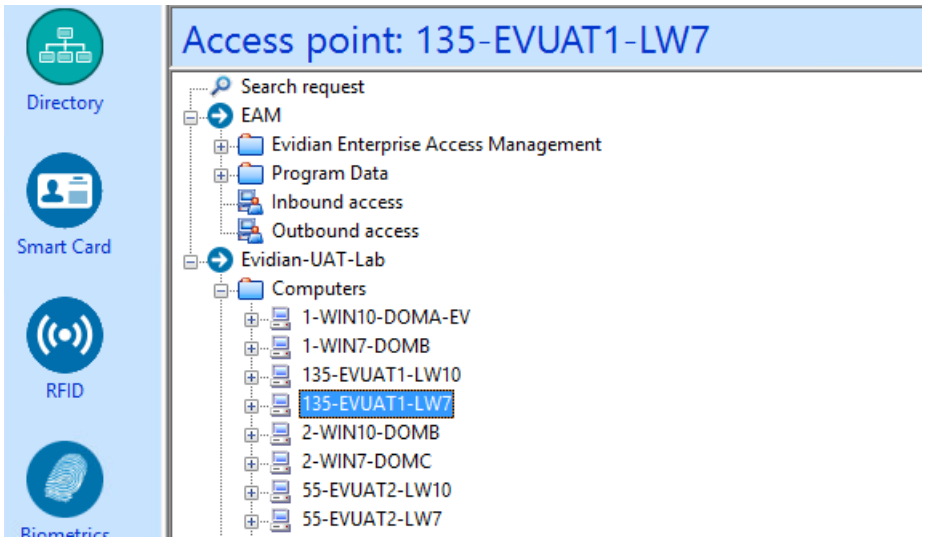
Replace the *nymi_api.dll* file that the Evidian EAM Client uses with Nymi Runtime version that you installed.

About this task

These steps apply to user terminals and Citrix servers/RDP session hosts in a wearable configuration only.

Procedure

1. Rename the *nymi_api.dll* in *C:\Program Files\Common Files\Evidian\WGSS*.
2. From Windows explorer, navigate to Nymi SDK installation package.
3. Copy the *..\nymi-sdk\windows\x86_64\nymi_api.dll* file to *C:\Program Files\Common Files\Evidian\WGSS*.
4. Log in to the Evidian EAM Management Console.
5. Click **`Account and access rights management`**  .
6. In the left navigation pane, expand **`Domain > Computers`**, and then select the terminal, as shown in the following figure.



7. 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.

6.6.11 - Enabling LDAPS Support

Perform the following steps on each terminal in the environment when you configure the Evidian EAM Controller to use LDAPS.

About this task

Consider using Group Policy Objects (GPO) to make this change.

Procedure

1. Run *regedit.exe*.
2. Navigate to *HKEY_LOCAL_MACHINE\SOFTWARE\Enatel\WiseGuard\FrameWork*.
3. Right-click *WGDirectory*, and then select **`New > DWORD (32-bit) value`**
4. In the **`Value`** file, type ***SSL***.
5. Double-click the **`SSL`** key, and in the **`Value data`** field, type ***1***.
6. In the *ServerList* key, confirm that the path to the AD LDS instance with the secure port appears. For example, ***srv-ssl.ssl.lan:636.***.
7. Close `Registry Editor`.

6.6.12 - Logging into the terminal

If you installed the Evidian SSOAgent with the Authentication Manager authentication mode, when the terminal locks, the Windows login screen appears with new options.

About this task

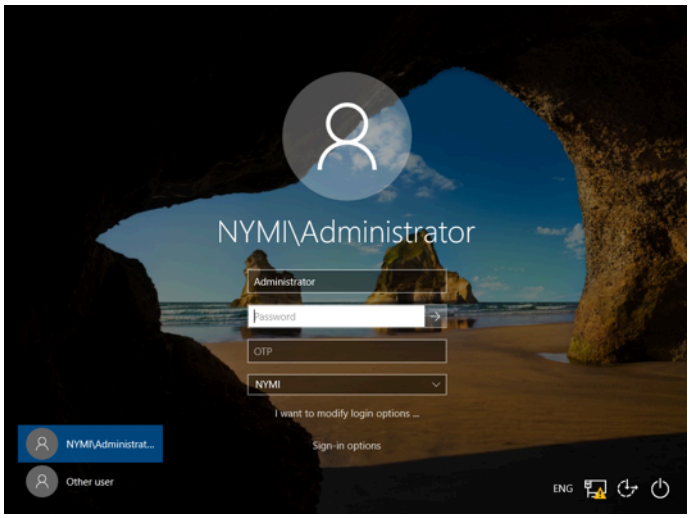
Perform the following steps to log in.

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.

6.6.13 - Validating the EAM Client Installation

After you log into the computer, validate that the Evidian EAM Client can connect to the Evidian EAM Controller and that the EAM client can retrieve certificates from NES.

- Open the system tray and confirm hover over the **`ESSO Credential Manager`** icon. Confirm that the status that appears is **Connected Mode**, as shown in the following figure.

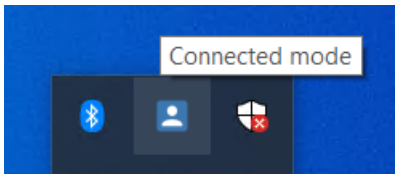
  

  Figure 86: ESSO Credential Manager connected mode

  If the status that appears is **Disconnected Mode**, the Evidian EAM Client cannot establish a connection with the Evidian EAM Controller, refer to the Nymi Connected Worker Platform with Evidian Troubleshooting Guide for more information.
- Navigate to *C:\Windows\System32\config\systemprofile\AppData\Roaming\Nymi\NSL \random_string\ksp*, and confirm that you see at least 20 files, as shown in the following figure. If you see 9 files only, refer to the Nymi Connected Worker Platform with Evidian Troubleshooting Guide for more information.

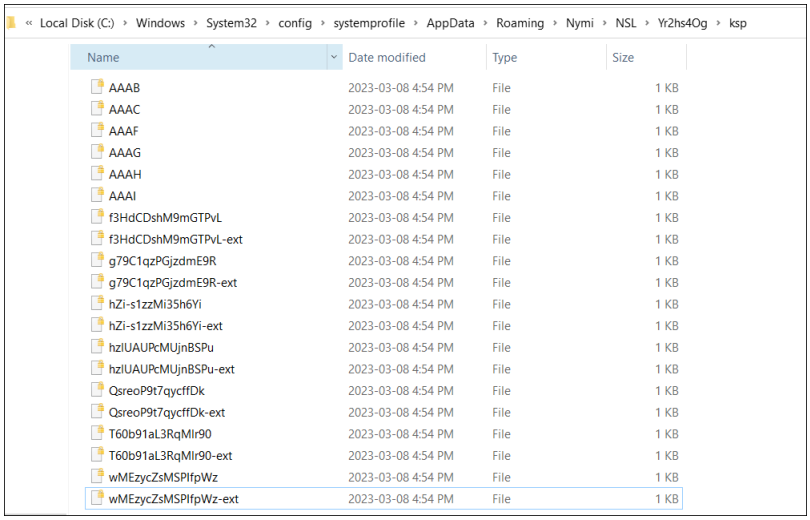


Figure 87: Certificates Folder

6.6.14 - 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 Enterprise SSO application.

Before you begin

Install the MES application. 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.

About this task

Perform the following steps on each user terminal that accesses the MES application.

Procedure

1. In the Windows System Tray, click on the Enterprise SSO (eSSO) icon.
2. Click the **Home** icon, and then click **Refresh**, as shown in the following figure.
   The Evidian EAM Client contacts the Evidian EAM Controller to retrieve new technical definitions.

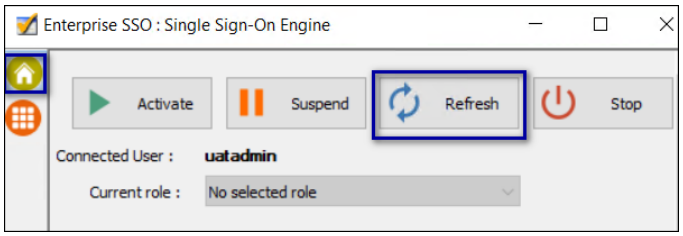


Figure 88: eSSO application Home Window

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.

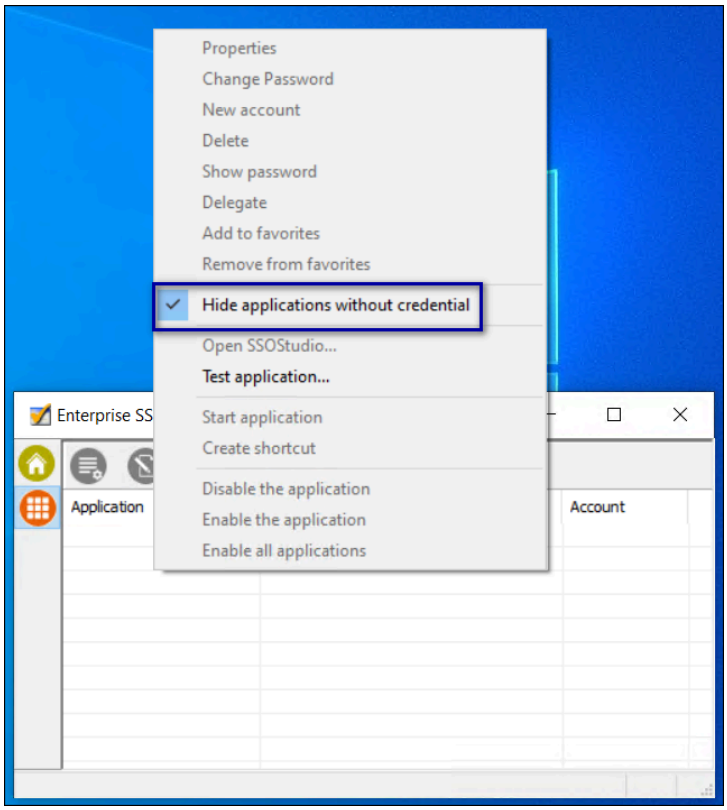


Figure 89: Enterprise SSO Account tab

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

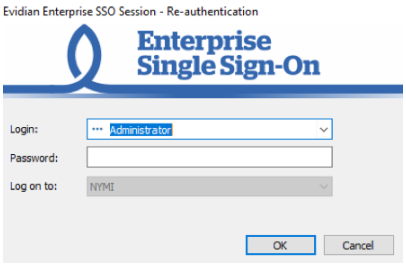


Figure 90: SSO Login screen

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.

6.7 - Configuring Support for Selective Trust Environments

Review this information for information about a multi-domain environment where there is a full trust from the client (computer) domain to the server (primary) domain, and a selective trust from the server (primary) domain to the client (computer) domain.

About this task

In a selective two-way trust:

- Primary domain trusts the Evidian EAM Client computers in the computer domain.
- Computer domain trusts the users and the Evidian EAM Controller/Nymi Enterprise Server(NES) in the primary domain.

To support SSO operations on the Evidian EAM Client computer, perform the following actions:

Procedure

1. On the user terminals, ensure that a service account on the primary domain runs the EAM security service.

2. On the user terminals, ensure that the service account has write permissions on the *HKLM\Software\Enatel* registry key.
3. In AD LDS, ensure that the service account has access privileges.
4. Ensure that the user logs into the user terminal with their account in the primary domain.

6.8 - Silent Installations of Evidian EAM Client and SSO Engine

For environments with a large number of user terminals, you can use enterprise tools to deploy the software and registry key settings from a central location.

When designing your strategy, export the following registry keys:

- *HKEY_LOCAL_MACHINE\Software\Nymi\NES*, which defines the *NES_URL*.
- *HKEY_LOCAL_MACHINE\Software\Enatel*, which defines the Evidian EAM Client configuration.
- *HKEY_LOCAL_MACHINE\Software\Evidian*, which contains Evidian license information.

6.9 - 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.

Before you begin

Before the user enrolls, ensure that an EAM administrator logs into the Evidian EAM Management Console and adds the user account to the appropriate user profile.

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 Evidian 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.

7 - Post Deployment Considerations

Review this section for information about tasks that you perform after you deploy the with Evidian solution, such as backup and recoveries and the steps you must perform when you add new users, user terminals, and enrollment terminals to the solution.

7.1 - Adding New Users and Computers to the Solution

After you deploy the Nymi with Evidian solution, you must perform the following tasks when you add new computers or users to the solution.

- When you add new users to the solution, ensure that you:
  - Add their Active Directory user account to the Active Directory inclusion group.
  - Assign the appropriate user profile to their user account in the Evidian EAM Management Console.
- When you add new computers to the solution, ensure that you assign the appropriate access point profile to the computer in the Evidian EAM Management Console.

7.2 - NES Backup and Recovery

Review this section for information about how to perform backups and recoveries of the NES host and NES database.

This section assumes that you:

- Deployed NES on a virtual machine
- The SQL instance resides on a server that differs from the NES server.
- Maintain the same FQDN and IP address for the NES virtual machine at the time of backup and the time of restore.
- Maintain the same FQDN and IP address for the SQL server virtual machine at the time of backup and the time of restore.

7.2.1 - NES Backups

To protect the Connected Worker Platform and certificate data on the NES machine, perform a backup of the NES virtual machine after you complete the initial installation and each time you change the NES or IIS configuration.

Use VMware vMotion or perform snapshots to backup the virtual machine.

7.2.2 - NES Database Backups

NES stores Nymi Band information, Nymi Band user information, and audit events securely in a SQL database named Nymi.`NES_service_name`, where `NES_service_name` is the NES service mapping name that you configured in the `NES Setup` wizard. For example, ***Nymi.nes***

Use your corporate backup and recovery software to back up the SQL database. The recovery point objective (RPO) determines the frequency of the NES database backup.

See Microsoft for more information about how to protect the SQL server.

7.2.3 - NES Server and Database Recoveries

Use your corporate backup and recovery software to restore the NES database on the SQL server and use VMware vMotion or snapshots to restore the virtual machine.

Note: You cannot recover the following data from a database restore:

- Any NES database changes, such as Nymi Band enrollments, Nymi Band re-enrollments, Nymi Band disassociations, and application policy changes that you perform after the last backup and prior to the failure.
- NES audit events that were recorded after the last backup and prior to the failure.

7.3 - Evidian EAM Controller Backup and Recovery

Review this section for information about how to perform backups and recoveries of the Evidian EAM Controller host and audit database.

This section assumes that you:

- Deployed the Evidian EAM Controller on a virtual machine
- Created the audit database a server that differs from the Evidian EAM Controller server.
- Installed ADLDS on the same virtual machine as the Evidian EAM Controller.
- Maintain the same FQDN and IP address for the Evidian EAM Controller server virtual machine at the time of backup and the time of restore.
- Maintain the same FQDN and IP address for the SQL server virtual machine at the time of backup and the time of restore.

7.3.1 - Evidian EAM Controller Backups

Use Virtual Machine(VM) snapshots to backup the Evidian EAM Controller virtual machine.

Perform a VM snapshot of the Evidian EAM Controller virtual machine:

- After you complete the initial installation.
- On a regular basis, as defined by your backup policy and your recovery point objective(RPO).

7.3.2 - Audit Database Backups

Evidian EAM Controller stores audit information in a SQL database named eamaudit.

Use your corporate backup software to back up the SQL database. The recovery point objective (RPO) determines the frequency of the audit database backup.

See Microsoft for more information about how to protect the SQL server.

7.3.3 - Evidian EAM Controller Server and Audit Database Recoveries

Use your corporate backup and recovery software to restore the audit database on the SQL server and use snapshot recovery to restore the virtual machine.

Note: You cannot recover the following data:

- Any ADLDS changes, such as Nymi Band enrollments, Nymi Band re-enrollments and Nymi Band disassociations that you perform after the last backup of the Evidian EAM Controller virutal machine and prior to the failure.
- Evidian EAM Controller audit events that were recorded after the last database backup and prior to the failure.

8 - 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.

8.1 - Migrating Existing Nymi Bands to Evidian

If you introduce Evidian into an existing Nymi direct integration environment, such as POMSnet, existing Nymi Band users must log in to the Nymi Band Application on the enrollment terminal to complete the enrollment on the Evidian EAM Controller.

Before you begin

Ensure that the user is wearing their authenticated Nymi Band.

About this task

Procedure

1. Log into the Nymi Band Application with the username and password of the user that will enroll the Nymi Band.
2. Close the Nymi Band Application when the enrollment completes

Results

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

8.1.1 - (Updates from NEE 3.3.1 and earlier only) 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 a 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 in the Evidian EAM Management Console to modify the settings in the access point profile, to prevent unexpected desktop locks when performing a Nymi Band tap in the Nymi-integrated MES application.

Procedure

1. In the `Directory` view, expand **`EAM > Evidian Enterprise Access Management > User Access > AccessPoint Profiles > Default Access Point Profile`**.
2. On the **`Authentication Manager`** 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 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.

8.2 - 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 Evidian EAM Management 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.

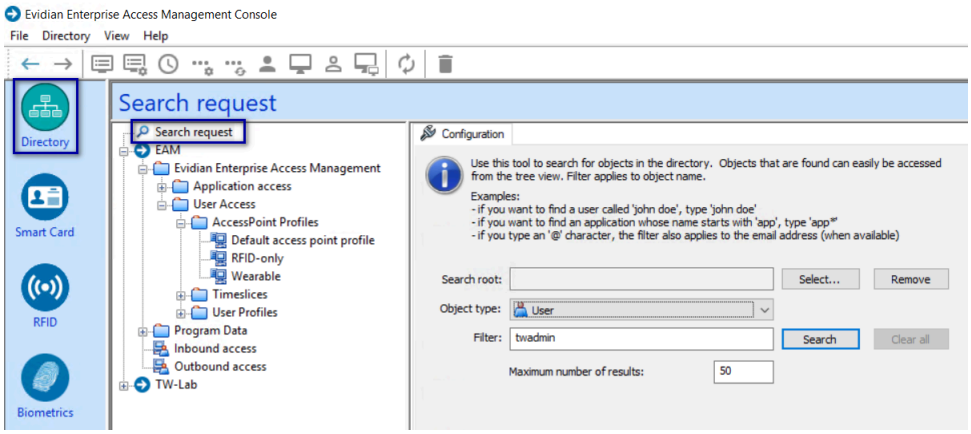
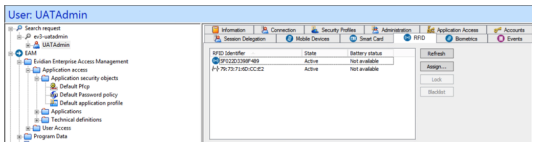


Figure 91: Search request window

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

Figure 92: RFID tab for a user



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

8.3 - Replacing, Re-Enrolling or Re-Registering the Nymi Band for a User

After a user enrolls to a Nymi Band, there are several reasons that a user might need to repeat enrollment:

- User might need to temporarily enroll to another Nymi Band when they have forgotten their Nymi Band at home.
- User might need to permanently enroll to another Nymi Band when they have lost their Nymi Band or the Nymi Band does not function correctly.
- User might need to re-enroll their Nymi Band when the characteristics of their fingerprint change, for example, when their finger has a cut.
-

Nymi provides you with configuration options that allow users to perform self-service re-enrollment without the assistance of an CWP Administrator. Alternatively, you can ensure that users only complete re-enrollment with the assistance of a CWP Administrator.

The steps to replace or re-enroll a Nymi Band differ depending on your configuration.

8.3.1 - Managing Nymi Band Re-Enrollments and Re-registrations with Self-Service

When you enable the self-service enrollment and self-service registration feature in the active Nymi Enterprise Server(NES) administration policy, users can re-enroll and re-register their own Nymi Band or optionally a Nymi Band that is currently assigned to another user without the assistance of an CWP Administrator.

Before you begin

Customizing Self-Service Re-Enrollment and Self_service Re-Registration provides detailed information about how to configure the NES active policy to allow a user to self-enroll and self-register their own Nymi Band or to the Nymi Band of another user.

Note: User with SEOS-enabled Nymi Bands cannot use self-service re-enrollment to re-enroll a Nymi Band that was previously assigned to a another user.

About this task

Instruct the user to perform the following steps.

Procedure

1. Perform the delete user data operation on the Nymi Band identified for re-enrollment.
2. Log into the Nymi Band Application and complete the steps for enrollment.

   The steps to complete a re-enrollment and re-registration are identical to the steps that the user follows to complete a new enrollment and registration.
3. For FIDO2 only, when a user enrolls to another Nymi Band, the user must re-create the FIDO2 security key on the newly enrolled Nymi Band.

Results

If the user re-enrolls/re-registers their own Nymi Band, the same Nymi Band appears in the `User Properties` window in the NES Administrator Console.

If a user re-enrolls/re-registers a Nymi Band that was assigned to another user, the following changes appear in the `User Properties` window in the NES Administrator Console of the Enrollment NES and Registration NES:

- The original Nymi Band appears for the user is not active but remains as the primary Nymi Band.
- The newly enrolled Nymi Band appears for the user and is set to active.

The following figure provides an example where a user named tw-user2 enrolled to a Nymi Band with serial number AAAH-00125, and then performed a self-service enrollment to second Nymi Band with serial number ACAK-00056.

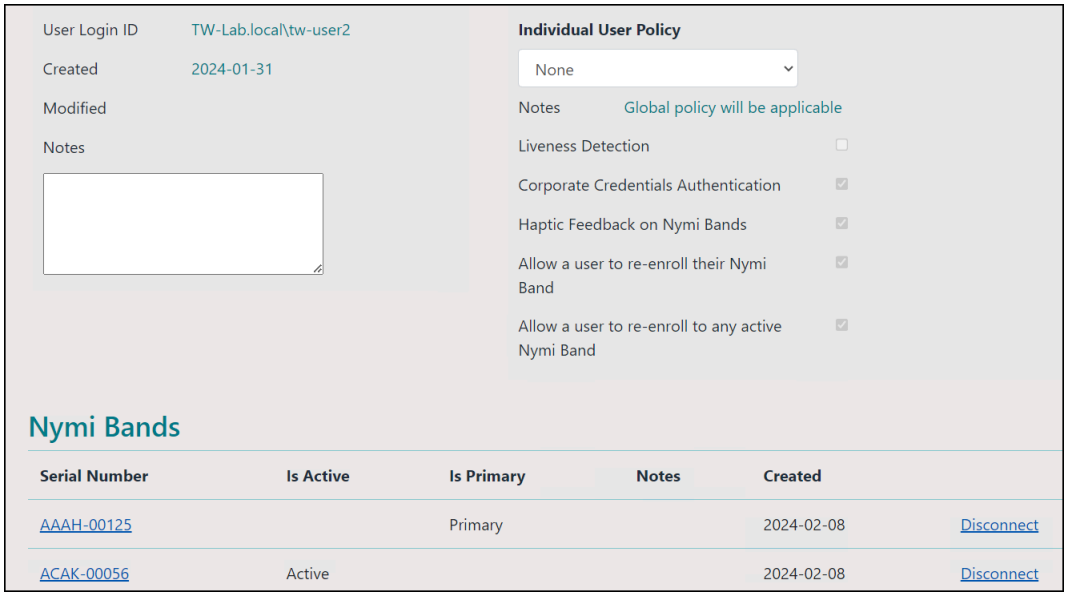


Figure 93: User with multiple Nymi Bands after self-service re-enrollment.

8.3.1.1 - Evidian Behaviour with Self-Enrollments

The following section describes what you see in the Evidian EAM Management Console after a user completes a self enrollment.

If a user re-enrolls to a Nymi Band that was assigned to another user or an unassigned Nymi Band, the RFID tab for the user displays the entries for NFC UID and MAC address for the newly enrolled Nymi Band as well as the NFC UID and MAC address entry for the previously enrolled Nymi Band.

Note: The user can use both Nymi Bands to complete authentication tasks in Evidian windows.

The following figure provides an example.

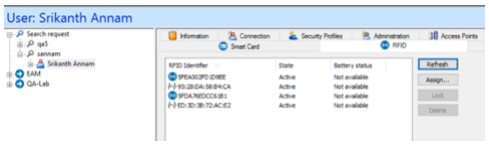


Figure 94: RFID tab for User with multiple Nymi Bands after self-service re-enrollment.

Managing Nymi Band self-enrollments with Evidian

Nymi recommends that you do not manually manage Nymi Band entries for a user after self-enrollment.

If the user re-enrolled to a new Nymi Band because their original Nymi Band was not available, for example the Nymi Band was lost or forgotten at home, perform the following steps:

1. Instruct the user to continue to use their newly enrolled Nymi Band.

2. Instruct the user to perform a delete user data operation on the originally enrolled Nymi Band.
3. Use the originally enrolled Nymi Band as a spare or provide it to a another user for enrollment.

8.3.2 - Re-enrolling/Re-registering a User to the Same Nymi Band without Self-Service

User might require re-enrollment and re-registration of their current Nymi Band in the event of multiple fingerprint authentication failures or when must use a different fingerprint for authentication, for example, due to a cut.

Before you begin

Perform a delete user data process of the Nymi Band. See section Deleting User Data for more information.

About this task

To re-enroll and re-register a user to their Nymi Band, the NES Administrator must delete the Nymi Band to user association in NES and the user or administrator must delete the user data on the Nymi Band.

Perform the following steps in the NES Administrator Console to assign a Nymi Band to a different user. In an IT/OT configuration perform these steps on the Enrollment NES and Registration NES.

Procedure

1. In the **Search** page, select the **Users** Option.
2. In the **Search** field, type the full or partial username, first name, or last name of the user.
3. Click **Search**. The Search page displays the user, or a list of users that match the search criteria.
4. Select the Domain\username link of the user to open the **User Details** page.
5. 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**.

What to do next

Contact the user to enroll the Nymi Band with the Enrollment Terminal. In IT/OT configurations, instruct the user to register with the Registration Terminal.

When the enrollment and if required, registration succeeds, in the NES Administrator Console of the Enrollment NES and Registration NES, search for the user in the NES Administrator Console, open the User Details page and confirm that in the **Nymi Band** table, the Nymi Band is Active.

8.3.2.1 - Evidian Behaviour with Self-Enrollments (Same Nymi Band)

The following section describes what you see in the Evidian EAM Management Console after a user completes a self enrollment.

If the user re-enrolls their own Nymi Band, the RFID tab for the user displays the entries for NFC UID and MAC address for the new instance of the Nymi Band as well as the MAC address entry for the old Nymi Band.

The following figure provides an example.

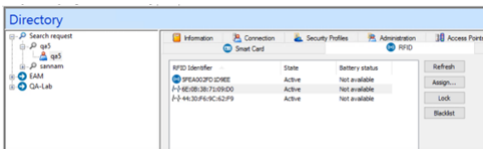


Figure 95: RFID tab for User re-enrolls their Nymi Bands with self-service re-enrollment.

Nymi recommends that you do not manually manage Nymi Band entries for a user after self-enrollment.

8.3.3 - Returning a Nymi Band Without Self-Enrollment

When a user no longer requires their Nymi Band, you must delete the Nymi Band association in NES and Evidian, and then perform a delete user data operation on the Nymi Band.

After you complete these steps, you can assign another user to the Nymi Band.

8.3.3.1 - Removing the User Association to the Nymi Band in Evidian Enterprise Access Management

This procedure removes the association between the user and the Nymi Band in Enterprise Access Management (EAM) and deletes the biometric data from the Nymi Band.

About this task

Log into the Evidian EAM Management Console with an account that is an EAM Administrator.

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 Evidian EAM Management 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.

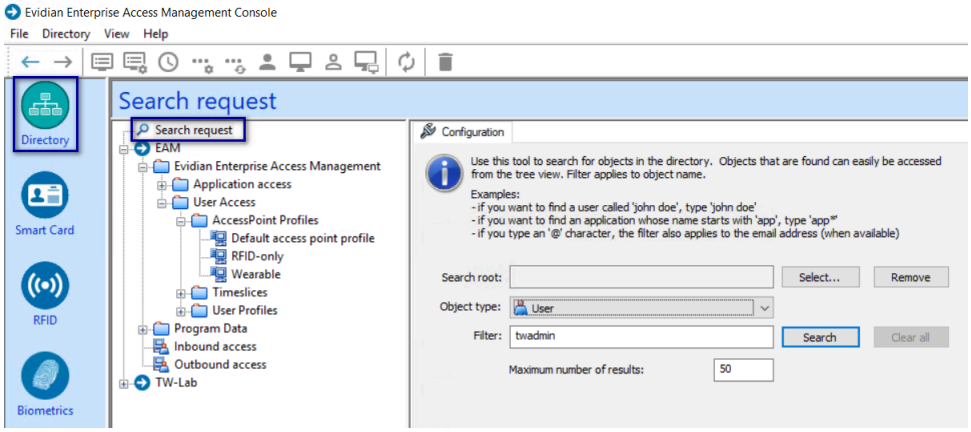
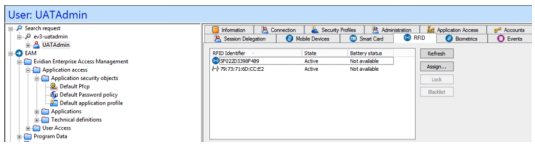


Figure 96: Search request window

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

Figure 97: RFID tab for a user



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

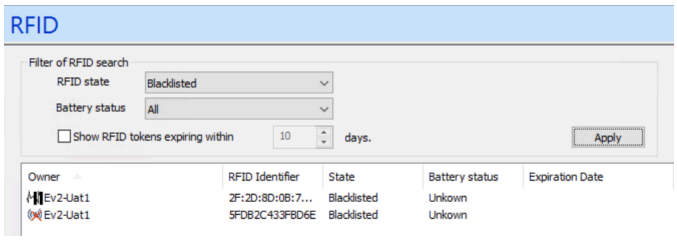


Figure 98: Blacklisted Nymi Band

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

8.3.3.2 - 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 **Search** page, select the **Users** Option.
2. In the **Search** field, type the full or partial username, first name, or last name of the user.
3. Click **Search**. The Search page displays the user, or a list of users that match the search criteria.
4. Select the Domain\username link of the user to open the **User Details** page.
5. 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**.
6. On the Disconnect screen, scroll to the bottom and select **Disconnect**.

8.3.3.3 - Deleting User Data on Nymi Band 3.0

The Delete User Data process clears personal information, such as the fingerprint template and credentials, from the Nymi Band that is currently enrolled to a user. This process also clears the lockout during a failed authentication lockout.

About this task

Before you can re-enroll a Nymi Band, you must perform the delete user data operation.

Procedure

1. Remove the Nymi Band from the wrist of the user, and then attach the Nymi Band to a charger.
2. On the Nymi Band, hold the bottom button. The Delete User Data message displays on the screen, as shown in the following figure.

   Note: The Nymi Band does not vibrate if the **Haptic Feedback on Nymi Bands** is not enabled for the user or active group policy.

   Figure 99: Delete User Data
3. Continue to hold the bottom button until the Nymi Band quickly vibrates twice and the **USER DATA DELETED** message displays on the screen (after about 10 seconds), as show in the following figure.

Figure 100: User Data Deleted

Results

Biometric authentication does not work for the user after you perform a delete user data operation. To use the Nymi Band again, the user must enroll the Nymi Band by using the Nymi Band Application.

Note: If you delete the user data on a Nymi Band and attempt to re-enroll it, you will see the following message,

A Nymi Band has been assigned to (user name), however it cannot be found.

To proceed, you need to delete the Nymi Band association with the user in the NES Administrator Console.

8.3.4 - Handling a Lost Nymi Band Without Self Enrollment

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 Evidian EAM Management 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.

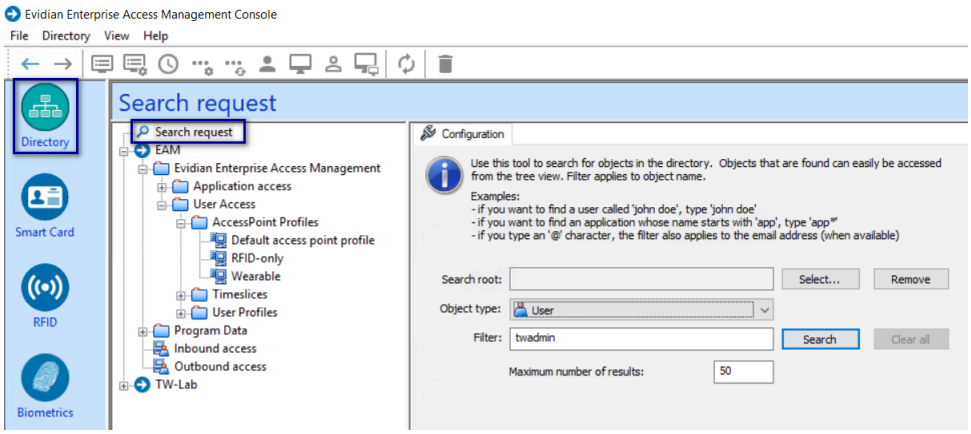
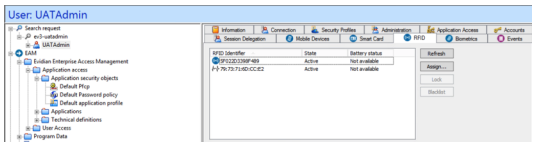


Figure 101: Search request window

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

Figure 102: RFID tab for a user



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.

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

4. Select the Domain\username link of the user to open the **`User Details`** page.
5. 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`**.
6. On the `Disconnect` screen, scroll to the bottom and select **`Disconnect`**.

8.3.5 - Handling a found Nymi Band Without Self-Enrollment

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

About this task

Log into the Evidian EAM Management Console with an account that is an EAM Administrator.

Procedure

1. In the Evidian EAM Management 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.

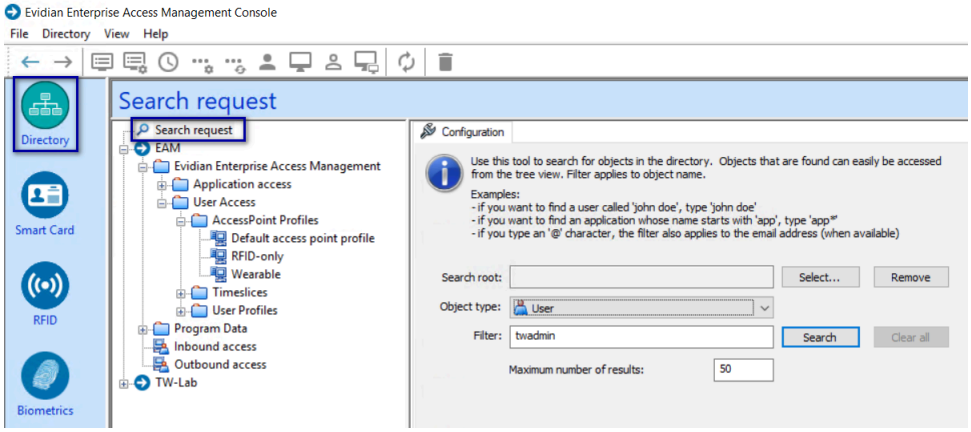


Figure 103: Search request window

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

Results

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

8.3.5.1 - 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 **Search** page, select the **Users** Option.
2. In the **Search** field, type the full or partial username, first name, or last name of the user.
3. Click **Search**. The Search page displays the user, or a list of users that match the search criteria.
4. Select the Domain\username link of the user to open the **User Details** page.
5. 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**.
6. On the Disconnect screen, scroll to the bottom and select **Disconnect**.

9 - Updating Nymi and Evidian Components

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

The section describes how to update the components in a Connected Worker Platform with Evidian solution.

9.1 - Updating the NES Software

Update the NES according to the instructions in the *Nymi Connected Worker Platform—Deployment Guide*.

If you update from NES 3.3.1 or earlier, 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 / Registration Destination`** list, select the option **`NES and Evidian`**, as shown in the following figure, and then click **`Save`**.

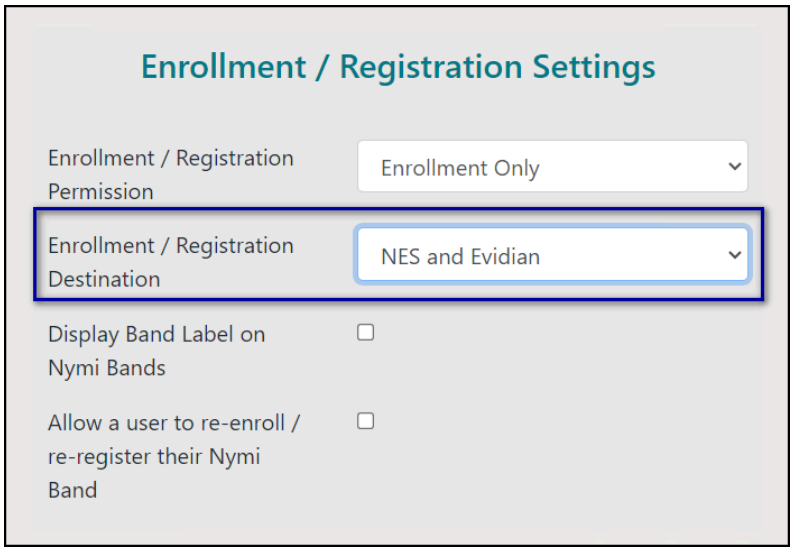


Figure 104: NES and Evidian enrollment option

Note: In CWP 1.17.0 and earlier the list name is **`Enrollment Destination`**.

9.1.1 - (Updates from NEE 3.3.1 and earlier only) 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 a 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 in the Evidian EAM Management Console to modify the settings in the access point profile, to prevent unexpected desktop locks when performing a Nymi Band tap in the Nymi-integrated MES application.

Procedure

1. In the `Directory` view, expand **`EAM > Evidian Enterprise Access Management > User Access > AccessPoint Profiles > Default Access Point Profile`**.
2. On the **`Authentication Manager`** 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 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.

9.2 - Updating the Evidian EAM Controller

Perform the following steps to update the Evidian EAM Controller software.

Before you begin

If you use LDAPS, before you perform the following steps you must first to revert the configuration to LDAP.

1. Open Registry Editor and navigate to *HKLM\SOFTWARE\Enatel\WiseGuard\FrameWork \WGDirectory* .
2. Edit **`ServerList`**, and in the **`ValueData`** field, change the port number from ***50001*** to ***55000***.
3. Edit **`SSL`**, and in the **`ValueData`** field, change the value from ***1*** to ***0***.

The following figure provides an example of changes in the *WGDirectory*.

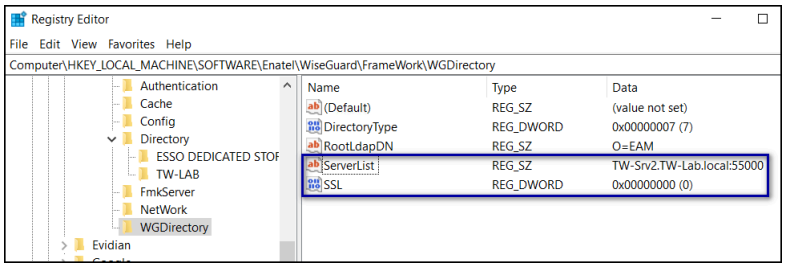


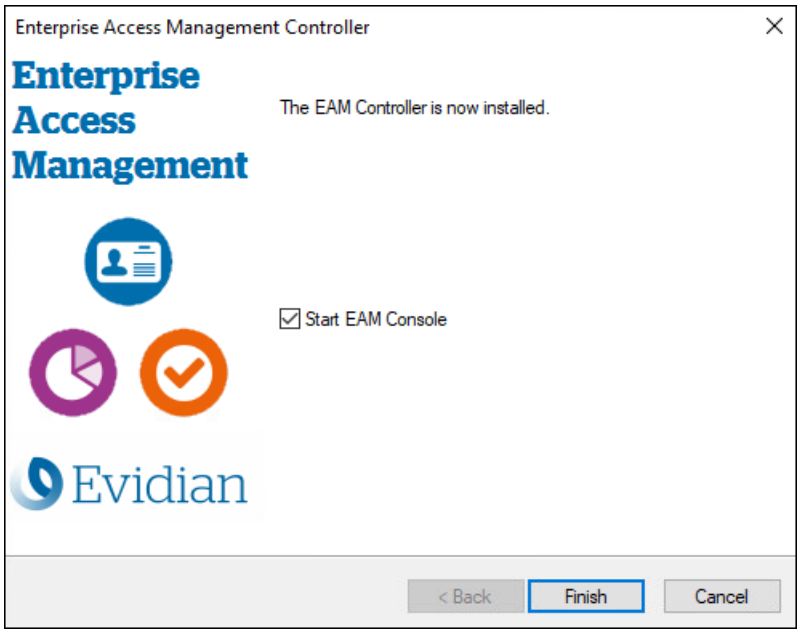
Figure 105: WGDirectory changes

4. Restart the *Enterprise Access Management Security Services* service.

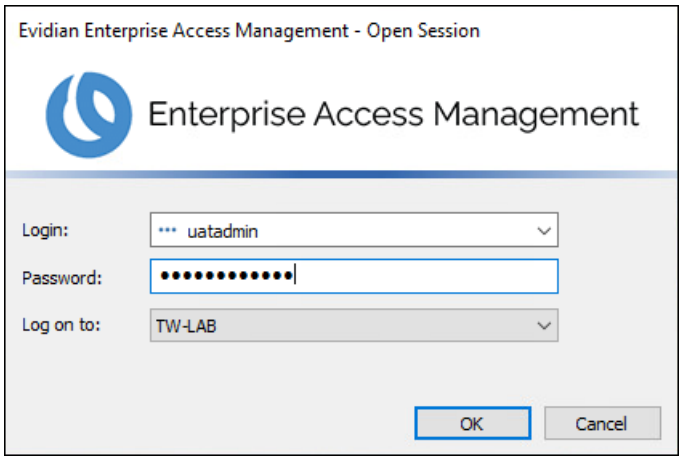
Procedure

1. Log in to the server as a local administrator.
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. Double-click the *C:\Downloads\EAM-v10.0xxxxxx.xx\EAM.x64\INSTALL \ESSOcontroller.msi* file.
4. On the `Windows protected your PC`, window, click **`More info`**, and then click **`Run anyway`**.
5. On the `Welcome to the EAM Controller installation assistant` window, click **`Next`**.
6. On the `License keys` window, click **`Next`**.
7. On the `Dedicated directory` window, click **`Next`**.
8. On the `Audit database server` window, click **`Next`**.
9. On the On the `Secrets Initialization` window, click **`Next`**.
10. On the `Authentication methods` window, click **`Next`**.
11. On the `Software installation` window, click **`Next`**.

    The Windows Installer window appears, and the installation process begins.
12. 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`**.



13. For LDAPS deployments only, perform the following steps:
    a. Open Registry Editor and navigate to *HKLM\SOFTWARE\Enatel\WiseGuard\FrameWork \WGDirectory* .
    b. Edit **`ServerList`**, and in the **`ValueData`** field, change the port number from ***55000*** to ***55001***.
    c. Edit **SSL**, and in the **`Data Value`** field, change the value from ***0*** to ***1***.
    d. Restart the *Enterprise Access Management Security Service* service.
14. Replace the *nymi_api.dll* file:
    a. Rename the *nymi_api.dll* in *C:\Program Files\Common Files\Evidian\WGSS*.
    b. In Windows explorer, navigate to Nymi SDK installation package.
    c. Copy the *..\nymi-sdk\windows\x86_64\nymi_api.dll* file to *C:\Program Files\Common Files \Evidian\WGSS*.
    d. Restart the *Enterprise Access Management Security Services* service.
15. 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`**.



Results

The Evidian EAM Management Console appears.

9.2.1 - (Updates from CWP 1.15.X and earlier only) Updating the TokenManagerStructure

The Connected Worker Platformsoftware package includes new TokenManagerStructure(TMS) files that support wearable and RFID authentication methods. When you update Connected Worker Platform components from Nymi Enterprise Edition, Nymi recommends that you replace any TokenManagerStructure file that you placed on a terminal to override the Evidian EAM Controller configuration, and the configuration on the Evidian 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.

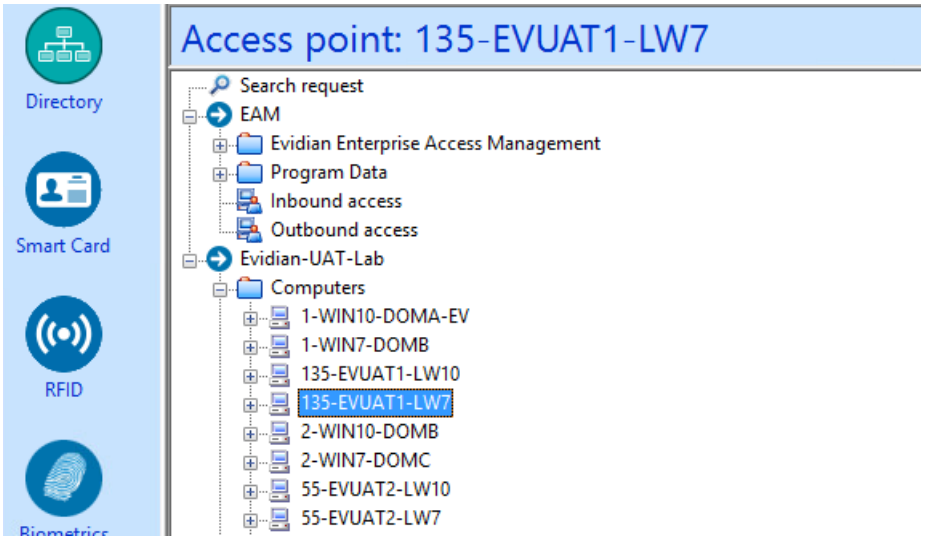
Perform the following steps to replace the TMS configuration in your environment.

Procedure

1. Log in to the Evidian EAM Management 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 Evidian 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. Log in to the Evidian EAM Management Console.
12. Click **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.

9.3 - Update the Centralized Nymi Agent

Perform the following steps if your environment uses a centralized Nymi Agent.

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, right-click the *Nymi Runtime Installer version.exe* file, and select **`Run as administrator`**.
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` page, 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.

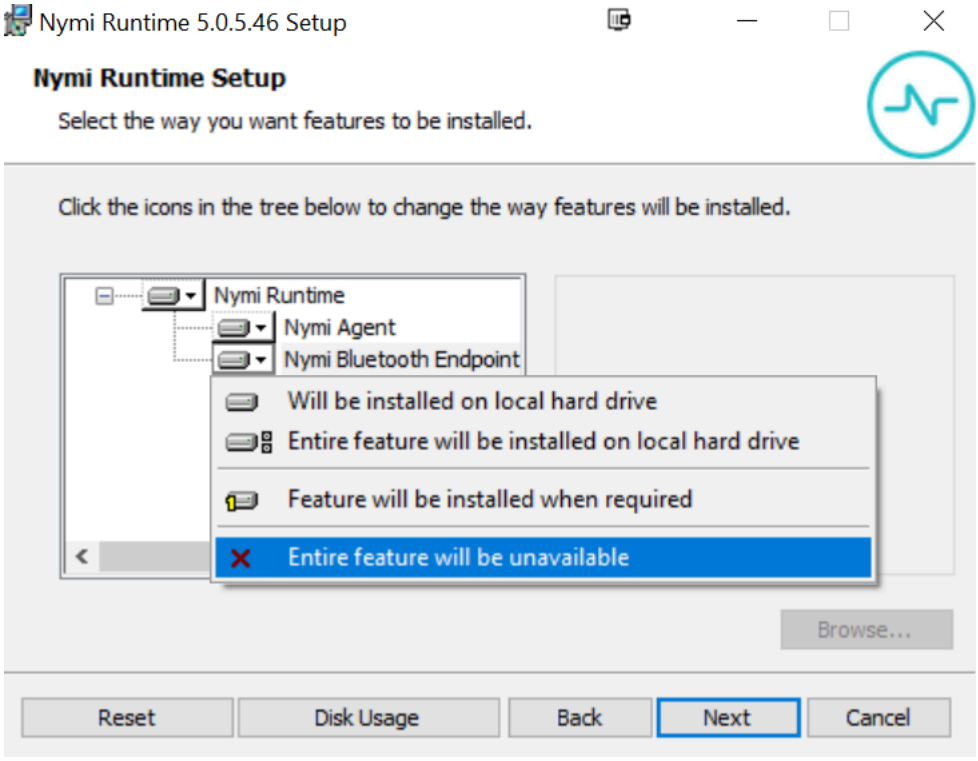


Figure 106: Nymi Bluetooth Endpoint feature will be unavailable

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

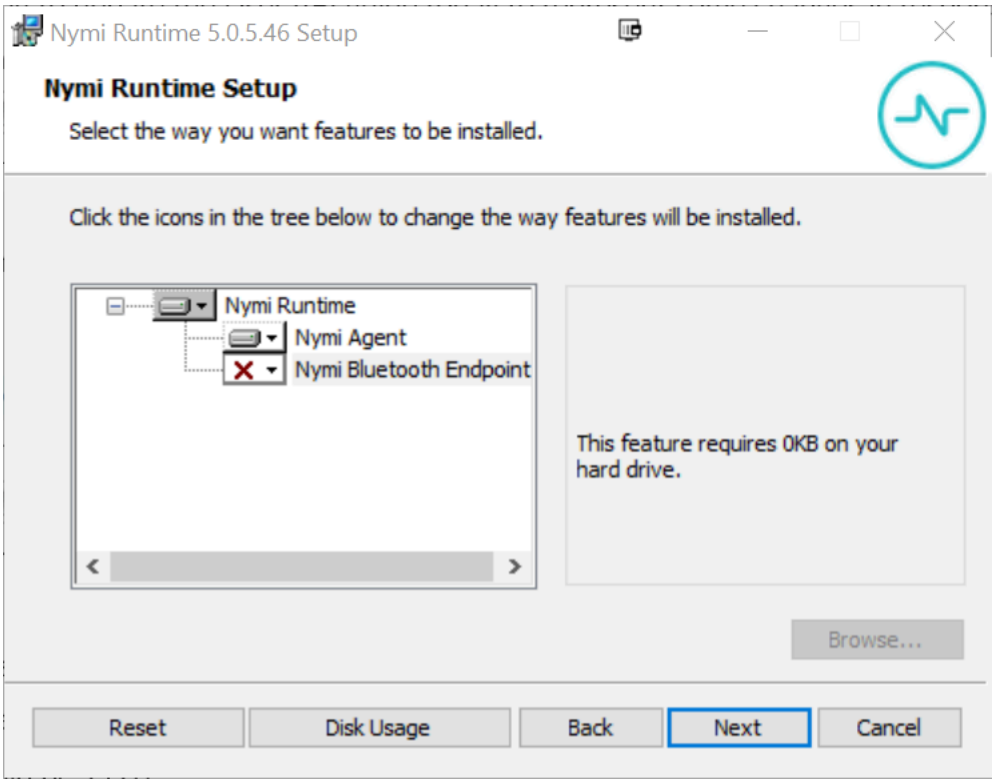


Figure 107: Nymi Bluetooth Endpoint feature is not available

10. On the `Service Account` window, perform one of the following actions to choose the account that starts the service:

    - Accept the default service account NTAuthority\LocalService, click **`Next`**.
    - For non-English Windows Operating Systems and for Nymi WebAPI configurations where you install the centralized Nymi Agent on the NES server, choose the LocalSystem account from the drop list, and then click **`Next`**.

    Note: The service account must have permission to run as a service. Enable Service Log On provides more information about how to modify the local policy to enable this permission for the service account.

    The following figure shows the `Service Account` window.

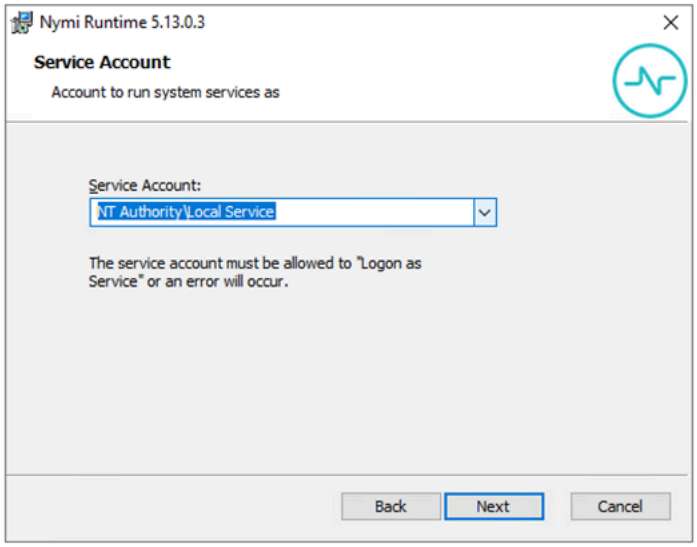


Figure 108: Nymi Runtime Service Account window

11. On the `(Optional) Nymi Infrastructure Service Account` window, specify the username and password of the Nymi Infrastructure Service Account. When you specify the username, include the domain name, for example *tw-lab\nymi_infra_service_acct*. Refer to *Appendix—Record the CWP Variables* for the service account name.

The following figure shows the `Nymi Infrastructure Service Account` window.

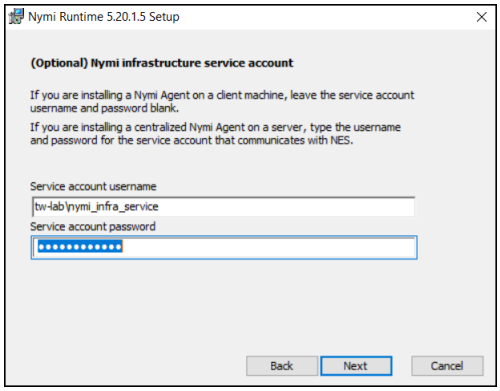


Figure 109: Nymi Infrastructure Service Account window

The installer creates the following files in the *C:\Nymi\NymiAgent\certs* folder:

- credentials-contains the encrypted credentials for the Nymi Infrastructure Service Account
- Private key, which is used to encrypt the credentials.
- Public key, which is used to encrypt the credentials.

12. On the `Ready to install` page, click **`Install`**.

13. Click **`Finish`**.

14. On the `Installation Completed Successfully` page, click **`Close`**.

9.4 - Update the Enrollment Terminal

On the Enrollment Terminal, update the Nymi Band Application, the Evidian EAM Client and replace the *nymi_api.dll* file.

9.4.1 - Updating the Nymi Band Application

An update 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.

9.4.2 - Updating Registry Key Settings

Review the registry key settings on the enrollment terminal and update as required.

Procedure

1. Run Registry Editor.
2. Navigate to *HKLM\SOFTWARE\Enatel\WiseGuard\FrameWork\Authentication* and then delete the *WearableNeedsRFID* registry key.
3. Navigate to *HKLM\SOFTWARE\Enatel\WiseGuard\FrameWork\Directory*, and then create a new **`DWORD (32-bit) Value`** named *GetCloudConfigDataOnlyInCloudMode*.
4. Edit the *GetCloudConfigDataOnlyInCloudMode* key, and in the **`Value data`** field type ***1***. Click **`OK`**.
5. Close Registry Editor.

9.4.3 - Updating the Evidian SSO Agent

Perform the following steps with an account that has permission to install software on the machine.

About this task

Obtain the Evidian software package from Nymi Solution Consultant or Nymi Support.

Procedure

1. Install the required version of the Microsoft Visual C++ redistributable by double-clicking *C:\Downloads\EAM-v10.0xxxxxxxx\EAMx64\INSTALL\VCRedist_x64.msi*.

   Note: If the required version of Microsoft Visual C++ redistributable is already installed on the server, a pop-up screen briefly appears, and then disappears.
2. Double-click the *C:\Downloads\EAM-v10.0xxxxxxxx\EAMx64\INSTALL\ESSOAgent.msi* file.
3. On the `Enterprise Access Management Client Installation`, click **`Next`**.
4. On the `License Agreement` window, click **`I accept the license agreement`**, and then click **`Next`**.

   The following figure shows the `License Agreement` window.

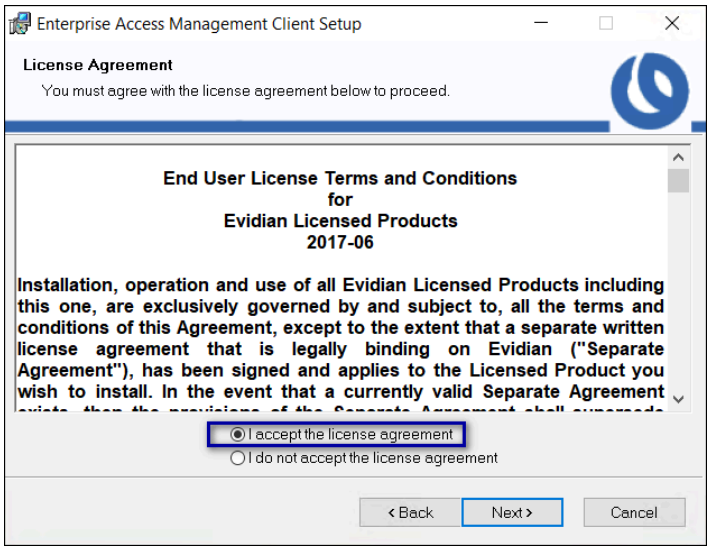


Figure 110: License Agreement window

5. On the `Destination Folder` window, accept the default, and then click **`Next`**.

   The following figure shows the `Destination Folder` window.

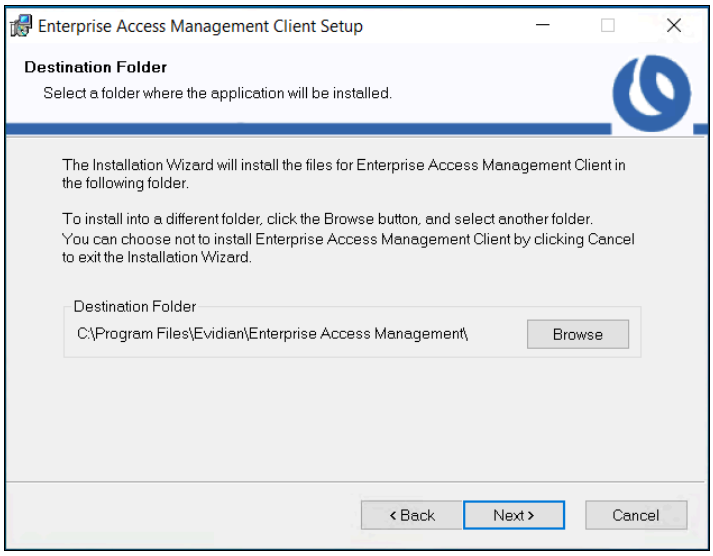


Figure 111: Destination Folder window

6. On the `Select Installation Type` window, select **`Custom`**, and then click **`Next`**.
   The following figure shows the `Select Installation Type` window.

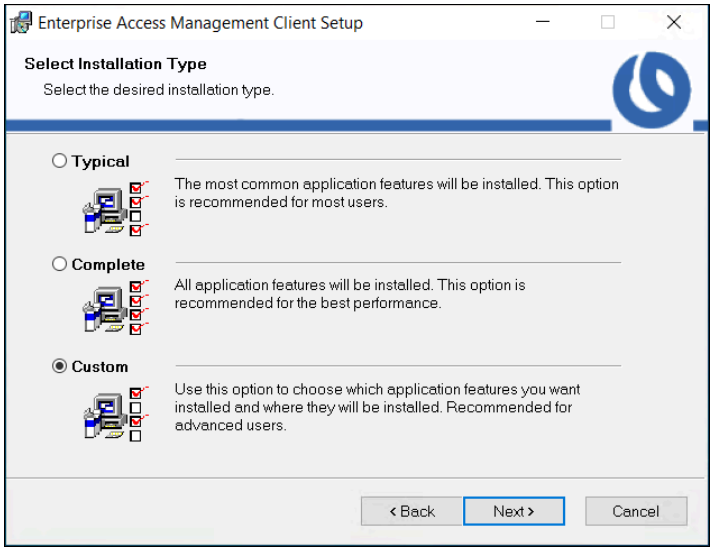


Figure 112: Select Installation Type window

7. On the **`Select Features`** window, click **`Next`**.
   The **`Select Features`** window contains the existing configuration options.
8. On the `Ready to install the application` window, click **`Next`**, as shown in the following figure.

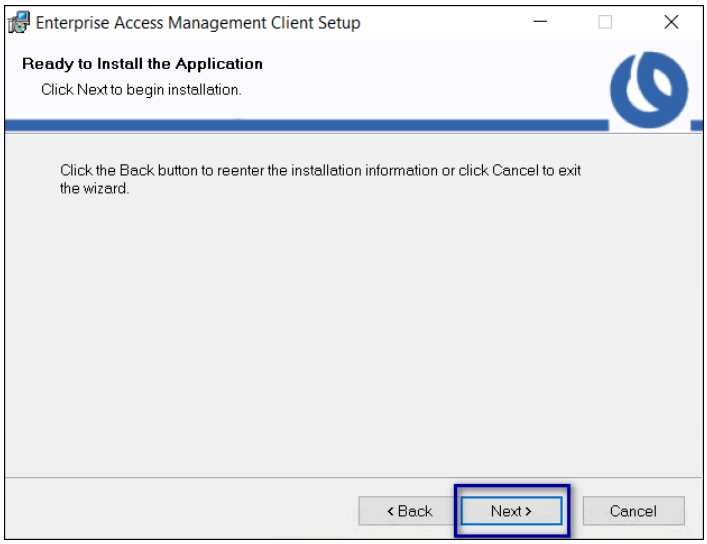


Figure 113: Ready to install the application

9. On the `User account control` pop-up, click **`Yes`**, as shown in the following figure.

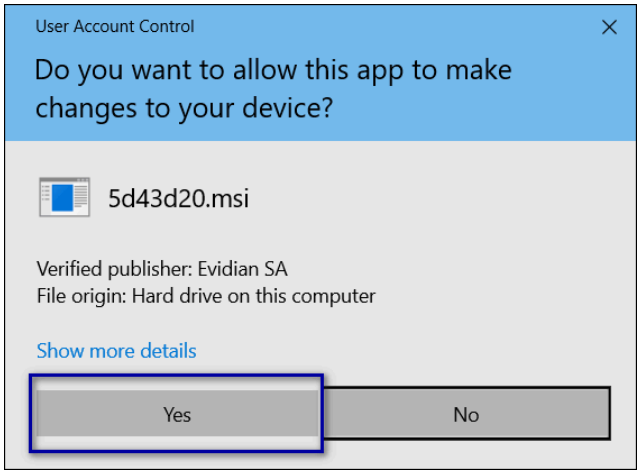


Figure 114: User account control

10. On the `Enterprise Access Management Client has been successfully installed` window, click **`Finish`**, as shown in the following figure.

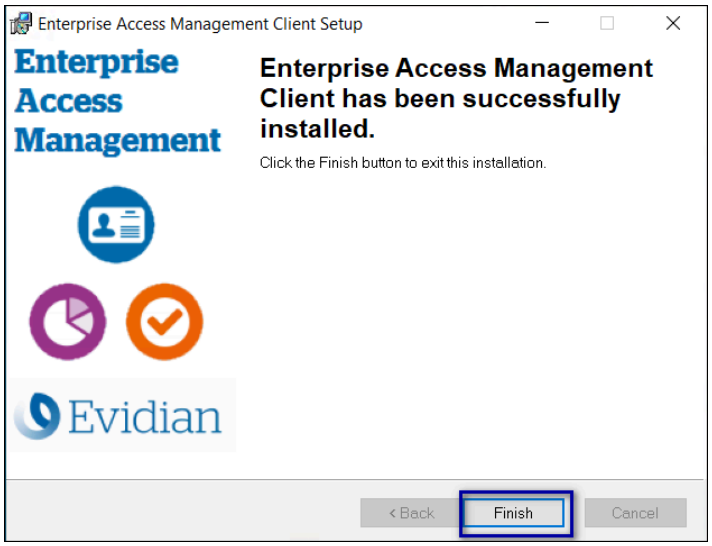


Figure 115: Evidian Client Installation Success window

9.4.4 - Confirming the Runtime dll versions

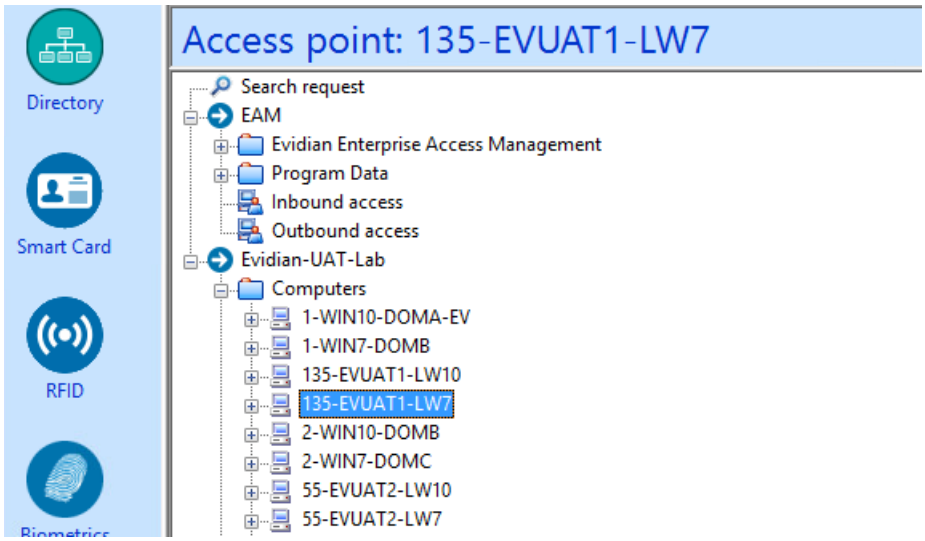
Review the Connected Worker Platform and Evidian EAM Client versions of the Nymi Runtime file to ensure that they are the same.

About this task

Perform the following steps on the client machine.

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. Log in to the Evidian EAM Management Console.
6. Click **`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.

9.4.5 - (Optional) Configuring the Communication Protocol

If you use the enrollment terminal to also access NEAs, perform the following steps to disable the legacy protocol.

About this task

Note: After you set this environment variable, user terminals cannot communicate with Nymi Bands that use pre-CWP 1.15.x firmware

Procedure

1. In the Windows search field, type ***env***, and then from the pop-up menu, select **`Edit the System Environment Variables`**.
2. Click **`Environment Variables`**.
3. In the **`System Variables`** section, click **`New`**, and the perform the following actions:
   a) In the **`Variable Name`** field, type *NYMI_NEA_SUPPORT_LEGACY_MODE*
   b) In the **`Variable Value`** field, type ***0***.
   The following figure provides an example of the new variable.

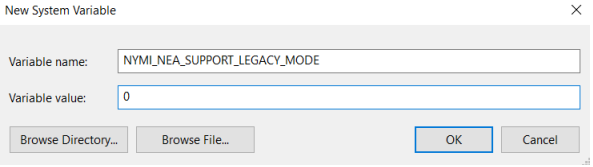


Figure 116: New System Variable window

c) Click **OK**.

9.5 - Update User Terminals

Update the Nymi Runtime, the Evidian EAM Client and the *nymi_api.dll* file on each user terminal.

9.5.1 - Updating Nymi Runtime

Update the Nymi Runtime on the user terminal and RDP/Citrix servers 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. Create a backup copy of the *C:\Nymi\Bluetooth_Endpoint\nbe.toml* file.
3. Extract the Nymi SDK distribution package.
4. From the *..\nymi-sdk\windows\setup* folder, right-click the *Nymi Runtime Installer version.exe* file, and select **`Run as administrator`**.
5. On the `Welcome` page, click **`Install`**.
6. 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.
7. On the `Welcome to the Nymi Runtime Setup Wizard` page, click **`Next`**.
8. On the `Nymi Runtime Setup` window, click **`Next`**.
9. On the `Service Account` window, perform one of the following actions to choose the account that starts the service:
   - Accept the default service account NTAuthority\LocalService, click **`Next`**.
   - For non-English Windows Operating Systems, choose the LocalSystem account from the drop list, and then click **`Next`**.
10. On the `(Optional) Nymi Infrastructure Service Account`, click **`Next`**.

Only deployments that use web-based Nymi-enabled Applications(NEAs) with a centralized Nymi Agent require you to configure the Nymi Infrastructure Service Account.

11. On the `Ready to install` page, click **`Install`**.
12. Click **`Finish`**.
13. On the `Installation Completed Successfully` page, click **`Close`**.
14. 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.

9.5.2 - Updating Registry Key Settings

Review the registry key settings on the user terminal and update as required.

Procedure

1. Run Registry Editor.
2. Navigate to *HKLM\Software\Enatel\SSOWatch\CommonConfig*, and then delete the *StopSSOEngineOnOTPFailed* registry key.
3. Navigate to *HKLM\Software\Enatel\WiseGuard\AdvancedLogin*, and then delete the *StartSSOEngine* registry key.
4. Navigate to *HKLM\SOFTWARE\Enatel\WiseGuard\FrameWork\Directory*, and then create a new **`DWORD (32-bit) Value`** named *GetCloudConfigDataOnlyInCloudMode*.
5. Edit the *GetCloudConfigDataOnlyInCloudMode* key, and in the **`Value data`** field type ***`1`***. Click **`OK`**.
6. Close Registry Editor.

9.5.3 - Updating the Evidian SSO Agent

Perform the following steps with an account that has permission to install software on the machine.

About this task

Obtain the Evidian software package from Nymi Solution Consultant or Nymi Support.

Procedure

1. Install the required version of the Microsoft Visual C++ redistributable by double-clicking *C:\Downloads\EAM-v10.0xxxxxxxx\EAMx64\INSTALL\VCRedist_x64.msi*.

   Note: If the required version of Microsoft Visual C++ redistributable is already installed on the server, a pop-up screen briefly appears, and then disappears.
2. Double-click the *C:\Downloads\EAM-v10.0xxxxxxxx\EAMx64\INSTALL\ESSOAgent.msi* file.
3. On the `Enterprise Access Management Client Installation`, click **`Next`**.
4. On the `License Agreement` window, click **`I accept the license agreement`**, and then click **`Next`**.

The following figure shows the `License Agreement` window.

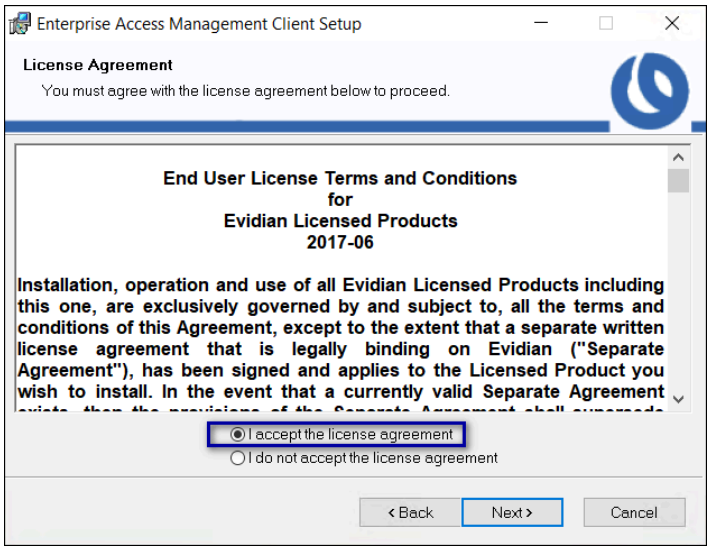


Figure 117: License Agreement window

5. On the `Destination Folder` window, accept the default, and then click **`Next`**.

   The following figure shows the `Destination Folder` window.

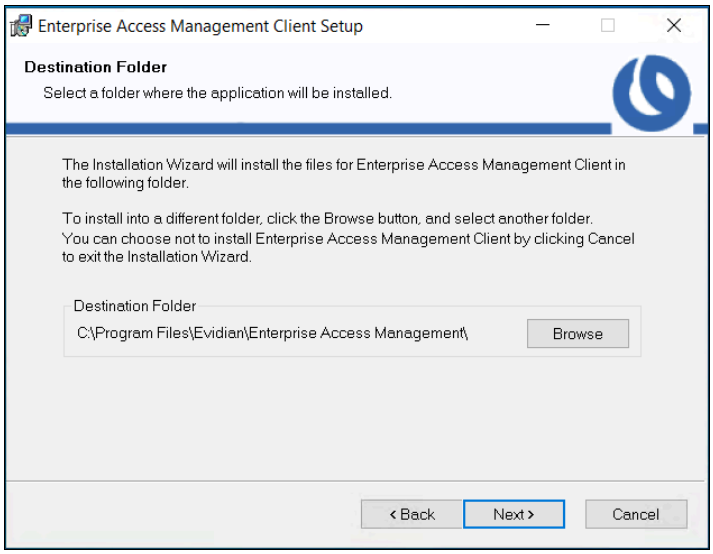


Figure 118: Destination Folder window

6. On the `Select Installation Type` window, select **`Custom`**, and then click **`Next`**.

   The following figure shows the `Select Installation Type` window.

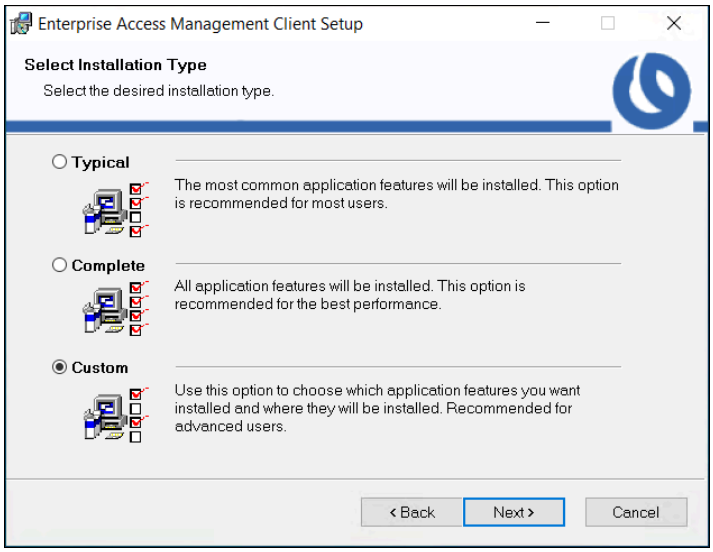


Figure 119: Select Installation Type window

7. On the **`Select Features`** window, click **`Next`**.

   The **`Select Features`** window contains the existing configuration options.

8. On the `Ready to install the application` window, click **`Next`**, as shown in the following figure.

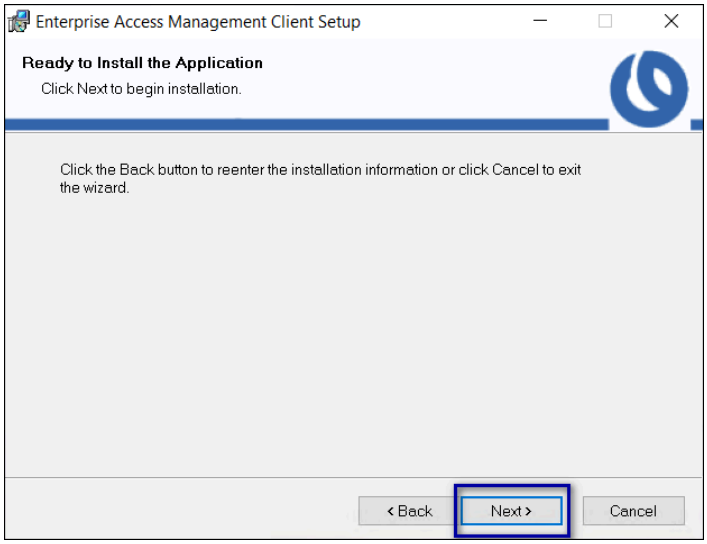


Figure 120: Ready to install the application

9. On the `User account control` pop-up, click **`Yes`**, as shown in the following figure.

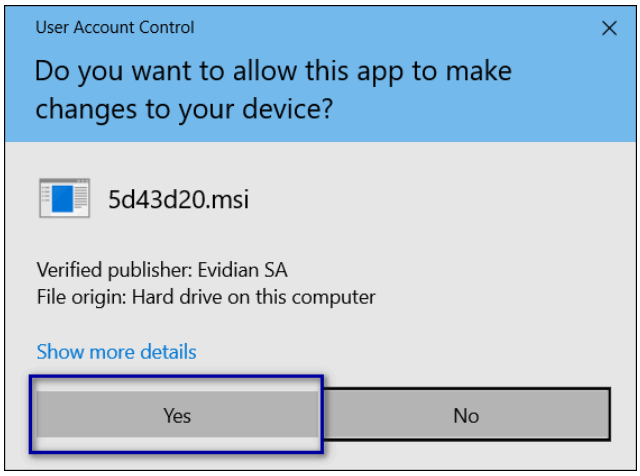


Figure 121: User account control

10. On the `Enterprise Access Management Client has been successfully installed` window, click **`Finish`**, as shown in the following figure.

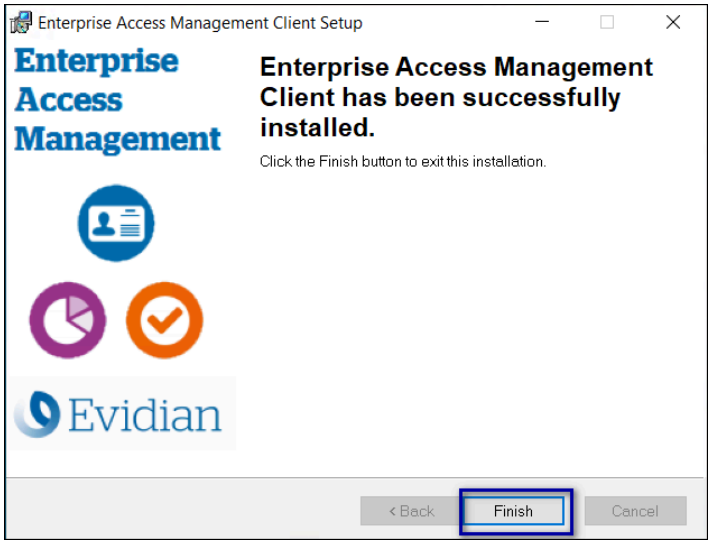


Figure 122: Evidian Client Installation Success window

9.5.4 - Configuring the Connected Worker Platform Communication Protocol

Starting with Connected Worker Platform(CWP) 1.15, the Nymi solution supports a new, high performance protocol over Bluetooth between the Nymi Runtime and Nymi Bands.

About this task

Perform the following steps on all user terminals (for Evidian environments on Wearable user terminals only) where users access Nymi-enabled Applications(NEAs) to disable the legacy

protocol. The enrollment terminal only requires the environment variable if users access NEAs on the enrollment terminal.

Note: After you set this environment variable, user terminals cannot communicate with Nymi Bands that use pre-CWP 1.15.x firmware

Procedure

1. In the Windows search field, type ***env***, and then from the pop-up menu, select **`Edit the System Environment Variables`**.
2. Click **`Environment Variables`**.
3. In the **`System Variables`** section, click **`New`**, and the perform the following actions:
   a) In the **`Variable Name`** field, type *NYMI_NEA_SUPPORT_LEGACY_MODE*
   b) In the **`Variable Value`** field, type ***0***.
   The following figure provides an example of the new variable.

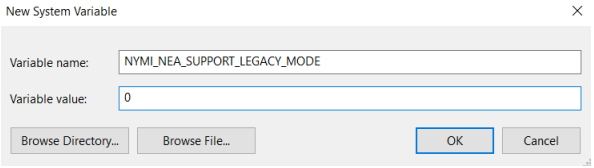


Figure 123: New System Variable window

   c) Click **`OK`**.

9.5.5 - Optimizing NFC Taps

The Evidian Access Management version EAM-v10.03b8573.4 optimizes the Evidian EAM Client configuration for Nymi Band taps on a Bluetooth adapter by default.

About this task

When you use an NFC reader to perform Nymi Band taps, perform the following steps on each Citrix or RDP server.

Note: EAM-v10.03b8573.4 does not support use cases that require Authentication Manager.

Procedure

1. Run *regedit.exe*.
2. Navigate to *HKLM\SOFTWARE\Enatel\WiseGuard\FrameWork\Authentication*.
3. Create a new DWord(32-bit) key named **`NymiIntentDiscardNfc`**.
4. Edit **`NymiIntentDiscardNfc`**, change the value in the **`Value data`** field to ***0***, and then click **`OK`**.
5. Create a new DWord(32-bit) key named **`NymiIntentDiscardPcsc`**. Leave the default value ***1***.
6. Close `Registry Editor`.
7. Restart the `Enterprise Access Management Security Services` service.

9.5.6 - Confirming the Runtime dll versions

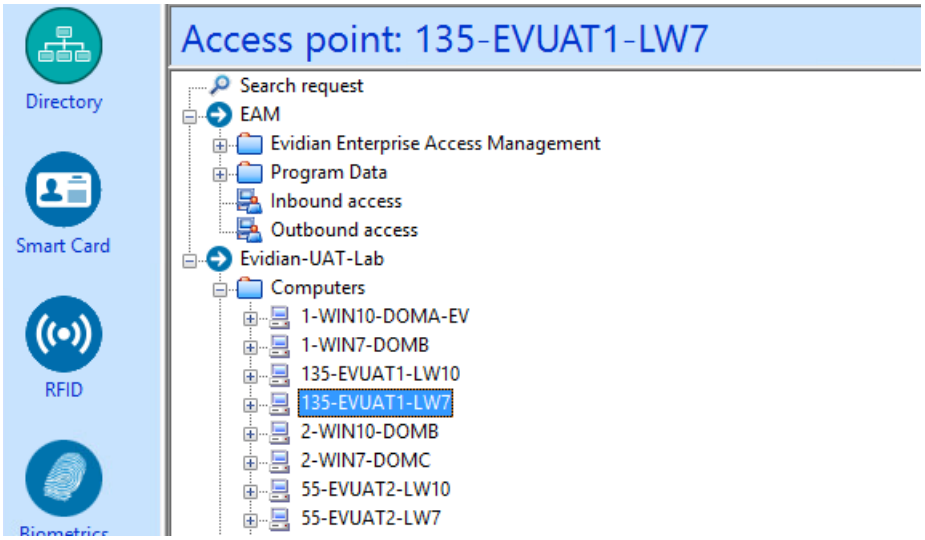
Review the Connected Worker Platform and Evidian EAM Client versions of the Nymi Runtime file to ensure that they are the same.

About this task

Perform the following steps on the client machine.

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. Log in to the Evidian EAM Management Console.
6. Click **`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.

9.6 - Updating from Nymi Enterprise Edition 3.2.1 and Earlier

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

After you update all the components in the Connected Worker Platform with Evidian solution, perform the following actions:

- Replace the token structure configuration on the Evidian EAM Controller and any EAM client that has a TMS file.
- Re-enroll all existing users to ensure that the Nymi Band to user association appears in the NES and EAM databases.

9.6.1 - (Updates from CWP 1.15.X and earlier only) Updating the TokenManagerStructure

The Connected Worker Platformsoftware package includes new TokenManagerStructure(TMS) files that support wearable and RFID authentication methods. When you update Connected Worker Platform components from Nymi Enterprise Edition, Nymi recommends that you replace any TokenManagerStructure file that you placed on a terminal to override the Evidian EAM Controller configuration, and the configuration on the Evidian 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.

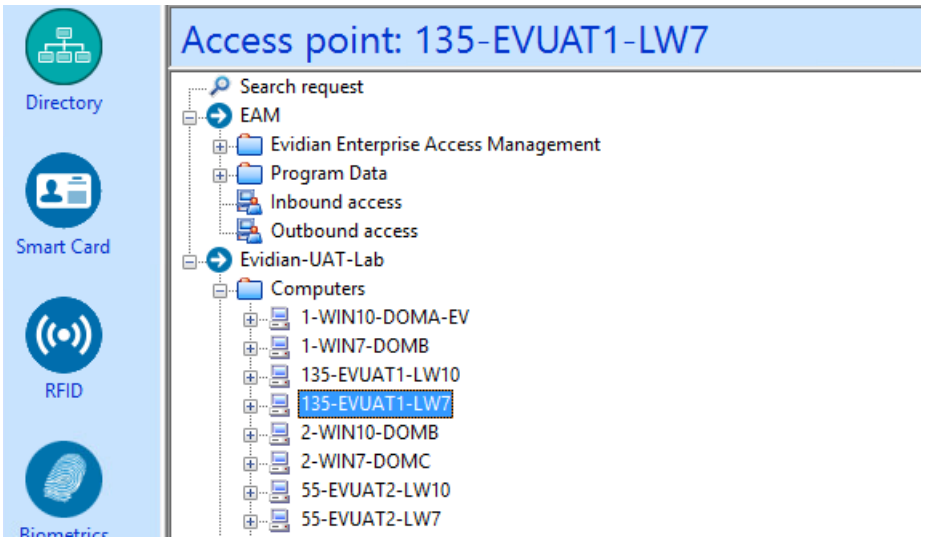
Perform the following steps to replace the TMS configuration in your environment.

Procedure

1. Log in to the Evidian EAM Management 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 Evidian 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. Log in to the Evidian EAM Management Console.
12. Click **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.

9.6.2 - Re-enrolling existing Nymi Band Users

After you update all the components in the Connected Worker Platform with Evidian solution from Nymi Enterprise Edition 3.3.1 or earlier, perform the following steps for all users that have a Nymi Band that was enrolled in Evidian prior to the update.

- Delete the Nymi Band association for the user on the Evidian EAM Controller

- Delete the user data from the Nymi Band
- Re-enroll the Nymi Band

9.6.2.1 - 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 Evidian EAM Management 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.

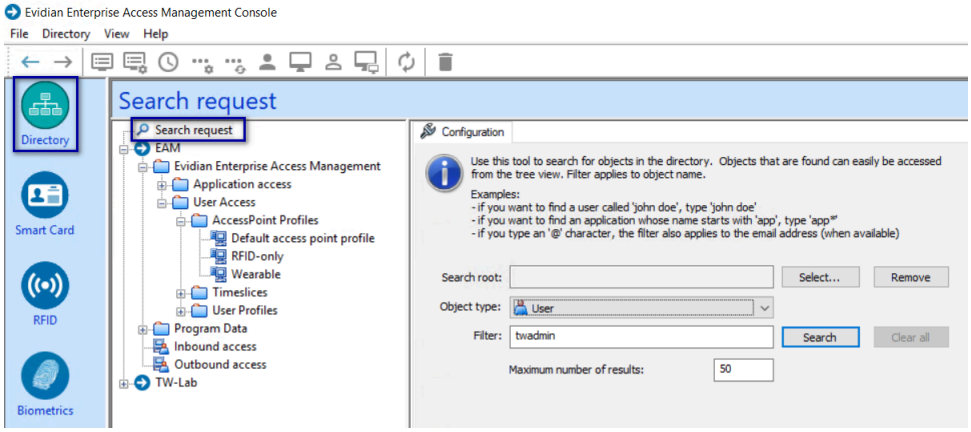
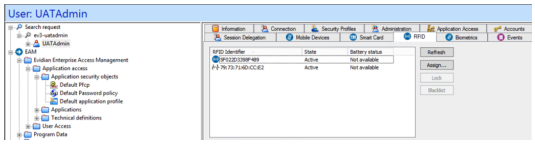


Figure 124: Search request window

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

Figure 125: RFID tab for a user



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

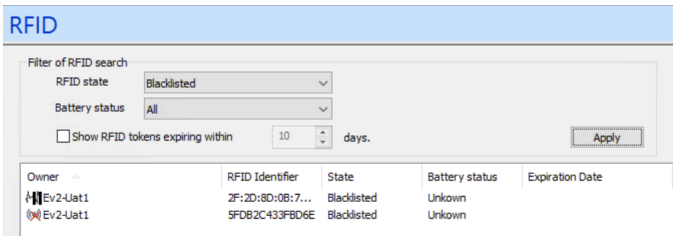


Figure 126: Blacklisted Nymi Band

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

9.6.2.2 - Deleting User Data on Nymi Band 3.0

The Delete User Data process clears personal information, such as the fingerprint template and credentials, from the Nymi Band that is currently enrolled to a user. This process also clears the lockout during a failed authentication lockout.

About this task

Before you can re-enroll a Nymi Band, you must perform the delete user data operation.

Procedure

1. Remove the Nymi Band from the wrist of the user, and then attach the Nymi Band to a charger.
2. On the Nymi Band, hold the bottom button. The Delete User Data message displays on the screen, as shown in the following figure.

   Note: The Nymi Band does not vibrate if the **Haptic Feedback on Nymi Bands** is not enabled for the user or active group policy.

Figure 127: Delete User Data

3. Continue to hold the bottom button until the Nymi Band quickly vibrates twice and the **USER DATA DELETED** message displays on the screen (after about 10 seconds), as show in the following figure.

Figure 128: User Data Deleted

Results

Biometric authentication does not work for the user after you perform a delete user data operation. To use the Nymi Band again, the user must enroll the Nymi Band by using the Nymi Band Application.

Note: If you delete the user data on a Nymi Band and attempt to re-enroll it, you will see the following message,

A Nymi Band has been assigned to (user name), however it cannot be found.

To proceed, you need to delete the Nymi Band association with the user in the NES Administrator Console.

9.6.2.3 - 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.

Before you begin

Before the user enrolls, ensure that an EAM administrator logs into the Evidian EAM Management Console and adds the user account to the appropriate user profile.

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 Evidian 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.

9.7 - Updating Technical Definitions

After you make changes to a technical definition, perform the following steps to propagate the change to the Evidian EAM Client.

Procedure

1. In `SSO Builder`, from the **`File`** menu, select **`Manage updates`**.
2. Select **`Post an update`**.
3. Close `SSO Builder`.
4. In the Windows System Tray, click on the Enterprise SSO (eSSO) icon.
5. Click the **`Home`** icon, and then click **`Refresh`**, as shown in the following figure.

   The Evidian EAM Client contacts the Evidian EAM Controller to retrieve new technical definitions.

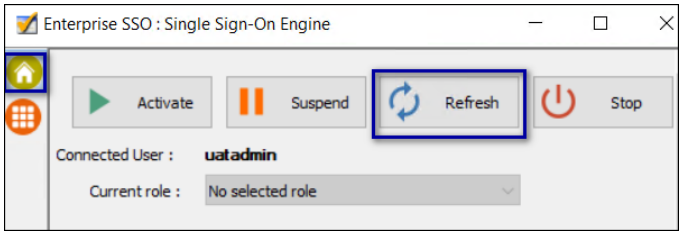


Figure 129: eSSO application Home Window

10 - Appendix - Changing Evidian Authentication Method

Changing the authentication method from RFID to Wearable requires the following steps:

- Changing configuration settings on the Evidian EAM Controller
- Changing registry key entries on the Evidian EAM Clients
- Clearing the Evidian cache on the Evidian EAM Clients

10.1 - Obtaining the TokenManagerStructure file for the Evidian EAM Controller

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

10.2 - Changing the Configuration of the Evidian EAM Controller

Perform the following steps in the Evidian EAM Management Console with an EAM Administrator account.

Procedure

1. Log into the Evidian EAM Management Console as an Evidian administrator.
2. Select **`Account and access rights management`**  .
3. Expand **`EAM > Evidian Enterprise Access Management > User Access > Access Point Profiles > Default access point profile`**, as shown in the following figure.

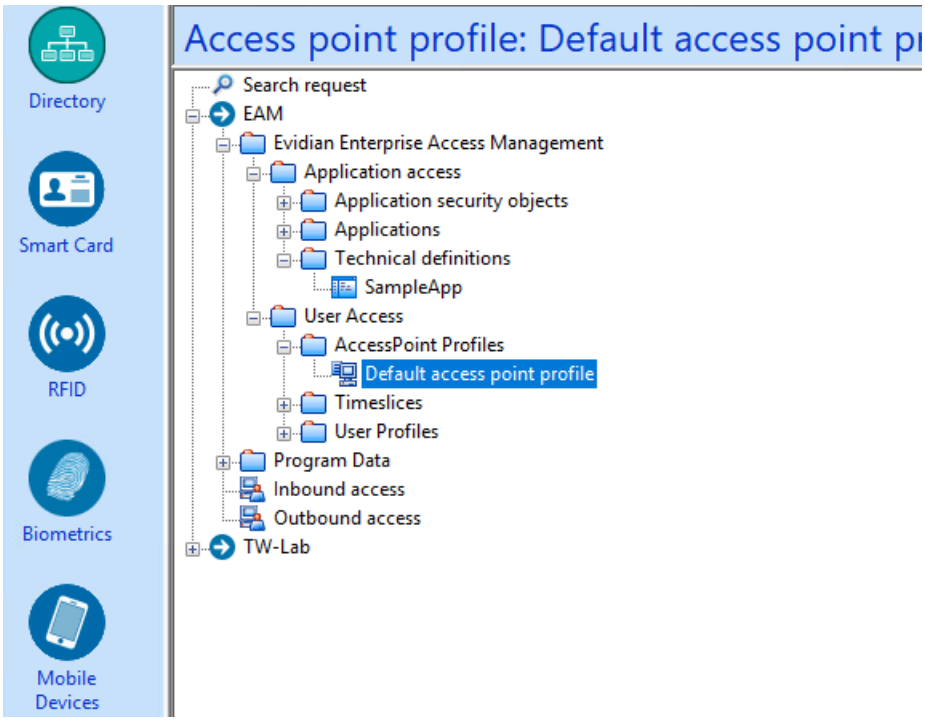


Figure 130: Default Access Point Profile

4. On the **`Authentication Manager`** tab, clear **`Allow Roaming Session`**, and then click **`Apply`**, as shown in the following figure.

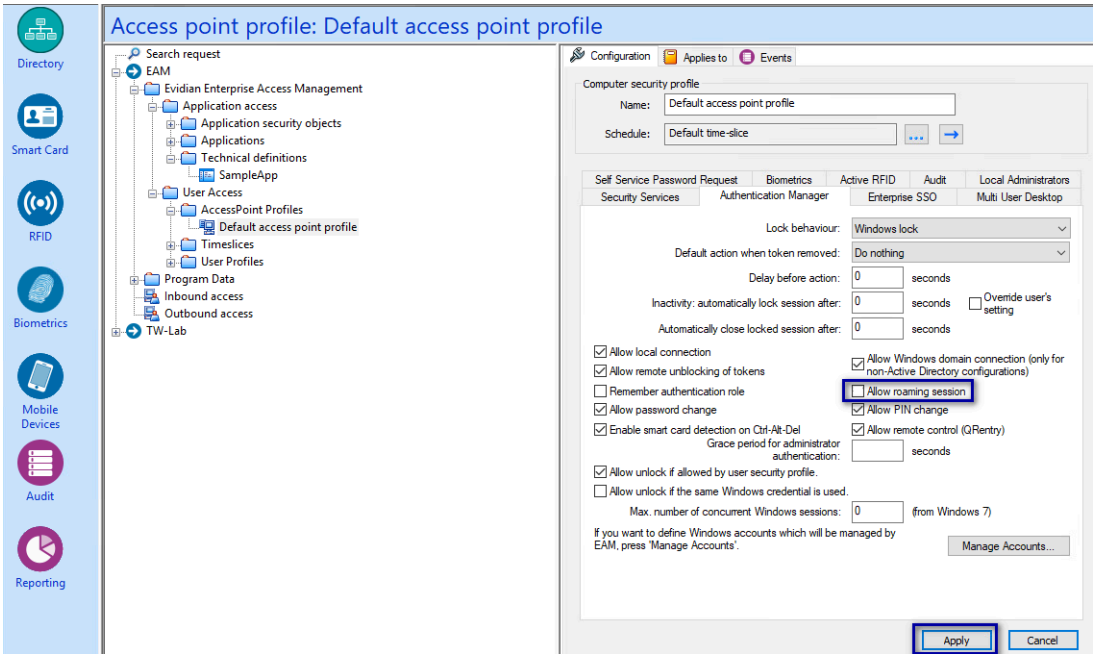


Figure 131: Authentication Manager window

5. Navigate to **`Evidian Enterprise Access Management > User access > User Profiles > Default user profile`**, as shown in the following figure.

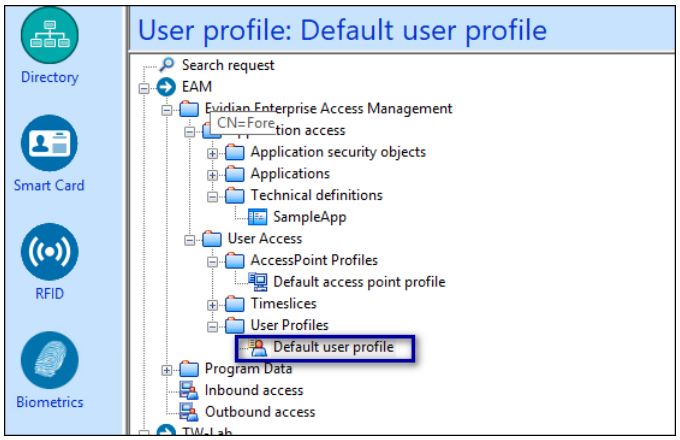


Figure 132: User Profiles

6. Under the **`Security`** tab, clear the **`Roaming Session Duration`** and **`No duration limit`** options, as shown in the following figure, and then click **`Apply`**.

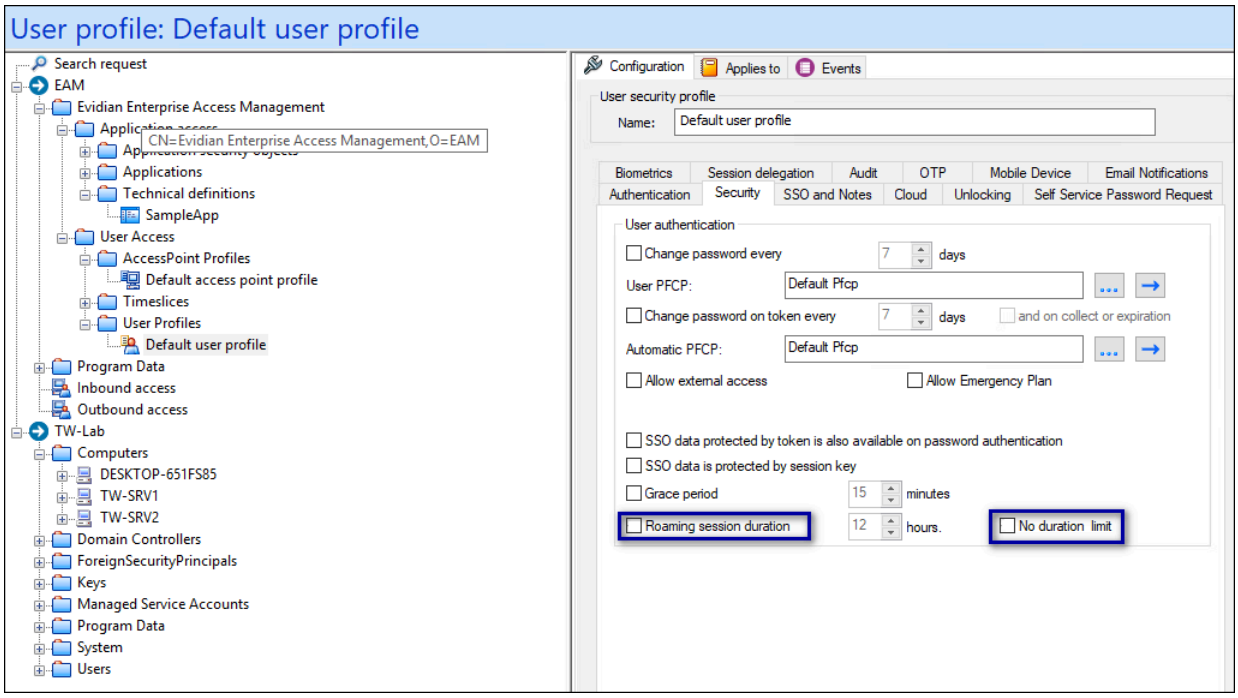
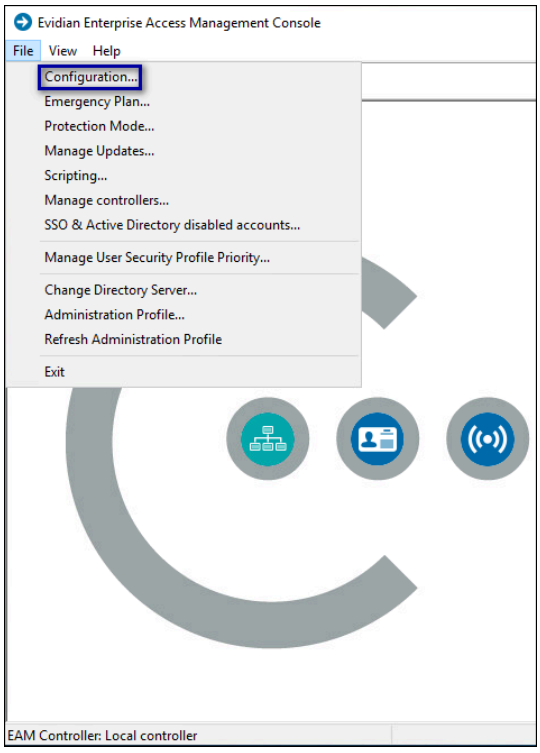
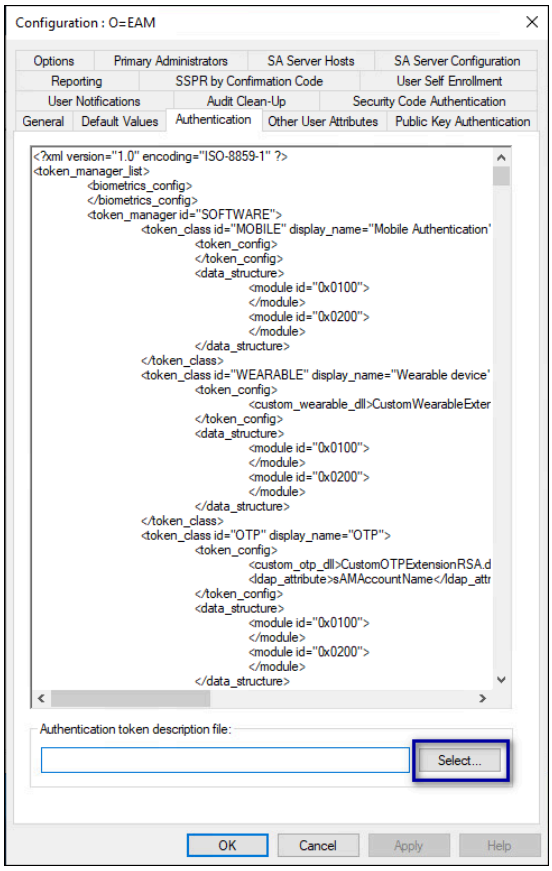


Figure 133: Roaming Session Duration Limit

7. From the **`File`** menu, select **`Configuration`**, as shown in the following figure.



8. On the **`Authentication`** Tab, click the **`Select`** button, as shown in the following figure.



9. In the `Open File` dialog, navigate to the directory that contains the Wearable TokenManagerStructure file, select the TokenManagerStructure file, and then click **`Open`**.
10. Click **`Apply`**, which will validate the structure of the file.
11. Click **`OK`**.
12. Close the Evidian EAM Management Console.

10.3 - Changing the Evidian EAM Client Configuration on User Terminals

To change the Evidian EAM Client configuration from RFID-only to Wearable, remove the roaming sessions registry key, and then rename the token management structure file, if the file exists.

About this task

Perform the following steps on each user terminal.

Procedure

1. Run `Registry Editor`.
2. Navigate to *HKLM\SOFTWARE\Enatel\WiseGuard\FrameWork\Authentication*.
3. Right-click the *RoamingSessionAllowedForSSO*, and then select **`Delete`**, as shown in the following figure.

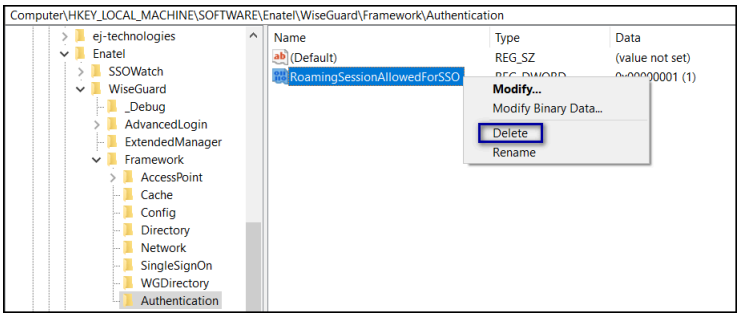


Figure 134: Delete RoamingSessionAllowedForSSO

4. On the `Confirm Value Delete` window, click **`Yes`**.
5. Close `Registry Editor`.
6. From `File Explorer`, navigate to *C:\Program Files\Common Files\Evidian\WGSS* folder.
7. If the file exists, rename *TokenManagerStructure.xml* to *TokenManagerStructure_rfid.xml*

10.4 - Changing the Evidian EAM Client Configuration on the Enrollment Terminal

Remove the wearable token management structure file from the Enrollment Terminal, to ensure that the Enrollment Terminal retrieves the wearable configuration from the Evidian EAM Controller.

Procedure

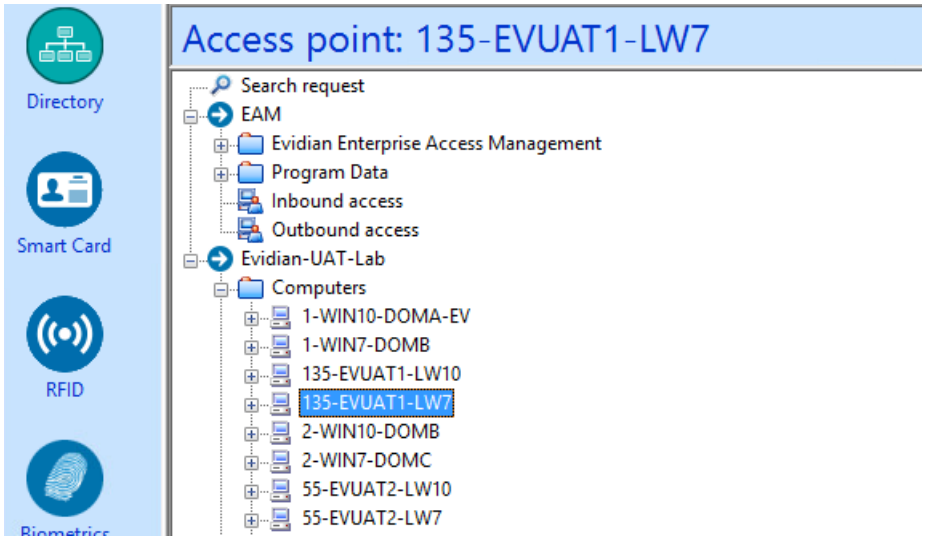
1. From `File Explorer`, navigate to *C:\Program Files\Common Files\Evidian\WGSS* folder.
2. Delete the *TokenManagerStructure.xml* file.
3. Close `File Explorer`.

10.5 - Deleting Evidian EAM Client Cache

Perform the following steps to delete the cache files on the cache files on the user terminal and the enrollment terminal.

Procedure

1. Log in to the Evidian EAM Management Console.
2. Click **`Account and access rights management`**  .
3. In the left navigation pane, expand **`Domain > Computers`**, and then select the terminal, as shown in the following figure.



4. 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.

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