Secude

HaloCAD

HaloCAD for Autodesk Vault

Operations Manual

Version 3.0

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Typographic Conventions

This guide uses the following typographic conventions to distinguish types of in-text information and icons to alert you to important information.

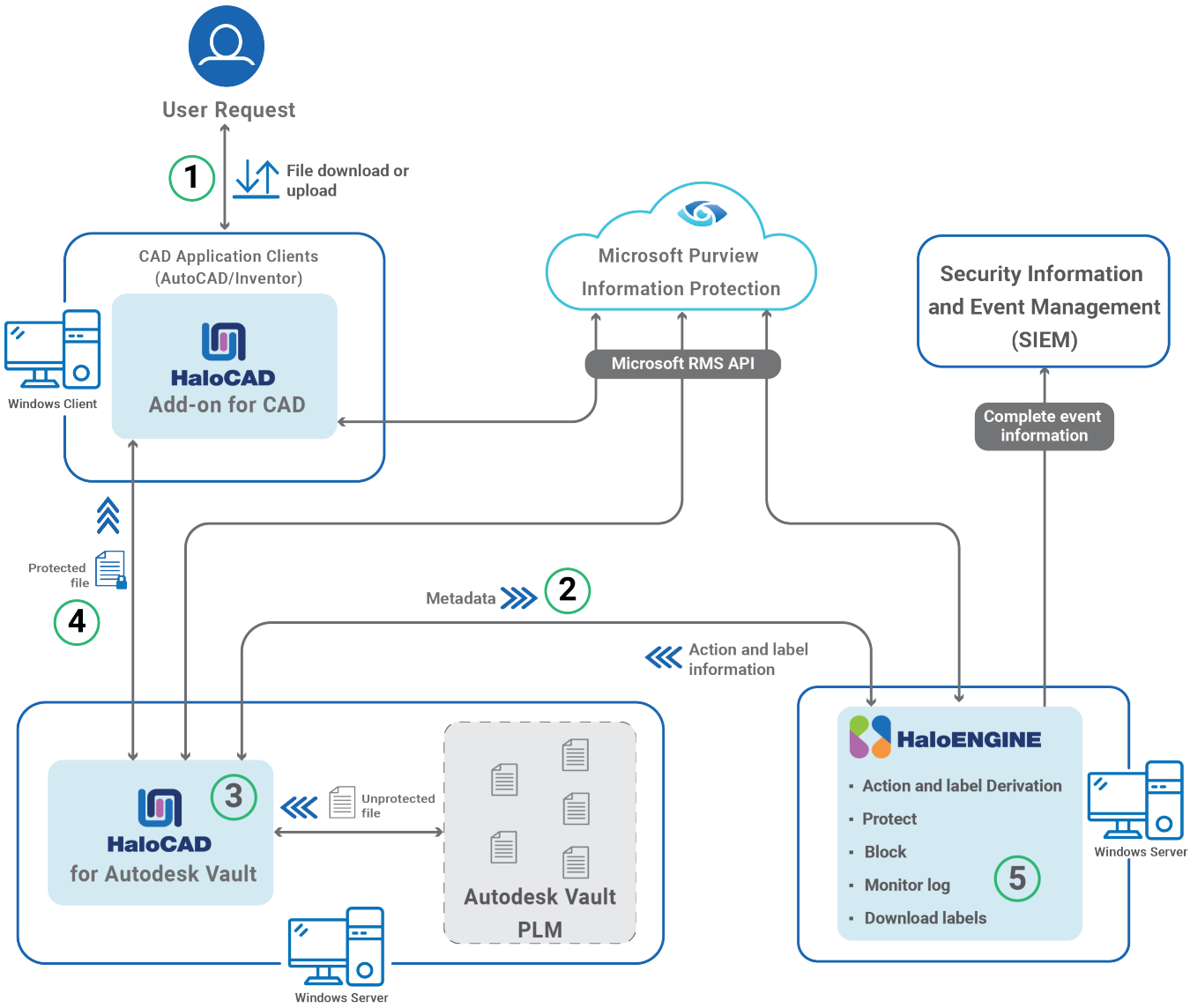
Convention	Description
Boldface type	• Items you must select, such as menu options, command buttons, or items in a list. • Titles of sections, sub-sections, etc.
Italic type	• To emphasize a word • Error messages • Table and Figure captions
`Consolas Font`	• Package names • Filenames and directory names • XML element names and attribute names • Parameters • File type • Code examples Example: `hesadm.exe start -user <domain\user> -pwd <password>`
Hyperlink	Provides quick and easy access to cross-referenced topics. Hyperlinks are highlighted in blue and underlined.
Admonitions	Note Provides additional information relevant to the topic. Warning Contains information about circumstances, parameters, and so on that MUST be fulfilled. Failure to comply will have consequences for the current operation. Tip Contains useful information about the operation of the application. Info Contains information, guidelines, or suggestions for performing tasks more effectively.

1. About this Manual

This manual provides comprehensive guidelines and step-by-step instructions for working with HaloCAD solutions (Monitor and Protect). For installation and configuration instructions, refer to the Installation Manual included with the product package.

2. How does it work?

At a high level, the HaloCAD for Autodesk Vault workflow comprises the following steps:



HaloCAD for Autodesk Vault

Step 1: User File Selection (Check-out / Check-in)

1. The user creates a new CAD or Microsoft Office document or opens an existing workspace object from the client.
2. The user performs a check-out (download) or check-in (upload).

Step 2: Request Monitoring and Interception

1. HaloCAD for Autodesk Vault intercepts every file the user attempts to download, retrieves it from the PLM Vault, and collects its associated metadata.

2. The metadata is sent to HaloENGINE GenNXT, which evaluates the configuration, determines the required action and label, and returns this information to HaloCAD for Autodesk Vault.

Step 3: Encryption / Decryption

HaloCAD for Autodesk Vault carries out actions based on the provided action and label:

1. If no valid action exists, the file is downloaded without modification.
2. During check-in, if a valid action with a label is identified, the label is removed, and the decrypted file is stored in Autodesk Vault PLM.
3. During check-out, if a valid action with a label is identified, the label is applied. Protection is performed based on the configured mode:
   a. **File Mode (Path-Based Processing):** The file path is sent to the HaloCAD Tomcat service for direct protection.
   b. **Stream Mode (Direct Stream Processing):** The file content is sent as a byte stream to the HaloCAD Tomcat service for protection.
4. If a block rule is configured in HaloENGINE GenNXT, HaloCAD for Autodesk Vault prevents the file from being downloaded.

Step 4: Processed File Delivery

The encrypted file with the assigned label is delivered to the user through the client application.

Step 5: Monitoring and Audit Log

HaloCAD for Autodesk Vault records event details and forwards them to the HaloENGINE GenNXT Monitor log.

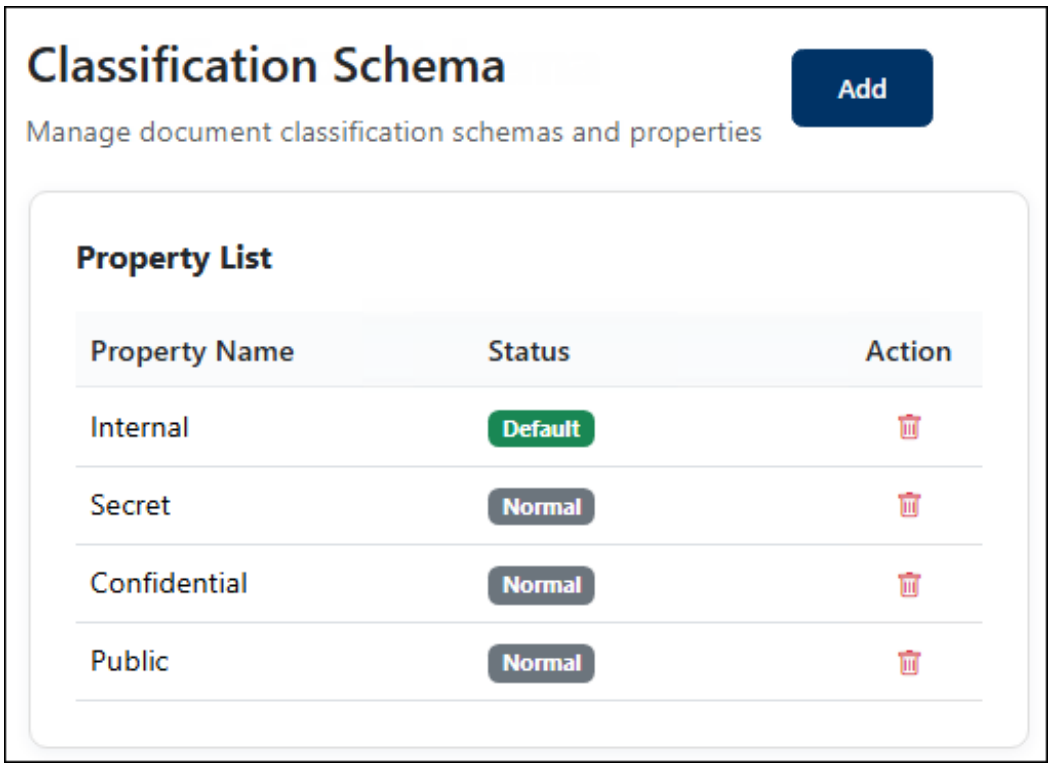
3. How to Protect and Block a File

Fulfill the Requirements

1. HaloCAD for Autodesk Vault is installed and configured.
2. HaloCAD Add-on for AutoCAD/Inventor is installed.
3. HaloENGINE GenNXT is installed and configured.

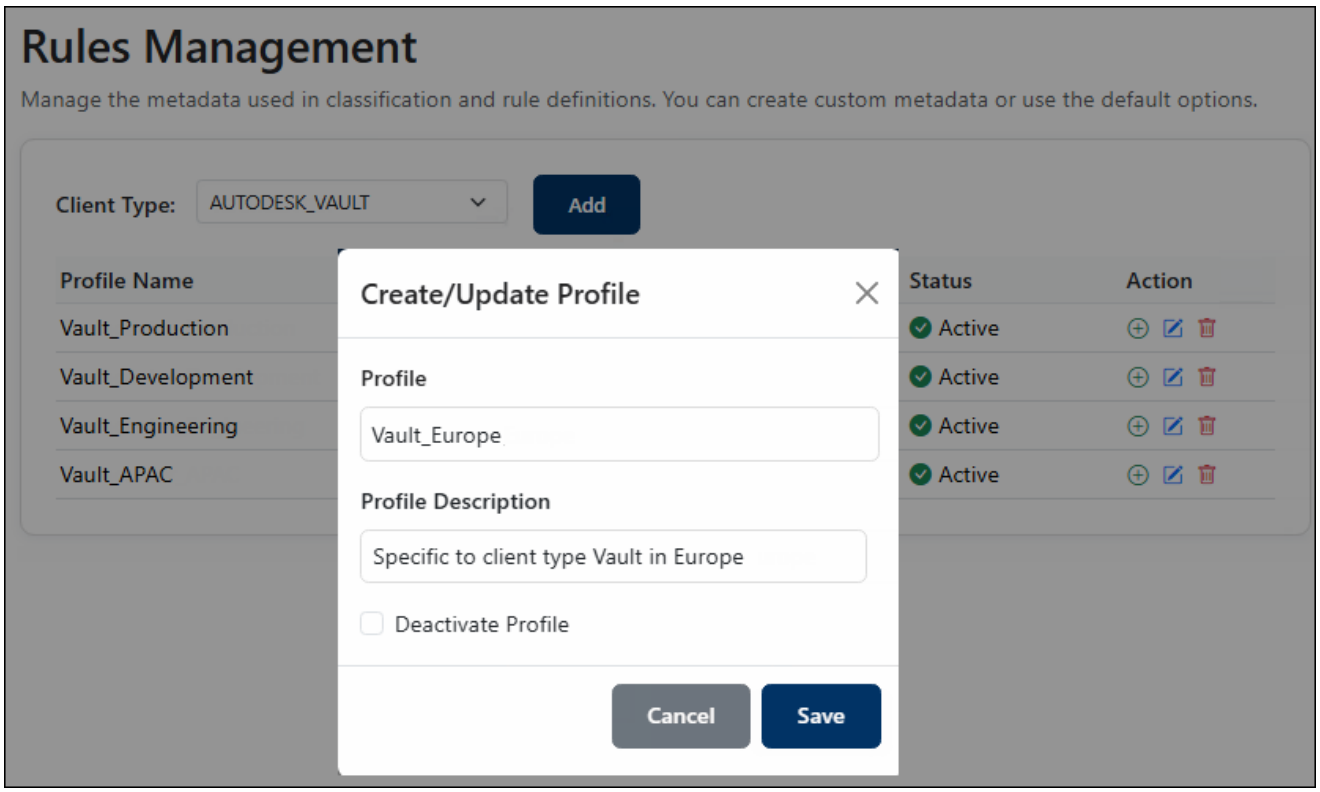
For illustration purposes, this section describes a simple classification profile configuration.

1. Step 1: Create classification schemas based on your business requirements.



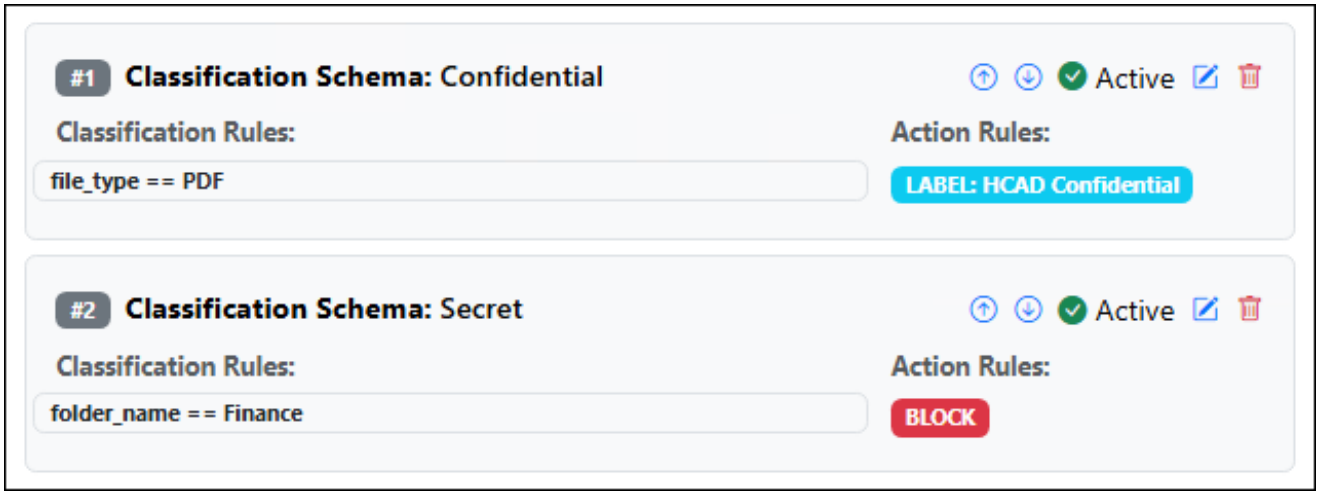
Sample classification schema

2. Step 2: Create a classification profile for the Autodesk Vault client type.



Sample classification profile

3. Step 3: Add rules to the profile.



Sample classification rules

3.1. Download a Protected File

Files can be exported from the Autodesk Vault server using multiple methods. The following options describe how to download (check out) a file using different clients and applications.

Option 1: Autodesk Vault Professional Client

1. Log in to the **Autodesk Vault Professional Client** (Standalone Vault Client).
2. In the **Project Explorer** screen, navigate to the required folder.
3. Select a file.
4. Right-click the file and select **Get** to download it.

Option 2: Autodesk Vault Thin Client

1. Open the **Autodesk Vault Thin Client**.
2. Select the workspace.
3. Click **Sign In** and enter your credentials.
4. Navigate to the required folder.
5. Select the file.
6. Download the file using one of the following options:
   - Click the **three dots** menu.
   - Click the **Download** button.

Option 3: AutoCAD or Inventor Application

1. Open the **AutoCAD** or **Inventor** application.
2. Go to the **Vault** tab.
3. Click **Log In** and enter your credentials.
4. Click **Open**.
5. Select a file to download.

Result:

- The downloaded file is labeled according to the configuration in HaloENGINE GenNXT.
- The label-based encryption settings are enforced and remain with the file regardless of its storage location.

3.2. Block a File Download

1. Log in to the **Autodesk Vault Professional Client**.
2. In the **Project Explorer** screen, navigate to the required folder.
3. Attempt to download a file. Note: You can also attempt to download the file using any other supported method.

Results

- The block action rule configured in HaloENGINE GenNXT prevents the file from being downloaded.
- No file is downloaded.
- For additional details, refer to the HaloENGINE GenNXT Monitor log.

4. Common Scenarios

This section presents some common scenarios for illustrative purposes and provides general guidelines.

4.1. Open a Protected CAD File

Prerequisite**:** Ensure that the HaloCAD Add-on is installed before opening a protected file.

1. Double-click the protected file to open it.
2. When you open a labeled file for the first time, the system prompts you to connect to the Microsoft Entra tenant using the **Microsoft Sign-In Assistant**.
3. Click **OK** when prompted that the Microsoft Sign-In Assistant has been invoked and the user credentials have been cached.
4. Follow the on-screen instructions to complete the authentication process.

Results

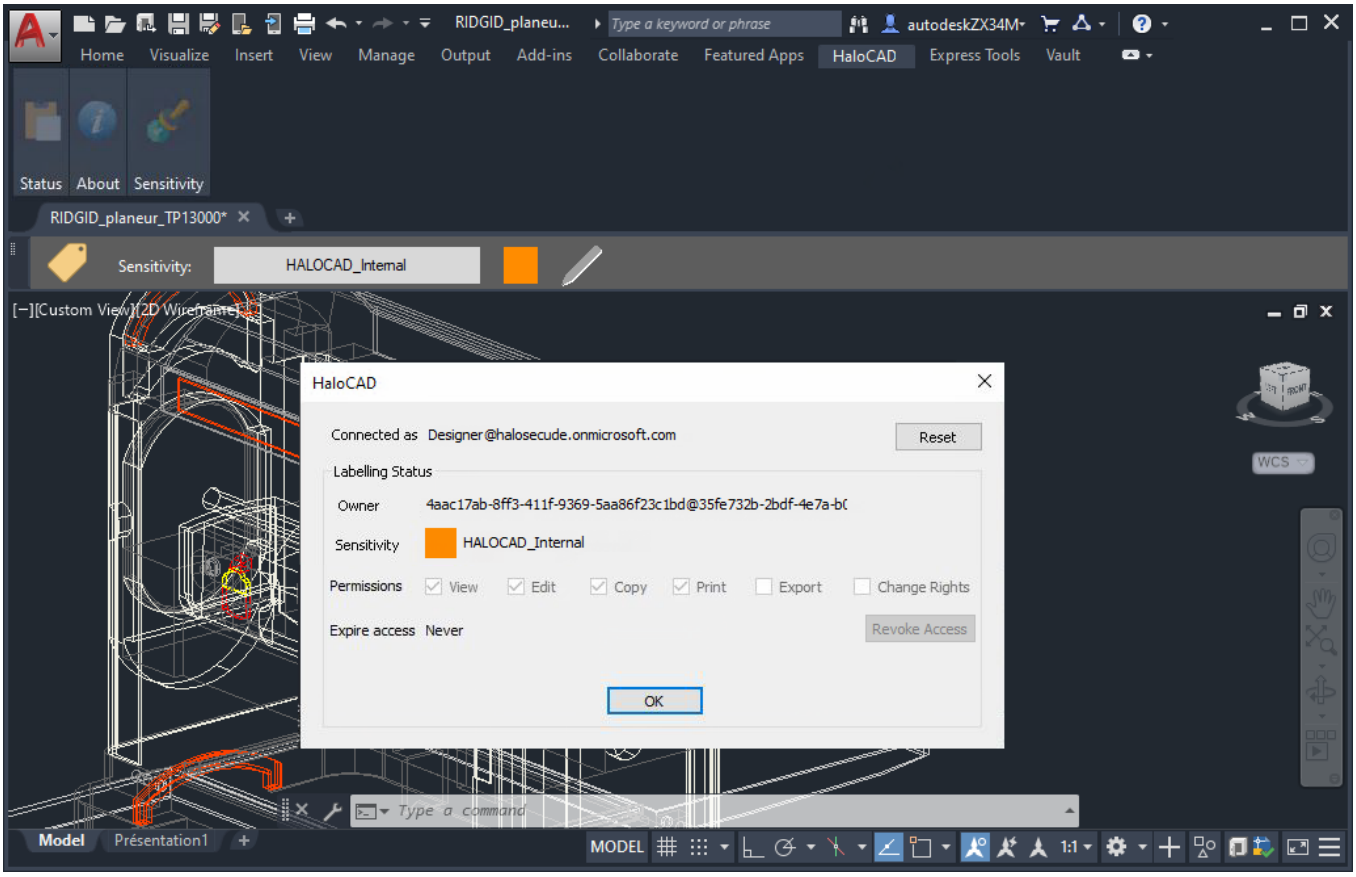
- After successful authentication, the file opens.
- Access to the document may vary depending on the configured policy settings.
- For more information about access behavior, refer to the Operations Manual of the respective add-ons.

4.2. Integrate with the AutoCAD Application

Below are some examples of the functionality of HaloCAD in the AutoCAD application.

4.2.1. Example 1: Application ID as the Owner of the File

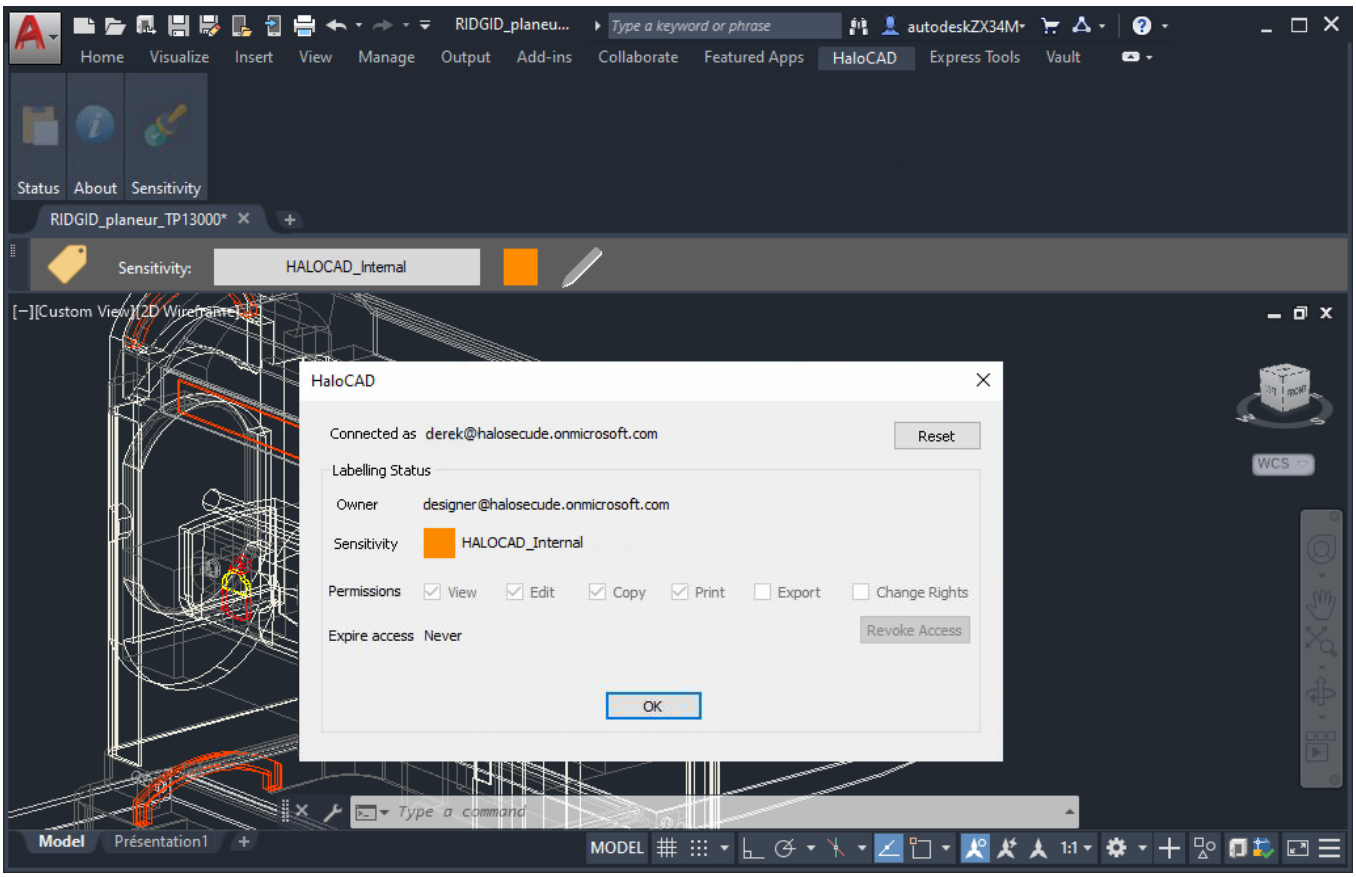
The following figure shows an example of an Application ID that is used to initialize the HaloENGINE GenNXT. This Application ID is the default owner of the document. However, a static email can also be an owner of the downloaded file if specified in the HaloENGINE GenNXT. Refer to Example 2.



Application ID as the owner of the file

4.2.2. Example 2: Static Email as the Owner of the File

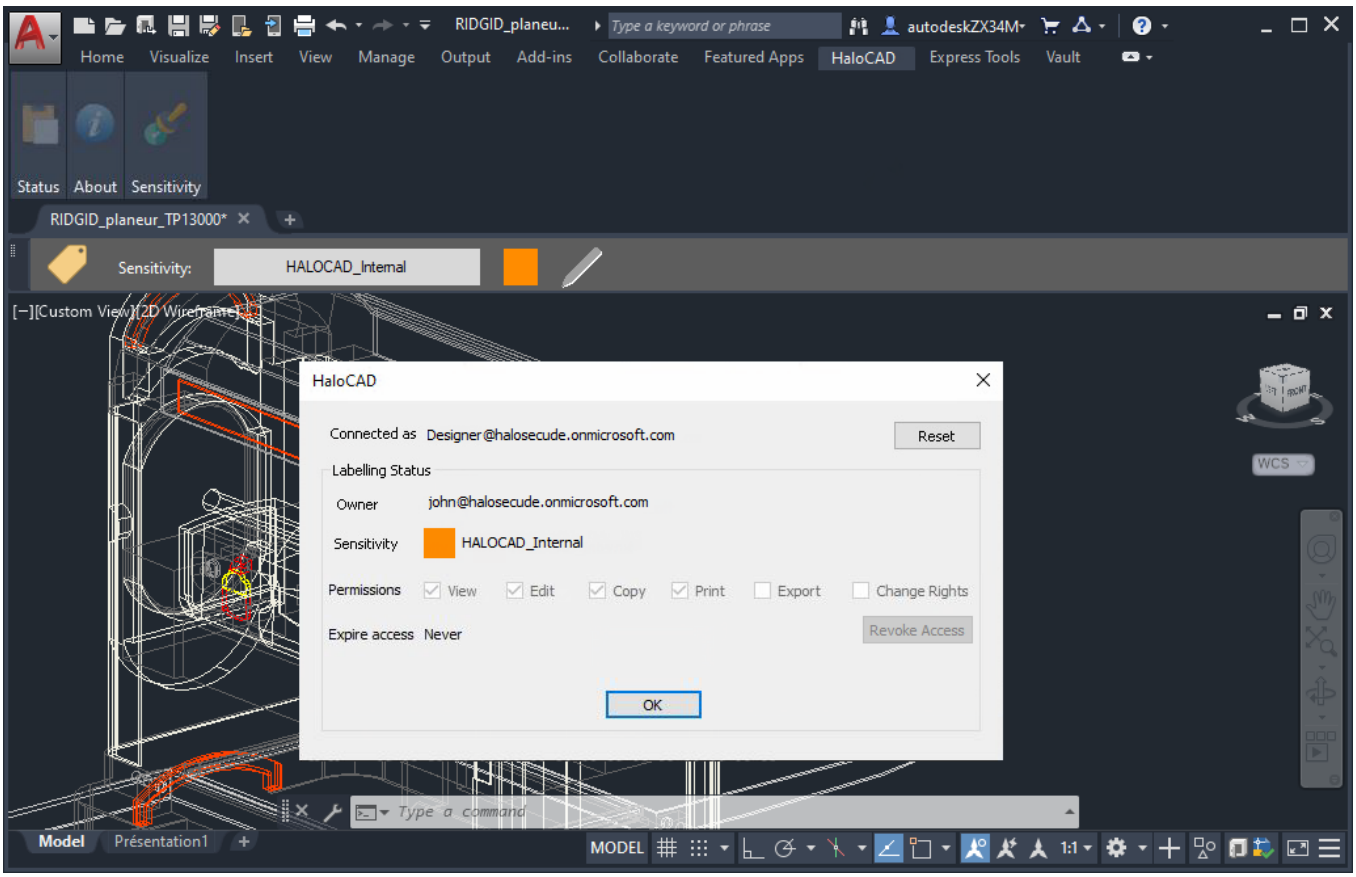
The following figure shows an example of an email address configured in HaloENGINE GenNXT. This email address identifies the owner of the exported document.



Static Email as the Owner of the File

4.2.3. Example 3: User as the Owner of the File

The following figure shows an example of a PLM logged-in user who becomes the owner of the document. To achieve this, set the Owner configuration to "**user**" in the HaloENGINE GenNXT Admin portal. The exported document uses the email address of the currently logged-in user as the owner.



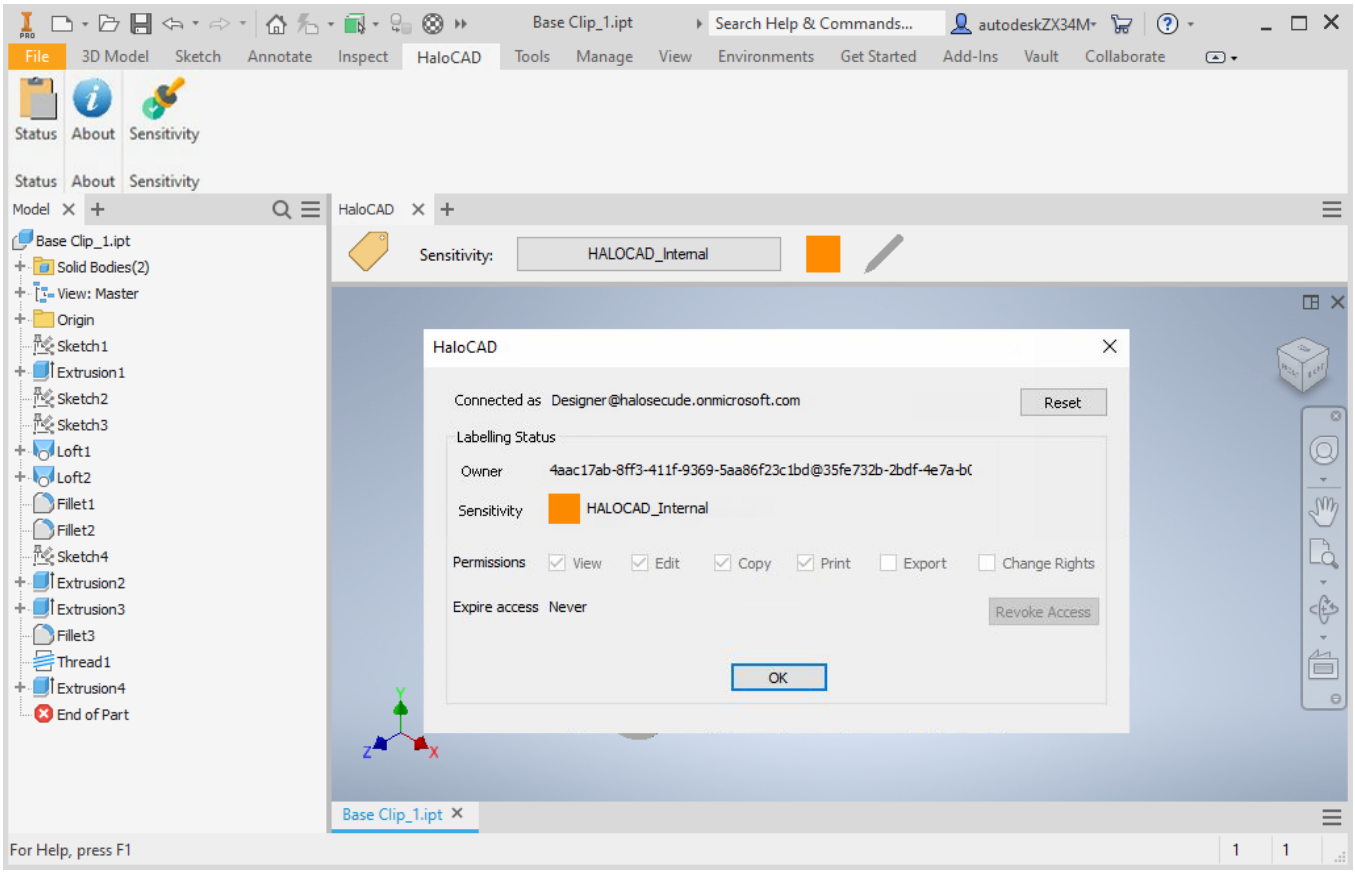
User as the Owner of the File

4.3. Integrate with the Inventor Application

Below are some examples of the functionality of HaloCAD in the Inventor application.

4.3.1. Example 1: Application ID as the Owner of the File

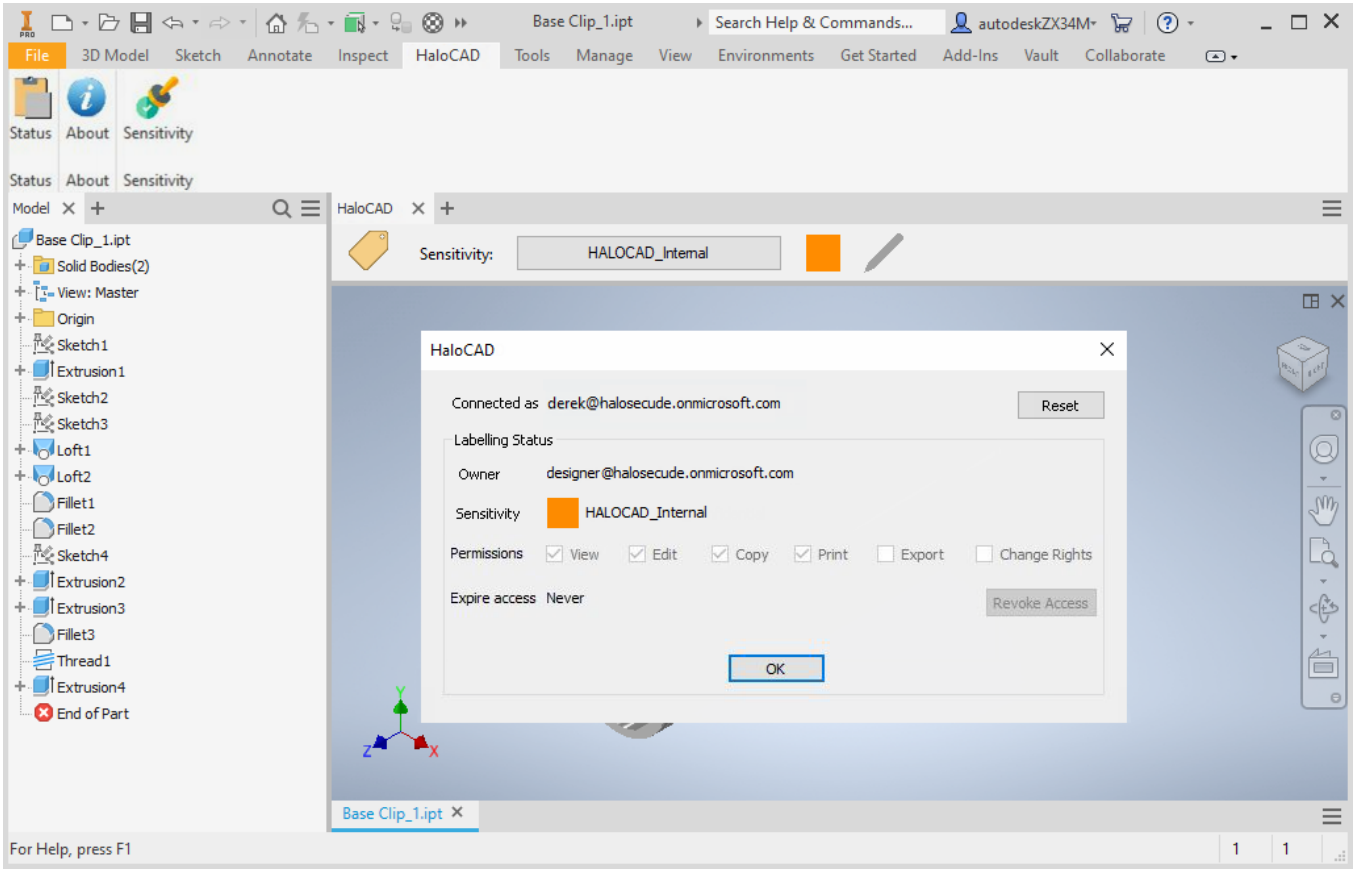
The following figure shows an example of an Application ID that is used to initialize the HaloENGINE GenNXT. This Application ID is the default owner of the document. However, a static email can also be an owner of the downloaded file if specified in the HaloENGINE GenNXT. Please refer to Example 2.



Application ID as the owner of the file

4.3.2. Example 2: Static Email as the Owner of the File

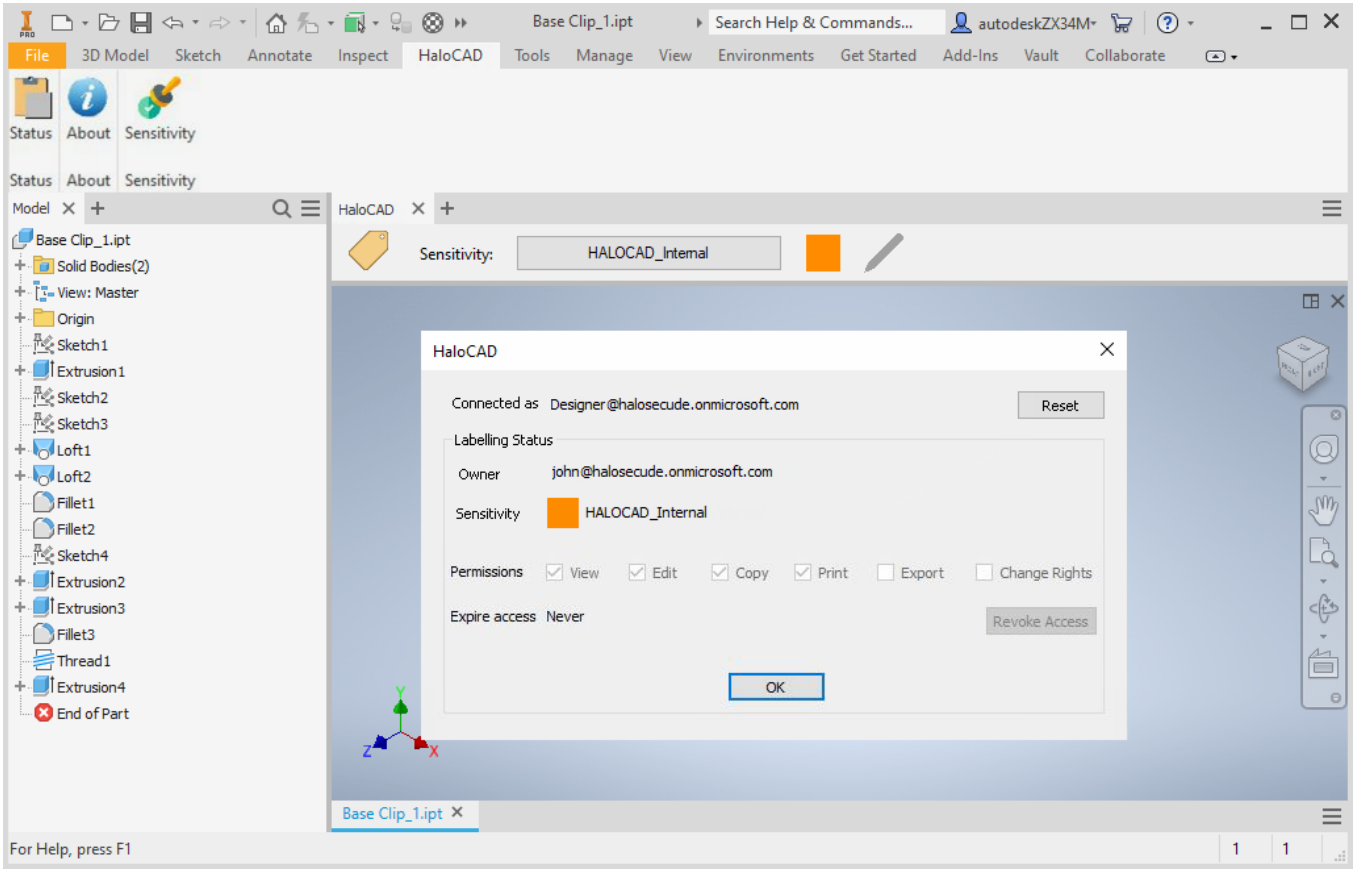
The following figure shows an example of an email address configured in HaloENGINE GenNXT. This email address identifies the owner of the exported document.



Static Email as the Owner of the File

4.3.3. Example 3: User as the Owner of the File

The following figure shows an example of a user configured in HaloENGINE GenNXT. This user is considered the owner of the document. If the user logged in to the Autodesk Vault PLM Server does not have an email address, the Application ID used to initialize HaloENGINE GenNXT becomes the owner of the document.



User as the Owner of the File

4.4. Integrate with MS Office Applications (File Upload and Download)

The following example describes the upload and download sequence in Autodesk Vault PLM integrated with HaloCAD. Although non-Office files (for example, `.txt` and `.pdf`) are also supported, this procedure uses an Excel file for illustration.

Upload a File (Check-in Sequence)

1. Create a new Microsoft Office file (Word or Excel).
2. Select a label from the **Sensitivity** ribbon.
3. Click **Save**.
4. Alternatively, open an existing protected file. Note: In this example, the file (`Bill Of Materials.xlsx`) is already protected with the **HaloCAD_INTERNAL** label.
5. Go to the **Autodesk Vault** tab.
6. Click **Log In** and enter your credentials.
7. Click **Check-in**.
8. Select the destination folder in Autodesk Vault Server.
9. The **Check-in** dialog box appears.
10. Select the **Close files and delete working copy** check box.
11. Click **OK**.
12. When prompted, "*Do you wish to delete the file xxxxx.xlsx from its original location 'C:\xxxx\xxxx\xxxx'*?" click **Yes** or **No**.

Results

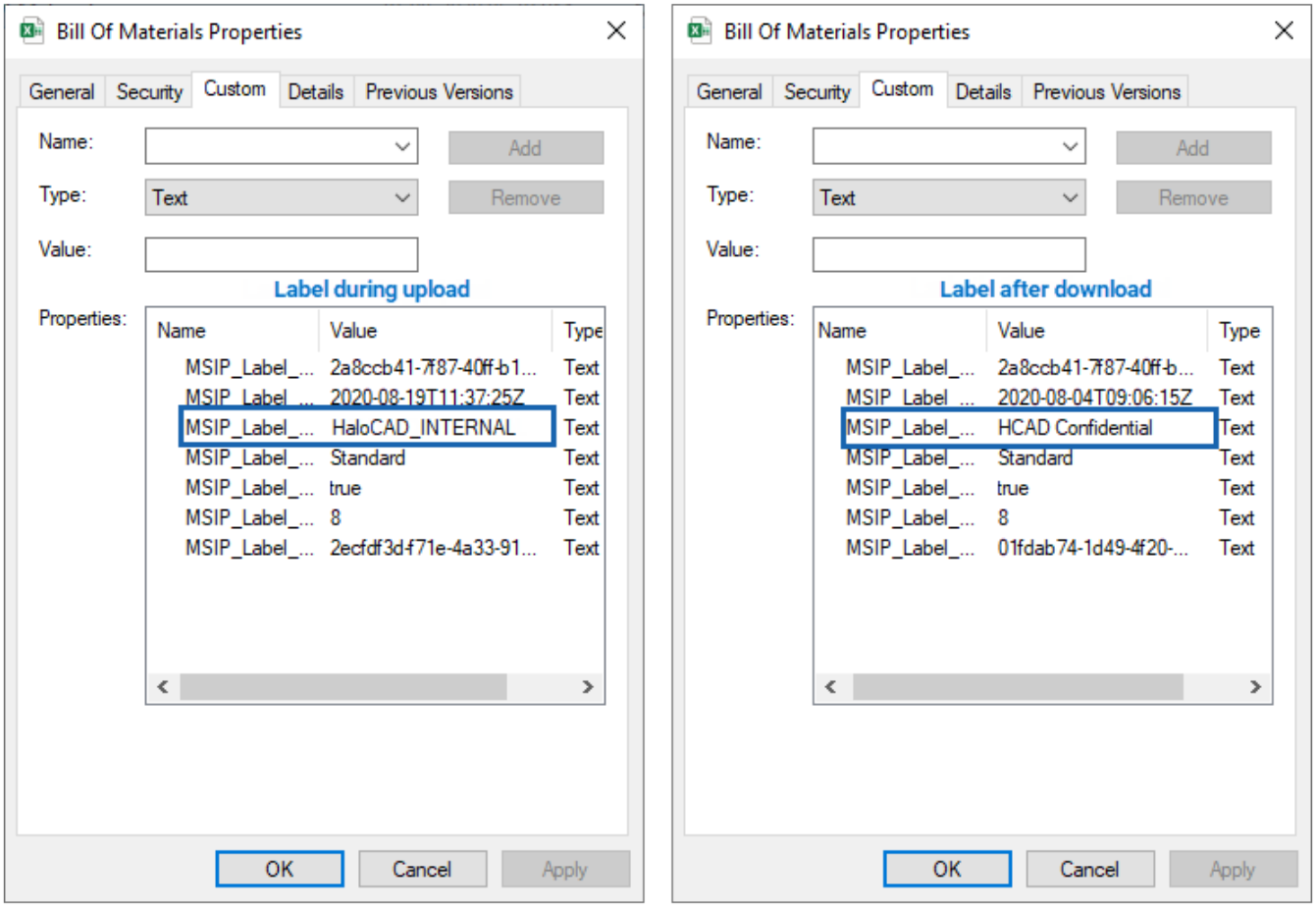
- During the upload (check-in) process, the original label is removed.
- The decrypted file is stored (checked in) in Autodesk Vault PLM.
- The upload (check-in) event is logged in the HaloENGINE GenNXT Monitor log file.

Download the File (Check-out Sequence)

1. Go to the **Autodesk Vault** tab.
2. Click **Open**.
3. Select the previously uploaded file from the Vault server.
4. Click **Open**.
5. When prompted, "*File S/xxxxx/logs/xxx.xlsx is not checked out. Do you want to check it out now?*"
6. Click **Yes** to check out the file directly
7. Alternatively, click **No**, and then click **Check-out** from the **Autodesk Vault** tab.

Results

- During the download (check-out) process, the file is exported from Vault with a new label defined in HaloENGINE GenNXT.
- The download (check-out) event is logged in the HaloENGINE GenNXT Monitor log file.



File upload and download Sequence

5. Technical Support

Before Contacting Technical Support

Before contacting Technical Support, ensure that you have the following information available.
Providing this information helps the support team investigate and resolve your issue more efficiently.

- Full contact details
- Product build version
- Date, time, and description of the error (include screenshots, if possible)
- Details of any third-party software used with the product
- Any additional information required to reproduce the issue

Contact Technical Support

Secude provides technical support through email support@secude.com. When contacting Technical Support by email, include your company details, a detailed description of the issue, and the relevant log files (if available). A support representative will respond to your inquiry.

Additional Resources

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- Documentation topic
- Description of the suggestion or error

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