



HaloCAD

HaloCAD for Windchill

Operations Manual

Version 2.7

Copyright

© 2024-2025 Secude Solutions AG. All Rights Reserved.

This Secude-branded software and its corresponding documentation are the exclusive property of Secude Solutions AG of Luzern, Switzerland and are protected under the various copyright laws around the world and by various other intellectual property laws. The use of this software and/or its documentation and any copying thereof by end users is subject to the terms of a license agreement with Secude Solutions AG. The wrongful use or copying of this software and/or documentation subjects infringers to both criminal and civil liabilities.

ANY USE, COPYING, REPRODUCTION, ALTERATION, TRANSMISSION, OR TRANSLATION OF THESE MATERIALS, IN WHOLE OR IN PART, IN ANY FORM OR BY ANY MEANS, IS STRICTLY PROHIBITED WITHOUT THE PRIOR WRITTEN PERMISSION OF SECUDE SOLUTIONS AG. IF THIS MATERIAL IS PROVIDED WITH SOFTWARE LICENSED BY SECUDE, THE INFORMATION HEREIN IS PROVIDED SUBJECT TO THE TERMS OF THE WARRANTY PROVIDED WITH THE PRODUCT LICENSE. IF THIS MATERIAL IS NOT PROVIDED WITH LICENSED SOFTWARE, THE INFORMATION HEREIN IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. IN EITHER CASE, THERE ARE NO OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, OR QUALITY. IN NO EVENT SHALL SECUDE SOLUTIONS AG OR ANY OF ITS AFFILIATES BE LIABLE FOR ANY DIRECT OR INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE, OR EXEMPLARY DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE MATERIALS AND/OR INFORMATION CONTAINED HEREIN. Some jurisdictions do not allow the exclusion of implied warranties, so the above exclusion may not apply to you.

Secude Solutions AG takes reasonable measures to ensure the quality of the data and other information produced herein. However, these materials may contain technical inaccuracies or typographical errors, and are not guaranteed to be error-free. Information may be changed or updated without notice. Secude Solutions AG has no obligation to update these materials based on changes to its products or services or those of third parties. Secude Solutions AG may also make improvements or changes to the products or services described in this information at any time without notice. Secude Solutions AG frequently releases new versions and updates to its software, and therefore images shown in this document may be slightly different from what you see on screen.

As with any security product, Secude Solutions AG highly recommends the back up of data as well as passwords on a regular basis. Secude Solutions AG is not responsible for the loss of passwords or data that cannot be retrieved based upon a user's failure to adhere to stringent backup and safe-keeping conventions.

Contact

Secude Solutions AG
Landenbergstrasse 34
6005 Luzern
Switzerland
Tel: +41 41 510 70 70
Mail: info@secude.com

Support

Web: <https://support.secude.com>
Mail: support@secude.com

Table of Contents

1. ABOUT THIS MANUAL.....	1
2. HOW DOES IT WORK?	2
3. HOW TO PROTECT A CAD FILE?	4
3.1. Fulfill the Requirements	5
3.2. Download a Protected File	9
3.3. Blocking a File Download	10
4. COMMON SCENARIOS	11
4.1. How to Open a Protected CAD File?	12
4.2. Example 1: Application ID as the Owner of the File.....	13
4.3. Example 2: Static Email as the Owner of the File	14
4.4. Example 3: User as the Owner of the File	15
4.5. Example 4: File Upload and Download	16
5. CUSTOMER SUPPORT	18
6. DOCUMENTATION FEEDBACK.....	19

Typographic Conventions

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

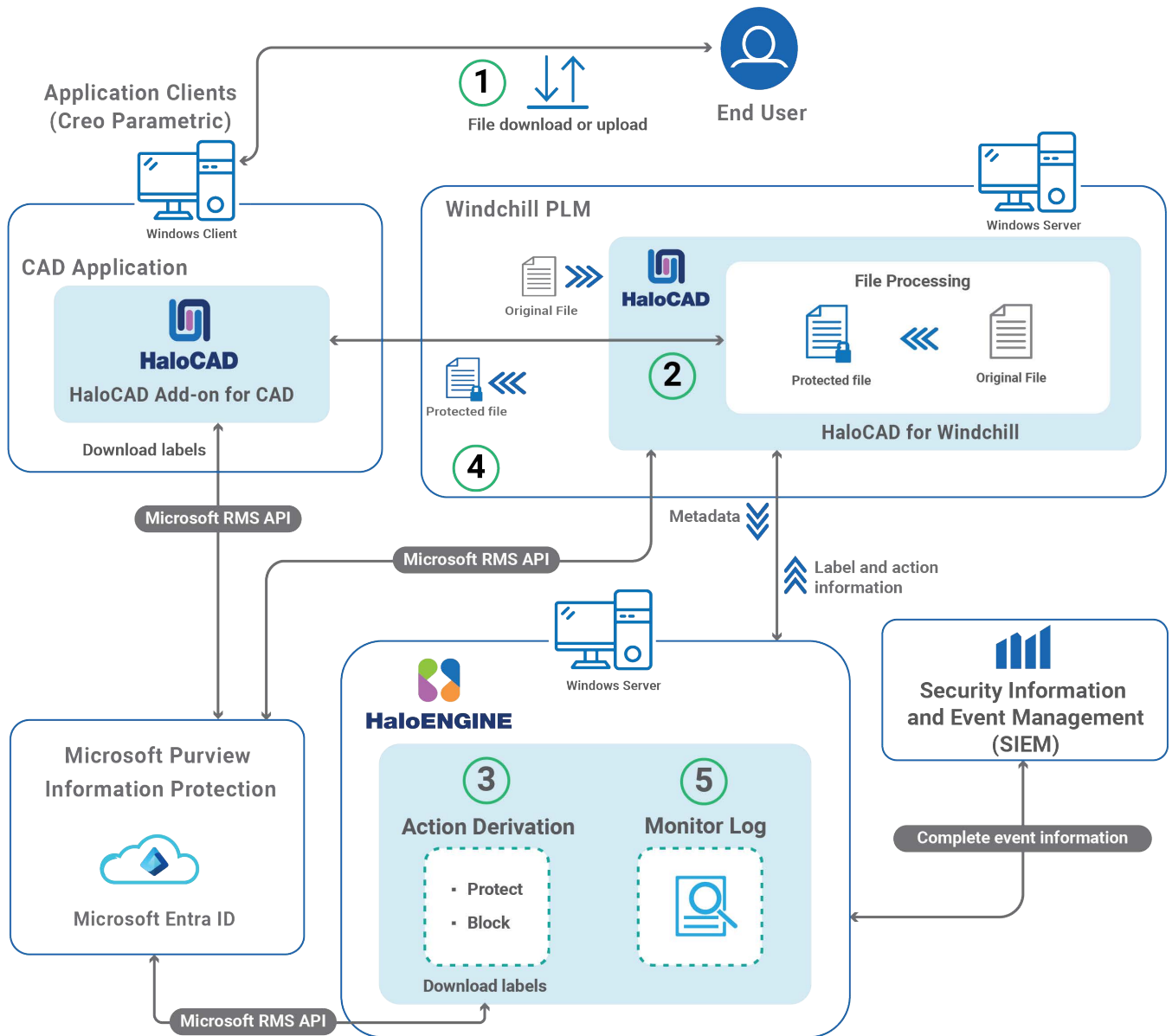
Convention	Description
Boldface type	<ul style="list-style-type: none">• Items you must select, such as menu options, command buttons, or items in a list.• Titles of sections, sub-sections, etc.
<i>Italic type</i>	<ul style="list-style-type: none">• To emphasize a word• Error messages• Table and Figure captions
Consolas Font	<ul style="list-style-type: none">• Package names• Filenames and directory names• XML element names and attribute names• Parameters• File type• Code examples <p>Example:</p> <pre>hesadm.exe start -user <domain\user> -pwd <password></pre>
Hyperlink	Provides quick and easy access to cross-referenced topics. Hyperlinks are highlighted in blue and underlined.
Admonitions	<div data-bbox="416 1171 1394 1279" style="border: 1px solid yellow; padding: 5px;"><p>Note Provides additional information relevant to the topic.</p></div> <div data-bbox="416 1335 1394 1518" style="border: 1px solid red; padding: 5px;"><p>Warning Contains information about circumstances, parameters, and so on that MUST be fulfilled. Failure to comply will have consequences for the current operation.</p></div> <div data-bbox="416 1574 1394 1682" style="border: 1px solid green; padding: 5px;"><p>Tip Contains useful information about the operation of the application.</p></div> <div data-bbox="416 1738 1394 1883" style="border: 1px solid blue; padding: 5px;"><p>Info Contains information, guidelines, or suggestions for performing tasks more effectively.</p></div>

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, please refer to the "Installation Manual" shipped with the product package.

2. How does it work?

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



HaloCAD for Windchill

Step 1: File Check-out / Check-in

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

Step 2: Metadata and Label Segregation

1. HaloCAD for Windchill fetches the user-selected file and collects its metadata.

2. The metadata is sent to the HaloENGINE, where the appropriate action and label information are derived and provided back to HaloCAD for Windchill.

Step 3: Encryption / Decryption

1. HaloCAD for Windchill executes actions based on the derived action and label information:
 - If no valid action is available, the file is downloaded without modification.
 - During check-in, if a valid action with a label is found, HaloCAD for Windchill removes the label and stores the decrypted file in Windchill PLM.
 - During check-out, if a valid action with a label is found, HaloCAD for Windchill applies the label.
2. If a block action rule is configured in the HaloENGINE, HaloCAD for Windchill prevents the file download.

Step 4: Processed File Delivery

The file, now encrypted with the derived label, is returned to the user.

Step 5: Monitoring and Audit Log

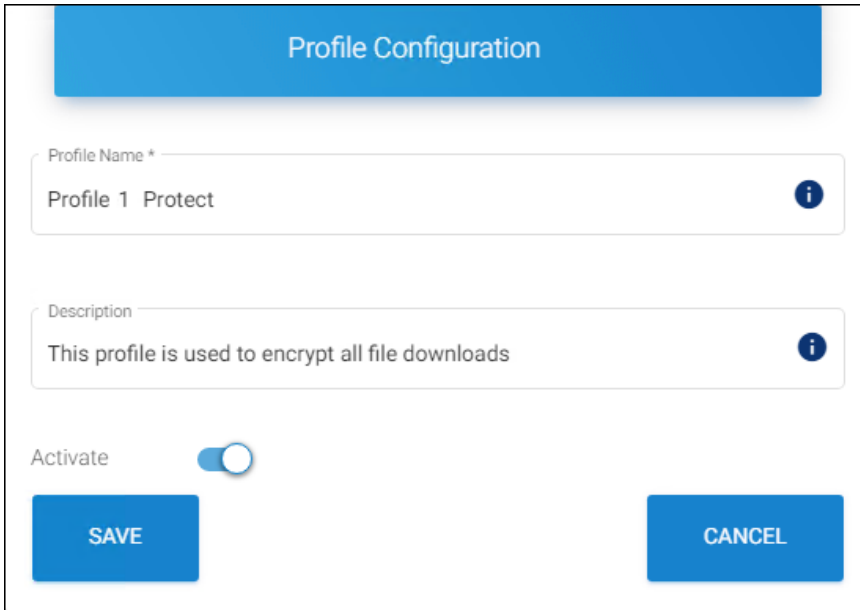
HaloCAD for Windchill captures the event details and forwards them to the HaloENGINE monitor log for auditing.

3. How to Protect a CAD File?

This section describes how to protect Creo and office files via PLM. Note: We recommend referring to the "Operations Manual of HaloCAD Add-on for Creo" to know more about standalone HaloCAD protection scenarios.

3.1. Fulfill the Requirements

1. HaloCAD for Windchill needs to be installed and set up.
2. HaloENGINE must be installed and configured.
3. The Classification Engine must be configured. For illustration purposes, a simple classification profile is explained here.
 - a. Step 1: Enter a name for the profile.



Profile Configuration

Profile Name *
Profile 1 Protect

Description
This profile is used to encrypt all file downloads

Activate

SAVE CANCEL

Sample profile

- b. Step 2: Configure classification properties and their values.

Classification Schema Configuration

Property Name * i

Property Value i +

Enable tree structure

Secret	🗑️
Confidential	🗑️
Internal	🗑️

Default Property Value * ▼

Deactivate Property

SAVE CLOSE

Classification properties

- c. Step 3: Create classification rules based on metadata types. Note: If you want to use your metadata, specify it on the Custom Metadata page of the HaloENGINE admin portal. Please refer to the Custom Metadata section of the HaloENGINE Installation and Configuration manual.

Download Classification Rules

Note: Any change in the Download Classification Rules requires "RELOAD CONFIGURATION".

Property List:
Choose a property

Overview:
Priority of rules is from top to bottom

Sensitivity
Countries
Departments

Sensitivity.Confidential
WINDCHILL.user_name == John

Rules

- d. Step 4: Create an action rule to label and block.

ACTION RULE OVERVIEW

Applied Actions : LABEL System Type : WINDCHILL Label Name : HCAD Confidential

Constructed Rule :

PROPERTY	CONDITION	VALUE
Sensitivity	Equal	Confidential

CLOSE

Action rule for labeling

Secude

ACTION RULE OVERVIEW

Applied Actions : BLOCK System Type : WINDCHILL

Constructed Rule :

PROPERTY	CONDITION	VALUE
Sensitivity	Equal	Secret

CLOSE

Action rule for blocking

- e. Step 5: Assign Systems to the profile.

WINDCHILL-SYSTEM ID +

Note: Any change in this page requires "RELOAD CONFIGURATION".

WINDCHILL01 [Document] [Edit] [Delete]

System Details

System Unique ID : WINDCHILL01
Description : Windchill PLM Server, Client 01

CLOSE

Assign Systems

- 4. HaloCAD add-on must be installed.

3.2. Download a Protected File

Follow the instructions below to protect CAD files via PLM:

1. Go to **Windchill Workspace**, download a file via **Export from Workspace/Open in Creo**.
2. Alternatively, from **Windchill Commonsplace**, download a file using the **Check out and Download** option.

Results: The downloaded file is labeled as defined in the HaloENGINE. The encryption settings from the label are enforced and remain with the file wherever it is stored.

What to do next:

- a. If you are an authorized user, you can modify the label and save the file.
- b. If you wish to view the audit log, you can view the export event in the HaloENGINE audit log.

3.3. Blocking a File Download

1. Go to **Windchill Workspace** and download a file using **Export from Workspace/Open in Creo**.
2. You can also download a file by using the **Check out and Download** option in Windchill Commonsense.

Results:

- a. The action rule for the block configured in HaloENGINE prevents file download. As a result, no file download occurs.
- b. Refer to the monitor log for further information.

4. Common Scenarios

This section presents some common scenarios for illustrative purposes and is meant to provide general guidelines.

4.1. How to Open a Protected CAD File?

Prerequisite: Before opening the protected file, make sure the HaloCAD Add-on for Creo is installed.

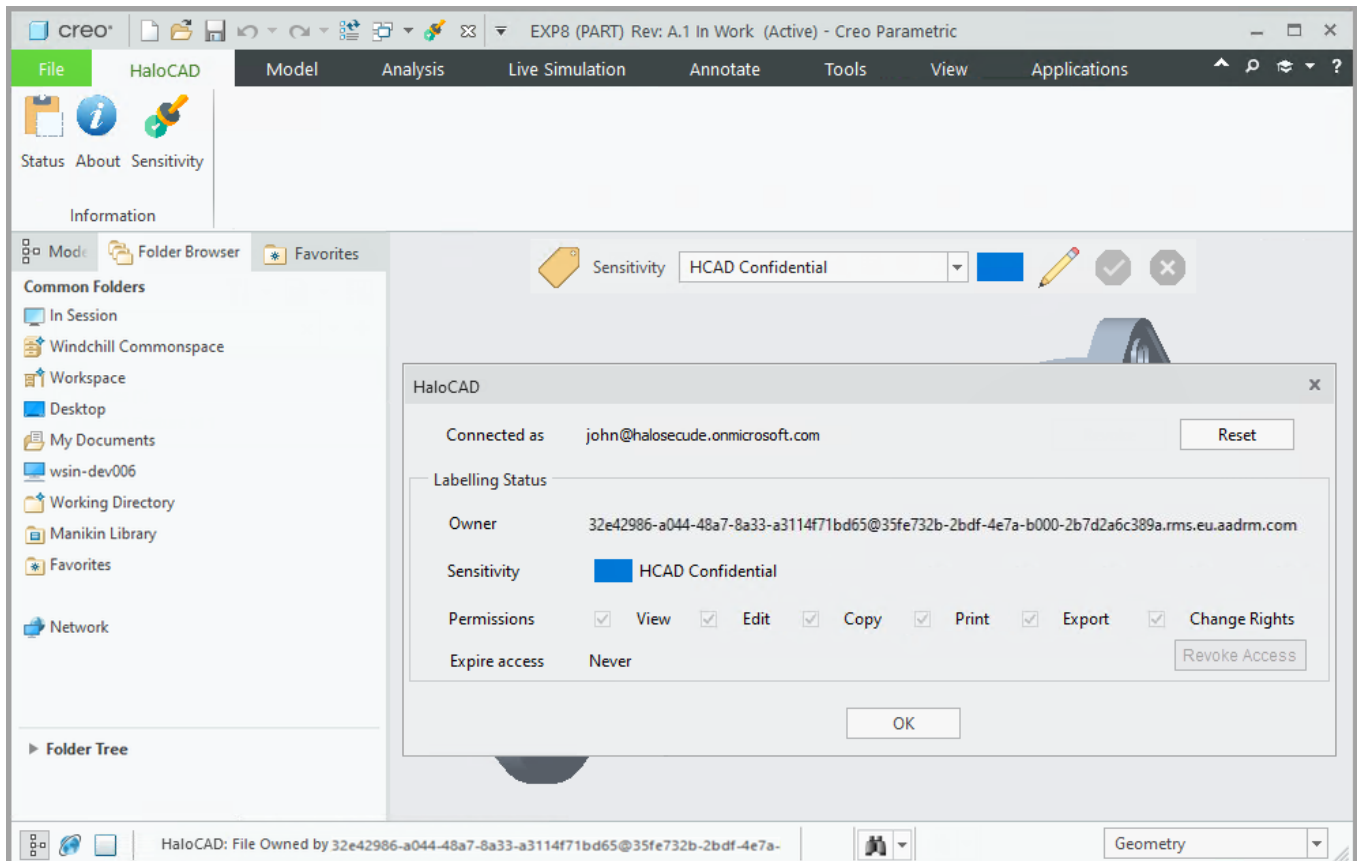
1. Click on the protected file.
2. The first time when you try to open a labeled file, HaloCAD will prompt you about the **Microsoft Sign-In Assistant**.
3. Click **OK** when prompted, "*Microsoft Sign-In Assistant will be invoked and the user credentials will be cached.*"
4. Follow the on-screen prompts to complete the authentication process.

Results:

- a. On successful confirmation, the file will open.
- b. Users could experience different access results for the same document based on the policy settings. For more details, refer to the "Operations Manual of HaloCAD Add-on for Creo".

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

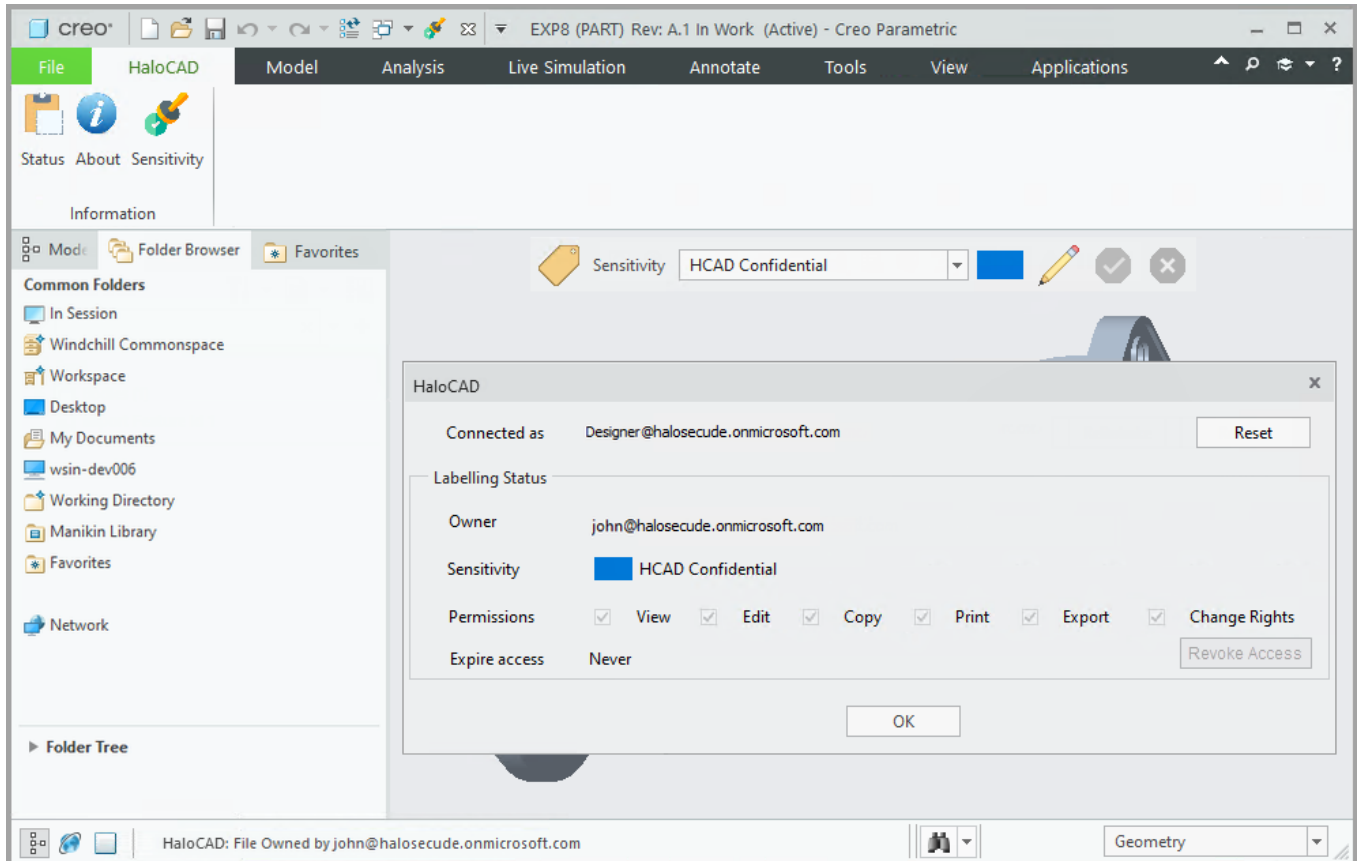
The following figure shows an example of an Application ID that is used to initialize the HaloENGINE. This Application ID will be the owner of the document by default, however, a static email or a user who logs in to Windchill can also be an owner of the downloaded file if specified in HaloENGINE. Please refer to examples 2 and 3.



Application ID as the Owner of the File

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

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

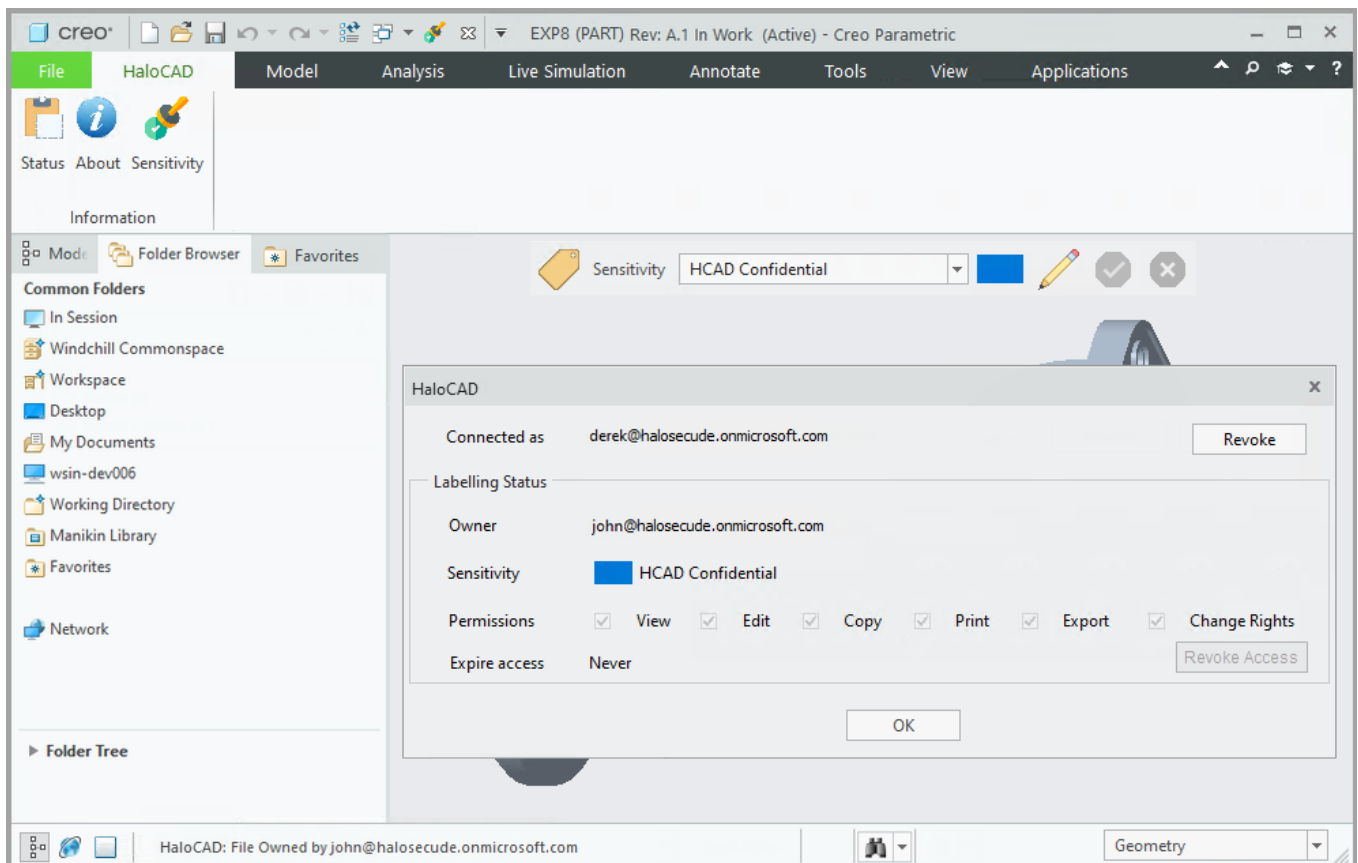


Static Email as the Owner of the File

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

The following figure shows an example of a PLM logged-in user who has become the owner of the document. In order to achieve this, the Owner configuration must be set to "user" on the HaloENGINE Admin portal. The exported document will have the email address of the currently logged-in user as its owner.

In case, the user who logged in to Windchill PLM Server does not have an email ID, then the Application ID (which is used to initialize HaloENGINE) will be the owner of the document.



User as the Owner of the File

4.5. Example 4: File Upload and Download

The following is an example of an upload and download sequence in Windchill PLM integrated with HaloCAD. Note: Non-office files are also supported (e.g., .txt and .PDF). For illustration purposes, an Excel file is used here.

1. Open the Creo Parametric application and enter the user credentials of the PLM server.
2. Navigate to your **Windchill Commonsplace**.
3. Click the **New Document** option, the **New document** screen will appear.
4. Select the product type as **Document** and select the protected file using the **Browse** option. [Please note, in this example, the file (Bill Of Materials.xlsx) which is going to be uploaded is already protected with the **HaloCAD INTERNAL** label].
5. Click the **Finish** button.

Results:

- a. The file is uploaded to the Windchill.
 - b. During the upload/check-in sequence, the original label **HaloCAD_INTERNAL** is removed, and the decrypted file is stored (checked-in) in Windchill PLM.
 - c. The upload/checked-in event is logged in the HaloENGINE.
6. **Check-out sequence:** From the list, select the previously uploaded file and click the option - **Download PDF** or **Download Text File** or **Download Unknown** buttons available in the workspace.

Results:

- a. The file is downloaded to the default location.
 - b. During the download/check-out sequence, the file is exported from Windchill with a new label **HCAD Confidential**, which is defined in the Classification Engine.
 - c. The download/check-out event is logged in the HaloENGINE.
7. The figure below shows the difference between the uploaded file into Windchill and the downloaded file from Windchill.

Secude

Bill Of Materials Properties

General Security Custom Details Previous Versions

Name: Add

Type: Text Remove

Value:

Label during upload

Properties:

Name	Value	Type
MSIP_Label_...	2a8ccb41-7f87-40ff-b1...	Text
MSIP_Label_...	2020-08-19T11:37:25Z	Text
MSIP_Label_...	HaloCAD_INTERNAL	Text
MSIP_Label_...	Standard	Text
MSIP_Label_...	true	Text
MSIP_Label_...	8	Text
MSIP_Label_...	2ecdf3d4f71e-4a33-91...	Text

OK Cancel Apply

Bill Of Materials Properties

General Security Custom Details Previous Versions

Name: Add

Type: Text Remove

Value:

Label after download

Properties:

Name	Value	Type
MSIP_Label_...	2a8ccb41-7f87-40ff-b...	Text
MSIP_Label_...	2020-08-04T09:06:15Z	Text
MSIP_Label_...	HCAD Confidential	Text
MSIP_Label_...	Standard	Text
MSIP_Label_...	true	Text
MSIP_Label_...	8	Text
MSIP_Label_...	01fdab74-1d49-4f20-...	Text

OK Cancel Apply

File upload and download Sequence

5. Customer Support

Please be ready with the information listed below before contacting our team to help you with the issue you are experiencing. The data that you provide will help us serve you better.

1. Full contact details.
2. HaloCAD build version.
3. Date, time, and description of the error (if possible, provide screenshots).
4. What (if any) third-party products (software or other) were used in conjunction with our product?
5. Any other information necessary to reproduce the error.

Secude offers help and support through

1. Technical support email: support@secude.com

If you choose to contact us by email, please provide your company details and a detailed description of the issue, as well as the log file (if any). Our representative will respond to your email inquiry.

2. Phone support: Call +41 41 510 70 70 to talk to our representative to diagnose and resolve the technical problem.

Other resources

Please visit <https://secude.com> to know about upcoming events, press releases, and to download whitepapers.

6. Documentation Feedback

Secude understands the importance of technical content when attempting to gain product knowledge and strives to continuously improve product documentation to ensure that users receive the information they want. To provide feedback on the documentation, please send an email to documentation@secude.com. Please include the following details in your feedback:

1. Product name and version
2. Documentation topic
3. Details of the suggestion or error

The technical documentation team will consider your feedback and address it in future documentation updates.



www.secude.com

About Secude

Secude, a trusted Microsoft and Siemens Digital Industries Software partner, is a global leader in Zero Trust data protection and data governance.

Our solutions extend Microsoft Purview Information Protection (MPIP) to secure sensitive files—including CAD and PLM assets—from the moment of creation. By embedding persistent protection and access controls directly into design and engineering data, we help enterprises prevent Intellectual Property (IP) theft, data leakage, reputational damage, and compliance risks. With operations in Europe, North America, and Asia, Secude supports global manufacturers, defense contractors, and AEC firms in implementing robust IT security strategies across the product lifecycle and digital supply chain.