



HaloCAD for SOLIDWORKS PDM 1.3
Operations Manual

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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	<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>hcsadm.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	<p>Note</p> <p>Contains detailed information about a topic and are of direct importance to the subject at hand.</p>
	<p>Warning</p> <p>Contains information about circumstances, parameters, and so on that MUST be fulfilled. Failure to comply will have consequences for the current operation.</p>
	<p>Tip</p> <p>Contains useful information about the operation of the application.</p>
	<p>Info</p> <p>Contains information, guidelines, or suggestions for performing tasks more effectively.</p>

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. General FAQs

This section provides answers to the most frequently asked questions (FAQ). If you have further inquiries, please contact our sales representative or support team.

1. What does HaloCAD provide for an organization?

HaloCAD solution protects engineering CAD files and enforces security throughout their full life cycle.

2. What languages are supported by the HaloCAD add-on?

Currently, the HaloCAD add-on only supports the English language.

3. Does the HaloCAD Add-on support all native CAD file types?

Yes, the HaloCAD Add-on supports all CAD native file types.

4. What happens if an unauthorized person tries to open a HaloCAD-protected CAD file?

At first, user authentication takes place. It is a process of verifying the identity of the user. If the user fails during the authentication, he/she will be prompted with an error message and access will be denied.

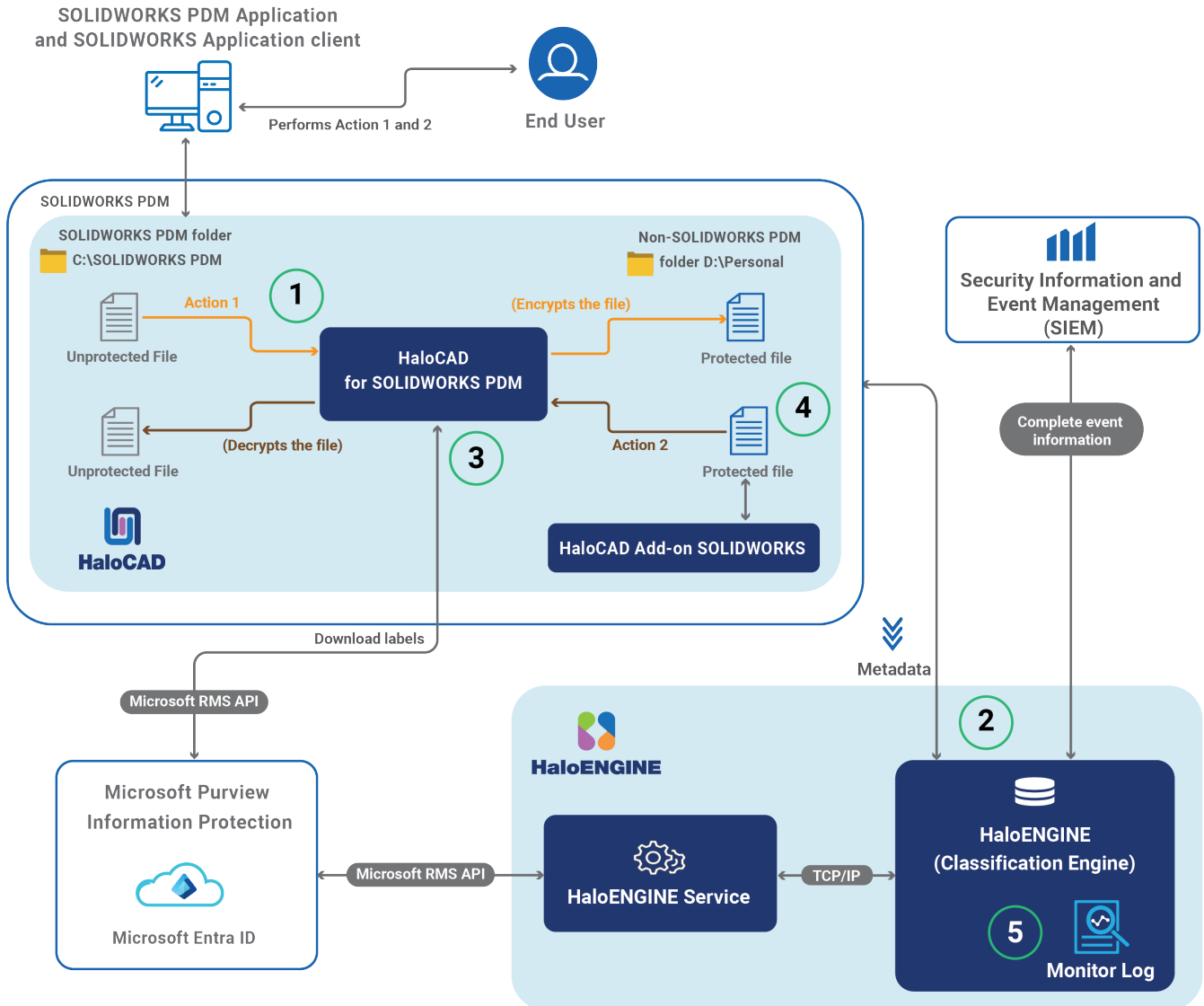
5. Who decides what labels should be used for various CAD drawings and how it is managed in the background?

An administrator in an organization creates and manages labels (user rights) in the Microsoft Purview portal.

Engineering managers can define a profile, a classification schema, and an action rule based on the sensitivity of the data to regulate how labels are allocated to different users in the HaloENGINE Classification Engine.

3. How does it work?

At a high level, HaloCAD workflow involves the following steps:



HaloCAD for SOLIDWORKS PDM

Step 1: HaloCAD starts automatically

1. **Action #1:** The user copies a file from a SOLIDWORKS PDM folder and pastes it into a non-SOLIDWORKS PDM folder, or the user creates a new file or saves an existing file to a non-SOLIDWORKS PDM folder using the SOLIDWORKS application.
2. **Action #2:** The user copies a previously protected SOLIDWORKS application file to a SOLIDWORKS PDM folder.

Step 2: Send metadata to the HaloENGINE

1. HaloCAD for SOLIDWORKS PDM intercepts the copy or cut operation in the background, retrieves metadata from the PDM folder, and passes it to the HaloENGINE.
2. Based on the collected metadata, the HaloENGINE determines the action derivation and transmits it to HaloCAD for SOLIDWORKS PDM.

Step 3: Execute Action Rule

1. In case of action #1: HaloCAD for SOLIDWORKS PDM encrypts the file based on the action rule.
2. In case of action #2: HaloCAD for SOLIDWORKS PDM decrypts the file by default because it is already encrypted.
3. If an inappropriate action is present, or if no action is supplied, the file will not be processed.

Step 4: Processed file sent to the destination folder

1. Result of action #1: The encrypted file with the derived label is sent to the user-specified folder. Using the HaloCAD Add-on for SOLIDWORKS, the protected file is opened and the permission label is displayed with enforcement.

2. Result of action #2: The decrypted file is sent to the PDM folder.

A file created, saved, or exported to the SOLIDWORKS PDM folder using the SOLIDWORKS application is not protected; however, the label information of each file is retrieved from the HaloENGINE and preserved. As a result, the sensitivity label displays the associated label when you open a file in SOLIDWORKS.

HaloCAD prevents moving or copying a file from the SOLIDWORKS PDM folder to a non-SOLIDWORKS PDM folder if a proper blocking action rule is configured in HaloENGINE.

Step 5: Monitor log

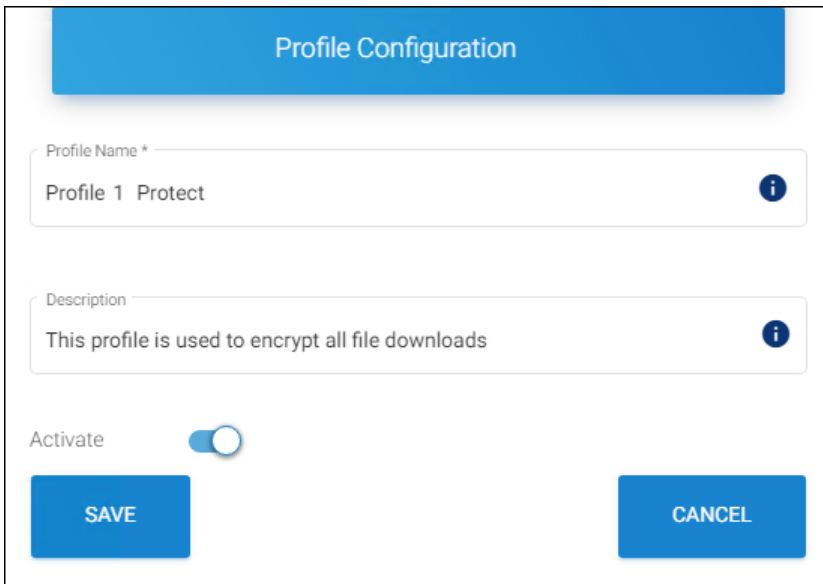
The event is captured by the HaloCAD component and forwarded to the monitor log of the HaloENGINE.

4. How to Protect and Block a CAD File?

This section describes how to protect SOLIDWORKS PDM. Note: We recommend referring to the "Operations Manual of HaloCAD Add-on for SOLIDWORKS" to know more about standalone HaloCAD protection scenarios.

Fulfill the Requirements

1. HaloCAD for SOLIDWORKS PDM needs to be installed and set up.
2. HaloENGINE Service must be installed and configured.
3. HaloENGINE must be installed and configured.
4. 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.



The screenshot shows a 'Profile Configuration' dialog box. It features a blue header bar with the text 'Profile Configuration'. Below the header, there are three input fields. The first is labeled 'Profile Name *' and contains the text 'Profile 1 Protect'. The second is labeled 'Description' and contains the text 'This profile is used to encrypt all file downloads'. The third is labeled 'Activate' and has a toggle switch that is currently turned on. At the bottom of the dialog, there are two blue buttons: 'SAVE' on the left and 'CANCEL' on the right.

Sample profile

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

Classification Schema Configuration

Property Name *
Sensitivity i

Property Value i +

Enable tree structure

Secret 🗑️

Confidential 🗑️

Internal 🗑️

Default Property Value *
Secret ▼

Deactivate Property

SAVE **CLOSE**

Classification properties

- c. Step 3: Create classification rules based on metadata types.

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 +

SOLIDWORKS_PDM.user_name == John

✎

🗑️

⬆

⬇

Rules

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

ACTION RULE OVERVIEW

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

Constructed Rule :

PROPERTY	CONDITION	VALUE
Sensitivity	Equal	Confidential

CLOSE

Action rule for labeling

ACTION RULE OVERVIEW

Applied Actions : BLOCK System Type : SOLIDWORKS_PDM

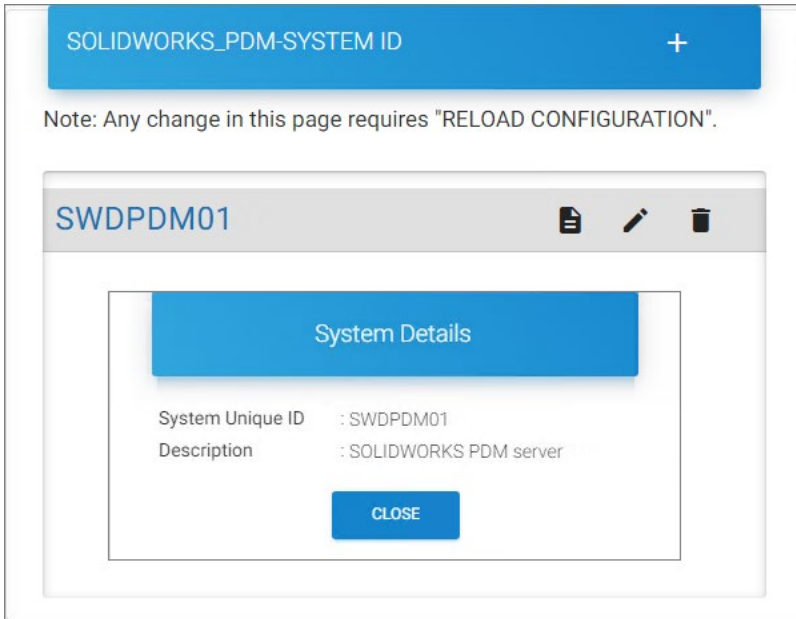
Constructed Rule :

PROPERTY	CONDITION	VALUE
Sensitivity	Equal	Secret

CLOSE

Action rule for blocking

e. Step 5: Assign Systems to the profile.



Assign Systems

5. HaloCAD add-on must be installed.

Downloading a Protected File

Follow the instructions below to protect CAD files via PDM:

1. Move or copy a CAD file from the SOLIDWORKS PDM folder to a non-SOLIDWORKS PDM folder.
2. Microsoft Sign-in prompts you to enter your login information.
3. Enter the credentials and click **Sign in**.

Result:

The copied 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.

Blocking a File

1. Move or copy a CAD file from the SOLIDWORKS PDM folder to a non-SOLIDWORKS PDM folder.
2. Microsoft Sign-in prompts you to enter your login information.
3. Enter the credentials and click **Sign in**.

Result:

The copying action is terminated with the HaloCAD message *"Copying the file is blocked by the rules."* The rules set up in HaloENGINE control the prevention of copying events.

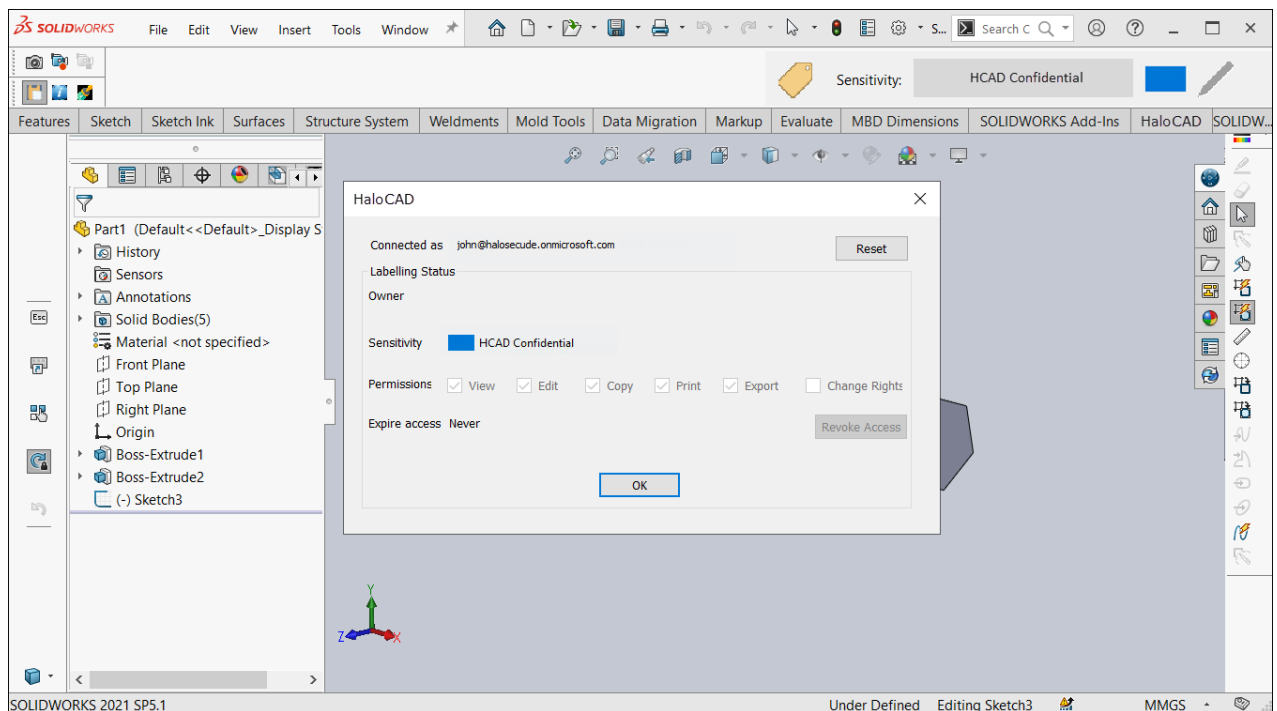
5. How to Open a Protected CAD File?

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

1. Click on the protected file.
2. The first time 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 SOLIDWORKS".



Sample file

6. Customer Support

1. Please be ready with the below-listed information before contacting our team to help you with the issue you are experiencing. The data that you provide will help us to serve you better.
2. Full contact details.
3. HaloCAD component and HaloENGINE build version.
4. Date, time, and description of the error (if possible, provide screenshots).
5. What (if any) third-party products (software or other) were used in conjunction with our product?
6. Any other information necessary to reproduce the error.

Secude offers help and support through

1. Technical support email: support@secude.com

If you choose the email option to contact us, please provide your company details with a detailed description of the issue and attach 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.

7. 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.



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About Secude

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For more than 25 years Secude has been trusted by many Fortune 500 and DAX-listed companies for architecting, implementing, and protecting their data. Our data-centric security professionals apply their passion and deep domain expertise to provide a holistic approach to protect priceless Intellectual Property (IP) in CAD & SAP based collaborations and supply chains.

With branches in Europe, North America and Asia, Secude supports customers with the implementation of IT security strategies through a global network.