Installation and Configuration

CAD Conversion

Install CAD Converter

To set up CAD Conversion, refer to the *Aras 3D Visualization 35 – Installation Guide*, available in the **Documentation** folder of the 3D Visualization CD Image, which subscribers can obtain from the **Aras 3D Visualization** folder on the Aras FTP site.

Use Legacy View Files

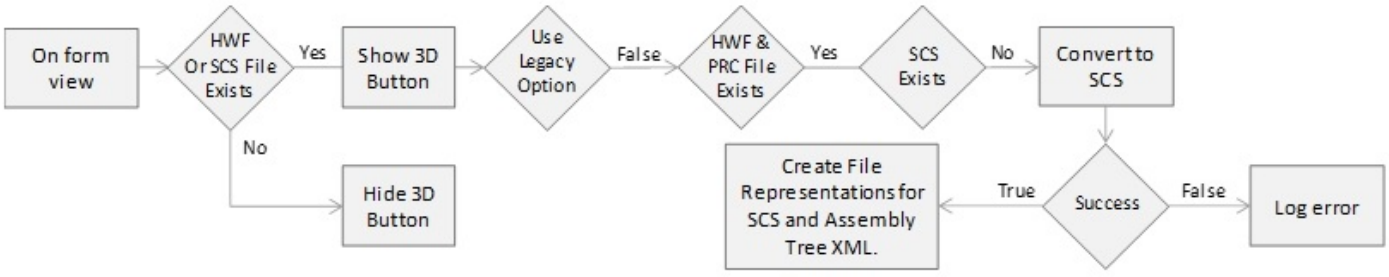
Aras Innovator provides backward compatibility in both the data model and viewing features. With the current Viewer, users can convert legacy HWF view files to the new Stream Cache Single (SCS) file format using an automated asynchronous process. The **CAD** Items can either use the HWF, SCS or SCZ format.

Preference Settings

Users can choose to always display legacy HWF files instead of converting them to SCS by selecting the **Use Legacy 3D View Files** checkbox on the **Secure Social** tab of a given Preference Item.

Convert Legacy View Files

The conversion process for legacy view files begins when a user asks to view a **CAD Document** or **Part** Item with a related **CAD Document** Item that includes a legacy view file (HWF). The following figure describes the process.



The existence of an HWF, SCS file determines whether the 3D Viewer can be opened. If 3D Viewer opens up, a button appears on the sidebar enabling users to open the Viewer. If either of these files does not exist, the user is unable to open the 3D Viewer. The **Use Legacy 3D View Files** setting value of the given Preference Item and the existence of an SCS file determines whether it is necessary to convert the file. If the following conditions exist, an ad hoc, asynchronous conversion process starts:

- The Use Legacy 3D View Files Preference setting is False.
- HWF and PRC files exist.
- An SCS file has not been created previously.

A successful conversion process results in a new file representation that points to the generated SCS and Assembly Tree files. Conversion process errors should be logged. Subsequent attempts to open the same CAD document after a successful conversion result in viewing the generated SCS file.

CAD Unit Support

3DV introduces a new Extended Property to FileRepresentation type called 'xp-unit-scale'

In the conversion process, the Unit attributes are searched in the root node of the conversion XML and set the value to XML File Representation ‘xp-unit-scale’.

In generating ModelXM, 'xp-unit-scale' is added to the value from the Root XML File Representation (from the Root CAD native file) to generate ModelXML. The ModelXML then goes to HOOPS Viewer to visualize the generated structure.

Important

Unit scale in this case helps to visualize assemblies with incorrect default measurements. Correct display and correct measurements