

Manual Aras CAD Converter Installation

The following steps outline the process of manual Aras CAD Converter Installation:

1. In the unzipped **Aras 3D Visualization 39 CD Image** package, navigate to the following folder:
Aras 3D Visualization 39 CD Image\Packages\CADConverter.
2. Copy the **HOOPS Converter** folder from the CADConverter package folder into a permanent location on a machine with the Conversion Server, for example, **C:\HOOPS Converter.**
3. Copy the **ConversionServer** folder from the **CADConverter** package folder to a folder that includes the **ConversionServer** folder with the installed Conversion Server.
4. Open the **ConversionServerConfig.xml** file in a text editor with an admin's privileges. This file is the root Aras Innovator code tree folder for the default installation. Do not confuse this file with the **ConversionServer.config** XML file in the **ConversionServer** folder with the Conversion Server.

5. In the child `sectionGroup name="ConverterSettings"` tag of the `configSections` tag, add the following section tags with attributes:

```
<configSections>
<sectionGroup name="ConverterSettings">
<section name="ArasCadConverter"
type="Aras.ConversionFramework.Converter.Hoops.Configuration.HoopsConverterC
ArasCadConverter"></section>
<section name="ArasCadConverterPrc"
type="Aras.ConversionFramework.Converter.Hoops.Configuration.HoopsConverterC
ArasCadConverter"></section>
<section name="DpnCadConverterStepJt"
type="Aras.ConversionFramework.Converter.Hoops.Configuration.HoopsConverterC
ArasCadConverter" />
</sectionGroup>
</configSections>
```

These new tags define the configurations of the new **ArasCadConverter** and **ArasCadConverterPrc** converters.

6. In the child `Converters` tag of the `ConversionServer` tag, add the following Converter tags with attributes:

```
<ConversionServer>
```



```

<Converters>
<Converter name="Aras CAD to PDF Converter"
type="Aras.ConversionFramework.Converter.Hoops.HoopsConverter,
ArasCadConverter" />
<Converter name="Aras PRC to SCS Converter"
type="Aras.ConversionFramework.Converter.Hoops.HoopsConverterPrc,
ArasCadConverter" />
<Converter name="JT Step CAD Converter"
type="Aras.CadConverter.StepJtCadConverter, ArasCadConverter"
xdt:Transform="Insert"/>
</Converters>
</ConversionServer>

```

These new tags define the new converters. Such a tag specifies a DLL for a given converter and a Class within this DLL that performs the conversion.

7. In the `ConverterSettings` tag, add the following `ArasCadConverter` and `ArasCadConverterPrc` tags with child tags and attributes:

```

<ConverterSettings>

<ArasCadConverter>

<Application converterPath="C:\HOOPS Converter\bin\converter.exe"/>

<Command arguments="--sc_compute_bounding_boxes 'All' --
input_pdf_template_file 'C:\HOOPS
Converter\templates\Blank_Template_L.pdf' --output_pdf
'%filepath%\%filename%.pdf' --output_png '%filepath%\%filename%.png' -
-output_png_resolution '150x150' --output_scs
'%filepath%\%filename%.scs' --output_xml_assemblytree
'%filepath%\%filename%.xml' --output_prc '%filepath%\%filename%.prc' -
-background_color '1.0, 1.0, 1.0' --output_logfile
'%filepath%\%filename%.log'" />

<Output>

<UploadToVault>

```



```

<File extension="prc" argsMarkers="--output_prc" />

<File extension="scs" argsMarkers="--output_scs" />

<File extension="pdf" argsMarkers="--output_pdf" />

<File extension="png" argsMarkers="--output_png" />

<File extension="stl" argsMarkers="--output_stl" />

<File extension="xml" argsMarkers="--output_xml_assemblytree" />

</UploadToVault>

</Output>

<AssemblyCommand dynamicEnabled="True" arguments="--
sc_compute_bounding_boxes 'All' --input_pdf_template_file 'C:\HOOPS
Converter\templates\Blank_Template_L.pdf' --output_pdf
'%filepath%\%filename%.pdf' --output_png '%filepath%\%filename%.png' -
-output_png_resolution '150x150' --output_scs
'%filepath%\%filename%.scs' --output_xml_assemblytree
'%filepath%\%filename%.xml' --output_prc '%filepath%\%filename%.prc' -
-background_color '1.0, 1.0, 1.0' --output_logfile
'%filepath%\%filename%.log'" />

</ArasCadConverter>

<ArasCadConverterPrc>

<Application converterPath="C:\HOOPS Converter\bin\converter.exe"/>

<Command arguments="--output_scs '%filepath%\%filename%.scs' --
output_xml_assemblytree '%filepath%\%filename%.xml' --output_logfile
'%filepath%\%filename%.log'" />

<Output>

```



```

<UploadToVault>
<File extension="prc" argsMarkers="--output_prc" />
<File extension="scs" argsMarkers="--output_scs" />
<File extension="pdf" argsMarkers="--output_pdf" />
<File extension="png" argsMarkers="--output_png" />
<File extension="stl" argsMarkers="--output_stl" />
<File extension="xml" argsMarkers="--output_xml_assemblytree" />
</UploadToVault>
</Output>
</ArasCadConverterPrc>
<DpnCadConverterStepJt>
<Application converterPath="/opt/exchange/bin/linux64"/>
<Parameters>
<Parameter key="JTVersion" value="8.1" /> <!-- Optional. Possible
values: 8.1|9.5|10.0 -->
</Parameters>
</DpnCadConverterStepJt>
</ConverterSettings>

```

The `ArasCadConverter` and `ArasCadConverterPrc` tags set up the new converters.

The `converterPath` attributes should include the path to the **converter.exe** application in the **HOOPS Converter** folder copied in the third step.



The `--input_pdf_template_file` argument in the arguments attributes should include the path to the **Blank_Template_L.pdf** template file in the **HOOPS Converter** folder copied in the third step.

An entire `<... arguments="..." />` attribute must be only one single line without carriage returns or newlines.

The child File tags of the `UploadToVault` tags enable the files of the given file types to be uploaded to the Vault and rendered correctly by the Viewer.

Capitalization differences, typos, extra newlines, and carriage returns in the **ConversionServerConfig.xml** file raise an error discussed in the *500.19 Internal Server Error* section.

8. Save and close the **ConversionServerConfig.xml** file.
9. Restart the **Internet Information Services (IIS)**.
10. Import the Aras 3D Visualization 3D Common database package with the **Package Import Export Utilities**. For more information using this tool, refer to the *Aras Innovator 39 – Package Import Export Utilities* documentation.
 1. Enable the **Super User (root)** login.



2. Browse to the **\PackageImportExportUtilities\Import** folder and run the **Import.exe** file.

The screenshot shows the 'Import' application window. It features a menu bar with 'Import', 'Settings', 'Exit', and 'About'. The main area is divided into several sections: 'Innovator Server' with a 'Server' text box containing 'http://localhost/InnovatorServer35' and a 'Logout' button; 'Release settings' with 'Target Release' (3DV14.0.8) and 'Description' (Aras 3D Visualization 14.0.8 - 3D Viewers); 'Manifest File' with a 'Path' text box containing a long file path and a browse button; 'Available for Import' with a checked 'Select All Packages' checkbox and a list of packages; 'Language codes' with a list of codes (en, de, fr, ja); 'Existing Packages in the Database' with a list of package names; and 'Type' (Merge selected, Ignore) and 'Mode' (Fast Mode, Thorough Mode selected) options.

3. Input the connection information.

- **Server:** The connection URL for Aras Innovator. By default, it is <http://localhost/InnovatorServer/>.

Click the **Login** button and enter:

- **Database:** The target Aras Innovator database. By default, it is InnovatorSolutions.
- **Username:** root
- **Password:** Password for “root” login (Default is “innovator”)
- **Target Release:** 3DV14.9.0
- **Description:** Aras 3D Visualization 14.9.0 – 3D Common
- **Manifest File Path:** The manifest file
\\Packages\CADConverter\Imports\3d_common.mf
- **Available for Import:** Select All Packages



- **Type:** Merge
- **Mode:** Thorough Mode

4. Click the **Import** button.

11. Import the Aras 3D Visualization CAD Converter database package with the **Package Import Export Utilities**. For more information using this tool, refer to the *Aras Innovator 39 – Package Import Export Utilities* documentation.

1. Enable the **Super User (root)** login.
2. Browse to the **\\PackageImportExportUtilities\\Import** folder and run the **Import.exe** file.

The screenshot shows the 'Import' dialog box with the following fields and options:

- Innovator Server:** Server: Logout
- Release settings:** Target Release: Description:
- Manifest File:** Path: ...
- Available for Import:**
 - ☒ Select All Packages
 - ☒ dynamic model constructor
- Language codes:**
 - ☒ en
 - ☒ de
 - ☒ fr
 - ☒ ja
- Existing Packages in the Database:**
 - com.aras.defaults.filerepresentations
 - com.aras.innovator.access.common
 - com.aras.innovator.access.domain
 - com.aras.innovator.access.mandatory
 - com.aras.innovator.access.uservisibility
 - com.aras.innovator.access_sharing
 - com.aras.innovator.admin
 - com.aras.innovator.authenticationfram
- Type:**
 - ☒ Merge
 - ☐ Ignore
- Mode:**
 - ☐ Fast Mode
 - ☒ Thorough Mode

3. Input the connection information.

- **Server:** The connection URL for Aras Innovator. By default, it is <http://localhost/InnovatorServer/> .

Click the **Login** button and enter:

- **Database:** The target Aras Innovator database. By default, it is InnovatorSolutions.
- **Username:** root
- **Password:** Password for “root” login (Default is “innovator”)

- **Target Release:** 3DV 14.9.0
- **Description:** Aras 3D Visualization 14.9.0 – CAD Converter
- **Manifest File Path:** The manifest file \Packages\CADConverter\Imports\imports.mf
- **Available for Import:** Select All Packages
- **Type:** Merge
- **Mode:** Thorough Mode

4. Click the **Import** button.

12. Disable the **Super User (root)** login.

Important

The **Super User (root)** login should not be enabled in production.

13. This step is optional. Confirm the successful installation. See the *Confirming Aras 3DV Installation* section.

14. If the installation fails, restore the Aras Innovator code tree, Conversion Server, and database with the backups done before the installation and contact Aras Support at support@aras.com .

