

# 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.

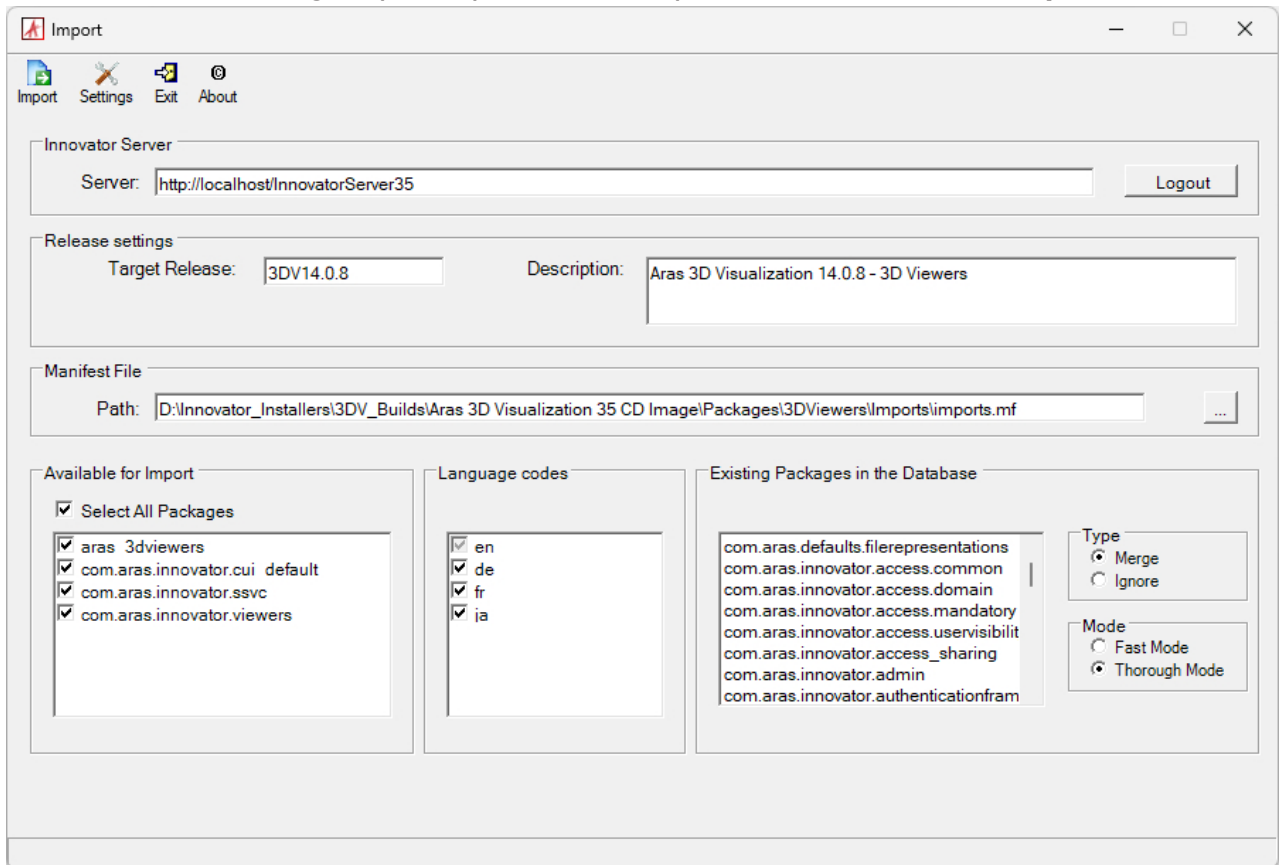
The child File tags of the UploadToVault tags enable the files of the given file types to be uploaded to the Vault and rendered correctly by the Viewer.

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.

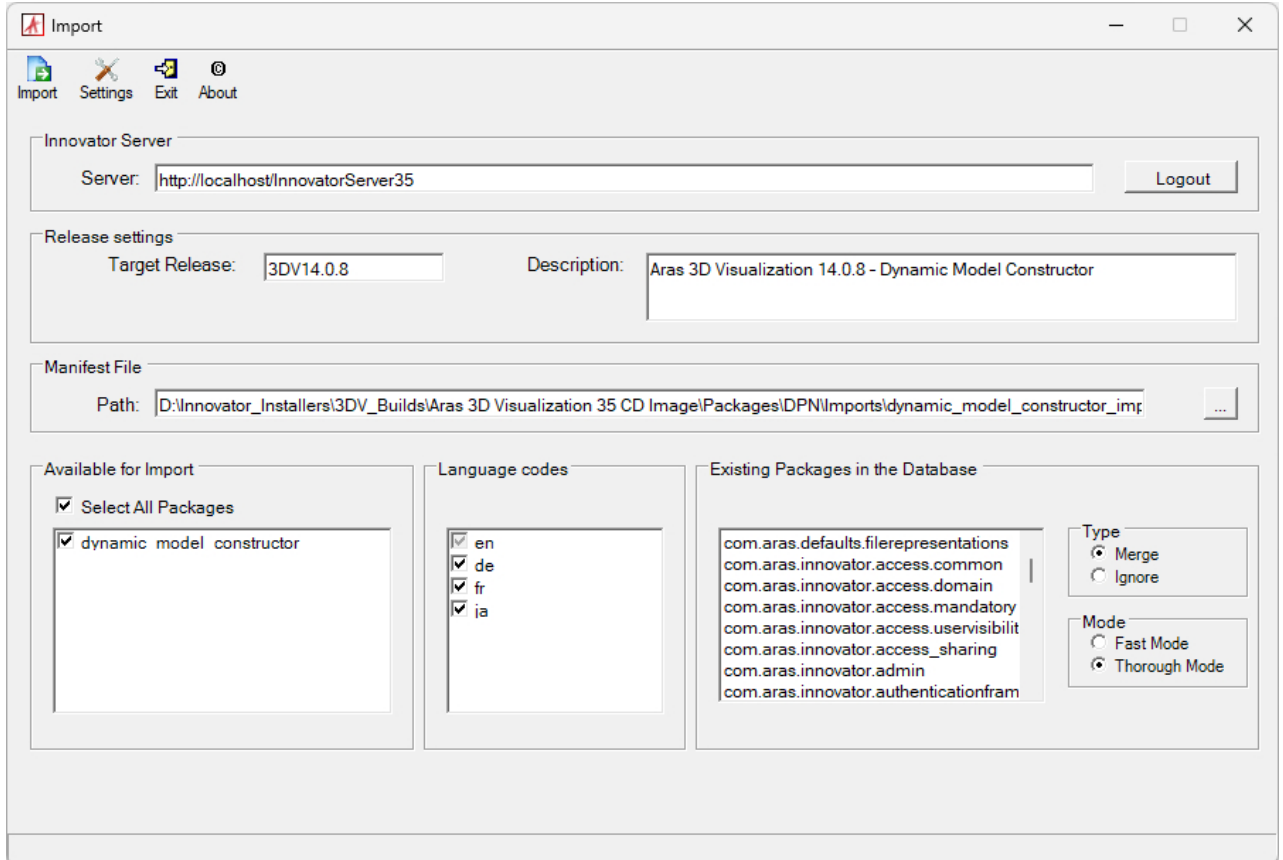


3. Input the connection information.

- **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.



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](mailto:support@aras.com) .

