# Manual Aras Streaming Viewer Installation

**Important**

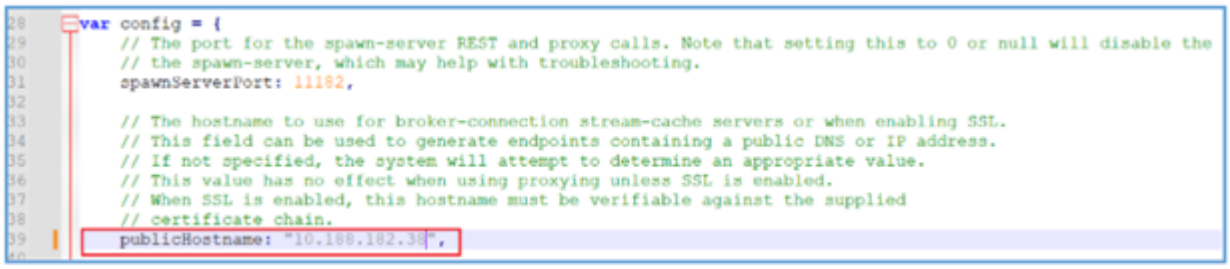
Please note that the output files of Dynamic/Monolithic Viewer and Streaming Viewer are incompatible with one another. If the Streaming 3D Viewer is installed in an environment where the Monolithic or Dynamic 3D Viewers have been previously installed and used, all existing native files of existing CAD Documents need to be re-converted. There is no automated means to perform this reconversion.
The Streaming Viewer currently cannot be deployed in a cloud environment. The HOOPS Server must be deployed with networked file access to a single vault containing view files for rendering.

**Important**

Only one Streaming Viewer can be installed on one machine at a time.

The following steps outline the process of manual installation of Aras 3DV Streaming Viewer:

1. In the unzipped **Aras 3D Visualization 39 CD** Image package, navigate to the following folder: Aras 3D Visualization 39 CD Image\Packages\HOOPS Server
2. Copy the HOOPS Server folder from **HOOPS Sever** package to a permanent location on a machine. For example, C:\HOOPS Server.
3. In the HOOPS Server folder, go to C:\HOOPS Server\server\node and open Config.js file in a text editor run as administrator.
4. For publicHostname parameter, replace "localhost" value with the IP Address of the local machine.
   For example, publicHostname: "10.188.182.38"

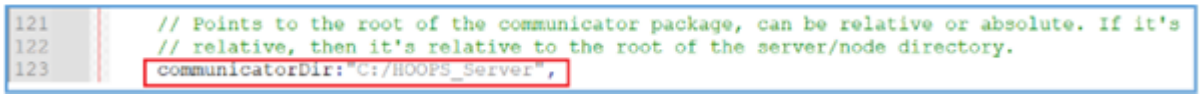



5. For communicatorDir parameter, enter the path to Hoops Server directory created in the third step.
   For example, communicatorDir: "C:/Hoops Server"

```
121     // Points to the root of the communicator package, can be relative or absolute. If it's
122     // relative, then it's relative to the root of the server/node directory.
123     communicatorDir:"C:/HOOPS_Server",
```

6. For modelDirs parameter, enter the path to Aras Innovator instance Vault.
   For example, modelDirs: ["C:/Aras/Vault/14SP10",]

```
129     // Array of directories that contain the models available to the stream-cache servers.
130     // Any relative directories are relative to 'communicatorDir'
131     // Note that SCS models are not delivered by the spawn server, thus the paths are not included
132     modelDirs: ["C:/Aras/Vault/14SP10",
133         "./quick_start/converted_models/user/sc_models",
134         "./quick_start/converted_models/authoring_samples_data",
135         "./quick_start/converted_models/standard/sc_models",
136     ],
```

7. 

Set the windowsServiceRespawnEnabled parameter to true.

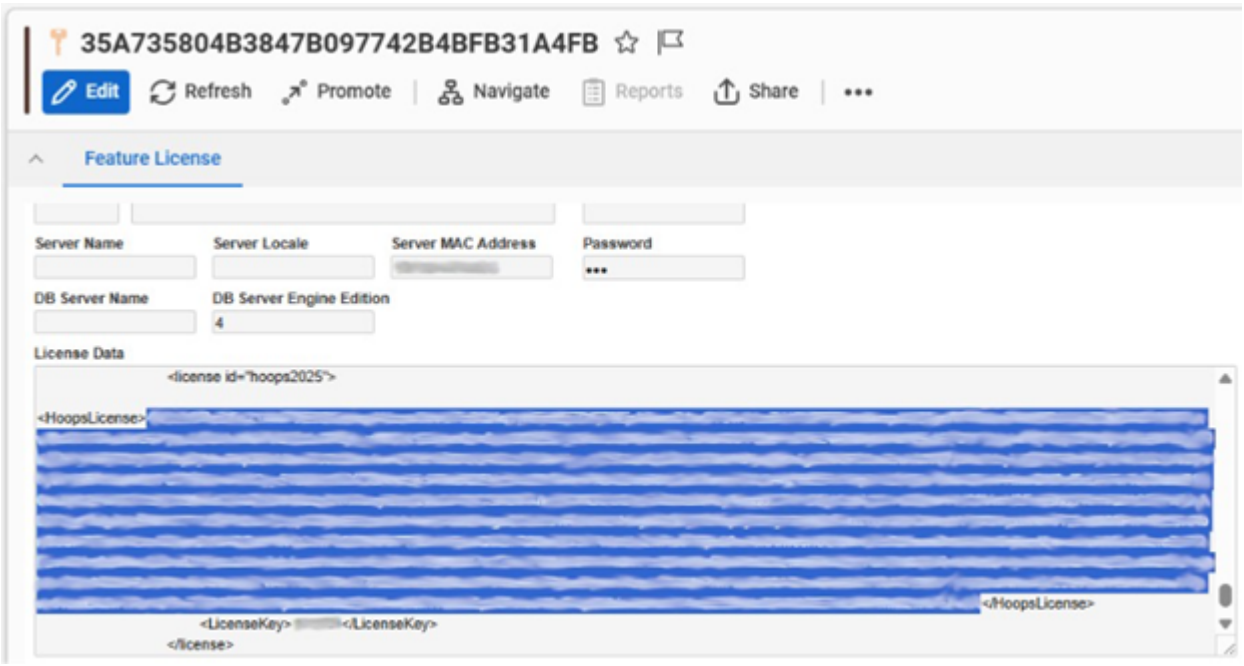
```
267     // See https://docs.microsoft.com/en-us/windows/
268     windowsServiceRespawnEnabled: true,
```

**Important**

If the server where Streaming Viewer is installed has Graphic Processing Unit (GPU), then the windowsServiceRespawnEnabled parameter in the Config.js file should be set to false.

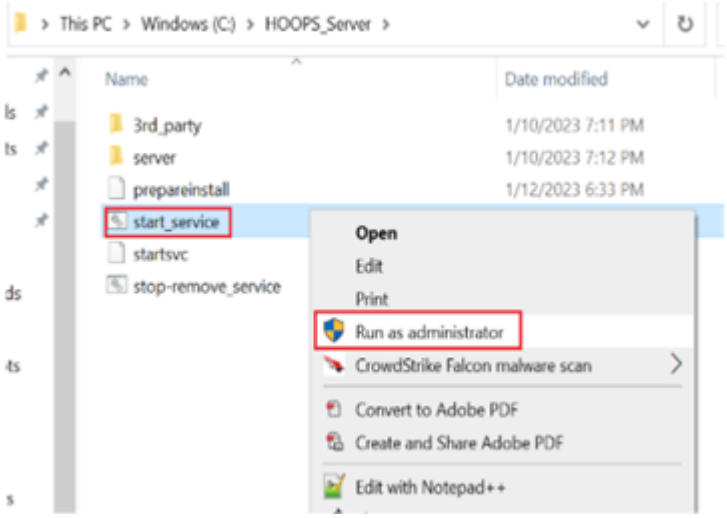
8. Copy the **Aras.CADConverter3** license from the Feature Licenses. Only copy the content from the <HoopsLicense> tag for the latest available version, for example:

```
<license id="hoops2025">

<HoopsLicense>4E...xeR</HoopsLicense>
```

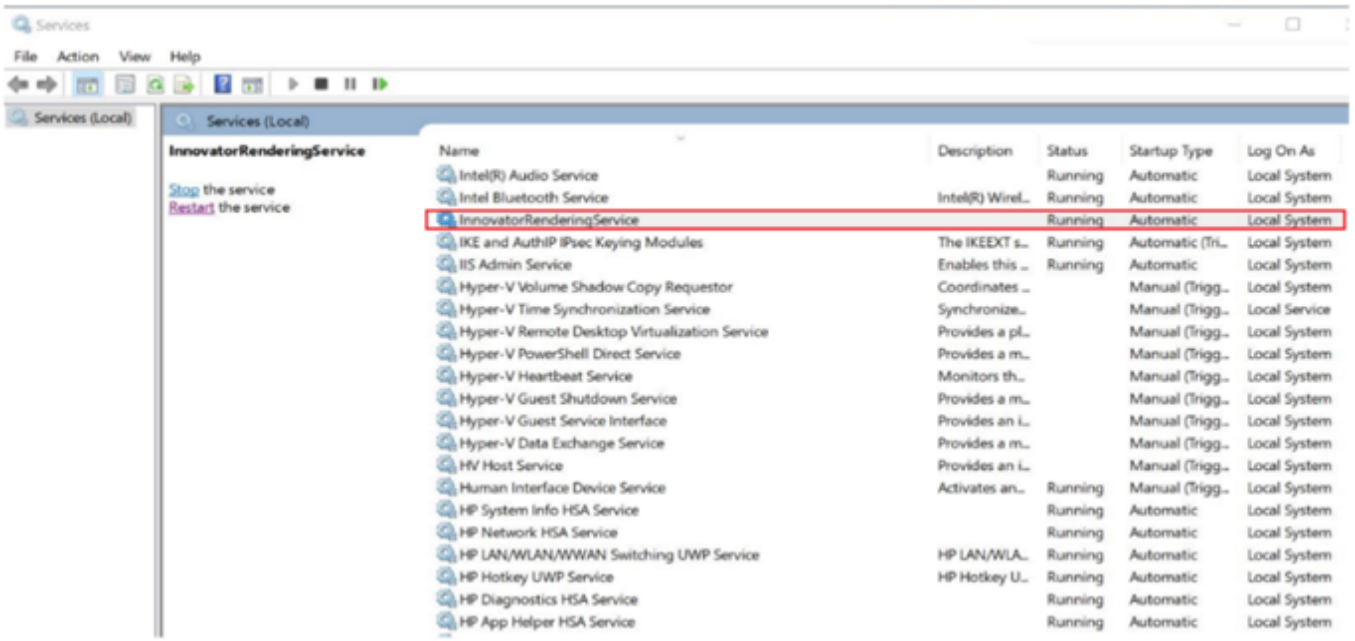



9. In the Config.js file, for the license parameter, replace it with the newest license copied from the previous step.


10. Save the Config.js file.
11. In the Hoops Server folder, right-click start_service file and select **Run as Administrator**.



12. Open Windows **Services** and check if **InnovatorRenderingService** is added and is running.




13. Copy the ConversionServer folder from the CADConverter package folder (Aras 3D Visualization 39 CD Image\Packages\CADConverter) to a folder that includes the ConversionServer folder with the installed Conversion Server.
14. Open ConversionServerConfig.xml file in a text editor run as administrator. This file is in the root Aras Innovator code tree folder in the case of the default installation.

15. In the <sectionGroup> tag, add the following:

```
<section name="ArasCadConverter"
type="Aras.ConversionFramework.Converter.Hoops.Configuration.HoopsConverterC
ArasCadConverter">

</section>

<section name="ArasCadConverterPrc"
type="Aras.ConversionFramework.Converter.Hoops.Configuration.HoopsConverterC
ArasCadConverter">

</section>
```

16. In the <Converters> tag, add the following:

```
<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" />

</Converters>
```

17. In the `<ConverterSettings>` tag, add the following:

```
<ConverterSettings>

<!-- Place here configuration sections for converters -->

<ArasCadConverter>

<Application
converterPath="C:\Aras\14SP10\HOOPSConverter\bin\converter.exe" />

<Command arguments="--sc_compute_bounding_boxes 'All' --
input_pdf_template_file 'C:\Aras\ Innovator Server Name\HOOPS
Converter\Templates\Blank_Template_L.pdf' --output_pdf
'%filepath%\%filename%.pdf' --output_png '%filepath%\%filename%.png' -
-output_png_resolution '150x150' --output_sc '%filepath%\%filename%' -
-sc_create_scz 'true' --sc_compress_scz 'false' --
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" />

<File extension="scz" argsMarkers="--output_sc" />

</UploadToVault>

</Output>

<AssemblyCommand arguments="--sc_compute_bounding_boxes 'All' --
input_pdf_template_file 'C:\Aras\Innovator Server Name\HOOPS
Converter\Templates\Blank_Template_L.pdf' --output_pdf
'%filepath%\%filename%.pdf' --output_png '%filepath%\%filename%.png' -
-output_png_resolution '150x150' --sc_create_scz 'true' --
sc_compress_scz 'false' --output_xml_assemblytree
'%filepath%\%filename%.xml' --output_prc '%filepath%\%filename%.prc' -
-background_color '1.0, 1.0, 1.0' --output_logfile
'%filepath%\%filename%.log'" streamingEnabled="True"/>

</ArasCadConverter>

<ArasCadConverterPrc>

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

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

<Output>
```

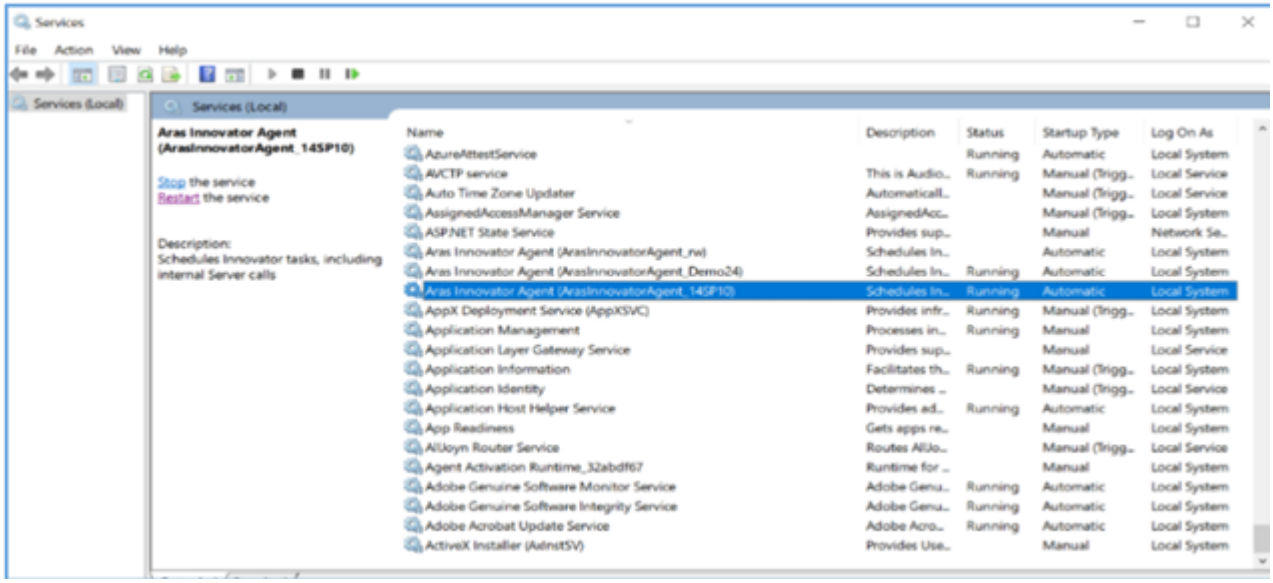
```
<UploadToVault>

<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>

</ConverterSettings>
```

18. Save and close the ConversionServerConfig.xml file.
19. Restart the Internet **Information Services (IIS)**.
20. Copy the Innovator folder from the **3DViewers** package folder (Aras 3D Visualization 39 CD Image\Packages\3DViewers) to the root Aras Innovator code tree folder where the Innovator folder exists.Replace the files in the destination if the system prompts.
21. Copy the Innovator folder from the **DPN** package folder (Aras 3D Visualization 39 CD Image\Packages\DPN) to the root Aras Innovator code tree folder where the Innovator folder exists.Replace the files in the destination if the system prompts to.
22. In the Aras Innovator code tree, navigate to \Innovator\Server and open the method-config.xml file in a text editor run as administrator.
23. In the `<ReferencedAssemblies>` tag, add the following:

```
<ReferencedAssemblies>

...

<name>$(binpath)/Aras.DynamicModelViewer.Core.dll</name>
```

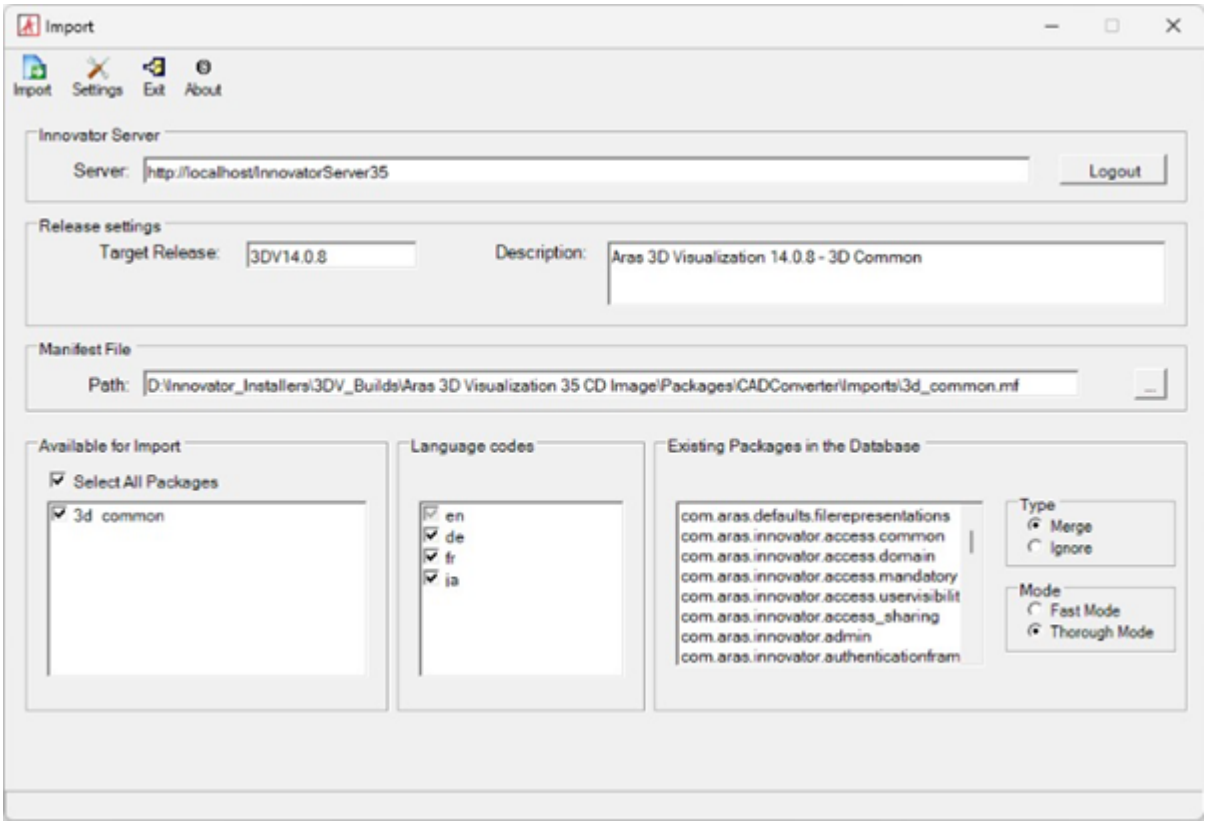
```
<name>$(binpath)/Aras.DynamicModelViewer.DataModel.dll</name>

<name>$(binpath)/Aras.DynamicModelViewer.QueryProcessor.dll</name>

<name>Microsoft.Extensions.Logging.dll</name>

</ReferencedAssemblies>
```

24. **Save** and close the method-config.xml file.
25. Restart the **Internet Information Services (IIS)**.
26. Restart **Aras Innovator Agent for corresponding instance** on Server side on **Windows Services**.



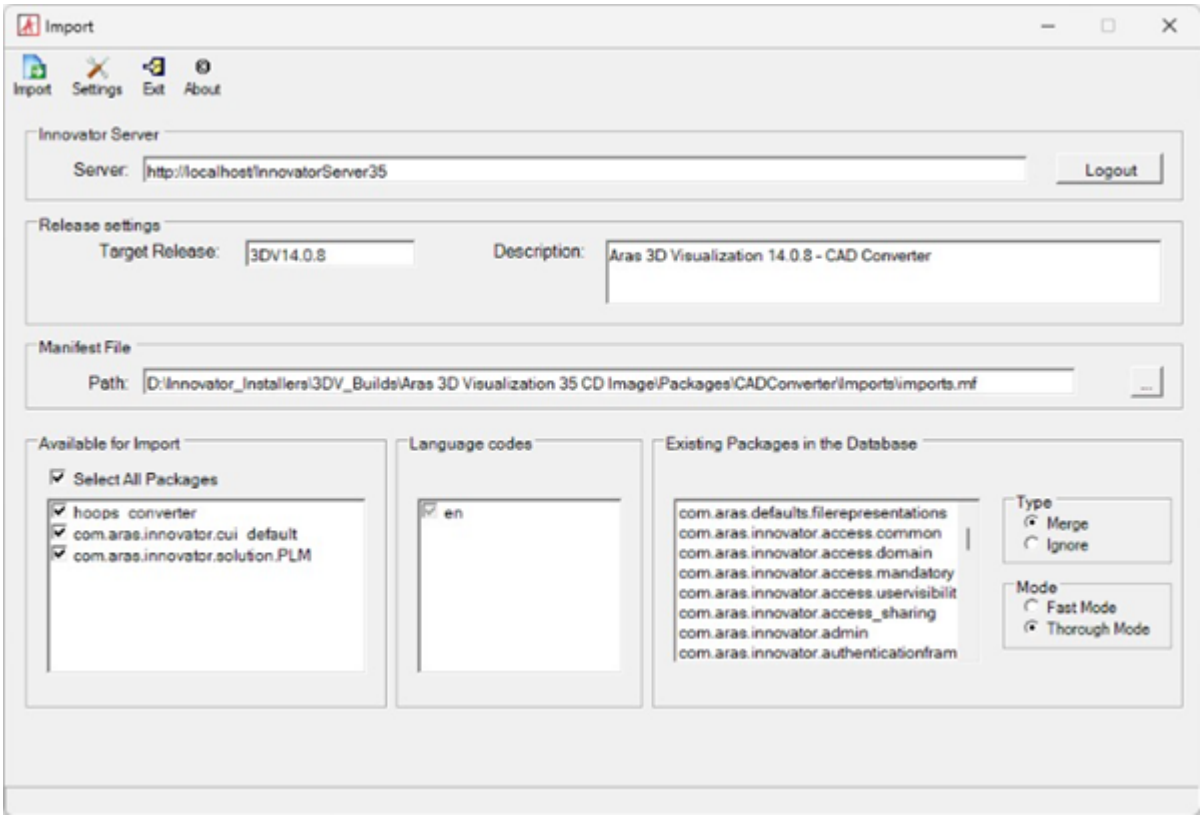

27. Import the Aras 3D Visualization 3D Common database package with the **Package Import Export Utilities**. For more information using this tool, refer to the *Aras Innovator 39 – Package Import Export Utilities* documentation.
    1. Enable the **Super User** (**root**) login.

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**: 3DV 14.9.0
    - **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.

28. 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.

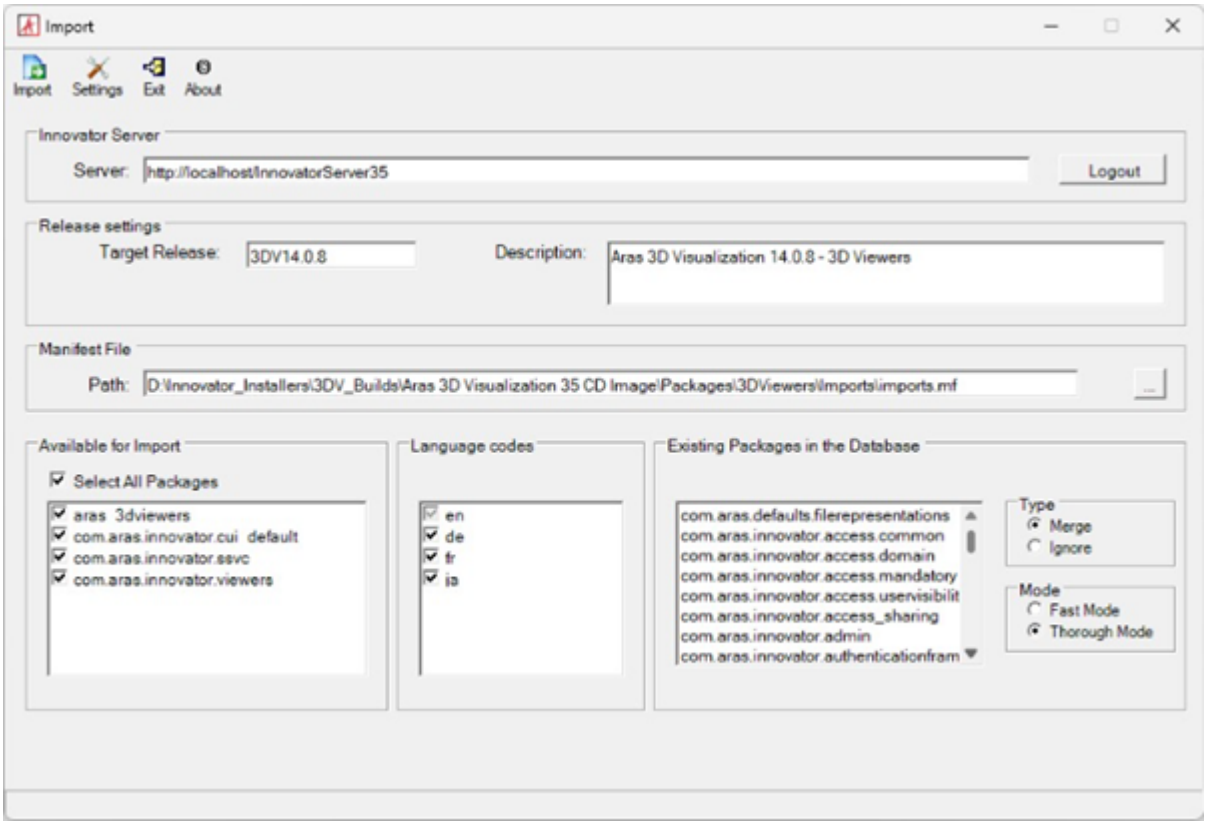



    3. Input the connection information.
        - **Server**: The connection URL for Aras Innovator. By default, it is http://localhost/InnovatorServer/.
          Click the **Login** button and enter:
            - **Database**: The target Aras Innovator database. By default, it is InnovatorSolutions.
            - **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.

29. Import the Aras 3D Visualization 3D Viewers 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.



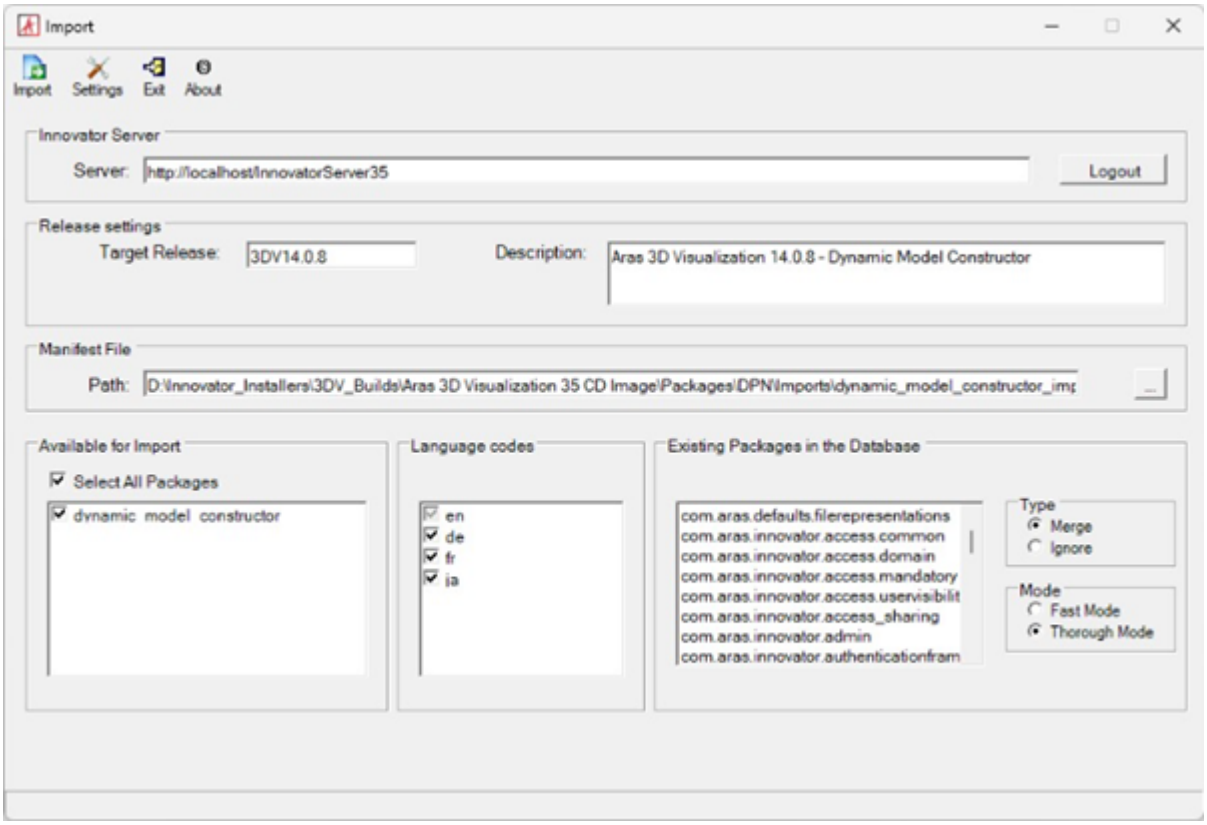

    3. Input the connection information.
        - **Server**: The connection URL for Aras Innovator. By default, it is http://localhost/InnovatorServer/.
          Click the **Login** button and enter:
            - **Database**: The target Aras Innovator database. By default, it is InnovatorSolutions.

- **Username**: root
- **Password**: Password for “root” login (Default is “innovator”)

- **Target Release**: 3DV14.9.0
- **Description**: Aras 3D Visualization 14.9.0 – 3D Viewers
- **Manifest File Path**: The manifest file \Packages\3DViewers\Imports\imports.mf
- **Available for Import**: Select All Packages
- **Type**: Merge
- **Mode**: Thorough Mode

4. Click the **Import** button.

30. Import the Aras 3D Visualization Dynamic Model Constructor 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/.

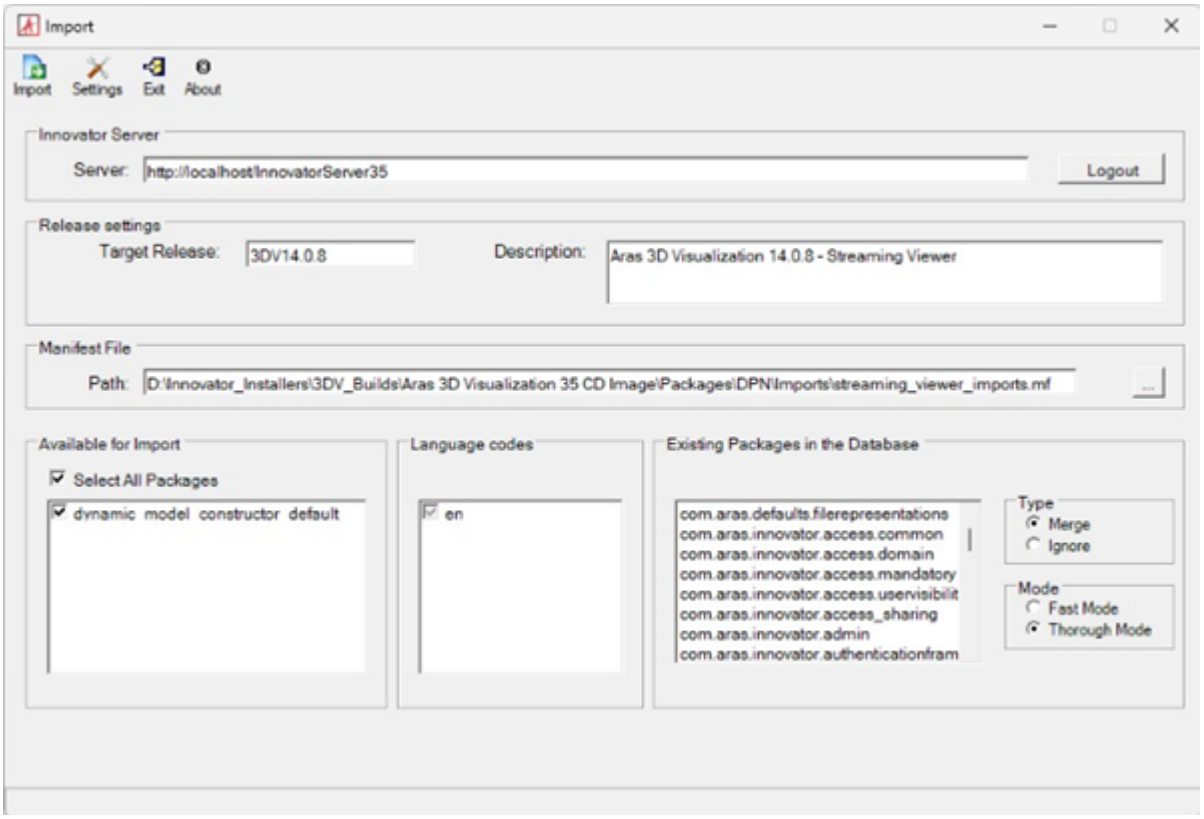
Click the **Login** button and enter:

- **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 – Dynamic Model Constructor
- **Manifest File Path**: The manifest file \Packages\DPN\Imports\dynamic_model_constructor_imports.mf
- **Available for Import**: Select All Packages
- **Type**: Merge
- **Mode**: Thorough Mode

4. Click the **Import** button.

31. Import the Aras 3D Visualization Streaming Viewer 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 – Streaming Viewer
   - **Manifest File Path**: The manifest file \Packages\DPN\Imports\streaming_viewer_imports.mf
   - **Available for Import**: Select All Packages
   - **Type**: Merge
   - **Mode**: Thorough Mode

4. Click the **Import** button.

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

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

33. This step is optional. Confirm the successful installation. See the *Confirming Aras 3DV Installation* section.
34. For the required setup to get the streaming viewer running, refer to the *Administrative Configuration for Streaming Viewer* section.
35. 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 .