

Dynamic and Streaming Viewer

Dynamic Viewer

The Dynamic Viewer is based on and requires the Monolithic Viewer.

A 3D CAD model shown in the Dynamic Viewer is dynamic because this Viewer shows an assembly dynamically generated on the fly from multiple viewable SCS files attached to the Items, such as CAD Documents, which were the children of the context Item, such as a CAD Document, representing an assembly at the moment of loading into the Viewer. This is also referred to as “shattered” viewing.

The Dynamic Viewer limitations are as follows:

- Not available for single components without structure.
- No support for product manufacturing information included in a 3D CAD model.
- No support for configurations.

The Monolithic Viewer resolves these limitations.

Streaming Viewer

A 3D CAD model shown in the Streaming Viewer is also dynamic as the viewer shows an assembly dynamically generated from multiple viewable SCZ files.

The Streaming Viewer enables user to stream large datasets from a server to a client in a single request, that, in some cases, provides an improved response time than multiple individual requests.

The Streaming Viewer limitations are as follows:

- No support for product manufacturing information included in a 3D CAD model.
- No support for configurations.
- No support for BLOB Storages on cloud environments.
- Only one Streaming Viewer can be installed on one machine at a time.

Important

The Dynamic and Streaming Viewers are not compatible with each other. Only one of the two viewers can be installed.

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.

Important

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.

Users can do the following with the Dynamic and Streaming Viewers:

- Manually move, rotate, and mark up geometry from the Viewer.
- Add and remove additional parts and assemblies from the 3D scene using Digital Mockup.
- Configure what is retrieved from the CAD structure and how it is shown in the Viewer.

There are out-of-the-box features specific to the Dynamic and Streaming Viewers—additional Aras 3DV functionality for displaying, annotating, and collaborating on a 3D CAD model.

It shows a dynamic 3D CAD model of an assembly featuring all general Aras 3DV functionality for viewing and annotating 3D CAD models described in the *General 3DV functionality* section. In addition to the general functionality, it provides its own features described in this section.

The Dynamic and Streaming Viewers fully reuse the 3D scene canvas and 3DV toolbars outlined in the 3 Aras 3DV UI section. It also extends the general 3DV context menus as outlined in the *Dynamic Viewer* and *Streaming Viewer* Context Menu subsection.

The extended 3DV context menus provide functionality for:

- Adding markup lines onto a 3D CAD model as outlined in the Markup Lines in Dynamic Viewer and Streaming Viewer subsection.
- Transforming geometries of parts and subassemblies as outlined in the *Manual Geometry Transformation* subsection.

The outlined viewer features the Tree Grid View (TGV) Model Browser for browsing assembly parts and standard model views as outlined in the Model Browser in Dynamic Viewer and Streaming Viewer subsection. Users can also save and use custom model views.

It also supports multi-selection: one or more subassemblies, parts, and surfaces can be selected during viewing as discussed in the *Multi-Selection* subsection.



Administrators of the Aras Innovator platform can customize the Dynamic and Streaming Viewers. For more information on the customization see, *Aras 3D Visualization 35 - Administrator Guide*.

