# PRODUCT RELEASE ANNOUNCEMENT

| Product Category | **TheoremXR** |
|---|---|
| Product Group | All Associated Products |
| Release Version | Version 2024.1 |

| Document Type | **Product Release Announcement** |
|---|---|
| Status | Released |
| Revision | 2.0 |
| Author | Product Manager |
| Issued | 14-Aug-24 |

# Contents

## History

| Revision | Update Information |
|:---:|---|
| 1.0 | Version 2024.1 Released |
| 2.0 | Includes TheoremAR links and a new TVP |

## Product - Distribution Media

Latest software release is available from the following download sites:

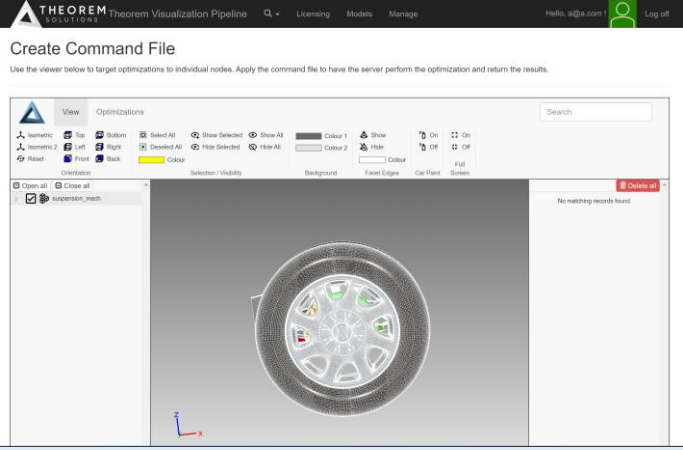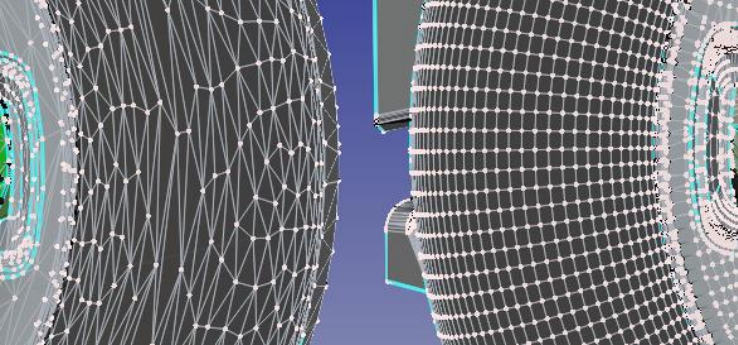| Product | URL for .exe and installer downloads |
|---|---|
| **Visualization Pipeline** | **2024.1.1** *(20240816)* |
| **VR Client Support** | ***V2024.1*** *– EXE*<br>***V2024.1*** *- Installer* |
| **Quest Untethered Support** | ***V2024.1*** |
| **Focus 3 Untethered Support** | ***V2024.1*** |
| **Varjo XR-3 Support** | ***V2024.1*** |
| **Desktop Experience Support** | ***V2024.1****– EXE*<br>***V2024.1*** *- Installer* |
| **HoloLens 2 Support** | ***V2024.1*** |
| **AR Android Client Support** | ***V2024.1*** *– APK*<br>***Google Play Store*** |
| **AR Apple Client Support** | ***App Store*** |

*Note!*  Flex Version 11.19 is required for this release it can be found here. A new license will be required once flex 11.19 has been installed.
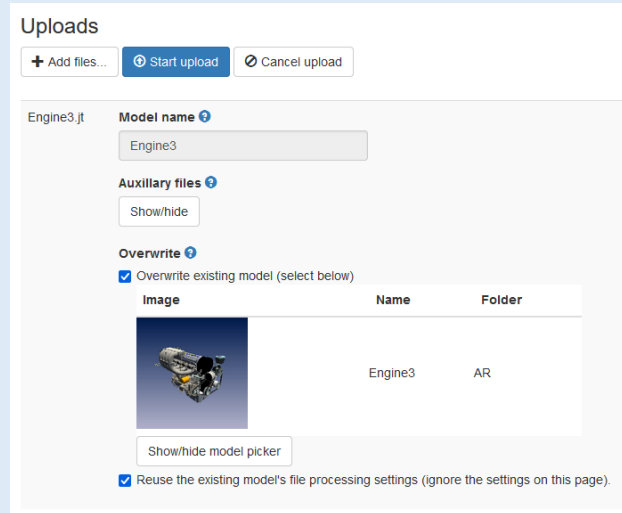
## TheoremXR Online Documentation

Click to review the User Guide
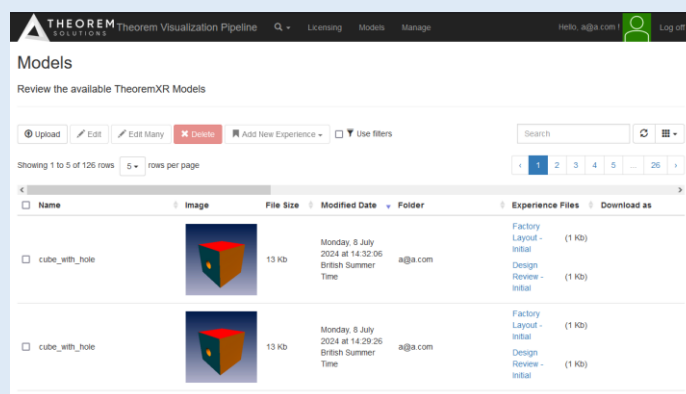
## New Features / Enhancements

The following new features or enhancements have been introduced with this release.

| Ref ID | New Feature / Enhancement Description |
|---|---|
| **Theorem Visualization Pipeline (TVP)** | <ul><li>Optimization Viewer<ul><li>Optimization options can be trialled in a viewer before committing to optimization of a model.</li></ul></li></ul><ul><ul><li>When the desired output is achieved a command file can be exported to be used on multiple CAD models.</li></ul><li>Quadding Optimization Overhaul<ul><li>Improvements to meshing in the quadding process.</li></ul></li></ul><ul><ul><li>Improved stability</li></ul></ul> |

- Model Overwrite

  o Model entries can now be overwritten allowing for new models to replace old models in layouts.
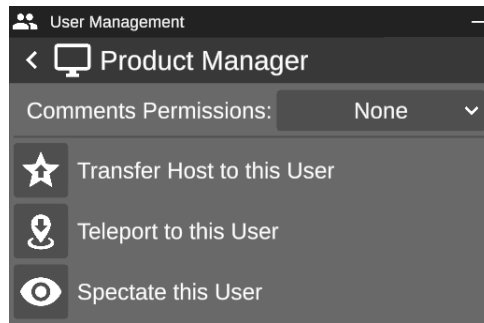


- SVG generation from DWG Upload

- Additional STL Output type

  o STL can now be created as an additional output type

- Updated UI

  o Many table entries across TVP have been updated to containerized scrollable tables.



| TheoremXR for VR and Desktop | - 2-Handed Grab<br><br>  o Both proximity and laser grab methods can now be used with two hands. |
| --- | --- |

- o Single parts may be grabbed with both hands and rotated around using a more natural interaction method.

- Multi-User Management

    - o Collaboration users can be managed using this panel.



    - o Comment Permissions can be changed per user or default permissions for all new users joining a session.

    - o Other features include: Spectate, Promote to Host and Teleport to user.

- Passive User Comments

    - o Non-Host users can be given permissions to create/edit comments.

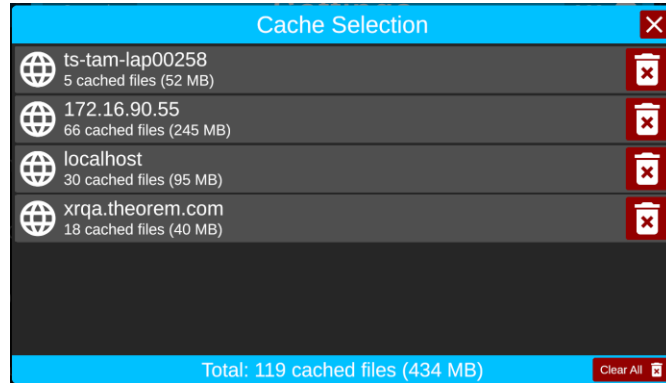    - o This can be managed In the Multi-User Management Panel.

- Volumetric Tools

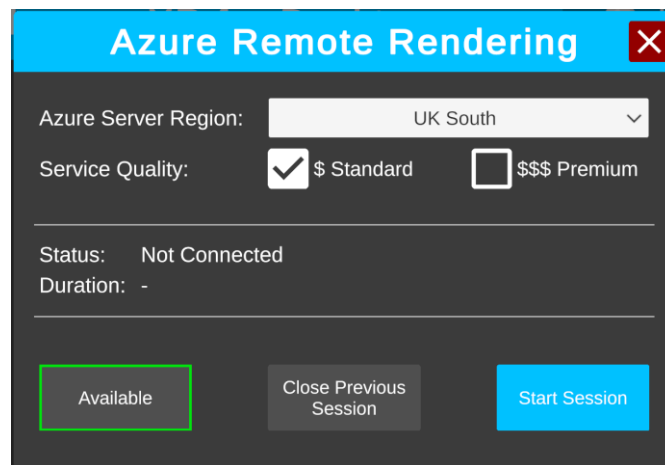    - o Thickness can be applied to tools in 3 new shapes: Square, Circle and Triangle.



- Tool Saving

    - o Tools are now saved alongside the experience.

- Manage Cache Panel Enhancements

  - o Multiple servers can be selected in the cache management panel to delete cache across multiple TVP instances.



- Passthrough Support (Meta Quest 3/Pro + Varjo XR-3)

  - o Passthrough can be toggled on through the Scenes menu.

  - o Models can be dropped to spatial surfaces that are setup within the device's settings.

- Azure Remote Rendering Support (Desktop + Standalone VR)

  - o Remote Rendering allows for detailed model sets to be viewed with good performance in mobile based devices.
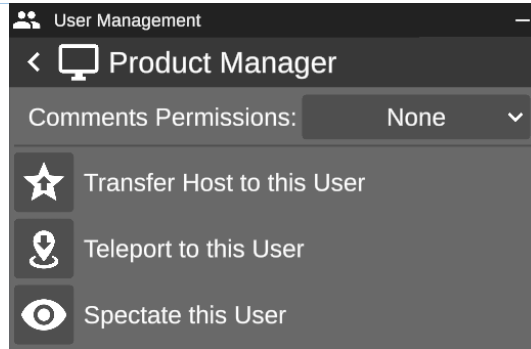


| **TheoremXR for AR** | - Deeplinking Enhancements<br><br>  o Folders can now be linked to.<br><br>  o The links are found on: ARWebServer/Data/Projects |
| --- | --- |

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|---|---|
|  | <ul><li>Large Model Movement<ul><li>Centralised handles allow for large models to be moved without the need for the manipulation box.</li></ul></li><li>Manage Cache Panel Enhancements<ul><li>Multiple servers can be selected in the cache management panel to delete cache across multiple TVP instances.</li></ul></li><li>Product Structure Viewer Support<ul><li>A viewable CAD structure panel has been ported from VR/Desktop applications to AR.</li></ul></li><li>Metadata Viewer support<ul><li>CAD metadata info panel has been ported from VR/Desktop applications to AR.</li></ul></li></ul> |
| **TheoremXR for MR** | <ul><li>Deeplinking Support<ul><li>QR Codes from the TVP can now be read within the HL2 and will load the selected model into the app.</li><li>The QR code can then be tracked to set the world origin around this point.</li></ul></li><li>Product Structure Traversal<ul><li>Model Structed can be traversed using the manipulation panel. Once a part is selected, going up the tree will allow the sibling nodes to be manipulated with it.</li></ul></li><li>Volumetric Tools<ul><li>Thickness can be applied to tools in 3 new shapes: Square, Circle and Triangle.</li></ul></li><li>Tool Saving<ul><li>Tools are now saved alongside the experience.</li></ul></li><li>Multi-User Management<ul><li>Collaboration users can be managed using this panel.</li></ul></li></ul> |

- o Comment Permissions can be changed per user or default permissions for all new users joining a session.

- o Other features include: Spectate, Promote to Host and Teleport to user.

- Passive User Comments

- o Non-Host users can be given permissions to create/edit comments.

- o This can be managed In the Multi-User Management Panel.

- 3 Point Alignment

- o Models can now be aligned by selecting 3 points on the model and then three correlating points in the real world. Once accepted the app will attempt to snap onto the given points.

## Bug Fixes

| Ref ID | Fix Description |
| --- | --- |
| XRQA-596 | Hiding and showing parts on the Product structure panel now translates across users joining late. |
| TH-796 | Bounding boxes have been better synced between HL2 and RE/VR users |
| TH-734 | Metadata is retained better when optimising data. |
|  |  |

## Known Limitations and Restrictions

The following limitations and restrictions have been identified during final testing prior to release and will be resolved for a future lock-down:

| Ref ID | Limitations and Restrictions |
| --- | --- |
| | Meta Quest Link v66 has reported issues regarding degraded Air Link performance. An upgrade/downgrade from this version is recommended. |
| | New Intel CPUs have changed how cores are used for services. Due to this change, there may be an impact to performance of optimisation. If the impact is significant, please email support on: support@theorem.com |
| XRQA-609 | HL2 Occlusion and world tracking do not work upon first use of the app. To work around it, enable occlusion inside an experience and relaunch all applications. |
| XRQA-638 | Drop to floor graphic is sometimes orientated incorrectly. |
| XRQA-704 | Undo/Redo has no effect on added scenery models. Components undo/redo ok. |
| XRQA-632 | Pink world meshes can sometimes be seen inside the HL2 application. |
| | Decrease in general Quest performance due to a Unity upgrade. It is recommended to change the quality settings inside the application to improve performance. |