A large, light blue wireframe sphere is positioned in the upper left quadrant of the page. It is composed of a grid of lines that form a spherical shape, with a small blue dot at its center. The sphere is partially obscured by the text.

AVEVA Review

Release 6.4

User Bulletin

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First published 2007. This revision published 2007

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1 About this software release

AVEVA Review 6.4 is supplied on a DVD-R, which self-installs using Macrovision's 'InstallShield for Windows' application.

The full software suite is normally loaded onto individual MS Windows workstations, and the licence file is normally loaded onto a networked Windows server (see Licensing below).

Prior to installing the software, you should ensure that your system meets the Minimum System Requirements.

1.1 How to Install AVEVA Review 6.4

Note: For full instructions on how to install AVEVA Review 6.4 and associated components please refer to the **Review Installation Guide**, available on the disk or from the AVEVA product support site.

To install AVEVA Review 6.4 from DVD – Insert the disk into your CD/DVD-ROM drive. If you have AutoPlay enabled for the drive, the installation starts automatically. Otherwise, run **Start.htm** on the disk.

To install REVIEW from the network - Click **Start>Run** on the Windows taskbar and type the path to the **Start.htm** file on your network.

Click on **Contents** and select the product that you want to install (in this case AVEVA Review 6.4). Before installing, click on the **product release notes** link, as you may have to install other programs or change system settings etc.

From the **Select a product to review release notes and install** form, select the **AVEVA Review 6.4** product.

Click **INSTALL**. Then click **OK** on any confirmation forms that appear.

On the **File Download** form, select **Run this program** from its current location (Internet Explorer 5.0) or **Open** (Internet Explorer 5.5 or later) to install the program files directly from their current location onto your hard disk.

Select **Yes** on the Security Warning query about an Authenticode signature. This starts the InstallShield® Wizard, which will lead you through the rest of the installation process.

1.2 Licensing

All AVEVA Review 6.4 software requires access to a licensing file provided by the Flexman 3.1 application, and loaded by the install wizard. The licence file can be stored on a networked server with client access, a networked workstation with client access, or on the workstation on which the AVEVA Review 6.4 software is currently loaded.

The reason for storing the licence file on a server or shared workstation is that it allows maximum user flexibility, while minimising the number of licences that must be leased.

1.3 Compatibility

Status files created by Review version 5.1 are fully compatible with this release.

Models EXPORTed from PDMS 10.4 through to PDMS 12.0 and AVEVA Marine 12.0 are compatible with AVEVA Review 6.4.

2 Introduction

2.1 AVEVA Review

AVEVA Review is a powerful 3D visualisation tool for large complex plant and marine models. With features such as walk-through, animation, and high-quality photo-realistic images, AVEVA Review lets you analyse designs and communicate complex ideas easily.

Key features include:

- High-performance 3D model rendering and walk-through
- High-quality graphical realism with lighting, textures, scenic backdrops, fog and real-time shadows.
- Large model support – effective handling of model files up to 1.1GB
- Advanced animation and avi production tools
- Object manipulation & clashing
- Laser Model Interface – view 3rd party point cloud data alongside the Review model
- Linked Review sessions support global project review
- 3D Export of Review model to Adobe Acrobat 3D PDF and Autodesk DWF
- Extensible .NET interface

3 AVEVA Review 6.4 Enhancements

3.1 Overview

3.1.1 AVEVA ReviewShare support

Review 6.4 is supplied with an AVEVA ReviewShare add-in to enable the creation, viewing, editing and distribution of ReviewShare documents with embedded 3D Review model views.

3.1.2 Enhanced Point Cloud Support

The Review Laser Model Interface (LMI) add-in architecture has been extended to give 3rd party point cloud vendors greater flexibility and control over the display of point cloud data within Review.

3.1.3 New Clip Volume and Sectioning Tools

New task panes, combined with interactive graphical manipulation tools, make the process of defining and editing clip volumes and planes much simpler.

3.1.4 Quick Find Toolbar

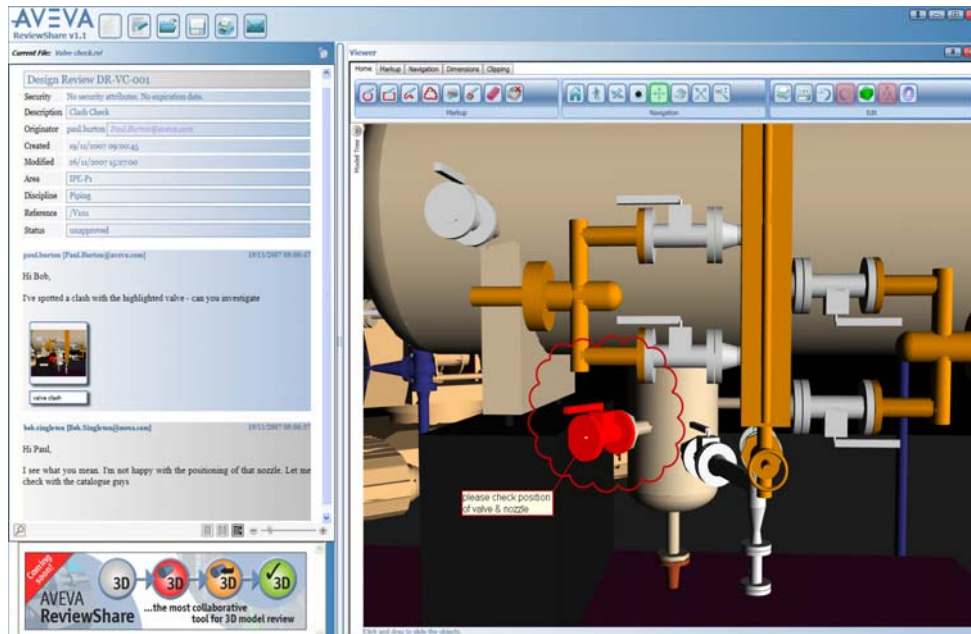
A new Quick Find toolbar makes locating and navigating to model elements much easier, helping you to be more productive.

3.2 AVEVA ReviewShare support

3.2.1 Introducing AVEVA ReviewShare

AVEVA ReviewShare is a 3D model visualisation and collaboration tool, enabling reviewers to combine marked-up 3D model views, 2D screenshots and comments in a single, easily distributable collaboration document. Making use of AVEVA's unique 3D streaming technology, it combines the high quality 3D visualisation of Review with intuitive comment and markup tools, to create compact, and easily distributable, 3D collaboration documents.

AVEVA ReviewShare integrates fully with Review 6.4, via Review's add-in capability, to enable the creation, viewing, editing and distribution of ReviewShare documents with embedded 3D Review model views.



Key Features

- Freely distributable 3D model collaboration
- Creation, viewing, editing & distribution of ReviewShare documents
 - Configurable header section
 - Threaded comment list with embedded 2D & 3D views
 - Built-in password protection and expiry date
- Advanced Streaming technology delivers centrally managed 3D data to the client
- Multi-format support via ZGL
- View, manipulate & mark-up 3D model views
 - Pan, Rotate, Zoom...
 - Highlighting, redlining, dimensioning...
 - Object isolation, sectioning...
- Capture and mark-up 2D screenshots (e.g. datasheets, drawings)
- Embedded web/file links
- Small file size for easy distribution

3.2.2 The ReviewShare Document

Central to the concept of ReviewShare is the ReviewShare document (*filename.rvf*). This is a self-contained, XML-based collaboration document containing a threaded history of comments and links to centrally stored 3D model data. Each comment can contain multiple 2d screenshots, web/file links and marked-up 3D model views.

Since the ReviewShare document only contains links to the 3D model data, and not the model data itself, it remains very compact, making it easy to download, store, and forward to other recipients.

For security, ReviewShare documents can be password protected and assigned expiry dates.

3.2.3 The ReviewShare Server

At the heart of AVEVA ReviewShare is the ReviewShare Server. The server provides a central store for your 3D model data, using AVEVA's advanced 3D streaming technology to deliver that content to ReviewShare clients around the world, regardless of bandwidth or model size.

The publishing of model files to the server couldn't be easier. A Replication Service is provided that can be configured to monitor one or more "replication" directories. Whenever a compatible model file (rvm/zgl) is copied to one of these replication directories the Replication Service automatically copies the file to the ReviewShare Server, where it is processed ready for streaming.

To collaborate on a particular model, simply load it into Review from the replication directory, open up the ReviewShare add-in and capture the model to the ReviewShare Document. ReviewShare automatically links the document to the streamable model stored on the server, so that when the client opens the ReviewShare Document and accesses the captured model view, a request is sent to the server to start streaming the 3D model to the client.

3.2.4 The ReviewShare Reader

The AVEVA ReviewShare Reader is a freely available client application that allows users to create, view, edit and distribute ReviewShare documents (rvf files). Available as a stand-alone application, freely downloadable from the AVEVA website (www.aveva.com), or as add-ins to AVEVA Review 12.0, AVEVA PDMS 12.0 and AVEVA Marine 12.0, the AVEVA ReviewShare Reader provides a means to share and collaborate on 3D models with everyone in your organisation, and beyond.

Making use of the latest Microsoft .NET technology AVEVA ReviewShare provides a modern and intuitive user interface. ReviewShare documents are displayed as a threaded list of review comments, each capturing the name and email address of the person who posted the comment, the date and time the comment was posted, together with the text of their comment and thumbnail images of any associated 2D or 3D views. Comments can be replied to individually, or new comments added to the end of the document.

Selecting a thumbnail image launches the view window, which can be left floating or docked into the ReviewShare application window. When viewing 2D images ReviewShare provides tools to pan and zoom around the image, and also to add 2D markup. For 3D views ReviewShare automatically connects to the ReviewShare server to deliver fully interactive and navigable 3D model viewing, including tools for pan, zoom, rotate, walk and fly-through; dimensioning; access to the model hierarchy; creation of clipping planes; as well as the full range of 2D and 3D mark-up tools.

3.2.4.1 AVEVA ReviewShare add-in to Review 6.4

AVEVA ReviewShare is integrated with Review 6.4 through a CAF (Common Application Framework) add-in which allows a ReviewShare document to be displayed within the Review application.

The add-in allows the users to create new ReviewShare documents as well as view and respond to existing ReviewShare collaboration threads. References to 3D model data can only be added to ReviewShare documents using the Review 6.4 add-in.

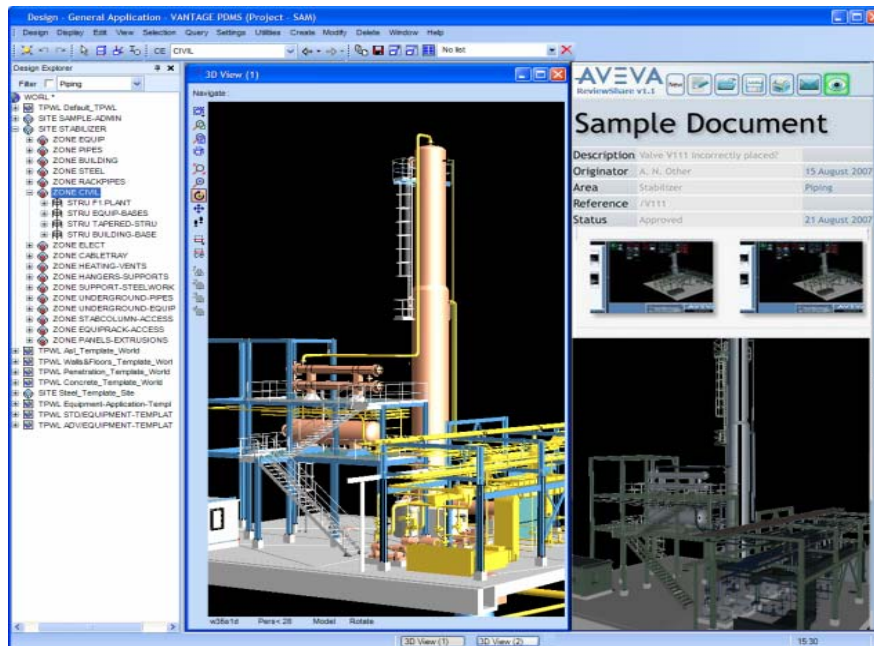
This add-in is provided as part of the Review 6.4 release.



3.2.4.2 AVEVA ReviewShare add-in to AVEVA PDMS/Marine 12.0

Review 6.4 also provides an AVEVA ReviewShare add-in for AVEVA PDMS 12.0 and AVEVA Marine 12.0. As with the Review add-in users can use the AVEVA PDMS/Marine add-in to create new ReviewShare documents as well as view and respond to existing ReviewShare collaboration threads. Unlike the Review add-in however, it does not support the publishing of 3D model content to ReviewShare documents. Design model views can still be screencaptured and added to the ReviewShare document as a marked-up 2D view.

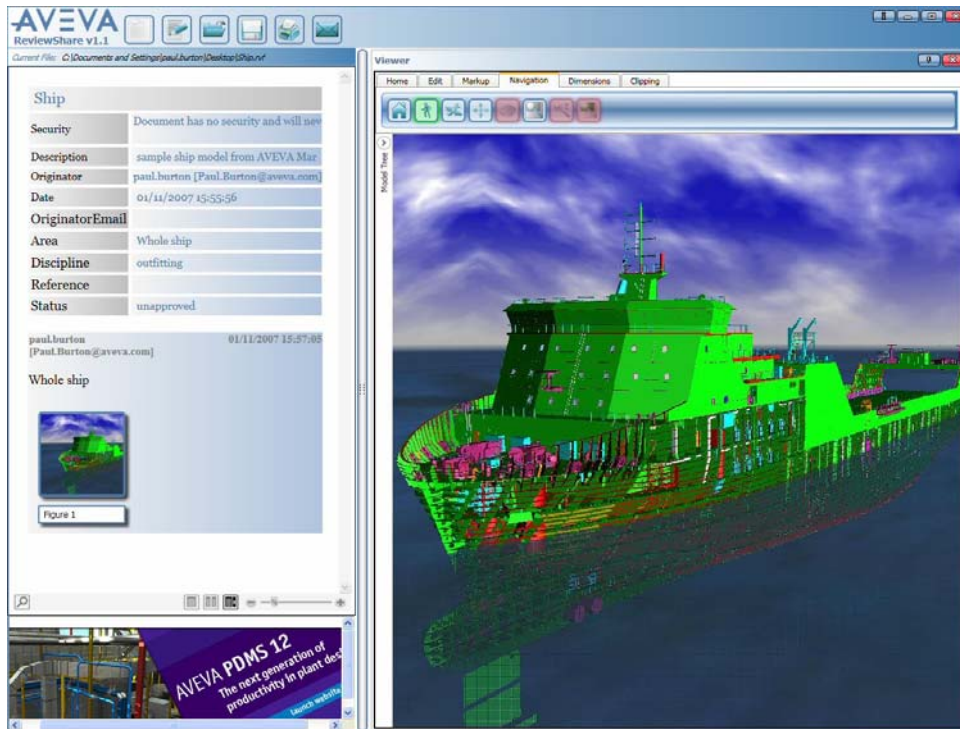
This add-in is provided as part of the Review 6.4 release.



3.2.4.3 AVEVA ReviewShare standalone version

The AVEVA ReviewShare Reader is also available as a standalone Windows application, which can be downloaded, for free, from the AVEVA website (www.aveva.com).

The application is licensed under the terms of a EULA (End User License Agreement) but does not require a FLEX license. It can therefore be downloaded and used by anyone without incurring any cost to the client. The AVEVA ReviewShare Reader can be used to create, view, edit and respond to ReviewShare documents. As with the PDMS/Marine add-in, references to new 3D model content cannot be added to a document using the reader, this can only be achieved using Review 6.4, but users can mark-up and store new 3D views on existing model data within the document.



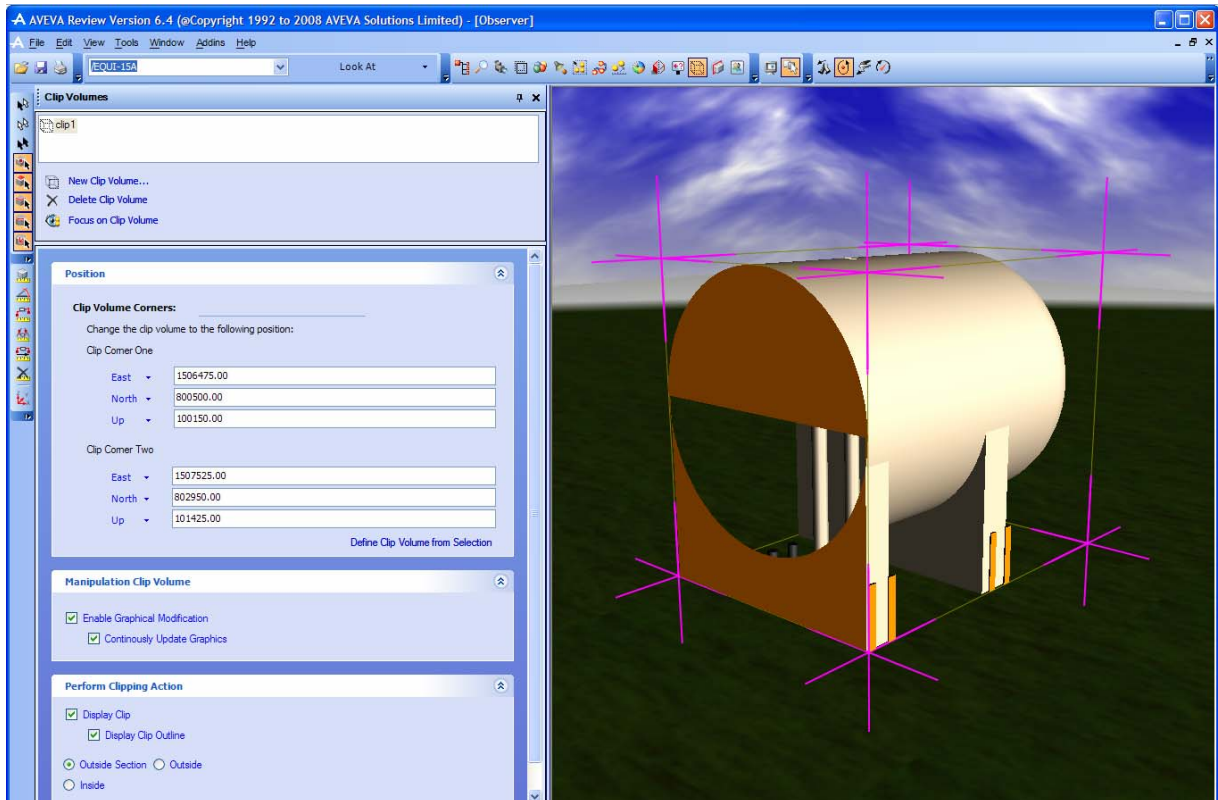
3.3 Enhanced LMI Support

Review version 6.3 introduced the ability to display point cloud data within the Review model view via its Laser Model Interface (LMI) add-in API. The API enabled 3rd party LMI vendors to plug their own point cloud applications into Review.

For Review 6.4 AVEVA has extended this API to give the LMI application vendors more control over how point cloud data is displayed and interacted with within Review.

3.4 Clip Volumes

A new Clip Volume task pane has been added to make it easier to define and manipulate clip volumes.

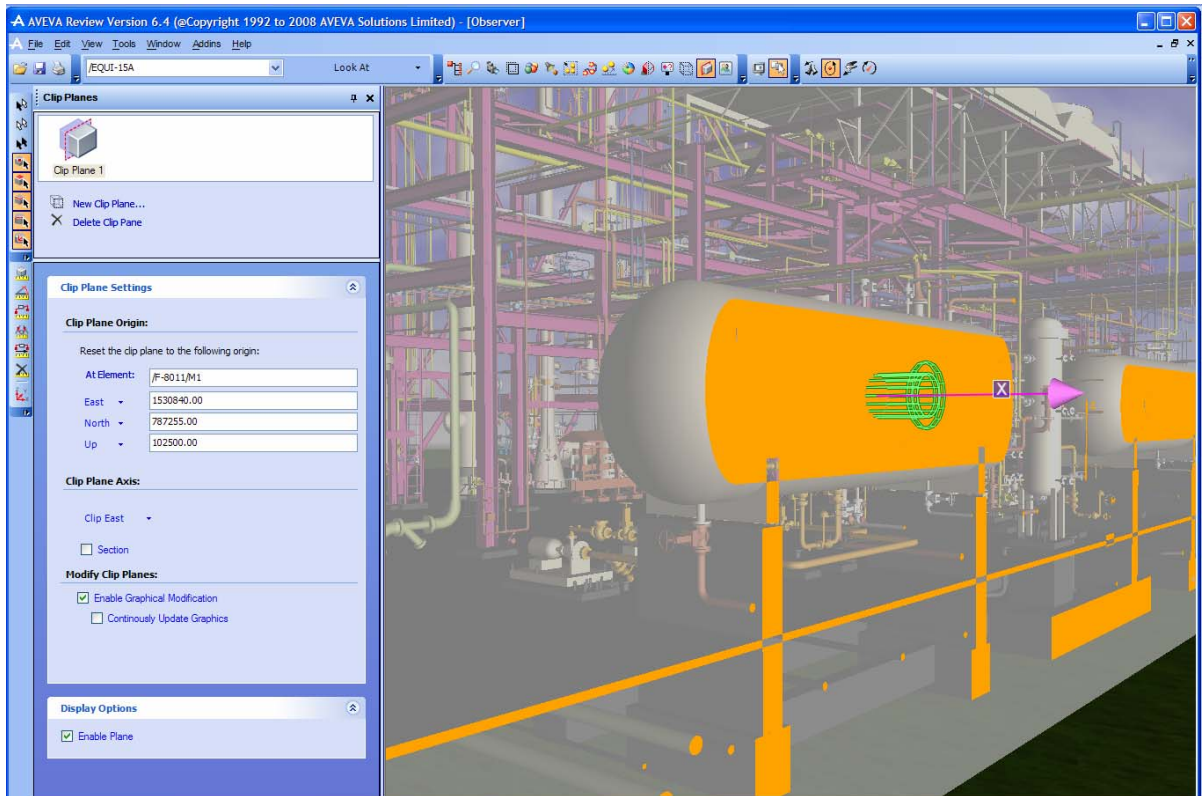


Clip volumes can now be defined based on the bounding box of picked items in the 3D view. Graphical manipulation tools allow the resulting clip volume to be manually resized by simply dragging the extents of the box within the 3D view window.

The model can then be clipped either **inside** or **outside** (or **outside section**) the selected volume.

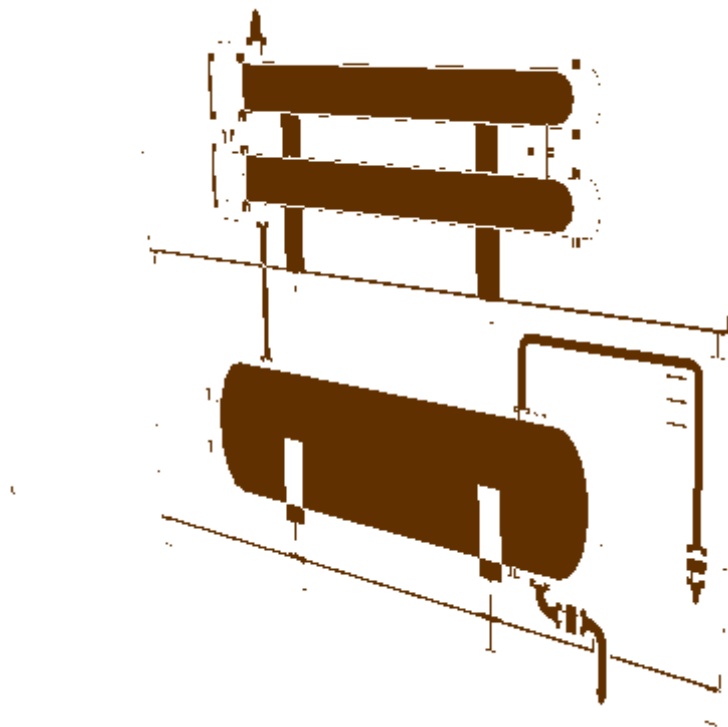
3.5 Clip Planes

Similarly to Clip Volumes, a new Clip Planes task pane has been created to simplify the process of defining and manipulating clipping planes.



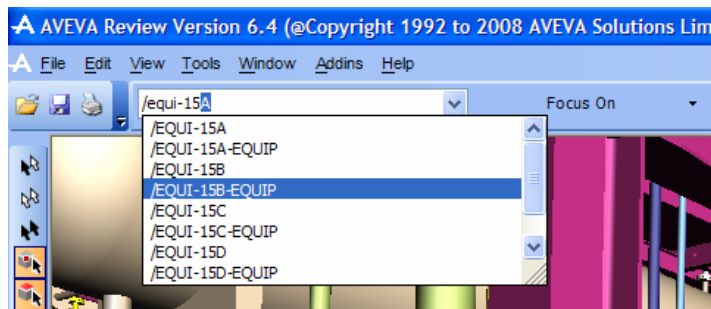
The position of the Clip Plane origin can be defined explicitly or aligned with the origin of a selected model element. The clip axis and direction can then be set and the position modified interactively using the Graphical Manipulation handle.

The Clip Plane can also be used to take a single pixel sectioned slice through the model, as shown below.



3.6 Quick Find

Review 6.4 includes a new **Quick Find** toolbar which makes it easy to locate and navigate to model elements within the 3D view. Matching items are automatically listed as you start to type.



By default the Observer View will automatically **Focus On** the element selected in the **Quick Find** box. Other options available in the toolbar include: **Look At**, **Move Close To**, **Copy** and **Locate in Tree**.

4 Withdrawn Functionality

VizStream Viewer

The Review 6.3 VizStream Viewer application has been superseded by the more advanced viewing and collaboration capabilities of AVEVA ReviewShare v1.1.

5 Known Issues

5.1 Known faults and Outstanding Issues

ReviewShare is not compatible with Lotus Notes.

5.2 Faults Corrected in this Version

The following items have been fixed for AVEVA Review 6.4:

- HPD0035663 Static detail is now respected when in fixed focus mode.
- HPD0036105 All Review assemblies are strong named to support network based installs.
- HPD0036318 The ReviewShare Server is more robust when dealing with invalid characters in RVM files.
- HPD0036295 The signboards are no longer scrambled when clipped.
- HPD0035680 The Keyplan sliders have been fixed.
- HPD0036277 All Review assemblies are strong named to support network based installs.
- HPD0035249 DWF export has same orientation as Review.

6 General Product Information

This section is intended to provide you with a summary of components and other auxiliary information associated with the release of Review 6.4.

6.1 Hardware and System support

Review 6.4 runs best on a high-end PC, including a good 3D graphics card with an overlay plane. Large model files will require plenty of memory.

For more details of hardware (including graphics cards) and operating system support, please refer to the AVEVA Review 6.4 Installation Guide and also the AVEVA support web-site: <http://support.aveva.com/cs/index.htm>

6.2 Product Set

6.2.1 Associated Data Files

Example model files are supplied with this release for test and installation purposes.

6.2.2 Licensing

The release is secured and licensed using FLEXMAN version 3.1 and associated FLEXIm license files.

6.2.3 Utilities

Upgrade utility: review_upgrade (for REVIEW Version 1 files).

6.2.4 Applicationware

Example appware code is provided with the release, which can be used in conjunction with 'ascii'flat file' or using the Query daemons. Please note that AVEVA Review 6.4 uses ODBC drivers - which will need to be purchased separately.

6.2.5 Interfaces

Input interfaces available for this release include: PDMS, DGN and CV-PVS.

6.2.6 User Documentation

New versions of the following documentation are available at this release:

- Review 6.4 User Bulletin (this document)
- Review 6.4 Install Guide
- Review 6.4 User Manual
- Review 6.4 VizStream Server Installation Guide.doc
- Review 6.4 VizStream Viewer User Guide.doc

In addition, the following manuals, unchanged at this release, are also provided:

- DGN2REV User Guide (for conversion of MicroStation files for Review)
- Review Construction Sequence User Manual

This manual is required for installation of the AVEVA licensing system:

- FLEXMAN 3.1 Installation Guide