



ENOVIA SmarTeam

Introduction to SmarTeam Viewers

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Chapter 1: Introduction

Overview

This guide provides an overview of all the viewers which are used in SmarTeam.

SmarTeam Corporation Internet Site

You are highly recommended to frequently visit the SmarTeam Corporation Internet site for the latest updates to SmarTeam and plug-in products, including the latest Service Packs, hot fixes and technical support at <http://www.smarteam.com>.

In addition, you will also be able to view any installation known issues.

Viewer's Software Location

Viewer	Location
DS Viewer	SmarTeam – Editor CD and SmarTeam – Web Editor CD (automatically installed in the installation processes)
SmarTeam – Viewer	SmarTeam – Editor CD (automatically installed in the installation process)
E-Drawings Viewer (for Solid Works)	SmarTeam – Editor CD (automatically installed in the installation process)
SmarTeam Web Viewer	SmarTeam – Web Editor CD (separate installation is required)

Related Documentation

All the documents mentioned in this document are available in the SmarTeam Documentation CD unless stated otherwise.

The following documentation is referred to in this guide.

Name of Document	Remarks
Hardware and Software Requirements	Details of the hardware and software required for a successful installation.
SmarTeam – Editor Installation Guide	For viewers that are automatically installed as part of the SmarTeam – Editor installation process.
SmarTeam – Web Editor Installation Guide	For viewers that are automatically installed as part of the SmarTeam – Web Editor installation process.
SmarTeam Web Viewer Installation Guide	Details of the installation process of the SmarTeam Web Viewer. Available via the IBM support site (for IBM version) and the SmarTeam support site (for the Direct version).
DS Server Viewer Installation Guide	Details of the installation process of the DS Server Viewer.
DS Viewer	DS Viewer User Guide
AutoVue User Guide/Online Help	SmarTeam Viewer's Desktop Edition User's Manual from Oracle in PDF or HTML format

Chapter 2: DS Viewer

General

The DS Viewer provides SmarTeam – Editor and SmarTeam – Web Editor with unified, cross-brand, DS 3D PLM Viewing technology for viewing V5 CATIA files.

The DS Viewer provides the following functionalities:

- Viewing formats: CGR and CGM
- Navigating in DS Viewer : Zooming; Panning; View Points Displaying; Visualization (Render) Modes; Rotating; Printing; Compass for indication of the viewed content's orientation for 3D files and view point rotation

The DS Server Viewer is a Java-based solution that provides a markup support for viewer for SmarTeam applications, such as SmarTeam – Editor Windows and web. DS Server Viewer enables users to view and perform markup operations on documents, drawings and CATIA files within SmarTeam – Editor Windows and web applications.

SmarTeam Pre-requisites

None

Installation Instructions

This viewer is automatically installed and configured as part of the SmarTeam – Editor Windows and web installation processes.

If you require the DS Server Viewer functionalities, you must install the DS Server Viewer. For further information refer to the DS Server Viewer Installation Guide.

Configuration

This section describes the settings that are required for CATIA files in order for the DS Server Viewer to view these files properly in SmarTeam.

Note: For V5R19 SmDemo and new databases that are created in V5R19 these configurations do not need to be performed.

Application Tools Setup

In SmarTeam, go to the Application Tools Setup and define the following for all the CATIA files types that will be viewed by the DS Viewer:

1. Enable the Plug-In Viewer and enter these parameters in the Plug-In Viewer section:
 - Name: Smart IE Viewer
 - ClassID: 156B79D3-C69C-11D4-B595-00104B3E8C2C
 - EventID: 156B79D1-C69C-11D4-B595-00104B3E8C2C
 - Event count: 8
2. Verify that the File Extension contains:
 - .cgr for 3D files

- .cgm for 2D files
3. Select the Hide Toolbar checkbox.

System Configuration

The system configuration is installed with the SmarTeam Services. Therefore, any changes which need to be made to the system configuration are done on the machine on which the SmarTeam Services exist.

You can make changes to the System Configuration by manually updating the XML files in the System Configuration.

Before making changes to the XML files, it is highly recommended to backup the “smarteam home directory\configuration settings\data” directory.

For Web Applications

To make the manual changes to the System Configuration:

1. On SmarTeam Services server navigate to **<SmarTeam home directory>\Configuration Settings\Data\Domain**
2. In the file smarteam.std.viewers.config.xml, there is a collection of adapters, which start with the **<viewerAdapters> node, find:**

```

<adapter>
    <extension>.CATPart</extension>
<adapter>SmarTeam.Std.Web.UI.WebControls.Viewer.Adapters.A3DComAdapter</adapter>
</adapter>

```
3. In this node:
 - Change .CATPart to .cgr
 - Change SmarTeam.Std.Web.UI.WebControls.Viewer.Adapters.A3DComAdapter to SmarTeam.Std.Web.UI.WebControls.Viewer.Adapters.CATIAWebViewerAdapter
4. For CATIA Drawings (.cgm) add the following:

```

<adapter>
    <extension>.cgm</extension>
<adapter>SmarTeam.Std.Web.UI.WebControls.Viewer.Adapters.CATIAWebViewerA
dapter</adapter>
</adapter>

```
5. Restart the Web Server.

Note: Whenever you modify an existing viewer for a selected file type, or add a built-in or plug-in viewer to a newly defined file type, you must first contact SmarTeam Technical Support to determine viewer compatibility for the selected file type.

What Next?

After this viewer has been installed and configured with the SmarTeam – Editor Windows and web you can use this viewer to view CATIA files in the SmarTeam – Editor and SmarTeam – Web Editor.

For details on how to use this viewer refer to the DS Viewer document.

The following features in the DS Viewer are supported by SmarTeam:

- 2D (cgm) format

- 3D (cgr) format
- Comprehensive navigation capabilities, including: Zooming, Panning, Display of View Points, Multiple visualization (rendering) modes, Rotating, Printing and Compass for indicating the orientation of the viewed content's for 3D files and view point rotation

Chapter 3: eDrawings Viewer

General

The eDrawings Viewer provides SmarTeam – Editor Windows and web and SmarTeam – Community Workspace with the facility to view SolidWorks files using eDrawings tools.

eDrawings in SmarTeam supports the following file formats:

- SolidWorks Part .SLDPRT
- SolidWorks Assembly .SLDASM
- SolidWorks Drawing .SLDDRW
- eDrawings Part .EPRT
- eDrawings Assembly .EASM
- eDrawings Drawing .EDRW

Remarks:

- Markup is not supported for eDrawings on the web. The markup is saved locally but is not transferred to the vault.
- When using eDrawings, original files can be accessed via the web. This can result in a breach of security.

SmarTeam Pre-requisites

None

Installation Instructions

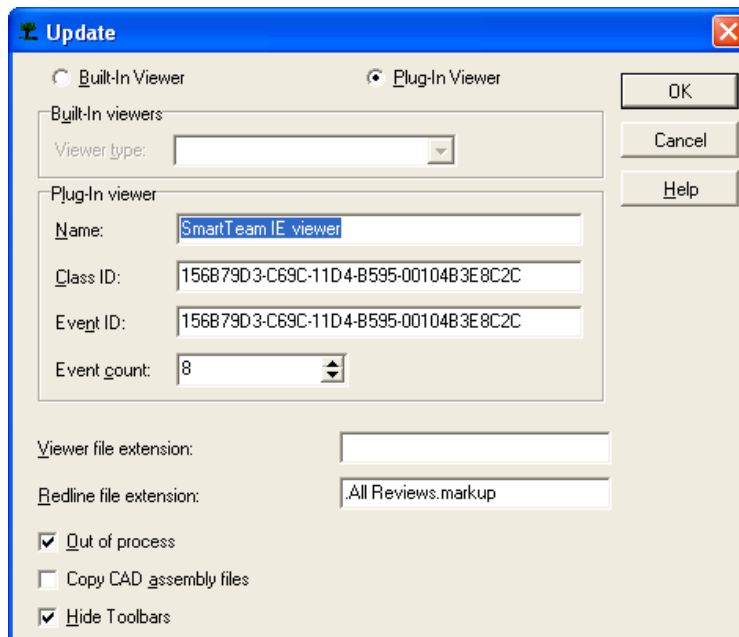
It is automatically installed and configured as part of the SmarTeam – Editor Installation process.

Configuration

For SmarTeam – Editor

In SmarTeam, go to the Application Tools Setup, and define the following for all the SolidWorks file types that will be viewed by the eDrawing Viewer:

1. Enable the Plug-In Viewer and enter these parameters in the Plug-In Viewer section:
 - Name: Smart IE Viewer
 - ClassID: 156B79D3-C69C-11D4-B595-00104B3E8C2C
 - EventID: 156B79D3-C69C-11D4-B595-00104B3E8C2C
 - Event count: 8
2. Verify that the File Extension is empty
3. Redline file extension: .All Reviews.markup
4. Select **Hide Toolbars** checkbox.
5. Click **OK**.



For Web Applications

To change back to this viewer after using another viewer you need to configure the Viewers XML File.

To setup viewing SolidWorks documents using eDrawings, add the following lines to the smarteam.std.viewers.config.xml file in the <ViewerAdapters> section:

```
<adapter>
<extension>.SLDDRW</extension>
<adapter>SmarTeam.Std.Web.UI.WebControls.Viewer.Adapters.eDrawingAd
  apter</adapter>
</adapter>
```

Repeat this procedure for the remaining extensions .SLDASM, SLDPRT, .EPRT, .EASM, .SLDDRW and .EDRW.

eDrawings must be installed for each client. You can find eDrawings viewer in the SmarTeam support site.

Note: Whenever you modify an existing viewer for a selected file type, or add a built-in or plug-in viewer to a newly defined file type, you must first contact SmarTeam Technical Support to determine viewer compatibility for the selected file type.

System Configuration Keys

The Viewer configuration settings are used for configuring SmarTeam Web applications to work with the SmarTeam Web Viewer server. These settings are generated and entered automatically by the SmarTeam Web application setup.

The System Configuration Service is a web-based tool that provides the administrator with the ability to handle and control all configuration settings from one central location. The tool runs on the system configuration server. For more information on the System Configuration Service and its parameters, refer to the System Configuration document.

To configure the Web applications, change the following parameters in the System Configuration Service:

- **eDrawingURL:** The location of the documents to be viewed in eDrawings should include the protocol: http://, https://, server:// etc.
- **eDrawingDirectory:** The location to which the files to be viewed in eDrawings are copied. This key overrides the value in TemporaryViewerPath for eDrawings.

Using eDrawing Viewer with Community Workspace

When using eDrawing Viewer with Community Workspace, the EDRAWINGS_ENABLED key must be set to YES.

To configure the eDrawing Viewer, use the following procedure:

1. From the System Configuration Editor, search for eDrawing.
2. Choose mySmarTeam.EDRAWINGS_ENABLED key.
3. From Override Level, click **Domain**.
4. In Value, enter **YES**.
5. Click **Save** and Logout from System Configuration Editor.

What Next?

After it is installed and configured, you can use this viewer to view Solid Works files using the eDrawings tools.

For details on how to use this viewer, refer to the eDrawings online help, which is available with your system.

Chapter 4: SmarTeam Viewer

General

The SmarTeam Viewer is the Oracle AutoVue® Electro-Mechanical Professional product from Oracle. It may only be used within SmarTeam – Editor to view documents managed by SmarTeam.

Note: Oracle viewer does not support Solid Edge 20 file format.

SmarTeam Pre-requisites

None.

Installation Instructions

It is automatically installed and configured as part of the SmarTeam – Editor Installation process.

Configuration

The configuration is done in the Application Tools Setup. For further details refer to the SmarTeam – Editor online help>Application Setup>Defining Applications>Embedded Viewer Setup section. The relevant setting for the SmarTeam viewer is the Built-in Viewer.

For details on how to configure this viewer, refer to Oracle's AutoVue User Guide, which is available on the SmarTeam Documentation CD.

Note: Whenever you modify an existing viewer for a selected file type, or add a built-in or plug-in viewer to a newly defined file type, you must first contact SmarTeam Technical Support to determine viewer compatibility for the selected file type.

What Next?

After it is installed and configured, you can use this viewer to view documents managed by SmarTeam in SmarTeam – Editor.

For details, on how to use this viewer, refer to Oracle's AutoVue User Guide, which is available on the SmarTeam Documentation CD.

The Multiple markup files feature of the SmarTeam viewer is not supported in SmarTeam. SmarTeam only supports one redline file for each document. This redline file can include comments from several users.

Troubleshooting

Fonts

Excel: When viewing a Microsoft Excel file in the SmarTeam Viewer, install all the Chinese fonts on your machine in order to display Chinese characters.

SolidEdge: When displaying text in SolidEdge Draft in the SmarTeam Viewer, the text does not appear correctly. You must therefore, install fonts from a machine with SolidEdge installed on it. Once you have installed these font files, they must be copied into C:\WINDOWS\Fonts; when placed there they will be automatically installed and listed by their Solid Edge names.

Autocad: When displaying text in Autocad in the SmarTeam Viewer, the text does not appear correctly. You must therefore, install fonts from a machine with Autocad installed on it. The fonts need not be placed in C:\WINDOWS\Fonts. Once you have installed these fonts, you have the choice of either copying them into \avwin\fonts or specifying their location in XFONTPATHS under the [Options] section in avx.ini (e.g. XFONTPATHS=<Directory>).

Mechanical Desktop: When displaying text in Mechanical Desktop in the SmarTeam Viewer, the text does not appear correctly. You must therefore, install fonts from a machine with Mechanical Desktop installed on it. The fonts need not be placed in C:\WINDOWS\Fonts. Once you have installed these fonts, you have the choice of either copying them into \avwin\fonts or specifying their location in XFONTPATHS under the [Options] section in avx.ini (e.g. XFONTPATHS=<Directory>).

Orcad Layout

When viewing an Orcad Layout from SmarTeam Web Viewer, the Copper and track circuitry boards are not separated properly. To separate these entities, perform the following:

6. Go to the [ECAD] section in the avx.ini file.
7. Set the ORCAD_CUTOOUT_COPPER_POUR option to 1, as follows:
ORCAD_CUTOOUT_COPPER_POUR=1

Text Alignment in ASCII files

When viewing ASCII files with the SmarTeam Web Viewer, the text does not align properly, because of the default font selected by the viewer. To display the text correctly, perform the following:

Set the following option in avx.ini file Face=Lucida Console under the [BaseFont] section.

1. Go to the [BaseFont] section in the avx.ini file.
2. Set these option Face=Lucida Console

Chapter 5: SmarTeam Web Viewer

General

SmarTeam Web Viewer is a Java-based viewing solution for SmarTeam Web applications, such as SmarTeam – Web Editor or SmarTeam – Community Workspace. It is the Web-based version of the SmarTeam – Viewer used within SmarTeam Win 32 clients. It is based on Oracle AutoVue® Electro-Mechanical Professional. It may only be used within SmarTeam – Web Editor to view documents managed by SmarTeam.

SmarTeam Web Viewer enables users to view and perform markup operations on documents, drawings and CAD files in more than 200 formats from within SmarTeam Web applications.

SmarTeam Web Viewer is composed of three components:

- A Java-based web application server that processes client-viewing requests, renders the original file into a much thinner format and streamlines the results to the Java applet on the client station.
- A Java applet embedded inside HTML page of the SmarTeam Web application client (SmarTeam – Web Editor or SmarTeam – Community Workspace).
- A Markup Service that manages all markups (redline files) created or requested by Web users. The service copies these files to and from the vault and prepares them for display by the SmarTeam Web Viewer. For further details see the SmarTeam Web Viewer Installation Guide.

An additional component, the Servlet Engine, is implemented automatically by the SmarTeam Web Viewer installation. This component enables viewing capabilities when the specific SmarTeam Web application server and the SmarTeam Web Viewer are placed outside a firewall.

Note: You can access the SmarTeam Web Viewer Installation Guide via the IBM support site for the IBM version and the SmarTeam support site for the (Direct) version.

SmarTeam Pre-requisites

You must install SmarTeam Web applications before the SmarTeam Web Viewer.

Installation Instructions

Refer to the SmarTeam Web Viewer Installation Guide.

Configuration

Refer to the SmarTeam Web Viewer Installation Guide (Post Installation Chapter) for details of required configuration and the System Configuration Keys.

Note: Whenever you modify an existing viewer for a selected file type, or add a built-in or plug-in viewer to a newly defined file type, you must first contact SmarTeam Technical Support to determine viewer compatibility for the selected file type.

What Next?

After it is installed and configured, you can use this viewer to view documents managed by SmarTeam in SmarTeam – Web Editor and SmarTeam – Community Workspace.

For details, on how to use this viewer, refer to the Oracle's online help, which is available on the SmarTeam Documentation CD.

The following SmarTeam Web Viewer features are not supported within SmarTeam Web applications:

- Collaboration
- Multiple markup files. SmarTeam supports only one redline file for each document. This redline file can include comments from several users.
- The Arrow Keys and Scroll wheel do not work in Grid view when this Viewer is open.

Troubleshooting

All the issues in the troubleshooting section in SmarTeam Viewer are also relevant for the SmarTeam Web Viewer. For further details see [Troubleshooting](#).

Printing an Excel Table

When printing a Microsoft® Excel table from SmarTeam Web Viewer, the column numbers and cell names are printed. To change this behavior, perform the following steps:

8. On the Viewer server, browse to the *c:\Program Files\jVue\bin* folder.
9. In the *alluser.ini* file, under the [Options] section, insert the following:
SSHIDEHEADERS=1

Note: If you want to specify this option only for the specific user, browse to *c:\Program Files\jVue\bin\Profiles* and insert the **SSHIDEHEADERS=1** line under the [Options] section in the user's ini file.

Chapter 6: SmarTeam 3DLive Embedded Viewer

General

The 3DLive application has two modes for presenting data:

- Regular mode – Search results are displayed on a plate, where drilling down into the assembly opens additional plates revealing the detailed parts of the assembly's composition
- Examine mode – This mode does not permit navigation, but enables you to display redlines and FTNA. For 3DLive Embedded Viewer, only the Examine mode will be available.

Pre-requisites

- You must install the 3DLive application plus 3DLive Server, R2009x and above.
- User must configure Node Licenses on client machine for the LIX, LSF, LFT, LCV, VAR, PIX & LIV configurations and product of 3DLive.
- User must install Web Services for Live Application on the 3DLive Server machine.

Installation Instructions

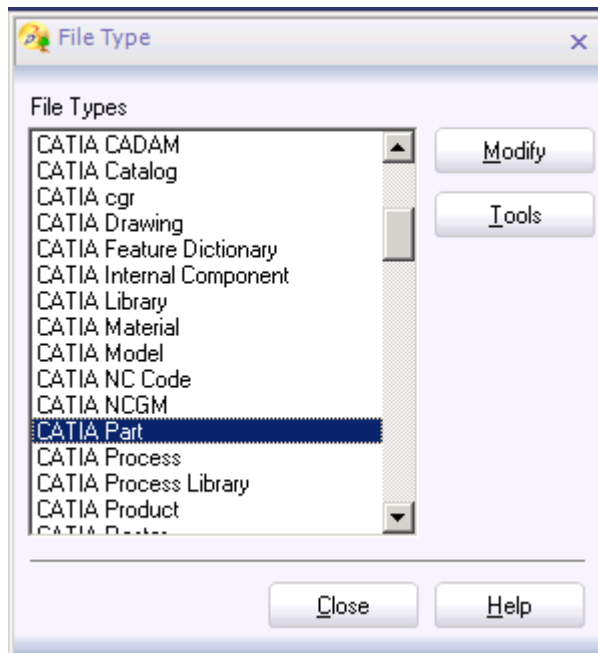
The 3DLive Embedded Viewer is not part of the SmarTeam Viewer package. The 3DLive Embedded Viewer is installed via the 3DLive application and requires you to install it manually on the client machine.

Note: The **Save Review** functionality is not Lifecycle managed; therefore, Reviews are not copied from the Checked In vault to the Release vault.

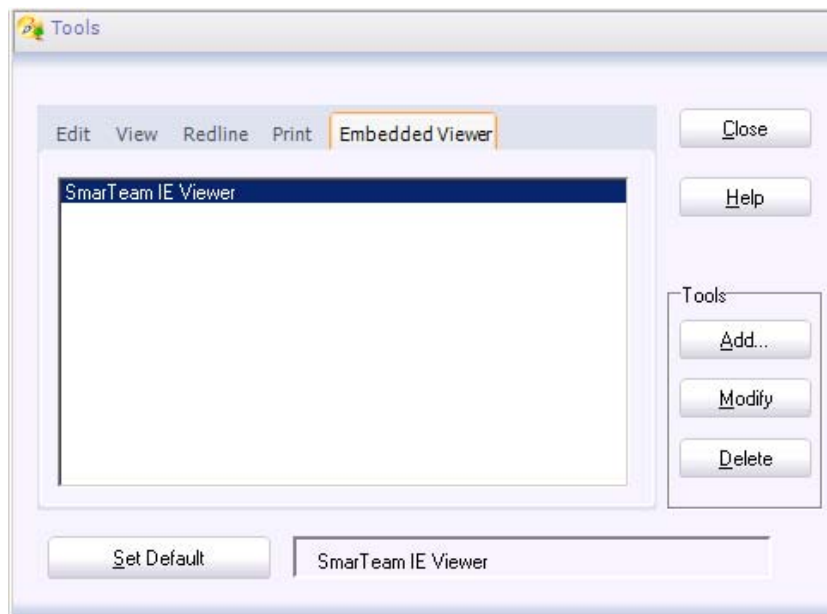
Configuration

To configure 3DLive Embedded Viewer:

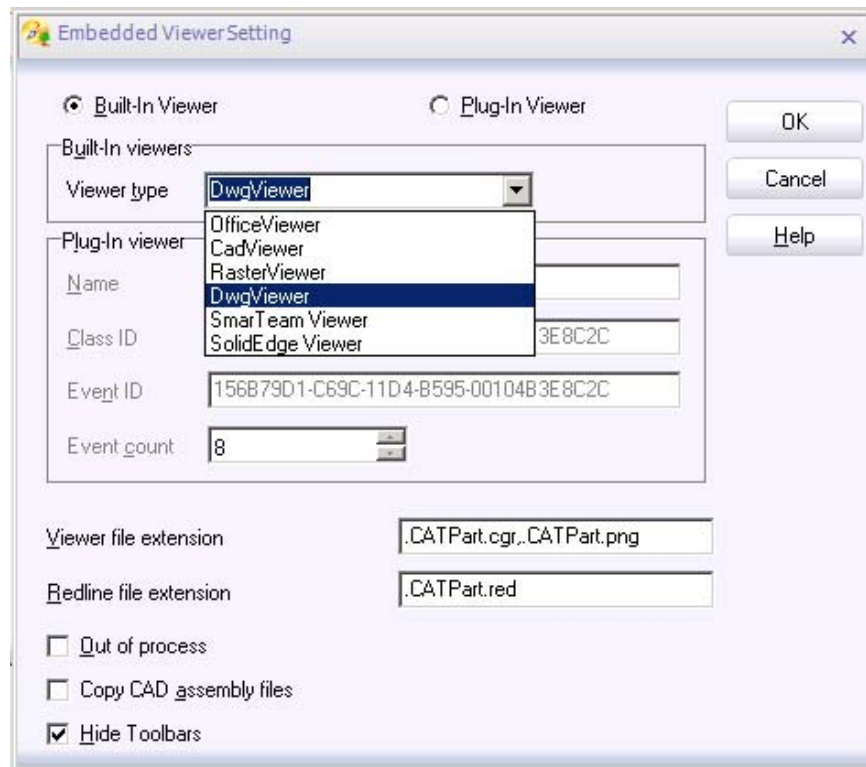
1. Open SmarTeam Configuration Editor and enter the 3DLive Server IP Address in the Live3DServerLocation
2. Open SmarTeam – Editor:
 - Navigate to Application Setup, File Type dialog
 - Select a file extension that you want to view in 3DLive (e.g., satellite cgr file)



3. In the File Type dialog:
- Click the Tools button
 - Click Embedded Viewer tab
 - Click Modify in the Tools pane



4. In the Tools pane:
- Select the Built-In Viewer radio-button
 - Select 3D Viewer from the dropdown list



5. Click OK.
6. Click Close.

Note: To view files in the 3DLive Embedded Viewer for SmarTeam – Web Editor, the Adapter key must be set to Live3DAdapter for the cgr files in the smarteam.std.viewers.config.xml file. The XML file is located at C:\Program Files\SMARTTEAM\ConfigurationSettings\Data\Default.

What Next?

Search for an object you want (like the one you selected to view in 3DLive) and select the Viewer tab.