

BPA 3DSmartDocCreator >

- <TS9> -

Installation Guide – V1.8

BPA Delivery 8 for V5R20 (V5.8)

3DSmartDocCreator – Business Process Accelerator
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1. Introduction

This document describes the installation procedure for the BPA 3DSmartDocCreator Server

This document is divided into the following sections:

- 3DSmartDocCreator Server installation
- Configuring 3DSmartDocCreator Server

1. Related Documentation

Related Documentation for Configuring the 3DSmartDocCreator Server

- SmarTeam Administration Guide
- SmarTeam Installation Guide

2. Definitions

Variables

Proposed examples:

Name	Definition
HOME	The selected directory for BPA Server installation
<CATIA Install Directory>	The directory of CATIA installation
<OS_Root_directory>	The operating system root directory (typically C:\)
<BPA License Directory>	The installation directory for BPA license files
<Path>	Variable for search path

Table 1 - Variables

Pictograms





Symbol	Usage
	Step The step symbol signals that a sequence of work operations is given.
	Information The info symbol signals background information.
	Tip The lamp symbol signals a tip that offers you practical experience to make your work easier.
	Warning: The warning symbol signals critical moments to which you should pay attention in order to avoid problems in your work process.

Table 2 - Pictograms

3. Prerequisite for 3DSmartDocCreator Installation

Hardware requirements

- See SmarTeam Hardware requirements

Software requirements

Software requirements for 3DSmartDocCreator Server

- SmarTeam Client Installation
- 3DVIA Sync Installation
- 3DVIA Sync Integration Installation
- Operating System :
 - Windows XP SP3 or Windows Server 2003
 - Windows 7 Professional 64 bit

Required disk space

- See SmarTeam Hardware requirements

2. 3DSmartDocCreator Server installation

1. Before Installing

- Be sure that you have sufficient rights on your PC to create a Path, copy files and register DLL's
- Check for installation folder
- Need for uninstalling manually an older version of the BPA (if upgrading of old versions is not automatically supported)
- Dot Net Framework 3.5 SP2 is installed

2. 3DSmartDocCreator Server package description

Setup files

The package includes these files separated in the listed folders:

3DSmartDocCreatorServer → Gets installed in the folder specified by the user. This folder in the documents is referred to as <Homedirectory>

- \BIN
 - AutomationServer.exe
 - AutomationServer.ini
 - Displayfile.exe
 - JobServerApp.dll
 - JobServerCompPlugIn.dll
 - JobServerWatcher.exe
 - SmartDocCreator.lic
 - vbSendMail.dll
- \Operations
 - convertshattered.xml
 - CREATECOMPOSERASSEMBLYFILES.jod
 - CREATECOMPOSERCONTENT.jod
 - CREATECOMPOSERDOCUMENTS.jod
 - CREATECOMPOSERFILES.jod
 - CREATECOMPOSERFILESANDVIEW.jod
 - createContent.xml
 - CreateView.xml
 - createViewPictures.xml

3DSmartDocCreatorClient

- \BIN
 - SmartDocCreator.dll
 - SmartDocCreator.lic
 - SmartDocCreator.dll.config
 - SmartDocCreator.xml
 - SmartDocCreatorNLS.xml
 - AxInterop.DS3DVIAPlayerActiveXLib.dll
 - Interop.DS3DVIAPlayerActiveXLib.dll
 - Interop.Shell32.dll
 - SmartTeam.Std.Interop.SmartTeam.SmApplic.dll
 - SmartTeam.Std.Interop.SmartTeam.SmartFlow.dll
 - SmartTeam.Std.Interop.SmartTeam.SmartMessages.dll

- SmarTeam.Std.Interop.SmarTeam.SmUISrv.dll
- SmarTeam.Std.Interop.SmarTeam.SmIntegrationTools.dll
- SmarTeam.Std.Interop.SmarTeam.SmRecList.dll
- SmarTeam.Std.Interop.SmarTeam.SmUtil.dll
- ComposerStarter.exe
- Interop.DS3DVIAComposer.dll
- Interop.ISPLI0BPALUMLib.dll
- ISPHA0HelpAbout.dll
- ISPLI0BPALUM.dll

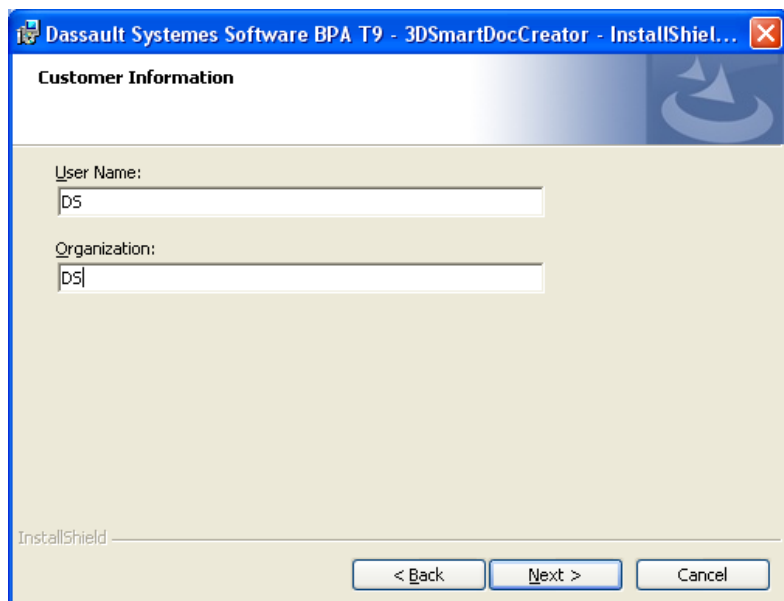
Possible other folders may contain: admin settings, demo data, additional tool folder for licensing, resources files etc... Indicate the setup file format (ex: tar file, InstallShield setup file).

3. 3DSmartDocCreator Server Installation

1.) The installation is done through installation software. Please execute the “setup.exe” from the delivered or existing media



2.) Key in your preferred User Name and Organisation:



Customer Information

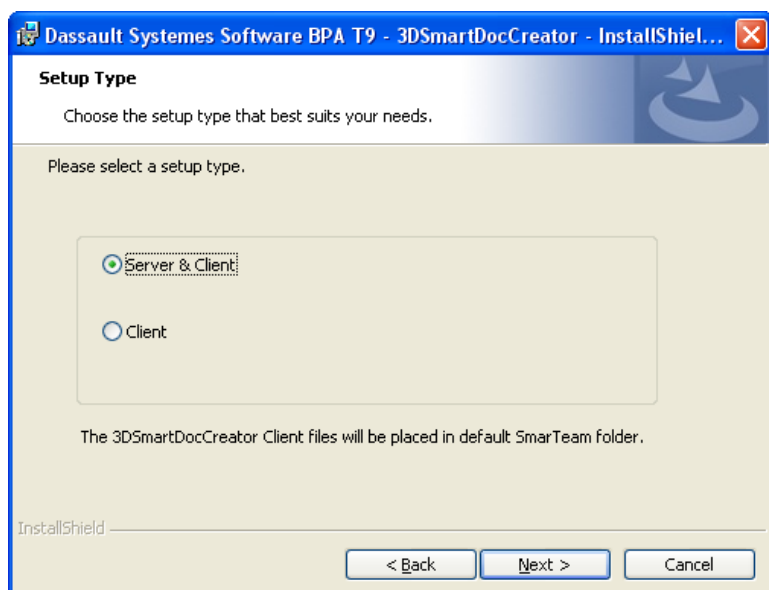
User Name:
DS

Organization:
DS

InstallShield

< Back Next > Cancel

3.) Choose the installation type. The Server installation requires also a client installation. So if you choose this type both, Server and Client will be installed



Setup Type

Choose the setup type that best suits your needs.

Please select a setup type.

☒ Server & Client

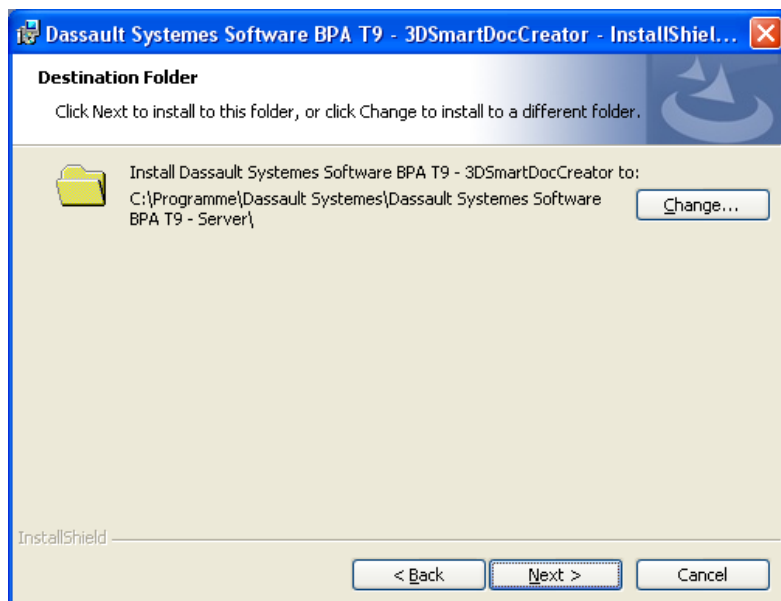
☐ Client

The 3DSmartDocCreator Client files will be placed in default SmarTeam folder.

InstallShield

< Back Next > Cancel

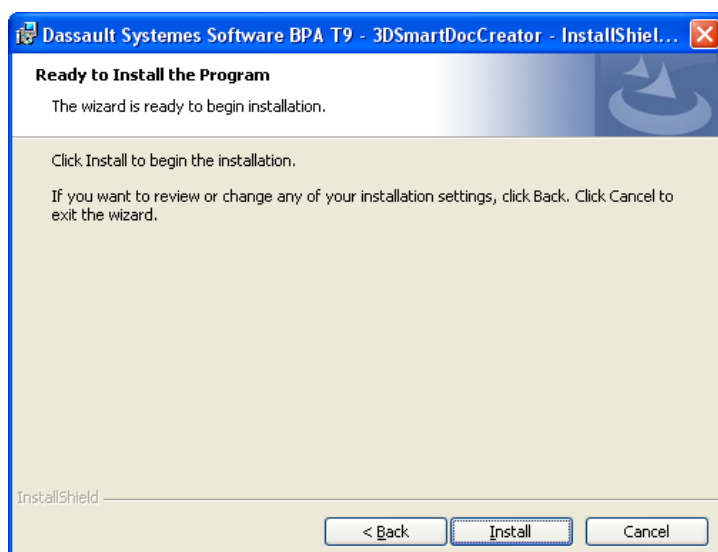
4.) Choose the Root Folder for the Server installation:



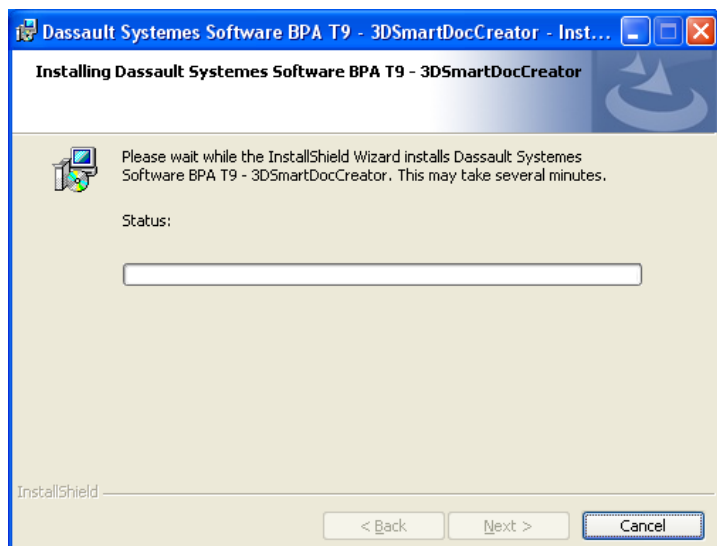
Under this root following folders are created through setup:

\Bin	All files are copied in this directory as explained in section 2.
\Documentation	Server Installation and Administration documentation
\Done	In this directory all done jobs are copied
\Failed	In this directory all failed jobs are copied
\Files	This is a directory that is used as working directory for files
\Log	In this directory the log files are located
\Operations	All files as explained in 2. 3DSmartDocCreator Server package description
\Pending	This is the shared directory where all jobs that have to be done are located
\Pictures	This is the directory where views are stored
\Redo	On redo the job files are located here
\Trace	In this directory the trace files from the jobs are located
\Work	This is the work directory for the jobs

4.) Click [Install] to start the installation:



5.) Wait to installer has finished the installation



3. Configuring 3DSmartDocCreator Server

1. 3DSmartDocCreator Server Configuration

Share the <Homedirectory>\pending folder. To allow the clients to create jobs on this server you must share the Pending directory to all users.

Directory Settings:

Open the <Homedirectory>\bin\AutomationServer.ini with and in the [General] Section

Change the [RootDir=c:\js] to your <Homedirectory>

To allow the user defined pending directory, add the following to the [General] Section

PendingDir=c:\mypath\

In the [runtime] section make the following changes

[RUNTIME]

COMPOSERPATH=G:\Program Files\Dassault Systemes\3DVIAComposer\6.6\Bin\ - Add here the Path of the 3DVIA Composer installation

SHAREDCOMPOSERDIR=T:\Geom_Dir\ - Add here the Shared composer directory which is discussed in the next section

DATABASENAME=PLM DB ST – This is the DB name

Open the CREATECOMPOSERFILES.jod File located in <Homedirectory>\Operations directory

- Since in the automation.ini in the runtime section the paths have been already given and associated with a variable, the same is used in the JOD files. Hence there is no change needed to be done in the JOD file with respect to the above settings. For other settings, please go through all the JOD files and make necessary changes.

2. Create a shared Directory on the SmarTeam Fileserver

Create a shared Directory for the converted Composer Files (smgXML and smgGeom). These files are created during through the AutomationServer. Please provide Read/Write permission for logged in user on the server (AutomationServer.exe) and also for the Client Composer User on this directory.

3. Change export values in XML files

Changes that have to be done in the related xml file for the 3DVIA Sync:

- Open the convertshattered.xml.

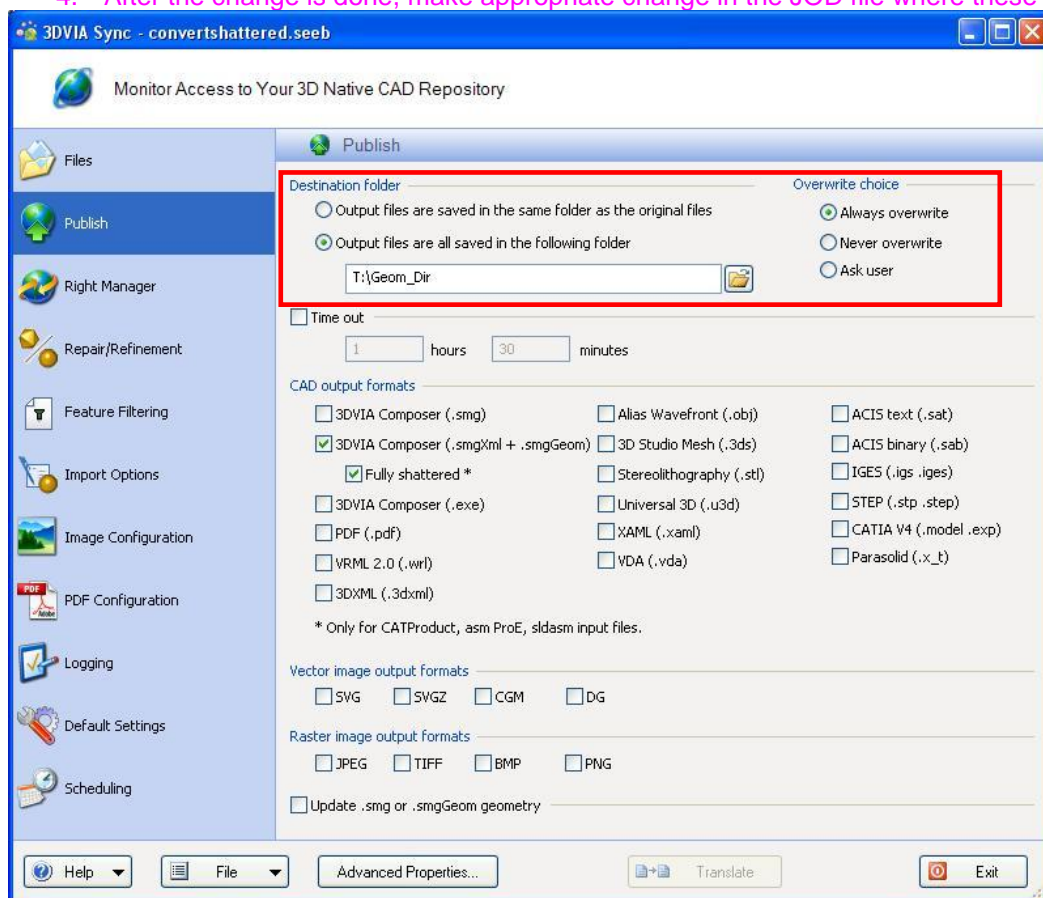
- Do the highlighted changes as shown in the pictures below:
- convertshattered.xml file as seen in notepad:

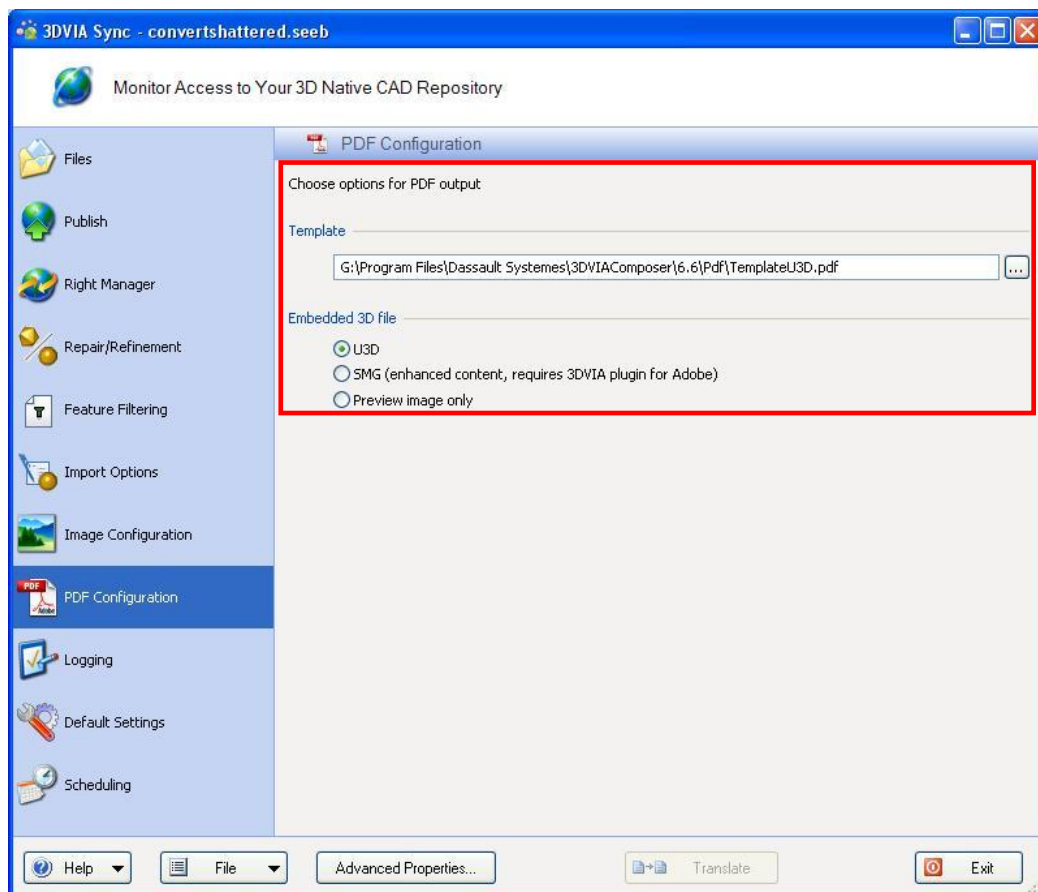
```
<SeemageBatch Version="6.1.1.1335">
<Properties>
  <Batch.IORRefinement Value="0.5"/>
  <Batch.SaveInSameFolder Value="0"/>
  <Batch.SaveInXmlOnly Value="1"/>
  <Batch.SaveFolder Value="T:\Geom_Dir"/> <-Shared Directory
  <Batch.OverwriteChoice Value="0"/>
  <Batch.IORRefinementAdapt Value="1"/>
  <Batch.Healing Value="0"/>
  <Batch.IOCheckOriginalFileChange Value="0"/>
  <Batch.IOMergeFileInOneActor Value="0"/>
  <Batch.IOMergeFileInOneFile Value="0"/>
  <Batch.IORecursivity Value="0"/>
  <Batch.IOImportAsBodies Value="1"/>
  <Batch.IOImportMassProperties Value="0"/>
  <Batch.IOImportPoints Value="0"/>
  <Batch.IOImportPMIs Value="1"/>
  <Batch.IOImportCurves Value="0"/>
  <Batch.IOImportFreeFaces Value="0"/>
  <Batch.IOImportNoShow Value="0"/>
  <Batch.IOImportNoPick Value="0"/>
  <Batch.IOImportGraphicData Value="1"/>
  <Batch.IOReduceAccuracy Value="0"/>
  <Batch.IOReduceAccuracy.Value Value="0.1"/>
  <Batch.IOWriteNormals Value="1"/>
  <Batch.IOWriteSmgGeomsWhenSaveSmgXml Value="1"/>
  <Batch.IOWriteSmgGeomsInSmgXmlDirectory Value="0"/>
  <Batch.IOCompressionBits Value="16"/>
  <Batch.IORRefinementType Value="0"/>
  <Batch.IORelativeRefinementFunction Value="0"/>
  <Batch.IOSetChordalError Value="1"/>
  <Batch.IOSetNormalDeviation Value="0"/>
  <Batch.IOSetEdgeLength Value="0"/>
  <Batch.IOChordalErrorValue Value="0.2"/>
  <Batch.IONormalDeviationValue Value="20"/>
  <Batch.IOEdgeLength Value="20"/>
  <Batch.IOUseFlatMethod Value="4"/>
  <Batch.IOU3dQualityOutput Value="0"/>
  <Batch.IOIdentType Value="1"/>
  <Batch.IOImportMetas Value="1"/>
  <Batch.IONodeFeatureName Value="1"/>
  <Batch.IONodeInstanceName Value="1"/>
  <Batch.IOPDFTemplate Value="G:\Program Files\Dassault Systemes\3DVIAComposer\6.6\Pdf\TemplateU3D.pdf"/>
  <Batch.IOPDFPublishType Value="0"/>
  <Batch.PerformLogging Value="1"/>
  <Batch.AppendToLog Value="0"/>
  <Batch.LogFilePath Value="C:\Documents and Settings\dpv\My Documents\3DVIAComposer\User\seePub.xml"/>
  <Batch.ShowProgress Value="0"/>
  <Batch.UseTimeOut Value="0"/>
</SeemageBatch>
```

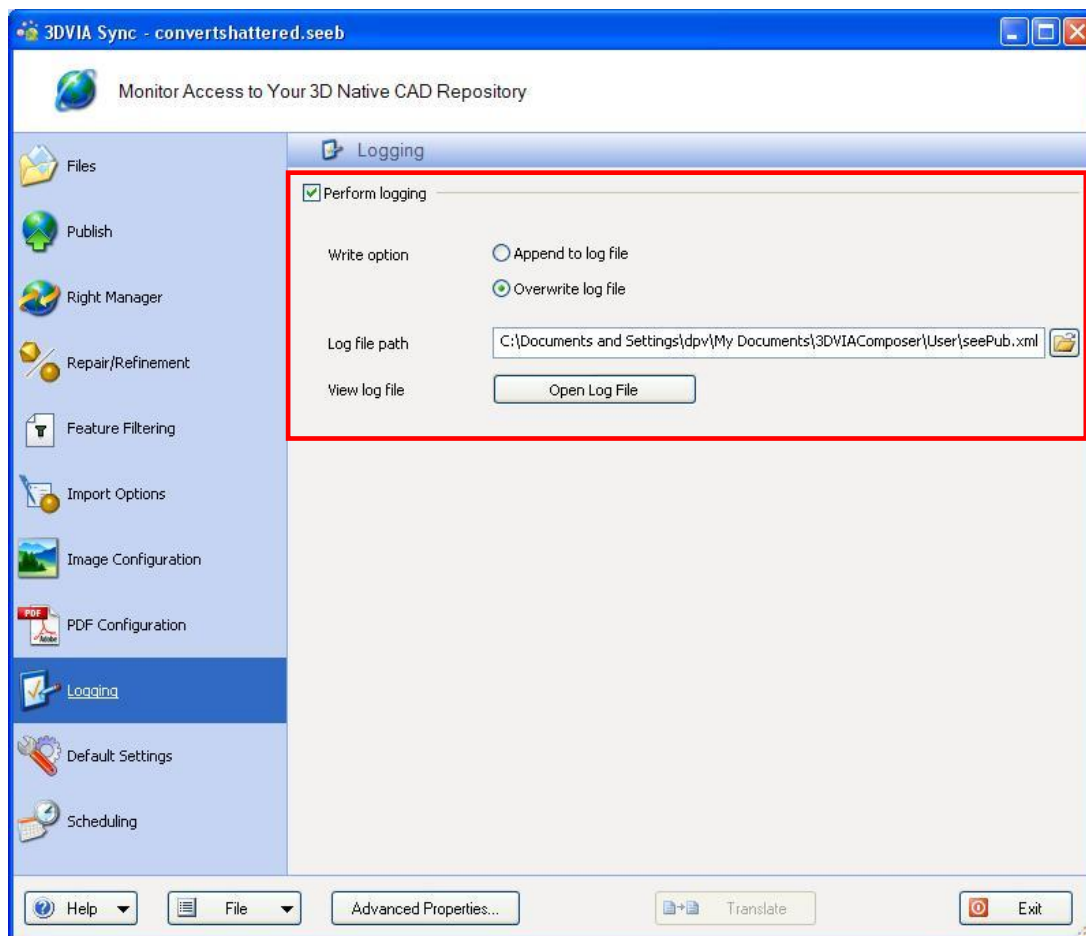
Do similar for the CreateViewPictures.xml that belongs to the CREATECOMPOSERDOCUMENTS.jod and all other xml files.

Note: The same changes in the XML file can be done through 3DVIA Sync. For this

1. Rename the XML file as .seeb file – example convertshattered.seeb
2. Double click on this file to open it in 3DVIA Sync
3. Make changes as shown in the screenshots below. These changes correspond to the same changes done in the XML file as shown above.
4. After the change is done, make appropriate change in the JOD file where these files are referenced.







4. About the AutomationServer.ini file

The default AutomationServer.ini has the following content

#Version: 11.1.0.0

[General]

Trace=ON

Language=EN

RootDir=C:\JS\

#LICENSE=VCCJPDXEPGBIWZCQR

LICENSE=LUM

RestartMenu=ON

CheckInstance=ON

MaxMinutes=100

MaxJobs=1000

CalculateDaylight=ON

SMTPHost=

SMTPUser=

SMTPMail=

SMTPPwd=

SMTPFrom=

PendingDir=c:\mypath\

[WATCHING]

LIFESIGN=3/4/2011 12:30:51 PM

LIFESPANCHECK=20

TIMER=10000
KILLMAIL=

[PROCESS]
PROCESS1=AutomationServer
PROCESS2=3dviaconverter
PROCESS3=3Dviac~1

[RUNTIME]
COMPOSERPATH=C:\Programme\Dassault Systemes\3DVIAComposer\6.4\Bin\
SHAREDCOMPOSERDIR=E:\composer\geomfiles\
DATABASENAME=PLM DB ST

[Explanations]
You can access the runtime values inside your operation like:
Set %ComposerPath%,#GETINVALUE.COMPOSERPATH#
Set %GeomPath%,#GETINVALUE.SHAREDCOMPOSERDIR#

There are 5 sections viz.

[General]
[WATCHING]
[PROCESS]
[RUNTIME]
[Explanations]

The details of each section is as follows

[General] –In this section we define the general parameters and values pertaining to the automation server.

Trace=ON or OFF

When set to ON, the trace file shall be generated in the Trace folder present in the Home directory. If it is set to OFF, there will be no trace file generated.

Language=EN or DE

With the language parameter, you can set the language of the Automation server. EN is for English and DE is for German.

RootDir=C:\JS

RootDir defines the path of root directory of the server installation. In this case the server is installed in the “JS” directory in “C” drive.

LICENSE=LUM

The License parameter defines the license management tool being used. In this case the IBM’s LUM is being used as a license management tool.

RestartMenu=ON

Not used anymore

CheckInstance=ON

Not used anymore – Only one Instance of AutomationServer on one machine possible

MaxMinutes=100

Not used anymore – changed to LIFESPANCHECK (see section watching)

MaxJobs=1000

The server will stop and shutdown, after processing the number of jobs defined with MaxJobs. Again if the Job watcher is running, then the “Automationserver” will be automatically restarted.

CalculateDaylight=ON

This switch enforces the Automationserver to calculate dates properly to the current national date schema. The SmartTeam dates are stored in UTC in the database.

To obtain the feedback in the mail, the Simple mail transfer protocol could be defined. The following parameters needs to be provided the

SMTPHost=<Host name of the SMTP Server>

SMTPUser=<User name>

SMTPMail=<Email ID>

SMTPPwd=<Password>

SMTPFrom=<Email from>

PendingDir=lets you define the Pending directory of your choice.

[Watching] –In this section we define settings that are responsible for the “watching” mechanism of the “JobServerWatcher”

LIFESIGN=07.03.2011 14:57:32

This is setted through the Automationserver itself and is the heartbeat of the server

LIFESPANCHECK=100

The “JobServerWatcher.exe” is checking all the time the “Heartbeat-Lifesign” of the server. If the last Lifesign differs more than Lifesign+Lifespancheck (minutes) the watcher kills all processes that are defined in the PROCESS section of the ini file.

The AutomationServer will be automatically restarted.

TIMER=10000

The interval in milliseconds the watcher is checking the Lifesign

KILLMAIL=error@company.com

A email address that should be used for an error mail if the server was restarted in case of exceeding life span.

[PROCESS] –In this section all processes can be defined that should be “killed” by the “JobserverWatcher.exe”

1.) An unexpected crash of the AutomationServer

2.) Job count was reached and the AutomationServer closes properly

3.) Job time exceeds and the Watcher kills the AutomationServer

PROCESS1=AutomationServer

PROCESS2=3DVIAconverter

PROCESS3=3Dviac~1

PROCESS4=3DVIAconverter.exe

PROCESS5=AutomationServer.exe

Define as many PROCESSES as you may need and take care of using an increasing number at the end of the definition: PROCESS + 6

[RUNTIME] –In this section the parameters could be defined which can be used on runtime.

COMPOSERPATH=C:\Programme\Dassault Systemes\3DVIAComposer\6.4\Bin\

Gives the path of the composer installation. This parameter is later used in the JOD files.

SHAREDCOMPOSERDIR=E:\composer\geomfiles\

Gives the path of the directory in which geom. files are written. This parameter is later used in the JOD files.

DATABASENAME=PLM DB ST

Gives the database name. This parameter is later used in the JOD files.

[Explanations]

This section gives the explanation on how the runtime values could be used in the JOD files.

5. Installation Checklist

Please feel free to use this checklist during Installation.

BPA Server Installation:

Installation Step	Description	Done
Check Prerequisites	3DVIA Sync/Integration / SmarTeam Client / Net 3.5SP2	
Create Folder Structure	Create the needed folders and main folder for the BPA Server	
Copy Files	Copy all Files to the related folders	
Register DLLs	Register the named DLLs located in the \BIN (see 2.4)	
Copy Client files	Also the server needs the BPA Client DLLs	
Register BPA Client	Register "SmartDocCreator.dll" (see 2.6)	
Install LUM License	Install a LUM License nodelocked (TS9)	
Install Zipping Software	Install Zipping Software instead of use Windows ZIP See 5.14	

BPA Server Configuration

Configuration Step	Description	Done
Create Network Share	Share the "\Pending" Directory of the Automation Server	
Edit ".jod" files	Change the ".jod" files to your environment (Path informations and 3DVIA informations) Change the name of your SmarTeam database and the user – login (refer to TS9_ServerAdministrationGuideR20D8SP5)	
Edit ".xml" files	Change the output path inside the named xml files for the SYNC-jobs	