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Enabling AutoVue Support in Oracle Secure Enterprise Search

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Executive Summary

Oracle AutoVue's (<http://www.oracle.com/autovue>) Enterprise Visualization is an industry leading solution for viewing, reviewing, and collaborating on technical documents and information across the enterprise.

This document describes the steps of enabling Oracle Secure Enterprise Search (SES) 11g (11.1.2.2) to search AutoVue documents. Oracle SES AutoVue support is implemented as the *AutoVue Document Service*, which is an Oracle SES document service plug-in. With the support, Oracle SES 11g users now can search Oracle AutoVue 2D, 3D and EDA documents. The searchable content includes the documents' metadata and comments.

Introduction

Oracle AutoVue's (<http://www.oracle.com/autovue>) Enterprise Visualization is an industry leading solution for viewing, reviewing, and collaborating on technical documents and information across the enterprise.

This document describes the steps of enabling Oracle Secure Enterprise Search (SES) 11g (11.1.2.2) to search AutoVue documents. Oracle SES AutoVue support is implemented as the *AutoVue Document Service*, which is an Oracle SES document service plug-in. With the support, Oracle SES 11g users now can search Oracle AutoVue 2D, 3D and EDA documents. The searchable content includes the documents' metadata and comments.

The AutoVue Document Service extends Oracle SES supported file types by adding AutoVue supported file types. Please see AutoVue Documentation "Oracle AutoVue Supported File Formats" guide (<http://www.oracle.com/us/products/applications/autovue/autovue-supported-file-formats-065285.pdf>) for the list of the additional supported AutoVue file types.

The example is based on the following assumptions:

- Oracle SES 11.1.2.2 is installed.
- AutoVue software 20.1 is installed and properly configured with AutoVue Web Services and AutoVue *Vuelinks*. Please refer to the AutoVue Installation and Administration Manual for the details.
- Oracle UCM 10.1.3 is installed as a data source. AutoVue Document Service supports data sources Web, Oracle UCM and Microsoft SharePoint. We use UCM as an example in this document.

Installing the AutoVue Document Service Plug-In

The following describes how to install AutoVue Document Service as the first step.

1. Log in to the Oracle SES administration interface.
2. Click on '**Global Settings**'.
3. Click on '**Document Services**' under '**Sources**'.
4. The resulting page will list the available document service managers. To create a new one, click on the '**Create**' button under '**Document Services**'.

The screenshot shows the Oracle Secure Enterprise Search administration interface. At the top, there is a navigation bar with 'ORACLE' logo, 'Secure Enterprise Search', and links for 'Search', 'Help', and 'Logout'. Below this is a blue header with 'Home', 'Search', and 'Global Settings' tabs. The main content area is titled 'Global Settings' and contains a section for 'Document Services'. A 'Create' button is visible in the top right of this section. Below the button, there are links for 'Expand All' and 'Collapse All'. A table lists document services under a 'Service Managers' category. The table has columns for 'Focus Name', 'Description', 'Edit', and 'Delete'.

Focus Name	Description	Edit	Delete
Service Managers			
Secure Enterprise Search Document Summarizer	Service that extracts the most significant phrases and sentences for the document		
ImageDocumentService	document service that processes JPEG, GIF, TIFF, JPEG 2000 and DICOM image metadata for search		

5. The next page gives two options. You can create a new document service manager or create a new document service instance for an existing document service manager. In this step, you have to add the new AutoVue Document Service manager first, select '**Create New Manager**' and click on '**Next**'.

The screenshot shows the 'Create Document Service' dialog box in the Oracle Secure Enterprise Search administration interface. The dialog has a title bar 'Create Document Service' and a 'Cancel' button. It contains a 'Document Service Manager' label and two radio button options: 'Create New Manager' (which is selected) and 'Select From'. Below the 'Select From' option is a dropdown menu labeled 'Available Managers' with 'Secure Enterprise Search Document Summarizer' selected. There are 'Cancel' and 'Next' buttons at the bottom right of the dialog.

6. In the next step fill in the fields as follows:

Manager Class Name: **oracle.search.plugin.doc.autovue.AutoVueServiceManager**

Manager Jar File Name: **autovue/AutovueDocServicePlugin.jar**

Then click 'Next'.

ORACLE Secure Enterprise Search Search Help Logout

Home Search Global Settings

Global Settings > Document Services

Create Document Service Manager

Specify the class name and jar file for this document service manager. Cancel Next

* Manager Class Name
(example: SampleDocManager)

* Manager Jar File Name
(example: doc_plugins.jar)

TIP The jar file must be placed in the search/lib/plugins/doc directory, under the Oracle Secure Enterprise Search installed location. Cancel Next

7. You can see the new document service manager's parameters listed. Click 'Finish' to complete the process. Now the new document service manager is created and you will get back to the Document Services page.

Create Document Service Manager

Manager Class Name
(example: SampleDocManager)

Manager Jar File Name
(example: doc_plugins.jar)

Parameter List

The parameter list is generated by the manager class. To edit the parameters, upload a new manager class.

Parameter Name	Description	Encryption
AutoVue Web Service Address	URL of AutoVue Web Service. For example, http://hostname:port/AutoVueWS/VueBeanWS	N
AutoVue Renderer Address	URL of AutoVue Renderer. For example, http://hostname:port/idc/jsp/autovue/csiApplet.jsp?GoBack=1&dID=	N
Vuelink Protocol	Vuelink protocol name. For example, vuelinkUCM. Optional.	N
Data Source	Name of the data source containing CAD files. Enter WEB for web site, UCM for Oracle UCM, SHAREPOINT for Microsoft SharePoint.	N
User ID	User ID for AutoVue Vuelink to access secure source. Optional.	N
Password	Password for AutoVue Vuelink to access secure source. Optional.	Y
AutoVue Web Service Timeout	The timeout in seconds for invoking AutoVue Web Service.	N
Retry Times	The retry times in case AutoVue Web Service is down.	N

Cancel Finish

8. The next step is to create a new document service instance for created AutoVue Document Service manager. For this again click the 'Create' button under 'Document Services'.

Document Services

This section lists all document services. You can create as many new document services as you want. Create

[Expand All](#) | [Collapse All](#)

Focus Name	Description	Edit	Delete
<ul style="list-style-type: none"> ▼ Service Managers 			
▶ Secure Enterprise Search Document Service for AutoVue	Extracts content from virtually any 2D, 3D and EDA files using AutoVue Web Service.		
▶ Secure Enterprise Search Document Summarizer	Service that extracts the most significant phrases and sentences for the document		
▶ ImageDocumentService	document service that processes JPEG, GIF, TIFF, JPEG 2000 and DICOM image metadata for search		

- Select **'Select From'** and select 'Secure Enterprise Search Document Service for AutoVue' from the **'Available Managers'** drop-down menu and click **'Next'**.

ORACLE Secure Enterprise Search Search Help Logout

Home Search Global Settings

Global Settings > Document Services

Create Document Service

Document Service Manager Create New Manager Select From

Available Managers Secure Enterprise Search Document Service for AutoVue

Cancel Next

Cancel Next

- In the following page, you need to give the instance a name and set the document service parameters. Instance name could be any name, e.g. **'AutoVue Document Service for UCM'**.

Create Document Service Instance

Cancel Create

* Instance name
 Document Service Manager Secure Enterprise Search Document Service for AutoVue

Parameters
 Specify parameter values for this document service.

Parameter Name	Value	Description	Encryption
AutoVue Web Service Address	<input type="text" value="http://rstintel24.us.oracle.com:8080/AutoVueWS/VueBeanWS"/>	URL of AutoVue Web Service. For example, http://hostname:port/AutoVueWS/VueBeanWS	N
AutoVue Renderer Address	<input "="" type="text" value="24.us.oracle.com:80/idc/jsp/autovue/csiApplet.jsp?GoBack=1&dID="/>	URL of AutoVue Renderer. For example, http://hostname:port/idc/jsp/autovue/csiApplet.jsp?GoBack=1&dID=.	N
Vuelink Protocol	<input type="text" value="vuelinkUCM"/>	Vuelink protocol name. For example, vuelinkUCM. Optional.	N
Data Source	<input type="text" value="UCM"/>	Name of the data source containing CAD files. Enter WEB for web site, UCM for Oracle UCM, SHAREPOINT for Microsoft SharePoint.	N
User ID	<input type="text" value="sysadmin"/>	User ID for AutoVue Vuelink to access secure source. Optional.	N
Password	<input type="password" value="***"/>	Password for AutoVue Vuelink to access secure source. Optional.	Y
AutoVue Web Service Timeout	<input type="text" value="60"/>	The timeout in seconds for invoking AutoVue Web Service.	N
Retry Times	<input type="text" value="3"/>	The retry times in case AutoVue Web Service is down.	N

You need to specify the required parameters. Each parameter is described in the “**Description**” field. The preceding figure shows an example configuration for Oracle UCM source.

PARAMETER NAME	EXAMPLE CONFIGURATION
AutoVue Web Service Address	URL of AutoVue Web Service. For example, http://hostname:port/AutoVueWS/VueBeanWS
AutoVue Renderer Address	URL of AutoVue Renderer. For example, http://hostname:port/idc/jsp/autovue/csiApplet.jsp?GoBack=1&dID=.
Vuelink Protocol	Vuelink protocol name. For example, vuelinkUCM
Data Source	Name of the data source containing CAD files. Enter WEB for web site, UCM for Oracle UCM, and SHAREPOINT for Microsoft SharePoint.
User ID	User ID for AutoVue Vuelink to access secure source. Specify empty value for public data sources.
Password	Password for AutoVue Vuelink to access secure source. Specify empty value for public data sources.
AutoVue Web Service Timeout	The timeout in seconds for invoking AutoVue Web Service.
Retry Times	The retry times in case AutoVue Web Service is down.

- Next, you need to add the newly created instance to a document service pipeline. First let’s create a new pipeline. Click on the ‘**Create**’ button under Document Service Pipelines.

Document Services
 This section lists all document services. You can create as many new document services as you want. Create

Expand All | Collapse All

Focus Name	Description	Edit	Delete
Service Managers			
Secure Enterprise Search Document Service for AutoVue	Extracts content from virtually any 2D, 3D and EDA files using AutoVue Web Service.		
Secure Enterprise Search Document Summarizer	Service that extracts the most significant phrases and sentences for the document		
ImageDocumentService	document service that processes JPEG, GIF, TIFF, JPEG 2000 and DICOM image metadata for search		

Document Service Pipelines
 This section lists all document service pipelines. You can create as many new document service pipelines as you want. Create

Name	Description	Assigned Sources	Edit	Delete
Default pipeline	Default document service pipeline	database.us.oracle.com, Global Crawler Settings		

12. You need to first specify the name of the new pipeline. In this example, the pipeline is called **'AutoVue Pipeline for UCM'**. You can also add a description. Now below in the **'Available Service'** list you should see **'AutoVue Document Service for UCM'**. Select it and click **'Move'**, which should put AutoVue Document Service in the **'Used in Pipeline'** list. Then click **'Create'**.

* Name
 Description

Document Services
 Select instances from available list to build the pipeline. The services will be invoked as the order you specified.

Available Services

- Autovue Document Service for SharePoint
- Default image service instance
- Default summarizer service instance
- Openworld Content Filter

> Move

>> Move All

< Remove

<< Remove All

Used in pipeline

- Autovue Document Service for UCM

Now in the Document Services page you can see the new pipeline.

This section lists all document services. You can create as many new document services as you want.

[Create](#)

[Expand All](#) | [Collapse All](#)

Focus Name	Description	Edit	Delete
<ul style="list-style-type: none"> Service Managers <ul style="list-style-type: none"> Secure Enterprise Search Document Service for 2010 Open World Secure Enterprise Search Document Service for AutoVue <ul style="list-style-type: none"> Autovue Document Service for SharePoint Autovue Document Service for UCM Secure Enterprise Search Document Summarizer ImageDocumentService Secure Enterprise Search WebCenter UCM Plugin 	<ul style="list-style-type: none"> Insert pre-defined new attributes to each of documents Extracts content from virtually any 2D, 3D and EDA files using AutoVue Web Service. Service that extracts the most significant phrases and sentences for the document document service that processes JPEG, GIF, TIFF, JPEG 2000 and DICOM image metadata for search Adds WebCenter standard metadata attributes to UCM Crawler 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">

Document Service Pipelines

This section lists all document service pipelines. You can create as many new document service pipelines as you want.

[Create](#)

Name	Description	Assigned Sources	Edit	Delete
Autovue Pipeline for SharePoint		autovue_sharepoint		
Autovue Pipeline for UCM		autovue_ucm		
Default pipeline	Default document service pipeline	Global Crawler Settings		
OpenworldContentFiler pipeline		Openworld_Demo		

Using AutoVue Document Service

To verify whether the AutoVue Document Service is working, you can create a new source (UCM in this document) and get them to use the document service pipeline just created.

Important Note: By default, Oracle SES crawlers skip CAD files. Therefore, before crawling, you have to update the MINEINCLUDE field in crawler.dat to make Oracle SES crawlers to handle CAD files correctly, e.g. If you want Oracle SES to crawl DWG file (DWG is an AutoCAD file type), you have to modify the following configuration file by adding 'application/dwg' to parameter MINEINCLUDE.

\$ORACLE_HOME/search/data/config/crawler.dat:

```
MIMEINCLUDE application/las application/cgm application/dgn application/dwg
application/unknown application/octet-stream application/x-unknown-content-type
application/907
```

Crawling and Searching UCM (Content Server)

In this case, you can use AutoVue Document Service to crawl files that are stored securely in Content Server.

1. Create a Content Server source in Oracle SES. Please select 'AutoVue Pipeline for UCM' in Crawling Parameters. Please refer Metalink Doc **ID 790808.1** for the detailed steps of creating Content Server source.

Source Configuration	URL Boundary Rules	Authentication	Authorization	Attribute Mapping	Crawling Parameters	Document Types
General Settings						
You can update the source name and default language.						
* Name <input type="text" value="autovue_ucm"/>						
Type Oracle Content Server						
* Default Language <input type="text" value="English"/>						
Parameters						
This section lets you update parameter values.						
Name	Value	Description				
Configuration URL	<input type="text" value="http://10.146.90.80/idc/idcplg?IdcService=SES_CRAWLER_DOWN"/>	File/HTTP URL of the configuration file				
Authentication Type	<input type="text" value="NATIVE"/>	Standard Java authentication type used by the application serving the control and data feed. This parameter is relevant when the feeds are accessed over HTTP. Enter BASIC for basic authentication, FORM for form-based authentication, ORASSO for Oracle SSO, NATIVE for proprietary XML over HTTP authentication.				
User ID	<input type="text" value="sysadmin"/>	User ID for accessing feeds				
Password	<input type="password" value="*****"/>	Password for accessing feeds				
Realm	<input type="text"/>	Realm of the application serving the control and data feed. This parameter is relevant when the feeds are accessed over HTTP and is mandatory when the authentication type is BASIC.				
Oracle SSO Login URL	<input type="text"/>	Oracle SSO login URL protecting all SSO applications. This parameter is relevant when the authentication type is ORASSO.				
Oracle SSO Action URL	<input type="text"/>	Oracle SSO action URL authenticating SSO user credentials. This is the URL to which the SSO login form is submitted. This parameter is relevant when the authentication type is ORASSO.				
Scratch Directory	<input type="text"/>	Local directory where status files can be temporarily written				
Maximum number of connection attempts	<input type="text" value="3"/>	Maximum number of connection attempts to access data feed or upload status feed				

Please note that during the crawling, AutoVue Vuelink is used to access the secure files within Content Server.

Edit User-Defined Source: **autovue_ucm** Cancel Apply

Source Configuration URL Boundary Rules Authentication Authorization Attribute Mapping **Crawling Parameters** Document Types

General

Number of Crawler Threads

Enable Language Detection No Yes

Default Language

Crawler Timeout Threshold (seconds)

Maximum Document Size (megabytes)

Default Character Set

Preserve Document Cache Yes No

Document Service Pipeline Enable

Honor Robots Exclusion Yes No

Select Pipeline

HTTP Cookies

Enable HTTP Cookies Yes No

Show Cookie Content in Log File No Yes

2. Start the Schedule to crawl files on UCM

After the schedule is done, a new document attribute 'RenderURL' is automatically added to each of indexed documents.

3. Querying UCM source group

- (1) Open a browser and access Oracle SES Query page, e.g. <http://rstintel25.us.oracle.com:7788/search/query/search> login as a user who has privilege to view the UCM files, e.g. sysadmin/idc
- (2) On the Oracle SES query UI, select the source group (e.g. "autovue_ucm") which is created in Oracle SES Admin page for the autovue_ucm source.
- (3) Query * to list all results
- (4) Click '**Open with AutoVue**' and you will get the target file in UCM directly (if a login windows is prompt out, please enter the user/password for step (1) again)

Login

Search Login

* Indicates required field

* User Name

* Password

[Attribute Filters](#) [Browse](#)

autovue_ucm

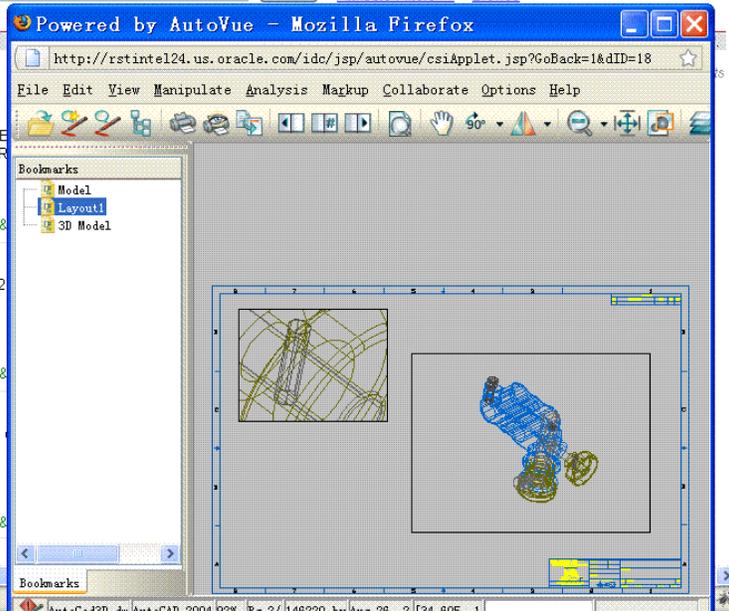
>>

[calcomp_907](#)
 W PION E R P W Y LAKE ARLI NGTON DR US 287 E
 ST WOOD LN TURNER WA RNELL RD E CRI & P RR
[Open with AutoVue](#)
 Source Group: [autovue_ucm](#) Path: [ADACCT](#)
 Author: sysadmin
 10.146.90.80/idc/idcplg?IdcService=GET_FIL...n=web&

[AutoCad3D](#)
 Model Layout1 3 1 A 4 5 6 7 8 8 7 6 5 4 3 1 D D C B 2
 SHT OF DATE: THIRD ANGLE PROJECTION
[Open with AutoVue](#)
 Source Group: [autovue_ucm](#) Path: [ADACCT](#)
 Author: sysadmin
 10.146.90.80/idc/idcplg?IdcService=GET_FIL...n=web&

[acad2006](#)
 Model small_square small_square text entity attribute
 arc
[Open with AutoVue](#)
 Source Group: [autovue_ucm](#) Path: [ADACCT](#)
 Author: sysadmin
 10.146.90.80/idc/idcplg?IdcService=GET_FIL...n=web&

[MicroStation](#)



Configuring Advanced Result List

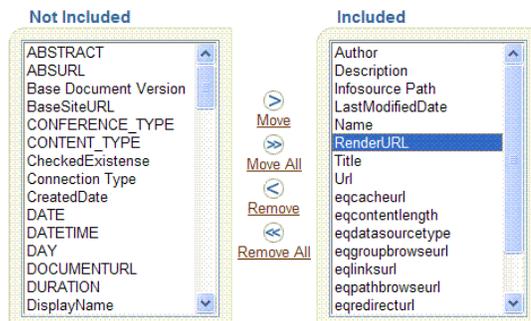
After the schedule is finished, you then need to configure Oracle SES to use customized Style Sheets before querying.

Please go to **Oracle SES Admin -> Global Settings -> Configure Search Result List** page, select **'Use Advanced Configuration'** option. In **'Attribute Selection'**, move **'RenderURL'** from left to right. Add the following lines (in bold) in the **'Style sheets'** on top of Infosource section.

```

<xsl:if test="renderurl[.='']">
    <a class="browseLink" href="{renderurl}">Open with AutoVue</a>
    <br />
</xsl:if>
<!-- Check for Infosource path -->
<xsl:if test="infosourcepath[.='']">
    <xsl:variable name="l_infosourcepath" select="infosourcepath"/>
    <xsl:choose>

```



Style sheets

Use style sheets to override the default look and feel of the search result list. For example, an XSLT may format the results differently based on the source type, and custom HTML styling may be provided in a Cascading Style Sheet (CSS).

Enter an XSLT to convert the XML result data into HTML.

```

</span>
<br />
</xsl:if>
</xsl:otherwise>
</xsl:choose>
<xsl:if test="renderurl[.='']">
  <a class="browseLink" href="{renderurl}">Open with AutoVue</a>
<br />
</xsl:if>
<!-- Check for Infosource path -->

```

Conclusion

AutoVue Document Service in Oracle SES integrates enables searching Oracle AutoVue visual CAD files. This new feature in Oracle SES 11g empowers better business decision-making, and increases revenue and profitability.



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Enterprise Search
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