

VirtualViewer[®]

Documentum Connector Integration Guide



DOC-0200-01

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Chapter 1 - Prerequisites

This document details how to connect the out-of-the-box VirtualViewer to Documentum using Snowbound DFC Connector.

Artifacts

#	Artifact	Notes
1	Documentum_DFC_VirtualViewer463_Integration_Deployment_Guide.pdf	Deployment instructions for integrating Snowbound's VirtualViewer® with Documentum DFC
2	tomcat_DFC_VV46.zip	Sample application integration for reference: Application Server: Tomcat 7.0.41 VirtualViewer Version: 4.6 Documentum Foundation Classes: 7.2.0050.0084
3	Video_TechOverview_of_VirtualViewer_DFC_DocumentumRepo.zip	Video file demonstrating VirtualViewer® accessing Documentum Repository using DFC Connector
4	classes.zip	Deployment artifact
5	DocumentumContentHandlerImpl.zip	Deployment artifact
6	ehcache.zip	Deployment artifact
7	lib.zip	Deployment artifact
8	viewer.zip	Deployment artifact
9	web.xml.zip	Deployment artifact

Chapter 2 - Integrating VirtualViewer WAR with the Snowbound Connector

Listed below are the steps to configure VirtualViewer to use the Snowbound DFC Connector.

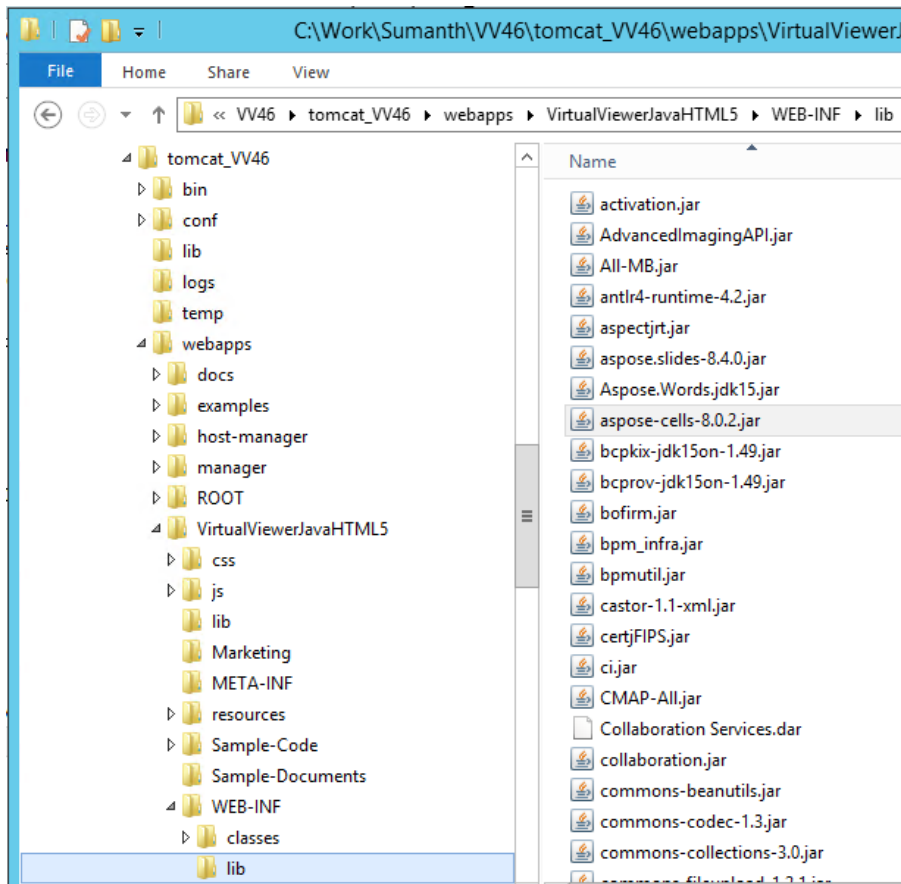
Adding the Libraries

Copy libraries from the artifact to the destination path.

Artifact: **lib.zip**

To: \<AppServer>\webapps\VirtualViewerJavaHTML5\WEB-INF\lib

Note:
Please do not overwrite any conflicts.

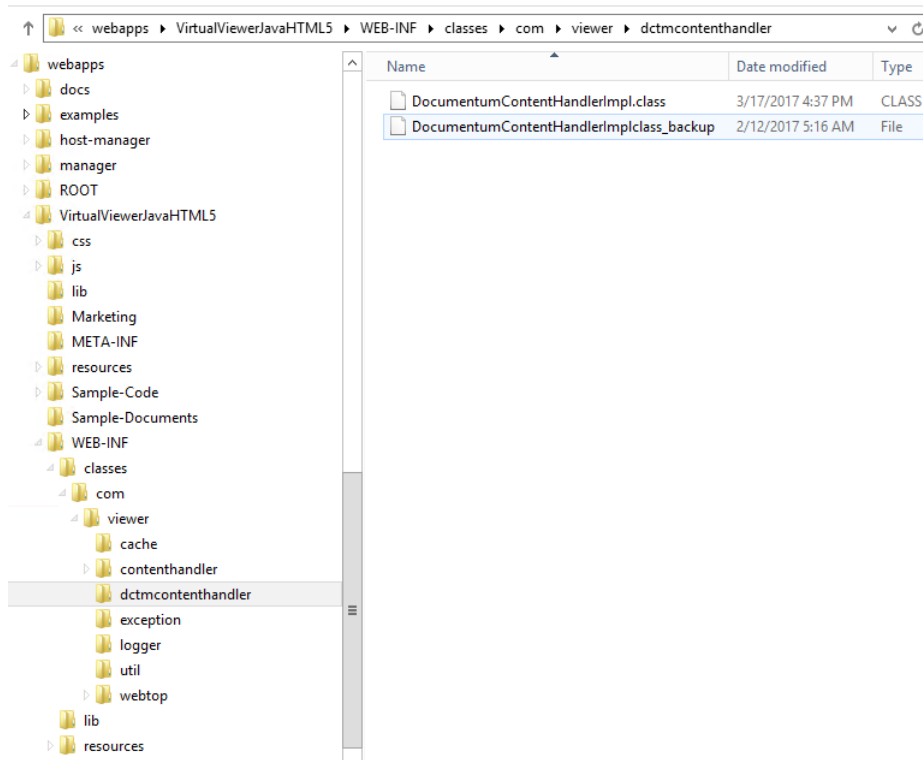


Updating DCTM Session Manager Class

Copy the class from the artifact to the destination path.

Artifact: **DocumentumContentHandlerImpl.zip**

To: \<AppServer>\webapps\VirtualViewerJavaHTML5\WEB-INF\classes\com\viewer\dctmcontenthandler

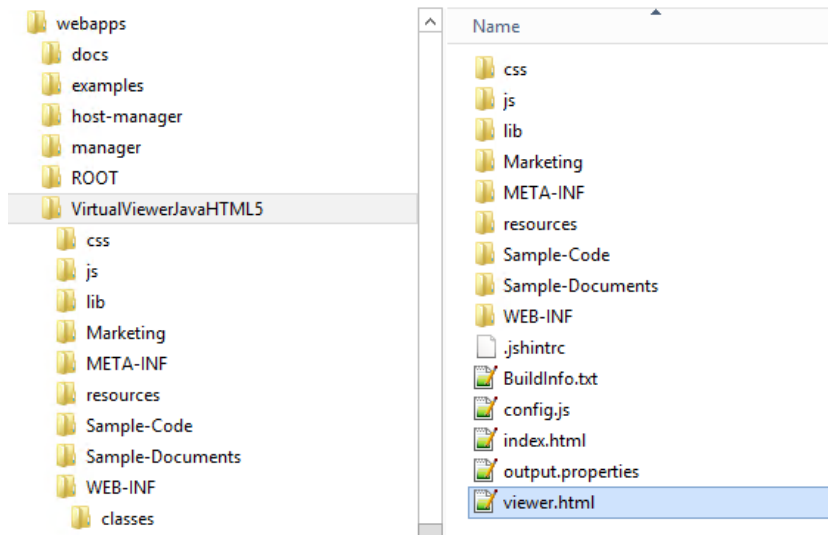


Configuring Viewer.html

Copy the viewer file from the artifact to the destination path.

Artifact: **viewer.zip**

To: \<AppServer>\webapps\VirtualViewerJavaHTML5\



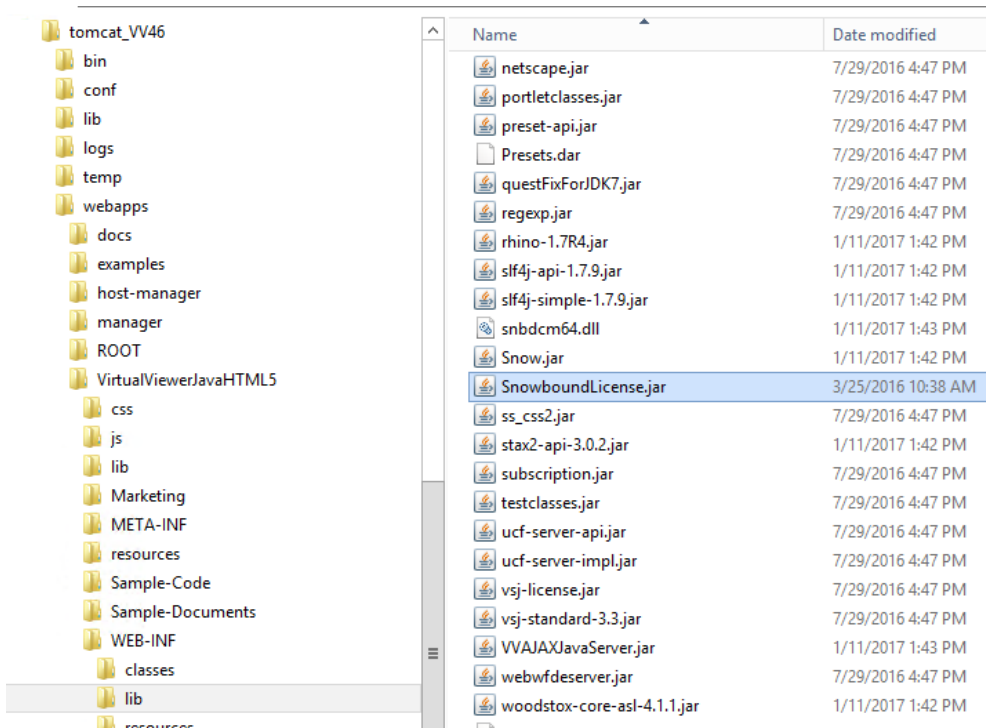
Configuring Snowbound License

Copy the **Snowbound license jar**. Please be sure to delete any prefixes/suffixes to the license file prior to copying, as shown in the screen print below.

Additionally, the suffix of the license file should indicate when the license is scheduled to expire. Please contact your account manager at Snowbound, if you need it to be extended/renewed.

Artifact: **Snowboundlicense.zip**

To: \<AppServer>\webapps\VirtualViewerJavaHTML5\



Configuring Properties

The following property files must be reviewed/updated as per the target deployment infrastructure/environment.

Web.xml

Verify/Update the **web.xml** to point to the **contentHandlerClass**.

com.viewer.contenthandler.ViewerContentHandler

Artifact: **web.xml.zip**

Location/File: <App Server>\webapps\VirtualViewerJavaHTML5\WEB-INF\web.xml


```

<servlet>
  <servlet-name>AjaxServlet</servlet-name>
  <servlet-class>com.snowbound.ajax.servlet.AjaxServlet</servlet-class>
  <init-param>
    <param-name>codebase</param-name>
    <param-value>http://localhost:8080/VirtualViewerJavaHTML5</param-value>
  </init-param>
  <!--Separate content server not available in evaluations -->
  <init-param>
    <param-name>servletURL</param-name>
    <param-value>http://localhost:8080/VirtualViewerJavaContentServer</param-value>
  </init-param>
  <init-param>
    <param-name>contentType</param-name>
    <param-value>integrated</param-value>
  </init-param>
  <!--Below parameters only used when contentType is set to "integrated"-->
  <init-param>
    <param-name>contentHandlerClass</param-name>
    <param-value>com.viewer.contenthandler.ViewerContentHandler</param-value>
  </init-param>

```

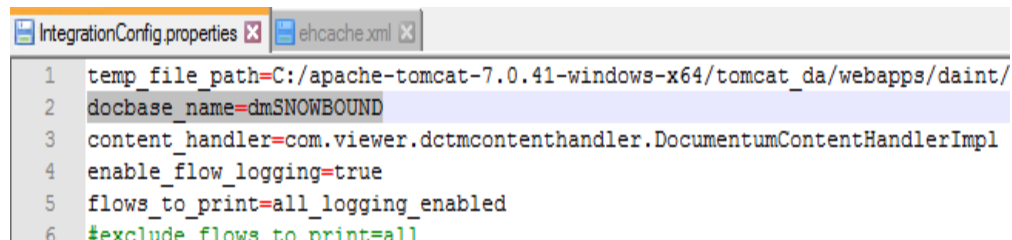
IntegrationConfig.properties

Verify/update that the **IntegrationConfig.properties** has the following values set accurately:

- content_handler= com.viewer.dctmcontenthandler.DocumentumContentHandlerImpl
- docbase_name=<name of the Documentum docbase>
- docbase_username=<Documentum username, which has access to view/edit documents>
- docbase_domain=<user domain>
- docbase_userpwd=<user password>

Artifact: **classes.zip**

Location/File: <App Server>\webapps\VirtualViewerJavaHTML5\WEB-INF\classes\com\viewer\ IntegrationConfig.properties



```

IntegrationConfig.properties
1 temp_file_path=C:/apache-tomcat-7.0.41-windows-x64/tomcat_da/webapps/daint/
2 docbase_name=dm.SNOWBOUND
3 content_handler=com.viewer.dctmcontenthandler.DocumentumContentHandlerImpl
4 enable_flow_logging=true
5 flows_to_print=all_logging_enabled
6 #exclude flows to print=all

```

Ecache.xml

Verify/update the **ehcache.xml** to point to the persistent cache storage location

Artifact: **ehcache.zip**

Location/File: <App Server>\webapps\VirtualViewerJavaHTML5\WEB-INF\ehcache.xml

```
<config xmlns:xsi='http://www.w3.org/2001/XMLSchema-instance' xmlns='http://www.ehcache.org/v3'
  xsi:schemaLocation="http://www.ehcache.org/v3 ../../main/resources/ehcache-core.xsd">
  <persistence directory="/Work/Sumanth/VV46/tomcat_VV46/temp/vvcache" />
  <cache alias="vvDocumentCache">
    <key-type>java.lang.String</key-type>
    <value-type>com.snowbound.clientcontentserver.DocumentIdAndContent</value-type>
```

Dfc.properties

Verify/update the **dfc.properties** is pointing to the correct **docbroker**. If you already have a dfc.-properties on the server, simply point this to the original.

Artifact: **classes.zip**

Location/File: <App Server>\webapps\VirtualViewerJavaHTML5\WEB-INF\classes\dfc.properties

dfc.properties

```
#include C:\Program Files\EMC\Documentum\7.1\config\dfc.properties
```

Log4j

Verify/update the **log4j** to point to the correct path for logs generation.

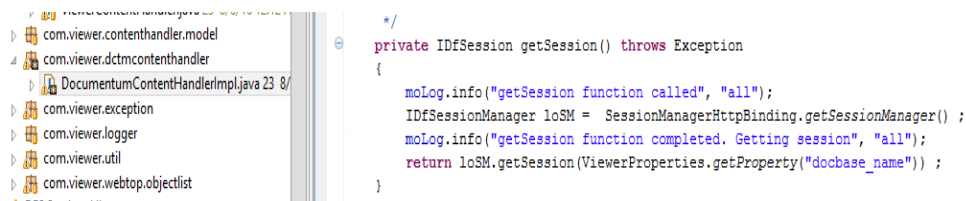
Artifact: **classes.zip**

Location/File: <App Server>\webapps\VirtualViewerJavaHTML5\WEB-INF\classes\log4j.properties

```
log4j.logger.com.viewer = DEBUG, file1
log4j.appender.file1=org.apache.log4j.RollingFileAppender
log4j.appender.file1.File=C:/Work/Sumanth/VV46/tomcat_VV46/temp/viewer.log
log4j.appender.file1.MaxFileSize=10MB
log4j.appender.file1.MaxBackupIndex=10
log4j.appender.file1.Append=false
log4j.appender.file1.layout=org.apache.log4j.PatternLayout
log4j.appender.file1.layout.ConversionPattern=%d{ABSOLUTE} %5p [%t] %c{1} - %m%n
```

Session Manager Implementation

- All functions (outside of the session management) which are available out-of-the-box of the Snowbound Connector become automatically available (annotation management, save operations, retrieve operations etc.).
- The session management needs to be implemented based on the customer specific requirements, unless what is already implemented matches the customer needs. As an example, in WDK integration, we simply used the WDK user session (in Webtop, for example, it's the session of the user logged into Webtop.) for the connector to access the documents and make them available in the viewer. Since we piggy back on the security ACL definitions from the underlying repository, if the user does not have access to a document to edit, the connector would also naturally fail to save any edits, there by keeping the underlying permission sets intact.



```

com.viewer.contenthandler.model
com.viewer.dctmcontenthandler
  DocumentumContentHandlerImpl.java 23 8/
com.viewer.exception
com.viewer.logger
com.viewer.util
com.viewer.webtop.objectlist
  
```

```

*/
private IdfSession getSession() throws Exception
{
    moLog.info("getSession function called", "all");
    IdfSessionManager loSM = SessionManagerHttpBinding.getSessionManager();
    moLog.info("getSession function completed. Getting session", "all");
    return loSM.getSession(ViewerProperties.getProperty("docbase_name"));
}
  
```

- In this POC, to help the reader easily understand the integration, we supplied the user information via properties file, for the connector to create a session from.

In the example below, as you see, the credentials are simply provided via the properties file:

```
private IDfSession getSession() throws Exception
{
    moLog.debug("getSession function called -- POC -- ", "all");
    String dctm_username = ViewerProperties.getProperty("docbase_username");
    String dctm_domain = ViewerProperties.getProperty("docbase_domain");
    String dctm_pwd = ViewerProperties.getProperty("docbase_userpwd");
    String dctm_docbase = ViewerProperties.getProperty("docbase_name");

    IDfClient dfClient = new DfClient();
    IDfSessionManager sMgr = dfClient.newSessionManager();
    IDfLoginInfo loginInfo = new DfLoginInfo();
    loginInfo.setUser(dctm_username);
    loginInfo.setDomain(dctm_domain);
    loginInfo.setPassword(dctm_pwd);
    sMgr.setIdentity(dctm_docbase, loginInfo);
    IDfSession dfSession = null;
    dfSession = sMgr.getSession(dctm_docbase);

    moLog.debug("getSession function completed. Getting session -- POC -- ", "all");
    return dfSession ;
}
```

Accessing Documentum object via VirtualViewer

URL Formation:

`http://<app-server>:<port>/VirtualViewerJavaHTML5/viewer.html?documentId=<r_object_id>`

Sample URL:

<http://localhost:8080/VirtualViewerJavaHTML5/viewer.html?documentId=0901e24080004cca>

BankStatement.pdf

Sample Bank Statement #1

Bank Logo

STATEMENT FOR
36 Jenna Jones
441 Amy Street
Anytown, IL

STATEMENT DATE
06-01-20 to 06-28-20

CHECKING ACCOUNT
888-888-2222

Previous Statement Balance On 05-01-20 355.00
Total of 2 Deposits For 355.00
Total of 4 Withdrawals For 1,010.00
Total Service Charges 4.00
New Balance 316.00

CHEQUES & OTHER DEBITS	CHEQUE	DATE PAID	AMOUNT	CHEQUE	DATE PAID	AMOUNT
	ATM	June 3	100.00	Debit	June 12	150.00
	C344	June 4	100.00	ATM	June 18	200.00
	C345	June 7	100.00			
	Debit	June 8	125.00			
	Monthly Maintenance Charge					4.00

DEPOSITS AND OTHER CREDITS	DATE POSTED	AMOUNT
Paycheck - XYZ Company	June 7	292.00
Paycheck - XYZ Company	June 15	292.00

ATM LOCATIONS USED

THANK YOU FOR BANKING WITH Your Bank!