

*IBM(R) Content Manager for Multiplatforms Version 8.1  
(Program Number 5724-B19)*

*IBM(R) Enterprise Information Portal for Multiplatforms Version 8.1  
(Program Number 5724-B43)*

*IBM(R) Content Manager eClient Version 8.1*

*IBM(R) Content Manager Client for Windows Version 8.1*

***This fixpack is available in ENGLISH only. It has not been translated into other languages.***

## Contents

About this readme file .....	4
1.1 Introduction .....	4
1.2 Customer technical support: eCare - Support Web site .....	4
Install Information for all Content Management V8.1 Fixpacks .....	6
2.1 Windows Platform .....	6
2.1.1 Content Manager for Windows .....	6
2.1.2 eClient Windows .....	8
2.1.3 EIP Windows .....	8
2.1.4 Client for Windows .....	9
2.2 AIX Platform .....	9
2.2.1 Content Manager AIX .....	10
2.2.2 eClient AIX .....	11
2.2.3 EIP AIX .....	11
2.3 Solaris Platform .....	12
2.3.1 Content Manager Solaris .....	12
2.3.2 eClient Solaris .....	13
2.3.3 EIP Solaris .....	14
2.4 DB2 Text Information Extender (TIE) Fixpack information .....	16
Fixes and descriptions .....	16
3.1 Fixpack 2 .....	16
3.1.1 Content Manager .....	16
3.1.2 EIP .....	17

3.1.3 eClient .....	22
3.1.4 Client for Windows .....	24
3.2 Fixpack 1 .....	25
3.2.1 EIP .....	25
3.2.2 eClient .....	28
3.2.3 Client for Windows .....	30
3.2.4 Resource Manager .....	31
Known problems and restrictions .....	31
4.1 Information Mining .....	31
4.2 CM v7 to v8.1 Migration issues .....	32
Integration for IBM Content Manager .....	32
5.1 Siebel Integration for IBM Content Manager .....	32
5.1.1 Siebel Integration for IBM Content Manager guide update .....	32
5.1.2 Additional troubleshooting tips .....	34
5.1.3 Additional miscellaneous tip .....	35
5.2 PeopleSoft Integration for IBM Content Manager .....	36
5.2.1 PeopleSoft Integration for IBM Content Manager guide update .....	36
5.2.2 Additional installation operations .....	38
5.2.3 Additional troubleshooting information .....	39
5.2.4 Using multiple PeopleSoft servers .....	40
5.2.5 Using spaces for tab names in PeopleSoft .....	40
5.2.6 PeopleSoft authentication timeout .....	40
5.2.7 IBM Content Manager, PeopleSoft and LDAP .....	41
Documentation updates .....	42
6.1 Information Mining - Configuring the Web Application Server for the Information Structuring Tool .....	42
6.2 Client for Windows Programming Reference .....	43
6.3 Installing, Configuring, and Managing the eClient .....	45
6.4 Siebel Integration for IBM Content Manager Guide .....	47
6.5 Planning and Installing Your Content Management System Guide .....	48
Validation Utility .....	50
7.1 Overview .....	50
7.2 Configuration .....	50
7.2.1 Shell script modifications .....	51
7.2.2 Logging .....	51

7.3 Resource manager - library server validation .....	51
7.3.1 Invocation .....	52
7.3.2 Validation discrepancy reports .....	53
7.4 Resource manager - volume validation .....	57
7.4.1 Invocation .....	57
7.4.2 Validation discrepancy reports .....	58
7.4.3 XML DTD for validation reports .....	60
7.4.4 Migration considerations .....	62

# 1 About this readme file

This readme contains new information, known problems, and updates to the documentation in support of

- Content Manager Version 8.1,
- Enterprise Information Portal Version 8.1,
- Content Manager eClient Version 8.1,
- Content Manager Client for Windows Version 8.1, and
- VideoCharger Version 8.1.

This is an interim fixpack between Formal Corrective Service Deliverables (CSDs). It contains APARs from previous fixpacks as well as new fixes that are only found in this fixpack.

**IMPORTANT:** Fixpacks do not receive extensive testing like CSDs. Do not install this fixpack unless you require a particular fix.

The latest version of this readme document is available at this Web site:

[ftp://ftp.software.ibm.com/ps/products/content\\_manager/](ftp://ftp.software.ibm.com/ps/products/content_manager/)

***This fixpack is available in ENGLISH only. It has not been translated into other languages.***

## 1.1 Introduction

This readme document is the first document you reference when you are setting up and installing the FixPack for v8.1 Content Manager, v8.1 Enterprise Information Portal, v8.1 Content Manager eClient, v8.1 Content Manager Client for Windows or VideoCharger Version 8.1.

The information in this readme is grouped into four categories:

- Installation - which describes installation restrictions and considerations.
- Known problems - subdivided into area topics, describes code restrictions and problems, and provides workaround solutions.
- New information - subdivided into area topics, provides additional information, not found elsewhere in the documentation.
- Updated documentation - references the documentation, provides corrections and additional information.

## 1.2 Customer technical support: eCare - Support Web site

For any questions, concerns, or problems related to Content Manager for Multiplatforms, visit this Web site:

[www.ibm.com/software/data/cm/cmgr/mp/support.html](http://www.ibm.com/software/data/cm/cmgr/mp/support.html)

For any questions, concerns, or problems related to Enterprise Information Portal, visit this Web site:

[www.ibm.com/software/data/eip/support.html](http://www.ibm.com/software/data/eip/support.html)

There you will be able to browse or search many technical documents, including Frequently Asked Questions (FAQs), Hints and Tips, defects (APARs), and other important information.

[Ref: d50182]

## 2 Install Information for all Content Management V8.1 Fixpacks

The fixpack install and uninstall instructions are organized by platform and by product. Go to the appropriate section for your system and follow the steps described.

### 2.1 Windows Platform

#### 2.1.1 Content Manager for Windows

##### Install:

###### DEFINITIONS OF ENVIRONMENT VARIABLES

\*\*\*\*\*

- \* [DBNAME]: Library Server database name. Ex : icmnsdb
- \* [DBUSERID]: User id used to create the Library Server database. Ex: icmadmin
- \* [DBPASSWORD]: Password for userid used to create the Library Server database. Ex: password
- \* [DBSCHEMA]: Schema name for the Library Server database. Ex: icmadmin
- \* [Deployed RM Location]: Location of the deployed Resource Manager web application in WebSphere.
- \* Ex: c:\Websphere\AppServer\installedApps\icmrm.ear. Path cannot contain any spaces.

\*\*\*\*\*

##### **Scenario A : Using the Auto-Launch Feature** (The preferred method of installation)

1. Make sure your DB2 and Websphere are stopped. This is required because files could be locked and might prevent the fixpack from installing properly. Also make sure that the jar command can be run from within a command prompt window; this is required for the Resource Manager to update properly.
2. Set the following environment variables by going to Start --> Settings -->Control Panel --> System. (Note that these are Windows 2000-specific instructions; Windows NT might have slight differences)
3. The System Properties panel appears. On the Advanced tab, select the Environment Variable button .
4. The Environment Variables panel appears. Add the following variables as System variables, by selecting the New button and entering the information below in the Variable Name and Variable Value fields for New System Variable:

DBNAME (ex: DBNAME =icmnsdb ) (*See DEFINITIONS OF ENVIRONMENT VARIABLES*)  
DBUSERID (ex: DBUSERID=icmadmin )  
DBPASSWORD (ex: DBPASSWORD=password )  
DBSCHEMA (ex: DBSCHEMA=icmadmin )  
RMLOCATION (ex: RMLOCATION=c:\Websphere\AppServer\installedApps\icmrm.ear)

5. Click OK.
6. After you have downloaded the fixpack from the FTP site, double-click on the executable CM810.20.WIN.EXE. The default directory to where the files extract is C:\TEMP. You can select another directory to where you want the files extracted (e.g. ICMROOT folder's FP2\_Install folder). Make sure the "When done Unzipping Run" checkbox is checked.
7. After selecting the unzip location, click Unzip. The fixpack installation runs after extraction is complete.

*If the autolaunch does not occur: please perform step 4 from Scenario A and then follow the steps for \_\_\_\_\_*  
*Scenario B: Manual launch.*

8. Remove the environment variables set in step 4.
9. Open a command prompt and run the following commands:  
cd %ICMROOT%\bin

icmpcidx.exe [DBName] [DBUserID] [DBPassword]  
ex: icmpcidxicmnlbdb icmadmin password

**Scenario B : Manual launch** (This scenario can be used if you do not want to use the auto-launch feature or if the auto-launch feature fails)

1. Make sure your DB2 and Websphere are stopped. This is required because files could be locked and might prevent the fixpack from installing properly. Also make sure that the jar command can be run from within a command prompt window; this is required for Resource Manager to update properly.
2. After you have downloaded the fixpack from the FTP site, double-click on the executable CM810.20.WIN.EXE. The default location to where the files extract is C:\TEMP, or you can select another location to where you want the files extracted (e.g. ICMROOT folder's FP2\_Install folder). Make sure the "When done Unzipping Run" check box is not checked.
3. After selecting the unzip location, click Unzip.
4. Open a command prompt window and set the following environment variables:

DBNAME (ex: set DBNAME =icmnlbdb ) (*See DEFINITIONS OF ENVIRONMENT VARIABLES*)  
DBUSERID (ex: set DBUSERID=icmadmin )  
DBPASSWORD (ex: set DBPASSWORD=password )  
DBSCHEMA (ex: set DBSCHEMA=icmadmin )  
RMLOCATION (ex: set RMLOCATION=c:\Websphere\AppServer\installedApps\icmrm.ear)

5. Using the same command prompt window as above in step 4, in which the environment variables are set, go to the directory in which the fixpack was extracted (eg c:\Temp or ICMROOT\FP2\_Install). Enter the following install command.

Install command :

java -jar LANG\fixpack\_CM\_win\_8.1.0.20.jar

6. This step needs to be done even if the auto configuration works. If the auto configuration fails, run the steps listed below in the "optional" section first and then do the following.

Open a command prompt and run the following commands:

cd %ICMROOT%\bin

icmpcidx.exe [DBName] [DBUserID] [DBPassword]

ex: icmpcidxicmnlbdb icmadmin password

*\*Note - LANG above should be replaced by a three character language code for a given locale. (e.g. ENU for English).*

*\*\*Note - Numbering used above will increment for subsequent fixpack releases (8.1.0.10, 8.1.0.20)*

*\*\*\*Note - The install may complain about finding files that are newer than the ones in the fixpack and ask you to check the fixpack log. Note what type of files are listed, as you should expect that configuration files such as \*.ini and \*.properties files will not be overwritten by the fixpack. You can disregard this warning.*

\*\*\*\*\*

**\* This section is optional, to be used in the event auto configuration fails.**

**\* Post Fixpack install configuration:**(*See DEFINITIONS OF ENVIRONMENT VARIABLES*)

- \* 1. Open a Command Prompt window and make sure that the jar command can be run within that window; this is required for Resource Manager to update properly.
- \* 2. Enter: cd /d %icmroot%\config
- \* 3. Enter: icmrmupdateFP [Deployed RM Location]  
\* ex: icmrmupdateFP C:\Websphere\AppServer\installedApps\ICMRM.ear\  
\* 4. Enter: icmnl81fp1 [DBName] [DBUserID] [DBPassword] [DBSchema]  
\* ex: icmnl81fp1 icmnlbdb icmadmin password icmadmin  
\* 5. Enter: icmprepbd.bat [DBName] [DBUserID] [DBPassword] [DBSchema]

```

*      ex: icmprepbd icmnlbdb icmadmin password icmadmin
* 6. Enter ./icmbdlbdb.bat
*      ex: icmbindbdb
*****

```

**Uninstall:**

1. Make sure your DB2 and Websphere are stopped. This is required because files could be locked and prevent the fixpack from uninstalling properly. Also make sure that the jar command can be run from in a command prompt window; this is required for Resource Manager to uninstall properly
2. Open a command prompt window and set the following environment variables if not already set.

*(See DEFINITIONS OF ENVIRONMENT VARIABLES.)*

```

DBNAME (ex: set DBNAME =icmnlbdb )
DBUSERID (ex: set DBUSERID=icmadmin )
DBPASSWORD (ex: set DBPASSWORD=password )
DBSCHEMA (ex: set DBSCHEMA=icmadmin )
RMLOCATION (ex: set RMLOCATION=c:\Websphere\AppServer\installedApps\icmrm.ear)

```

3. From the same command prompt window as step 2, go to your original FP2 install location, C:\temp or ICMROOT\FP2\_Install folder and enter the following command:

```
java -jar ENU\fixpack_CM_win_8.1.0.20.jar -uninstall
```

**2.1.2 eClient Windows**

**Install:**

1. Make sure Websphere is stopped. This is required because files could be locked and may prevent the fixpack from installing properly.
2. Once downloaded, double-click eClient810.20.WIN.exe file. The windows fixpack comes in a self-extracting zip file, which will auto-launch using the install command once extraction is complete. You may select where you want the files extracted to, and whether or not to auto-launch. After selecting the unzip location, click Unzip.
3. (Optional) If you chooses not to auto-launch, then the following command must be executed from the directory where the fixpack was extracted to.

```

Install command:
java -cp setup.jar run -silent

```

**Uninstall:**

1. Incremental uninstall of fixpacks for eClient Windows is not supported. If you run the uninstall you will lose both fixpacks and GA.

**2.1.3 EIP Windows**

**Install:**

**DEFINITIONS OF ENVIRONMENT VARIABLES**

```
*****
```

- \* [DBNAME]: EIP administration database name. Ex : icmnlbdb
- \* [DBUSERID]: User id used to create the EIP administration database. Ex: icmadmin
- \* [DBPASSWORD]: Password for userid used to create the EIP administration database. Ex: password
- \* [DBSCHEMA]: Schema name for the EIP administration database. Ex: icmadmin

```
*****
```

1. Make sure your DB2 and Websphere are stopped. This is required because files could be locked and might prevent the fixpack from installing properly.



2. Once downloaded, double-click on the executable EIP810.20.WIN.EXE. This will invoke the self-extracting fixpak executable.
3. You will be asked whether or not to auto-launch. If you leave the checkbox labeled "When done unzipping run: enu\setup.exe /SMS" checked, the fixpak installation will start automatically after the files are unzipped.. You can specify the location to extract the fixpak image to, e.g. C:\TEMP\eipfp. After selecting the unzip location, click Unzip.
4. If you want to run the fixpak install at a later time or if you unchecked the box to automatically start the fixpak install, then you can manually start the fixpak install by navigating to the location where you extracted the fixpak image, e.g. C:\TEMP\eipfp, and then go to the ENU directory and run the setup.exe located there.
5. cd %CMBROOT%\CONFIG\CreateDB\dbutil\ from a DB2CMD window.
6. Run icmnl81fp1.bat [DBName] [DBUserID] [DBPassword] [DBSchema]  
ex: icmnl81fp1 icmnl81 icmnl81 password icmnl81
7. Run eipbindlsdb.bat [DBName] [DBUserID] [DBPassword] [DBSchema]  
ex: eipbindlsdb.bat icmnl81 icmnl81 password icmnl81

*\*Note: If you see a message during the install saying "An error occurred during the move data process: -115," please note that this error occurred because the specified file on your system is locked by another process. Usually this error will not occur if you reboot your system before running the fixpack install.*

#### **Uninstall:**

1. Incremental uninstall of fixpaks for EIP Windows is not supported. If you run the uninstall you will lose both fixpaks and GA.

#### **2.1.4 Client for Windows**

##### **Install:**

1. Run the fixpak executable winclient810.20.exe.
2. Follow the instructions presented in the panels.

##### **Hints and Tips:**

You should see a message stating "The Installation Wizard has successfully installed IBM Content Manager Client for Windows. Click Finish to exit the wizard."

You can verify the fixpak installation by checking in the Add/Remove Programs window. Simply click on "IBM Content Manager Client for Windows v8.1" and then click on "Support Information". You can see if the version has been updated.

Note that the FIXPAKAPPLIED key in the registry may not display the correct version number.

**Important:** Under certain conditions, you may receive the following message during the fixpack installation: "The feature you are trying to use is on a network resource that is unavailable. Click OK to try again, or enter an alternate path to a folder containing the installation package 'IBM Content Manager Client for Windows v8.1.msi' in the box below.". This file is located on the IBM Content Manager Client for Windows V8.1 CD. This CD will be needed to complete the fixpack installation.

**Recommendation:** For organizations with numerous Client for Windows installations, make this file accessible on a network resource. This will avoid requiring having the CD available for each fixpack installation.

## 2.2 AIX Platform

### 2.2.1 Content Manager AIX

#### Install:

##### DEFINITIONS OF ENVIRONMENT VARIABLES

\*\*\*\*\*

- \* [DB2INSTANCE]: database instance name. Ex : db2inst1
- \* [DBNAME]: Library Server database name. Ex : icmnlbdb
- \* [DBUSERID]: User id used to create the Library Server database. Ex: icmadmin
- \* [DBPASSWORD]: Password for userid used to create the Library Server database. Ex: password
- \* [DBSCHEMA]: Schema name for the Library Server database. Ex: icmadmin
- \* [Deployed RM Location]: Location of the deployed Resource Manager web application in WebSphere.
- \* Ex: /usr/WebSphere/AppServer/installedApps.icmrm.ear.

\*\*\*\*\*

1. Make sure your DB2 and Websphere are stopped. This is required because files could be locked and may prevent the fixpack from installing properly.

2. Set the following environment variables. (See DEFINITIONS OF ENVIRONMENT VARIABLES)

DB2INSTANCE (ex: export DB2INSTANCE=db2inst1 )

DBNAME (ex: export DBNAME=icmnlbdb )

DBUSERID (ex: export DBUSERID=icmadmin )

DBPASSWORD (ex: export DBPASSWORD=password )

DBSCHEMA (ex: export DBSCHEMA=icmadmin )

RMLOCATION (ex: export RMLOCATION=/usr/WebSphere/AppServer/installedApps/icmrm.ear/ )

3. For AIX users, the fixpack comes in tar file format and requires gunzip-ing and untar-ing to the destination of your choice. The gunzip file is named: *CM810.20.AIX.tar.gz*

4. Once downloaded , gunzip-ing, and untar-ing is complete, you must execute the following command from the *directory* where the fixpack was extracted to.

Install command :

java -jar fixpack\_CM\_aix\_8.1.0.20.jar

5. This step needs to be done even if the auto configuration works. If the auto configuration fails, run the steps listed below in the "optional" section first and then do the following.

Open a command prompt and run the following commands:

cd %ICMROOT%\bin

icmxcidx.exe [DBName] [DBUserID] [DBPassword]

ex: icmxcidx icmnlbdb icmadmin password

*\*Note - Numbering used above will increment for subsequent fixpack releases (8.1.0.10, 8.1.0.20)*

*\*\*Note - The install may complain about the file \$ICMROOT/config/setprocenv.sh is newer than the one in the fixpack, please ignore this statement.*

*\*\*\*Note - The install may complain about finding files that are newer than the ones in the fixpack and ask you to check the fixpack log. Note what type of files are listed, as you should expect that configuration files such as \*.ini and \*.properties files will not be overwritten by the fixpack. You can disregard this warning.*

*\*\*\*\*Note - For AIX 5.1, be sure that the "oslevel" command returns "5.1.0.0" (or a number something like this). If it returns a junk string, be sure to install the right fix for this.*

*Unless the "oslevel" returns a number, the fixpack installation won't proceed.*

*\*\*\*\*\*Note - On systems not having both Resource Manager and Library Server installed, user will see:*

*“Errors occurred during installation. Check the log file ("fixpack.log") for details. The installation is restored.” Please disregard this message.*

\*\*\*\*\*

*\* This section is **optional**, to be used in the event auto configuration fails.*

*\* **Post Fixpack install configuration:** (See DEFINITIONS OF ENVIRONMENT VARIABLES)*

- \* 1. Open a Command Prompt windows and make sure the **Java JDK jar command is in the path.**
- \* 2. Cd \$ICMROOT/config
- \* 3. Run: icmspupdateFP.sh
  - \* ex: ./icmspupdateFP.sh install
- \* 4. db2start (use your db2 admin userid to do this job ; su - \$DBUSERID)
- \* 5. From same location run: lsrebindFP.sh (use your db2 admin userid to do this job)
  - \* ex: ./lsrebindFP.sh
- \* 6. Run : icrmupdateFP.sh
  - \* ex: ./icrmupdateFP.sh

\*\*\*\*\*

#### **Uninstall:**

1. Make sure your DB2 and Websphere are stopped. This is required because files could be locked and may prevent the fixpack from uninstalling properly.
2. Set the following environment variables. (See DEFINITIONS OF ENVIRONMENT VARIABLES)
  - DB2INSTANCE (ex: export DB2INSTANCE=db2inst1 )
  - DBNAME (ex: export DBNAME=icmnlbdb )
  - DBUSERID (ex: export DBUSERID=icmadmin )
  - DBPASSWORD (ex: export DBPASSWORD=password )
  - DBSCHEMA (ex: export DBSCHEMA=icmadmin )
  - RMLOCATION (ex: export RMLOCATION=/usr/Websphere/AppSrver/installedApps/icrm.ear/ )
3. Open a Command Prompt window.
4. cd \$ICMROOT/config
5. Execute: ./icrmupdateFP.sh -uninstall
  - ex: ./icrmupdateFP.sh -uninstall
6. Cd to your FP2\_Install folder and execute following command:
  - java -jar fixpack\_CM\_aix\_8.1.0.20.jar -uninstall

### **2.2.2 eClient AIX**

#### **Install:**

1. Make sure Websphere is stopped. This is required because files could be locked and may prevent the fixpack from installing properly.
2. Once downloaded, untar the eClient810.20.UNIX.tar file.
3. The following install command must be executed from the directory where the fixpack was extracted to.
  - Install command :
  - java -cp setup.jar run -silent

#### **Uninstall:**

1. Incremental uninstall of fixpacks for eClient AIX is not supported. If you run the uninstall, you will lose both fixpacks and GA.

### **2.2.3 EIP AIX**

#### **Install:**

##### **DEFINITIONS OF ENVIRONMENT VARIABLES**

\*\*\*\*\*

- \* [DBNAME]: EIP administration database name. Ex : icmnlbdb
- \* [DBUSERID]: User id used to create the EIP administration database. Ex: icmadmin

\* [DBPASSWORD]: Password for userid used to create the EIP administration database. Ex: password  
\* [DBSCHEMA]: Schema name for the EIP administration database. Ex: icmadmin  
\*\*\*\*\*

1. Download the *EIP810.20.AIX.tar.gz* file onto the local disk, then gunzip and untar it.
2. Run the script: `./cmbxupdate.sh` (This script will prompt for a value out of 4 options.)  
Options: 1. apply and commit  
          2. apply only  
          3. commit (already the filesets are in the apply state)  
          4. roll back (not valid for committed filesets)
3. Stop the db2, and WAS.
4. `cd $CMBROOT/lib`
5. `rm -f $db2insthome/sqllib/function/ICM*`
6. `cp -p ICM* $db2insthome/sqllib/function/`
7. `cd $CMBROOT/config`
8. `db2start` (use db2 admin userid to do this job; `su - $DBUSERID`)
9. `su - $DBUSERID; cd $CMBROOT/config`
10. Run : `eipbindlsdb.sh`  
      ex: `./eipbindlsdb.sh`

### Uninstall:

\*Note - If the fixpacks are in the committed state, the only way to uninstall the fixpack is to uninstall the whole product.

1. If the fixpacks are in the applied state, then option 4 of step 2 will uninstall the fixpack.

If the user wants to bring the database back to the original form: then

1. After uninstalling the fixpack, stop the db2, and WAS.
2. `cd $CMBROOT/lib`  
   3. `cp -p ICM* $db2insthome/sqllib/function/.`
4. `su - $DBUSERID; cd $ICMROOT/config;`
5. Run : `eipbindlsdb.sh`  
      ex: `./eipbindlsdb.sh`

## 2.3 Solaris Platform

### 2.3.1 Content Manager Solaris

#### Install:

##### DEFINITIONS OF ENVIRONMENT VARIABLES

\*\*\*\*\*

\* [DB2INSTANCE]: database instance name. Ex : db2inst1  
\* [DBNAME]: Library Server database name. Ex : icmnlbdb  
\* [DBUSERID]: User id used to create the Library Server database. Ex: icmadmin  
\* [DBPASSWORD]: Password for userid used to create the Library Server database. Ex: password  
\* [DBSCHEMA]: Schema name for the Library Server database. Ex: icmadmin  
\* [Deployed RM Location]: Location of the deployed Resource Manager web application in WebSphere.  
\*\*\*\*\*

1. Make sure your DB2 and Websphere are stopped. This is required because files could be locked and may prevent the fixpack from installing properly.
2. Set the following environment variables. (*See DEFINITIONS OF ENVIRONMENT VARIABLES.*)  
   `DB2INSTANCE` (ex: `export DB2INSTANCE=db2inst1` )  
   `DBNAME` (ex: `export DBNAME=icmnlbdb` )  
   `DBUSERID` (ex: `export DBUSERID=icmadmin` )  
   `DBPASSWORD` (ex: `export DBPASSWORD=password` )

- DBSCHEMA (ex: export DBSCHEMA=icmadmin )  
 RMLOCATION (ex: export RMLOCATION=/opt/WebSphere/AppServer/installedApps/icmrm.ear/ )
- For SUN users, the fixpack comes in tar file format and requires gunzip-ing and untar-ing to the destination of your choice. The download file is named: *CM810.20.SUN.tar.gz*
  - When downloaded, gunzip-ing and untar-ing is complete, you must execute the following command from the *directory* where the fixpack was extracted to.  
 Install command :  

```
java -jar fixpack_CM_sun_8.1.0.20.jar
```
  - This step needs to be done even if the auto configuration works. If the auto configuration fails, run the steps listed below in the “optional” section first and then do the following.  
 Open a command prompt and run the following commands:  

```
cd %ICMROOT%\bin
icmxcidx.exe [DBName] [DBUserID] [DBPassword]
ex: icmxcidx icmnlbdb icmadmin password
```

*\*Note - Numbering used above will increment for subsequent fixpack releases (8.1.0.10, 8.1.0.20)*  
*\*\*Note - The install may complain about the file \$ICMROOT/config/setprocenv.sh is newer than the one in the fixpack, please ignore this statement.*  
*\*\*\*Note - The install may complain about finding files that are newer than the ones in the fixpack and ask you to check the fixpack log. Note what type of files are listed, as you should expect that configuration files such as \*.ini and \*.properties files will not be overwritten by the fixpack. You can disregard this warning.*  
*\*\*\*Note- On systems not having both Resource Manager and Library Server installed, user will see: “Errors occurred during installation. Check the log file (“fixpack.log”) for details. The installation is restored.” Please disregard this message.*

\*\*\*\*\*  
*\* This section is **optional**, to be used in the event auto configuration fails.*  
*\* Post Fixpack install configuration: (See DEFINITIONS OF ENVIRONMENT VARIABLES )*  
 \* 1. Open a Command Prompt windows and make sure the **Java JDK jar command is in the path.**  
 \* 2. cd \$ICMROOT/config  
 \* 3. Run: icmspupdateFP.sh  
 \* ex: ./icmspupdateFP.sh install  
 \* 4. db2start (use your db2 admin userid to do this job ; su - \$DBUSERID)  
 \* 5. From same location run: lsrebindFP.sh (use your db2 admin userid to do this job)  
 \* ex: ./lsrebindFP.sh  
 \* 6. Run : icmrmupdateFP.sh  
 \* ex: ./icmrmupdateFP.sh  
 \*\*\*\*\*

## Uninstall:

- Make sure your DB2 and Websphere are stopped. This is required because files could be locked and may prevent the fixpack from uninstalling properly.
- Set the following environment variables. (See DEFINITIONS OF ENVIRONMENT VARIABLES )  
 DB2INSTANCE(ex: export DB2INSTANCE=db2inst1)  
 DBNAME (ex: export DBNAME=icmnlbdb )  
 DBUSERID (ex: export DBUSERID=icmadmin )  
 DBPASSWORD (ex: export DBPASSWORD=password )  
 DBSCHEMA (ex: export DBSCHEMA=icmadmin )  
 RMLOCATION (ex: export RMLOCATION=/opt/WebSphere/AppServer/installedApps/icmrm.ear/ )
- Open a Command Prompt windows.
- cd \$ICMROOT/config

5. execute: ./icrmupdateFP.sh -uninstall  
ex: ./icrmupdateFP.sh -uninstall
6. cd to your FP2\_Install folder and execute following command:  
java -jar fixpack\_CM\_sun\_8.1.0.20.jar -uninstall

### 2.3.2 eClient Solaris

#### Install:

1. Make sure Websphere is stopped. This is required because files could be locked and may prevent the fixpack from installing properly.
2. Once downloaded, untar the eClient810.20.UNIX.tar file.
3. The above install command must be executed from the directory where the fixpack was extracted to.  
Install command :  
java -cp setup.jar run -silent

#### Uninstall:

1. Incremental uninstall of fixpacks for eClient Solaris is not supported. If you run the uninstall, you will lose both fixpacks and GA.

### 2.3.3 EIP Solaris

#### Install:

##### DEFINITIONS OF ENVIRONMENT VARIABLES

\*\*\*\*\*

- \* [DBNAME]: EIP administration database name. Ex: icmnlbdb
- \* [DBUSERID]: User id used to create the EIP administration database. Ex: icmadmin
- \* [DBPASSWORD]: Password for userid used to create the EIP administration database. Ex: password
- \* [DBSCHEMA]: Schema name for the EIP administration database. Ex: icmadmin

\*\*\*\*\*

1. Make sure your DB2 and Websphere are stopped. This is required since files could be locked and may prevent the fixpack from installing properly.
2. For SUN users the fixpack comes in tar file format, and requires gunzip-ing and untar-ing to the destination of your choice. The download file is named: *EIP810.20.SUN.tar.gz*
3. When downloading, gunzip-ing and untar-ing is complete, you must execute the following command from the *directory* where the fixpack was extracted to.

Install command:  
java -jar fixpack\_EIP\_sun\_8.1.0.20.jar

*\*Note - Numbering used above will increment for subsequent fixpack releases (8.1.0.10, 8.1.0.20)*

*\*\*Note - The install may complain about the file*

*\$CMBROOT/samples/java/beans/infomining/accessAndMine/AccessAndMine.java is newer than the one in the fixpack, please ignore this statement.*

*\*\*\*Note - The install may complain about finding files that are newer than the ones in the fixpack and ask you to check the fixpack log. Note what type of files are listed, as you should expect that configuration files such as \*.ini and \*.properties files will not be overwritten by the fixpack. You can disregard this warning.*

#### **Post Fixpack install configuration:** (*See DEFINITIONS OF ENVIRONMENT VARIABLES*)

1. Open a Command Prompt window and make sure the **Java JDK jar command is in the path**.
2. Stop the db2, and WAS.

3. cd \$CMBROOT/lib
4. rm -f \$db2insthome/sqllib/function/ICM\*
5. cp -p ICM\* \$db2insthome/sqllib/function/
6. cd \$CMBROOT/config
7. cp -p ICMNWFSP \$db2insthome/sqllib/function/
8. su - \$DBUSERID; db2start (use db2 admin userid to do this job)
9. cd \$CMBROOT/config
10. execute:icmpls81fp1.sh [DBName] [DBUserID] [DBPassword] [DBSchema]  
ex: ./icmpls81fp1.sh icmnlbdb icmadmin password icmadmin
11. Run : eipbindlsdb.sh [DBName] [DBUserID] [DBPassword] [DBSchema]  
ex: ./eipbindlsdb.sh icmnlbdb icmadmin password icmadmin

**Uninstall:**

1. Make sure your DB2 and Websphere are stopped. This is required because files could be locked and may prevent the fixpack from uninstalling properly.
2. Open a Command Prompt window.
3. Go to your FP2\_Install folder and execute following command:  
java -jar fixpack\_CM\_sun\_8.1.0.20.jar -uninstall
4. Stop DB2 and WAS.
5. cd \$CMBROOT/lib
6. rm -f \$db2insthome/sqllib/function/ICM\*
7. cp -p ICM\* \$db2insthome/sqllib/function/
8. su - \$adminID ; cd \$CMBROOT/config
9. Run: eipbindlsdb.sh  
ex: ./eipbindlsdb.sh

## 2.4 DB2 Text Information Extender (TIE) Fixpack information

On a Windows system, DB2 Text Information Extender(TIE) daemon ctedem.exe may occasionally crash regardless of CM activities. This problem was addressed by DB2 TIE in PMR # 51796 499 (APAR# GG04314).

### **Fixpack1:**

A) Download and install DB2 TIE fixpack 1 from:

[ftp://ftp.software.ibm.com/ps/products/db2extenders/fixes/v72nt/FP1\\_TIE\\_UG03913/](ftp://ftp.software.ibm.com/ps/products/db2extenders/fixes/v72nt/FP1_TIE_UG03913/)

B) Next, replace the TIE daemon with a new version.

### **Fixpack2**

A permanent fix is provided in DB2 TIE FixPack 2.

A) Download and install DB2 TIE FixPack 2 from:

[ftp://ftp.software.ibm.com/ps/products/db2extenders/fixes/v72nt/FP2\\_TIE\\_UG03915/](ftp://ftp.software.ibm.com/ps/products/db2extenders/fixes/v72nt/FP2_TIE_UG03915/)

## 3 Fixes and descriptions

### 3.1 Fixpack 2

---

#### 3.1.1 Content Manager

---

APAR IR50013 (AIX, SUN, WIN)

#### APAR DESCRIPTION

The Library Server had an internal limit of 30 Components for an Item Type hierarchy (ie 1 root and 29 childs).

#### FIX DESCRIPTION

This internal limit was removed - the Item Type hierarchy is now unlimited.

---

APAR IR50084 (AIX, SUN, WIN)

#### APAR DESCRIPTION

A SQL host variable in the stored procedure which allows the addition of an attribute to an item type is declared as 'short'. It should be 'long', or unpredictable results could result.

#### FIX DESCRIPTION

The incorrect SQL host variable has been changed to 'long'.

---

#### PROBLEM DESCRIPTION (ref 53539)

When storing data into the Resource Manager, there are certain types of failures that will cause the freespace of the volume on which the store was to occur to be updated incorrectly.

The freespace will be reduced as if the object were stored, when it was not, so that the volume will appear to have less space available for stores than it actually has. These failures should



occur infrequently.

**FIX DESCRIPTION**

Workaround: The freespace of all volumes will be reset to the correct values whenever the Resource Manager is stopped and restarted.

Modify the httpd.conf file which is located in the /opt/IBMHTTPD/config directory.

Comment out the last 4 lines:

```
LimitRequestBody
LimitRequestFieldSize
LimitRequestFields
LimitRequestLine
```

---

3.1.2 EIP

---

APAR IR49224 (AIX, WIN)

**APAR DESCRIPTION:**

RMI server on NT platform terminates intermittently with access violations when accessing IP390 server, on multiprocessor systems.

**FIX DESCRIPTION:**

A fix was performed on the IP390 connector as well as improvements were performed on EIP code in the garbage collection areas.

---

APAR IR49665 (WIN)

**APAR DESCRIPTION:**

Domino doc connector needs to provide the Life cycle state to the user.

**FIX DESCRIPTION:**

Fixed. Through the document object, the user can now obtain the life cycle state information.

---

APAR IR49870 (AIX, SUN, WIN)

**APAR DESCRIPTION**

Stamp previewer in the stamp properties dialog has a superimposed or a messy background.

**FIX DESCRIPTION**

Stamp previewer background was made opaque to fix the problem.

---

APAR IR49876 (AIX, SUN, WIN)

**APAR DESCRIPTION**

When enabling WebSphere and CM single sign-on feature, calling CMBConnection.connectWithCredential() method causes a StringIndexOutOfBoundsException.

FIX DESCRIPTION

The code was modified to avoid StringIndexOutOfBoundsException.

---

APAR IR49912 PMR24169 (AIX, SUN, WIN)

APAR DESCRIPTION

Unable to print any document in portrait mode from the eClient applet viewer.

FIX DESCRIPTION

Java Viewer toolkit fixed to use updates to page setup while printing documents.

---

APAR IR49916 (AIX, SUN, WIN)

APAR DESCRIPTION

No range checking done for annotation border width properties.

FIX DESCRIPTION

Annotation services were fixed to accept only a value within a range of 1 to 100 for border width property values.

---

APAR IR49917 PMR23207,004 (AIX, SUN, WIN)

APAR DESCRIPTION

Unable to programmatically override the engine properties that were set by the default cmbviewerengine.properties file included in the cmbview81.jar.

FIX DESCRIPTION

Changes were made to use the cmbviewerengine.properties file as a default only. Fixed CMBDocumentServices bean setEngineProperties() such that the default properties can be overridden programmatically.

---

APAR IR49920 (AIX, WIN)

APAR DESCRIPTION

When parts with number 0 are stored by directly using the VI/390 library server APIs, Java or C++ VI/DL connector cannot retrieve these parts. VI/DL connector can only retrieve parts with numbers greater than 0.

FIX DESCRIPTION:

The EIP retrieve/update/delete methods now remove the restriction of partId 0.

The error message is now different when you retrieve/update/delete a non-exist partId 0 object.

If users pass partId 0, EIP will pass it to FM and pass back the error return code thrown by FM if the partId 0 does not exist.

---

APAR IR49930 PMR20420,004 (AIX,WIN)

APAR DESCRIPTION:

A memory leak was caused when adding a DDO to a 2nd level folder

FIX DESCRIPTION:

Problem fixed.

---

APAR IR49950 (AIX, SUN, WIN)

APAR DESCRIPTION

Remove debugging sysout msg

FIX DESCRIPTION:

Removed 2 sysout msg in methods:

DKUserGroupDataFed.java

DKWorkflowActionListFed.java

---

APAR IR49956 (AIX, SUN, WIN)

APAR DESCRIPTION

Viewing certain TIFF documents throws an ArrayIndexOutOfBoundsException.

FIX DESCRIPTION

Document Engine fixed such that TIFF documents can be viewed successfully.

---

APAR IR49971 PMR24724 (AIX, SUN, WIN)

APAR DESCRIPTION

Viewing 20 to 30 documents using eClient applet viewer throws Java Out Of Memory error.

FIX DESCRIPTION

Made overall improvements in memory management in the Java Viewer toolkit.

---

APAR IR49976 (WIN)

APAR DESCRIPTION

When the LDAP configuration set "User attribute = uid" not "User attribute = cn", the LDAP utility will fail to import users.

FIX DESCRIPTION

The problem is the implementation hardcoded "cn" as "user attribute".  
The fix. will get the "user attribute" from the properties which we save the LDAP configuration information, then use this "user attribute" to import users.

---

APAR IR50001 (AIX, SUN, WIN)

APAR DESCRIPTION

Documentation for CMBGenericDocViewer.closeDocument() indicates there is a parameter, when this method does not require a parameter.

FIX DESCRIPTION

Fixed the JavaDoc to reflect that there is no parameter needed.

---

APAR IR50007 (AIX, SUN, WIN)

APAR DESCRIPTION

When you add a stamp annotation and an arrow annotation to a document from a v8 client, the stamp is completely missing when the document is viewed with CM v7 production client and the arrow appears to be a line.

FIX DESCRIPTION

Annotation engine fixed such that v7 client can display the stamp annotation.  
Annotation engine also fixed to save the right wing angle for the arrow annotation.

---

APAR IR50008 (AIX, SUN, WIN)

Component JavaViewer

APAR DESCRIPTION

Users without printing privileges are able to print documents.

FIX DESCRIPTION

Disabled print action when the user does not have print privilege.

---

APAR IR50038 (AIX, SUN, WIN)

Component Beans

APAR DESCRIPTION:

Current calls to CMBItem.getName returns the value of the first attribute by default, which is not always correct. If the datastore is CMv7, getName should return the "key field represent object" of an index class. If the datastore is CMv8, getName should return the name of the item as defined by Sys Admin.

FIX DESCRIPTION:

1. Add a new private instance variable and package scope accessor methods to CMBEntity for the "name of attribute to represent the name", or get/setNameAttrName

2. Have logic in CMBEntity.getNameAttrName that will perform the search and retrieve the information on demand.
3. In CMBItem.getName, check if the name is filled in. If not, call CMBEntity.getNameAttrName, and look up by name the attribute value to use as the name.

---

APAR IR50050 (AIX,WIN)

Component icmsdk

APAR DESCRIPTION

- When adding and retrieving (using itemtree option) more than 27 parts for a document, user's application gets an error like this:

Return Code: 7047 Element ID: 129

(SERVER RC) : 7047

Filename: PUtilCRUDICM.cpp

Function:

LineNumber: 159

Filename: PRetrievePartItemICM.cpp

Function:

LineNumber: 166

Filename: PRetrieveItemICM.cpp

Function:

LineNumber: 292

Filename: DKDatastoreCRUDICM.cpp

Function:

LineNumber: 226

Exception Class Name: DKException

FIX DESCRIPTION:

Increased the CLOB size in PSpParmsICM object from the default value of 2K to more than 32K. The formula used is dependent on the number of items (or documents).

---

APAR IR50058W (WIN)

APAR DESCRIPTION

When we use LDAP User Import Scheduler to import users into Content Manager 8.1 library server, all users by default are assigned to ClientUserReadOnly privilege set.

Customer needs to manually change all privilege set after import users.

When customer has a lot of users, it is inconvenience.

FIX DESCRIPTION:

Add one column in the table of the LDAP utility dialog and let user to input the privilege set. The privilege set must be in the Library server to which the the LDAP users will be imported.

---

APAR IR50069 PMR47077 (AIX, SUN, WIN)

Component mstechjv

APAR DESCRIPTION

Certain JPEG documents are not scaled down appropriately.

FIX DESCRIPTION

Document engine fixed to return the right resolution value for JPEG documents that is used to determine the initial scale of such documents.

---

APAR IR50073 (AIX, SUN, WIN)

APAR DESCRIPTION

Documents were printed with very poor quality. Certain TIFF documents were unreadable when printed.

FIX DESCRIPTION

Print quality improvements made for all documents printed from the eClient applet viewer or from applications that use the java viewer toolkit.

---

APAR IR50090 (WIN)

APAR DESCRIPTION

When the LDAP user import utility is used to import users, the users will be created in the Library Server one at a time. If a user creation fails because of invalid character in user name or for any other reason, the whole import process will stop. The utility does not has the ability to skip the failed user and continue to import other users.

FIX DESCRIPTION

Modified the utility to continue to import other users even if errors are found with an individual user..

---

APAR IR50098 PMR46960001862 (AIX, SUN, WIN)

APAR DESCRIPTION

CMBMSTechDocumentEngine unable to handle TIFF documents in a Turkish locale.

FIX DESCRIPTION

CMBMSTechDocumentEngine fixed to handle TIFF documents in a Turkish locale.

---

APAR IR50099 PMR09603344000 (AIX, SUN, WIN)

APAR DESCRIPTION

Unable to view certain MODCA documents with overlays due to NullPointerException from the document engine.

FIX DESCRIPTION

Document engine fixed such that MODCA documents are displayed correctly along with the overlays.

---

APAR IR50100        PMR59081420631 (AIX, SUN, WIN)

APAR DESCRIPTION

Certain MODCA documents are displayed as a black box when viewed in the eClient.

FIX DESCRIPTION

Document engine fixed such that MODCA documents are displayed correctly.

---

3.1.3 eClient

---

APAR IR49747

APAR DESCRIPTION

The federated null search query does not return any results.

FIX DESCRIPTION

The doFedSearch in IDMSearch servlet was modified to correct the problem.

---

APAR IR49749

APAR DESCRIPTION

The print window does not close even after the user presses the OK button.

FIX DESCRIPTION

Changes were made to the ControlPrt.jsp file to correct this problem.

---

APAR IR49900        (AIX, SUN, WIN)

APAR DESCRIPTION

IDMViewToolbar.jsp causes a JavaScript error under German locale.

FIX DESCRIPTION

The German format of 0.5 is 0,5 caused a JavaScript error. This is now fixed.

---

APAR IR49923        (AIX, SUN, WIN)

APAR DESCRIPTION

In order to mitigate the memory consumption in the mie-tier, by default the image shown in the html viewer is not set to the enhanced mode. The customer may feel that the image quality is bad and illegible.

FIX DESCRIPTION:

Added a new property entry in IDM.properties file so that the admin can control the enhance mode setting when viewing documents. The new property is named documentEnhanceMode, by default this value is set to false. If it is set to true, the image will be rendered in the enhanced mode.

---

APAR IR49948 (AIX, SUN, WIN)

APAR DESCRIPTION

End users without print privilege should not see 'Print' button in eclient viewer.

FIX DESCRIPTION

Privileges are tested before displaying the viewer toolbar.

---

APAR IR49971 PMR24724 (AIX, SUN, WIN)

APAR DESCRIPTION

Viewing 20 to 30 documents using eClient applet viewer throws Java Out Of Memory error.

FIX DESCRIPTION

Made overall improvements in memory management in the Java Viewer toolkit.

---

APAR IR49981 (AIX, SUN, WIN)

APAR DESCRIPTION

Some customers would like to keep the viewer applet window opened for the single user logon/logoff session until he/she logs off. The original design of viewer applet was to close the applet window as long as the search results page was changed.

FIX DESCRIPTION:

The javascript function used to control open/close window behavior was changed so that the applet window will remain open until the user logs off.

---

APAR IR50027 (WIN)

APAR DESCRIPTION:

When multiple documents are opened at the same time, incorrect number of copies are printed for some documents.

FIX DESCRIPTION:

Problem fixed. The correct page count value for each document will be used, instead of the page count value for the latest document viewed.

---

APAR IR50096 PMR36985,004,00 (AIX, SUN, WIN)

APAR DESCRIPTION

After an end users changes attributes of an item from the worklist page, the changed values are not displayed in the worklist page, even if the user refreshes the page.

FIX DESCRIPTION

Problem fixed. The item being modified is now obtained from the cache.

---

APAR IR50217 PMR45232,004,000 (AIX, SUN, WIN)

APAR DESCRIPTION:

Timestamp display not consistent with winclient.



**FIX DESCRIPTION:**

The timestamp is stored in GMT. The timestamp was displayed in server local time.  
The timestamp needed to be timezone adjusted from GMT and not local time.

---

3.1.4 Client for Windows

---

APAR IR49620

**APAR DESCRIPTION:**

The client displays the following warning message when the user tries to open the notelog but there are no saved notes and the user cannot create a new notelog (either because s/he lacks permissions or because the item is open in Browse mode): "The system cannot open the note." This can be confusing because it can be perceived as an error message.

**FIX DESCRIPTION:**

The client now opens an empty, read-only notelog window in this case.

---

APAR IR49957

**APAR DESCRIPTION:**

The IBM-supplied Data Formats (MIME types) are only shipped with English display names (e.g. "TIFF Document"). When new languages are added to the server, these descriptions are prefixed with an asterisk (e.g. "\*TIFF Document"). The versions with asterisks are less usable than the internal names (e.g. "TIFF") since users cannot type the first character of the name to select it in a list. Administrators may not want to take the time or effort to supply translations (e.g. "TIFF Dokument" in German) in place of the versions with an asterisk and English words.

**FIX DESCRIPTION:**

The client will show the internal names for data types if their display names begin with an asterisk and thus appear not to be Translated.

---

APAR IR50023

**APAR DESCRIPTION:**

When using the variables \$time and \$date with a stamp annotation they do not work. The user sees \$date and \$time instead of the actual date and time

**FIX DESCRIPTION:**

The fix from MS Technology resolves this problem. The \$date is replaced by date and \$time is replaced by system time.

This functionality is now consistent with v7 viewer.

---

APAR IR50064

APAR DESCRIPTION:

The Preferences dialog was not displaying right-to-left data correctly for launch applications. This occurred after the settings were saved and the dialog was later reopened.

FIX DESCRIPTION:

The Preferences dialog now checks for the reading order of the data before displaying launch applications.

---

APAR IR50076

APAR DESCRIPTION:

If an item type is text-searchable, and thus has a "Document Contents" row displayed at the top of the Basic Search dialog, the Attribute Values user exit (ICMClientUEAttrVals) does not function properly.

FIX DESCRIPTION:

Choices provided from the Attribute Values user exit are now displayed correctly in all cases.

---

## 3.2 Fixpack 1

---

### 3.2.1 EIP

---

APAR IR49647: PMR 08214419 (AIX, SUN, WIN)

COMPONENT: EIP servlets

APAR DESCRIPTION:

The control servlet should use the default logon information when the info is provided in the servlets' property file (cmbServlet.properties)

FIX DESCRIPTION:

Default logon information will be used

---

APAR IR49668: PMR 47038,500 (AIX,SUN)

COMPONENT: EIP servlets

APAR DESCRIPTION:

Java class files missing from the jar file

FIX DESCRIPTION:

Added the missing files to the jar file

---

APAR IR49845            PMR 18717 (AIX,SUN, WIN)

COMPONENT: eClient  
APAR DESCRIPTION:  
Performance problem due to the java resource bundle lookup mechanism  
in the eClient Applet Viewer.  
FIX DESCRIPTION:  
Improved performance of the resource bundle lookup by forcing  
java to look for only properties resource bundles as supplied  
with EIP Java Viewer toolkit.

---

APAR IR49861: Error in Annotations (AIX,SUN, WIN)  
COMPONENT: EIP mstechjv  
APAR DESCRIPTION:  
Error in Annotations between version 7 CM Windows Client and V8 eClient applet  
FIX DESCRIPTION:  
code has been corrected..

---

APAR IR49904 PMR1827 (AIX,SUN, WIN)  
COMPONENT: EIP javaviewer  
APAR DESCRIPTION:  
A new property is required to control the initial thumbnailBar show/hide.  
FIX DESCRIPTION:  
Introduce a new property "ThumbnailBar.show" in the  
CMBViewerConfiguration.properties to optionally hide or show the  
thumbnail bar in the Java Viewer.

---

APAR IR49905: PMR18276 (AIX,SUN, WIN)  
COMPONENT: EIP mstechjv  
APAR DESCRIPTION:  
A performance regression was introduced in the driver that was shipped with v8.1.  
FIX DESCRIPTION:  
A new driver resolves this problem.

---

APAR IR49945: Infinite loop in connection pool code (AIX,WIN)  
COMPONENT: EIP  
APAR DESCRIPTION:  
Infinite loop in connection pool code  
FIX DESCRIPTION:  
Correction made to avoid infinite loop.

---

APAR IR49965 (AIX,WIN)  
COMPONENT: EIP icmsdk  
APAR DESCRIPTION:  
The userid icmconct privileges were changed, and validateConnection()failed  
FIX DESCRIPTION:

Privileges have been corrected

---

ABSTRACT: Check in/out document added another line (Ref 50964)

COMPONENT: EIP icmsdk

APAR DESCRIPTION:

When we check in/out the result list adds another line for the item being checked in/out. It should have updated the current line instead.

The work around is to manually push the refresh button right after check in/out the document.

FIX DESCRIPTION:

The problem has been corrected, the current line is updated instead.

---

ABSTRACT: Query length for IN operator in ICM (Ref 51055)

COMPONENT: EIP icmsdk

APAR DESCRIPTION:

The query generated when searching through EIP Federated against 1 attribute in CM with the IN operator and lots of values does not work.

FIX DESCRIPTION:

Redesign Fed->ICM conversion of queries for IN and NOTIN operators to use OR's instead of XQPE lists in order to significantly shorten query length for these types of queries.

---

APAR IR49640 (AIX, WIN)

COMPONENT: EIP Java Viewer

APAR DESCRIPTION:

In a custom web application that is multithreaded, when following calls are made through two different threads at the same time, CMBDocumentServices.dropAllDocuments(), CMBDocumentServices.loadDocument(), an unexpected exception "DocumentEngine.notAllPagesDropped" is thrown.

FIX DESCRIPTION:

Added synchronization to the following methods to erase the race condition:

dispose() of java class CMBDocument

write() of java class CMBDocument

getPageHandle() of java class CMBPage

---

APAR NUMBER: IR49673 (AIX,WINDOWS)

COMPONENT: vi400sdk

APAR DESCRIPTION:

With RMI, after the addObject and updateObject method of the DKDatastoreV4 need to reset the tracking list for collections like the DKParts and DKFolder. If the tracking list is not reset the update operation can happening again in an RMI situation for an item that has already been updated.

**FIX DESCRIPTION:**

Add codes to reset the tracking list in com\ibm\mm\sdk\client\DKDatastoreV4.java for addObject() and updateObject methods.

---

APAR IR49701          PMR17252,004,000

COMPONENT: EIP beans

**APAR DESCRIPTION:**

A null pointer exception is encountered when using the CMBCConnection to connect to a Fed server.

**FIX DESCRIPTION:**

A local variable was not correctly initialized when the connection is obtained from a pool.

---

APAR IR49854 (Windows)

COMPONENT: EIP System Administration

**APAR DESCRIPTION:**

User logoff exits was not implemented as part of user exits.

**FIX DESCRIPTION:**

Implement logoff logic.

---

APAR IR49902 (AIX, SUN, WIN)

COMPONENT: EIP java viewer

**APAR DESCRIPTION:**

Printed documents are out of scale.

**FIX DESCRIPTION:**

The code has been corrected.

---

3.2.2 eClient

---

**ABSTRACT:** ODMA does not work with the MS Word (Office XP) (Ref 51219)

**COMPONENT:** ODMA

**APAR DESCRIPTION:**

Documents being viewed with the Office XP version of Microsoft Word cannot be saved back to the CM server via the ODMA interface.

**FIX DESCRIPTION:**

Documents can now be saved without errors

---

APAR IR49869: (AIX, SUN, WIN)

COMPONENT: eClient

**APAR DESCRIPTION:**

When you try to view the contents of a folder from within a worklist, you will receive an error: com.ibm.mm.beans.CMBException: Search template name is not valid.

FIX DESCRIPTION:  
code has been corrected.

---

APAR IR49923: (AIX, SUN, WIN)

COMPONENT: eClient

APAR DESCRIPTION:

The image quality of displayed documents is poor in GA version of eClient 81

FIX DESCRIPTION:

Added a property to IDM.properties: DEFAULT\_SCREEN\_RESOLUTION,  
with a default value set to 96.

---

ABSTRACT: :Display orders in Fed need to be honored by eClient (Ref 50459)

COMPONENT: eClient

APAR DESCRIPTION:

Display orders in Fed need to be honored by eClient

FIX DESCRIPTION:

code has been corrected.

---

ABSTRACT: IN operator is not supported on ICM (Ref 50461)

COMPONENT: eClient

APAR DESCRIPTION:

IN operator is not supported

FIX DESCRIPTION:

New driver has been provided

---

ABSTRACT: Support the display of Reference attributes in eClient (Ref 50663)

COMPONENT: eClient

APAR DESCRIPTION:

Support the display of Reference attributes

FIX DESCRIPTION:

Reference attributes are now displayed

---

ABSTRACT: Multiple child DDO's displayed incorrectly on versions page (Ref 50996)

COMPONENT: eClient

APAR DESCRIPTION:

The row displaying the version information are misaligned--attribute  
values are displayed under "Date created" and "Last Edited By" instead  
of the correct attribute columns.

FIX DESCRIPTION:  
code has been corrected.

---

ABSTRACT: Item attributes fail to show in eClipboard and e-mail (Ref 50954)

COMPONENT: eClient

APAR DESCRIPTION:

Viewing eClipboard from Fed-ICM and e-mail from Fed-ICM fails to show the item attributes.

FIX DESCRIPTION:  
code has been corrected.

---

ABSTRACT: Use connection pooling for Federated database (Ref 49606)

COMPONENT: eClient

APAR DESCRIPTION

There is a connection to the federated database for each datastore for each eClient user session. Because of the usage of stored procedure in V8, all of the Federated connection become a DARI process which has a large footprint and memory usage. This limits the scalability of the federated mid-tier.

FIX DESCRIPTION:

In Federated component, all of modules which interact with Federated database with stored procedure will use connection pool to minimize the number of DB2 DARI connection created.

INSTALLATION INSTRUCTION:

For setting up connection pool with Fed. Please follow the document in V8.1 Using IBM WebSphere 4 connection pooling with eClient. The setup is the same.

---

3.2.3 Client for Windows

---

APAR IR49812:

COMPONENT: Client for Windows Viewer

APAR DESCRIPTION:

No image (all black) was shown as the thumbnail for some TIFF files.

FIX DESCRIPTION:

The thumbnails for such documents now display correctly.

---

APAR IR49828:

COMPONENT: Client for Windows Viewer

APAR DESCRIPTION:

Some TIFF documents that contained embedded JPEG images could not be displayed.

**FIX DESCRIPTION:**

These documents now display correctly.

---

**ABSTRACT:** Versioned Item with child comps - child values lost in TOC (Ref 50759)

**COMPONENT:** Client for Windows

**APAR DESCRIPTION:**

If a document's item type allows for both part versioning and child components, the child component values disappear from the Item List when the item is updated.

**FIX DESCRIPTION:**

The values in the Item List are now displayed correctly.

---

**ABSTRACT:** Filled, angled Stamp annotations not displayed correctly (Ref 50782)

**COMPONENT:** Client for Windows Viewer

**APAR DESCRIPTION:**

If a Stamp annotation was angled and filled with a color, the rectangle bounding the Stamp would be filled with the color chosen to fill the Stamp annotation.

**FIX DESCRIPTION:**

The area around the Stamp annotation is now displayed correctly.

---

**ABSTRACT:** Document.update (CHECKIN) doesn't checkin when the document is unchanged (Ref 50879)

**COMPONENT:** Windows Client

**APAR DESCRIPTION:**

Document.update (CHECKIN) doesn't checkin when the document is unchanged

**FIX DESCRIPTION:**

fixed.

---

### 3.2.4 Resource Manager

---

**APAR IR49646:** PMR 31239,49R

**COMPONENT:** Library Server

**APAR DESCRIPTION:**

Creating a new version of an item fails if any of the attributes are set as Unique. The exception is `com.ibm.mm.sdk.common.DKDataObjectAlreadyExists` and the SQL code is `SQL0803`, which turns out to be a unique constraint violation.

**FIX DESCRIPTION:**

The index for the unique attribute was fixed.



---

## 4 Known problems and restrictions

### 4.1 Information Mining

**Limits for IKF constants.** If you set the values for an information mining record using the JavaBeans or Service API, you need to make sure that the value you set is within the size limits. Otherwise, you will get a **DKIKFSi zeOutOfBoundsException..** The limits are indicated in the following table:

Key	Maximum	size in bytes
IKF_CONTENT		2097152
IKF_TITLE		2048
IKF_AUTHOR		2048
IKF_CATEGORIES		8192
IKF_SUMMARY		8192
IKF_LANGUAGE		8
IKF_FEATURES		524288
IKF_COMMENTS		8192

These values can be obtained by querying a catalog schema object.

Operating systems: Windows, AIX, Solaris

### 4.2 CM v7 to v8.1 Migration issues

**Abstract:** Migration of System Definition and User Data tables can only be executed ONCE

**Problem Description:** If the customers use the GUI utility to do the migration, and if the migration has completed for the system definition tables and user data tables, do not redo the migration by clicking on the button on the System definition panel and User Data tables panel, respectively. (Ref 51575)

**Abstract:** OS migration fails if migration utility is used to create tablespace.

**Problem Description:** The server migration will not be executed successfully if the system administrator uses the migration utility to create tablespace.

**Workaround:** Create the tablespace outside of the migration utility. (Ref 51655)

## 5 Integration for IBM Content Manager

**Usage Note:** The initial view of *Installing, Configuring, and Managing the eClient* presents a table of contents with links to *PeopleSoft Integration for IBM Content Manager Guide* and *Siebel Integration for IBM Content Manager Guide*. These two links are not displayed if you expand any of the main topics. Therefore, if you want to go to either one of these two documents while viewing the eClient information, you must collapse all of the main topics to access the links.

**Attention:** This restriction does not apply if the eClient, PeopleSoft, and Siebel guides are not translated.

### 5.1 Siebel Integration for IBM Content Manager

This installation enables the Siebel Integration for IBM Content Manager. For more information, refer to the Siebel Integration for IBM Content Manager guide, which is available from within the main page of the online eClient documentation.

#### 5.1.1 Siebel Integration for IBM Content Manager guide update

After the guide was completed, we identified some additional information that we thought you would find useful. Please study the following updates before proceeding with your configuration.

If you plan to use the eClient applet viewer, you need to configure your browser environment properly.

Procedure:

Step 1: Ensure that JRE 1.4 is installed properly:

Install the Java 2 Runtime Environment SE v1.4.0\_02 on your browser machine, and designate the Java plug-in as the default Java runtime for Microsoft Internet Explorer.

Step 2: Ensure that Internet Explorer is configured properly:

1. Select **Tools-->Internet Options-->Advanced**
2. In the Settings list, find the section with heading Java (Sun) and uncheck the checkbox titled "Use Java 2 v1.4.0\_02 for <applet> (requires restart)."

In the section "Software requirements," the version of IBM Content Manager ImagePlus for OS/390 should be 3.1 not 7.1.

In the section "Configuring WebSphere(R) Application Server to run the eClient," the following additional sub-steps in Step 2 should also be executed when setting the session timeout value:

7. Click the "General" tab.
8. Click the "Environment" button.
9. Click "OK."
10. Click "Apply."
11. Restart the eClient application server to ensure that the change becomes effective immediately.

If the sub-steps above are not performed, the environment settings might be lost and the eClient will no longer function.

In the section "Customizing and configuring Siebel Version 7.0.4," the first paragraph under the "Recommendation" heading should read:

Archive the Siebel repository objects that you plan to change. If you need to remove the Siebel Integration for IBM Content Manager later, you can import these archived object definitions to restore your Siebel application environment to the level that existed prior to this configuration.

In the section “Customizing and configuring Siebel Version 7.0.4,” Step 7 of Task 2 requires that the following fields also be specified in substep 3:

- Thread Applet: Provide the name of the applet that provides the data value for the thread field (in our example, “Service Request Detail Applet”).
- Thread Field: Provide the name of the field whose data value is included in the arrow box, following the Thread Title (in our example, “SR Number”).
- Thread Title: Provide the text used in the thread to identify the view (in our example, “SR #.”).

(Note: The quotation marks should not be included when entering the values.)

In the section “Customizing and configuring Siebel Version 7.0.4,” Step 11 of Task 2 is incorrect. The example target directory for the SRF file in step 3 should be "C:\sea704\client\OBJECTS\ENU\siebel.srf" rather than "C:\sea703\client\OBJECTS\ENU\". (Note: The quotation marks should not be included when entering the value.)

In the section “Customizing and configuring Siebel Version 7.5,” Step 7 of Task 1 is incorrect. In our example, the value of the Calculated Value field should be "SRSU" not “eipsserver.” (Note: The quotation marks should not be included when entering the value.)

In the section “Customizing and configuring Siebel Version 7.5,” the first paragraph under the “Recommendation” heading should read:

Archive the Siebel repository objects that you plan to change. If you need to later remove the Siebel Integration for IBM Content Manager, you can import these archived object definitions to restore your Siebel application environment to the level that existed prior to this configuration.

In the section “Customizing and configuring Siebel Version 7.5,” Step 7 of Task 2 requires that the following fields also be specified in substep 3:

- Thread Applet: Provide the name of the applet that provides the data value for the thread field (in our example, “Service Request Detail Applet”).
- Thread Field: Provide the name of the field whose data value is included in the arrow box, following the Thread Title (in our example, “SR Number”).
- Thread Title: Provide the text used in the thread to identify the view (in our example, “SR #.”).

(Note: The quotation marks should not be included when entering the values.)

In the section “Customizing and configuring Siebel Version 7.5,” Step 11 of Task 2 is incorrect. The example target directory for the SRF file in step 3 should be "C:\sea752\client\OBJECTS\ENU\siebel.srf" rather than "C:\sea705\client\OBJECTS\ENU\". (Note: The quotation marks should not be included when entering the value.)

In the Troubleshooting section, Scenario 6, the first paragraph should read:

This scenario only applies if your calculated field has a calculated value that is an IFRAME containing a URL.

In the Troubleshooting section, Scenario 6, in the second paragraph of the solution description, src=' ' should be src='' (That is, there should be no space between the single quotation marks.)

### 5.1.2 Additional troubleshooting tips

#### Scenario 7: authCookie message

**Problem:** When a Siebel user performs a search, the following error message appears in the eClient trace log: "Either an eClientToken value or an authCookie value must be provided in the Integration Properties File."

**Solution:** Provide an eClientToken value in the IP file.

#### Scenario 8: Search not performed when using a symbolic URL

**Problem:** When a Siebel user attempts to perform a search, the search request is not sent to the eClient.

**Solution:** Verify that each symbolic URL argument has an argument value. If a required argument has no value, the request is not sent because there is no value to append to the URL.

#### Scenario 9: Extraneous "WI\_UndefinedSymbolicURL:= " error message

**Problem:** A Siebel system administrator reconfigures the Siebel 7.5.2 application to use an IFRAME with an embedded URL rather than a symbolic URL. Then, when users execute search requests, the displayed search results list is correct but an extraneous "WI\_UndefinedSymbolicURL:= " error message also appears on the screen.

**Solution:** During initial configuration for use of a symbolic URL, the value of the Field Retrieval Type field within the control for the calculated field was set to "Symbolic URL." This value is invalid when using an IFRAME with an embedded URL. Change the value of the Field Retrieval Type field to blank.

#### Scenario 10: Security alert popups with HTTPS

**Problem:** The browser displays one or more security alert popups when using HTTPS as the protocol for a URL within a calculated value field or symbolic URL.

**Solution:** Either use a valid certificate issued from a trusted certificate authority or install the self-signed certificate in the certificate store. Certificates can be installed directly from the security alert popup dialog by selecting "view certificate" followed by "install certificate." This action launches the certificate import wizard.

### 5.1.3 Additional miscellaneous tip

A user ID that is associated with a Siebel application request must have authorization to access the federated server database containing the Siebel integration search templates and all content server databases that the request accesses .

## 5.2 PeopleSoft Integration for IBM Content Manager

This installation enables the PeopleSoft Integration for IBM Content Manager. For more information, refer to the PeopleSoft Integration for IBM Content Manager guide, which is available from within the main page of the online eClient documentation.

Throughout this section of the readme:

ECLIENTROOT	is the destination location specified when the eClient was installed.
ICMROOT	is the destination location specified when the Content Manager library server was installed.
CMBROOT	is the destination location specified when the EIP server was installed.
PS_HOME	is the destination location specified when PeopleSoft was installed.

Windows-based operating systems use back slashes (\) to delimit directories in a directory path. UNIX-based operating systems, including AIX, use forward slashes (/). In this information, back slashes (\) are used to delimit directories in directory paths that apply to all operating systems; depending on your operating system, you might need to enter these directory paths differently than shown in the information.

### 5.2.1 PeopleSoft Integration for IBM Content Manager guide update

There have been significant changes to the PeopleSoft Integration for IBM Content Manager since the guide was completed. Read the following updates to ensure that you are familiar with the latest information.

General updates that apply throughout the information:

One of the most significant changes is that two files, ICMPSSSO.java and ICMPSSSO.properties, are installed with the eClient rather than the Content Manager library server as described in the guide.

These files can be found in the following location:

ECLIENTROOT\integration\peoplesoft\

After you copy the ICMPSSSO.properties file to the same folder as ICMPSSSO.class, edit the ICMPSSSO.properties file and specify the configuration of the PeopleSoft server providing the authentication.

After the ICMPSSSO.java file is compiled, the output class file ICMPSSSO.class must be added to the directory in the WebSphere Application Server Advanced Edition or WebSphere Application Server Advanced Single Server Edition CLASSPATH on the eClient server. An example target directory for WebSphere Application Server Advanced Edition is:

ECLIENTROOT\installedApp\eClient81.ear\eClient81.war\WEB-INF\classes\

The eClient must have access to the PeopleSoft generated class files in the WebSphere Application Server's CLASSPATH. Depending on your PeopleSoft license agreement, the license might permit the

copying of these generated classes to the eClient machine. Examples for target directories for WebSphere Application Server Advanced Edition are:

```
ECLIENROOT\installedApp\eClient81.ear\eClient81.war\WEB-INF\classes\PeopleSoft\Generated\CompIntfc\
```

and

```
ECLIENROOT\installedApp\eClient81.ear\eClient81.war\WEB-INF\classes\PeopleSoft\Generated\PeopleSoft\
```

If your PeopleSoft license agreement does not permit this copying, you must configure WebSphere Application Server to access the classes on the PeopleSoft server.

The eClient must have access to the PeopleSoft run-time file in the WebSphere Application Server's CLASSPATH. Depending on your PeopleSoft license agreement, the license might permit the copying of the run-time file to the eClient machine. An example for the WebSphere Application Server Advanced Edition is:

```
ECLIENROOT\installedApp\eClient81.ear\eClient81.war\WEB-INF\lib\psjoa.jar
```

If your PeopleSoft license agreement does not allow this copying, you must configure WebSphere Application Server to access the run-time on the PeopleSoft server.

Specific updates to information:

In the section titled "Task 6: Copy the logon user exit routine file," the destination directory for the logon user exit routine file is incorrect for UNIX-based operating systems. On UNIX-based operating systems, the file should be copied to:

```
ICMDLL/databaseName/DLL/
```

where ICMDLL is the value of the ICMDLL environment variable.

In the section titled "Task 7: Generate the PeopleSoft portal single sign-on component interface," the first paragraph should state that this task is completed on the PeopleSoft server and the eClient server, not on the Content Manager library server. The ICMPSSSO.java file is on the eClient server, in the directory:

```
ECLIENROOT\integration\peoplesoft\
```

In the section titled "Task 7: Generate the PeopleSoft portal single sign-on component interface," step 3 should state that the PeopleSoft run-time environment (psjoa.jar) must be available to the eClient and the classes from the two PeopleSoft packages (PeopleSoft.Generated.CompIntfc and PeopleSoft.Generated.PeopleSoft) must be available as well. Therefore, depending on the PeopleSoft license agreement, you might be permitted to copy the classes to the eClient server. For example, WebSphere Application Server Advanced Edition for Windows uses the following directory locations:

```
ECLIENROOT\installedApp\eClient81.ear\eClient81.war\WEB-INF\classes\PeopleSoft\Generated\CompIntfc\
```

and

```
ECLIENROOT\installedApp\eClient81.ear\eClient81.war\WEB-INF\classes\PeopleSoft\Generated\PeopleSoft\
```

If your PeopleSoft license agreement does not allow you to copy the class files, you must configure WebSphere Application Server to access them on the PeopleSoft server.

In the section titled "Task 7: Generate the PeopleSoft portal single sign-on component interface," step 4 should state that the ICMPSOSSO.java file is compiled and installed on the eClient server. Substep a. should read:

- a. Enter CD ECLIENROOT\integration\peoplesoft

The section titled "Task 7: Generate the PeopleSoft portal single sign-on component interface," should state that the class file output must be copied to a directory in the WebSphere Application Server's CLASSPATH. For example, the WebSphere Application Server Advanced Edition uses the following directory location:

ECLIENROOT\installedApp\eClient81.ear\eClient81.war\WEB-INF\classes\

In addition, the package classes that were generated in step 2 must also be added to the WebSphere Application Server CLASSPATH.

The section titled "Task 8: Specify PeopleSoft configuration parameters for Content Manager" should state that the task is completed on the eClient server, not on the Content Manager library server. It should state that the PeopleSoft configuration parameters for use by the eClient to authenticate the PeopleSoft users must be specified in the ICMPSOSSO.properties file. The third paragraph in this section should read:

For the eClient to communicate with the PeopleSoft component interface, it must know where the PeopleSoft software is installed. To configure the eClient, you must edit the file named ICMPSOSSO.properties, located in the following directory:

ECLIENROOT\integration\peoplesoft\

The section titled "Task 9: Access PeopleSoft run-time" should state that this task is completed on the eClient server. The eClient must have access to the PeopleSoft run-time file in the WebSphere Application Server's CLASSPATH. Depending on the PeopleSoft license agreement, you might be permitted to copy the PeopleSoft run-time file to the eClient server. The run-time file is a JAR file named psjoa.jar. In a default PeopleSoft 8.4 installation, psjoa.jar is in:

PS\_HOME\web\psjoa\psjoa.jar

For example, WebSphere Application Server Advanced Edition uses the following directory location:

ECLIENROOT\installedApp\eClient81.ear\eClient81.war\WEB-INF\lib\psjoa.jar

If the PeopleSoft license agreement does not permit copying of the run-time file, you must configure the WebSphere Application Server to access the run-time file on the PeopleSoft server.

### 5.2.2 Additional installation operations

If EIP is installed on a machine that does not share a Content Manager library server database, you need to install the ICMXLSLG.DLL file on the EIP system. Copy the following file from the Content Manager server:

ICMROOT\integration\peoplesoft\ICMXLSLG.DLL\

For Windows EIP servers, copy this file to the Windows EIP DLL directory:

*CMBROOT\database name\DLL\*

For UNIX EIP servers, copy this file to the UNIX EIP DLL directory:

*PATHICMDLL\database name\DLL\*

Where:

PATHICMDLL: path specified for the DLLs in the column PATHICMDLL in the

ICMSTSYSCONTROL table.

database name: name of the EIP database.

If the EIP DLL directory does not exist, create that directory, then copy the ICMXLSLG.DLL file into it.

### 5.2.3 Additional troubleshooting information

eClientToken message

**Problem:** When a PeopleSoft user performs a search, the following error message appears in the eClient trace log: "Either an eClientToken value or an authCookie value must be provided in the Integration Properties File."

**Solution:** Provide an authCookie value in the IP file.

Blank eClient browser window

**Problem:** A PeopleSoft user receives a blank eClient browser window.

**Solution:**

- a) Look in the eClient trace log for more information.
- b) Check the URL used to invoke the eClient. Ensure that all required parameters and values have been specified.
- c) Check the Integration Properties file specified by the URL. Ensure that all required properties and values have been specified.

**Problem:** A PeopleSoft user encounters the followed error report when attempting to use the single sign-on pagelet to access the eClient:

"Your session has expired or you have not logged on."

This problem can occur when a browser window for an eClient on server "A" is accidentally superseded by a browser window for an eClient on server "B". This might happen if the user forgets that there is already an active eClient "A" session and then starts a new window for eClient "B" from the same Microsoft Internet Explorer session, without logging off from eClient "A" first.

**Solution:** Use the Netscape Communicator browser, or logoff before launching a new eClient browser window with Microsoft Internet Explorer.

**Problem:** A second eClient user is granted greater or fewer privileges than designated. For example, user A is allowed to see user B's search templates. This problem can occur



when an eClient window for privilege "A" user is accidentally superseded by a new eClient window for a privilege "B" user. This might happen if the user forgets that there is already an active eClient session (logged on for user with privilege set "A") and then starts a new eClient window, from the same Microsoft Internet Explorer session, and then logs on again for user with privilege set "B" without logging off user "A" first.

**Solution:** Use the Netscape Communicator browser, or logoff before launching a new eClient browser window with Microsoft Internet Explorer.

**Problem:** When trying to use the document viewer to access content on the eClient, the browser window displays the following error report:

“An Error Has Occurred! com.ibm.mm.beans.CMBNoConnectionException: There is no established connection to the server. The connection has been disconnected.”

This problem can occur when an eClient window is accidentally superseded by a new eClient window. This might happen if the user forgets that there is already an active eClient session and then attempts to start a new eClient window, from the same Microsoft Internet Explorer session, without logging off first.

**Solution:** Use the eClient applet viewer to access content, use the Netscape Communicator browser, or logoff before launching a new eClient browser window with Microsoft Internet Explorer.

#### 5.2.4 Using multiple PeopleSoft servers

When an installation has more than one PeopleSoft server and these servers all have the defaults from the original installation, then they have the same message node names. This occurrence might be considered a feature that could be exploited for fail-over purposes. However, one consequence is that when more than one PeopleSoft server has the same user ID defined, any one of those servers can authenticate the user ID used to log on to the eClient. If the Content Manager system administrator considers that this is a security risk, the workaround is to change the MSGNODENAME in all the tables where the default message node name is found. Contact PeopleSoft Global Support Center for the database script needed to modify all instances of MSGNODENAME in your RDBMS.

#### 5.2.5 Using spaces for tab names in PeopleSoft

In PeopleSoft, when the user clicks over to a tabbed page on the portal (or when the browser is automatically directed to a tabbed default homepage), PeopleSoft's internal name of the tab is part of the URL. If the internal name of a tab has a space in it, then the URL has a space in it. Some versions of Netscape Navigator do not encode the space as %20, but Microsoft Internet Explorer does. Therefore, if you are using Netscape Navigator and you want to create tabbed pages on the PeopleSoft portal, do not use a space in the tab name.

#### 5.2.6 PeopleSoft authentication timeout

If a PeopleSoft user signs on to PeopleSoft and does not click over to the eClient before the PS\_TOKEN cookie times out, then the user cannot access Content Manager. The PS\_TOKEN cookie is used for PeopleSoft user authentication and the default timeout value is 720 minutes (12 hours). Modification of the PS\_TOKEN cookie timeout value affects all users of the PeopleSoft system. To modify the timeout value from the PeopleSoft Portal Enterprise Menu:

1. Select **PeopleTools** -> **Security** -> **Security Objects** -> **Single Signon**.
2. Change the Authentication Token expiration.
3. Click **Save**.

#### 5.2.7 IBM Content Manager, PeopleSoft and LDAP

Currently, use of both LDAP authentication and PeopleSoft single sign-on is not supported on the same Content Manager library server. If you have configured your Content Manager library server for optimized association you cannot authenticate with LDAP, regardless of whether the user is signing on from PeopleSoft or not. If the library server is configured to perform LDAP authentication, it is still possible to use loose association.

The Content Manager system administration client provides a tool to import users from LDAP into Content Manager. The import facility assumes that you are importing users from LDAP into Content Manager with the intention of using LDAP authentication. However, when a user is imported into Content Manager from LDAP, there are alternative ways to get this user authenticated:

- Enable the PeopleSoft single sign-on feature by configuring for optimized association. After completing this configuration, you can now proceed to use the PeopleSoft single sign-on authentication.
- Define users on the machine where Content Manager resides and configure the pagelets that they access for loose association. Additionally, imported users that intend to use the stand-alone eClient must also be defined locally on the machine where Content Manager resides.

## 6 Documentation updates

### 6.1 Information Mining - Configuring the Web Application Server for the Information Structuring Tool

Book: Planning and Installing Enterprise Information Portal  
Chapter 8. Configuring Enterprise Information Portal components  
Section: Installing and configuring Information Mining  
Page: 131

Deployment of the IST included in the fixpack

If the IST version of the EIP 8.1 GA is already installed on the machine, you have to remove this web application first. Afterwards, follow the regular deployment instructions to install the new IST version.

To remove the IST web application:

WAS AEs

Stop the WAS.

Windows:

In a command shell, enter stopserver

AIX:

In a command shell, switch to the  
/usr/WebSphere/AppServer/bin  
directory and enter ./stopServer.sh

Solaris:

In a command shell, switch to the  
/opt/WebSphere/AppServer/bin  
directory and enter ./stopServer.sh

Remove the IST web application.

Windows:

In a command shell, enter  
seappinstall -uninstall IST -delete true

AIX:

In the command shell from step 1, enter  
./SEAppInstall.sh -uninstall IST -delete true

Solaris:

In the command shell from step 1, enter  
./SEAppInstall.sh -uninstall IST -delete true

WAS AE

Open the WAS Administrative Console.

In the navigation panel, expand "Enterprise Applications"

Right-click the application "IST" and select "Stop".

Right-click the application "IST" and select "Remove".

Select "No" at the first confirmation panel, "Yes" at the second.

## 6.2 Client for Windows Programming Reference

Under Application Object, in the Automation interface properties and methods chapter, the Search method has been updated to the following Application Object Method:

### Search

The Search method returns search results in a temporary folder. You can customize what search results return by modifying the parameters of your search. **Important:** When you specify an item type name, an attribute name, or a child component name, be sure to use the internal name, rather than the description or display name.

Parameters:

ItemTypeName as VT\_BSTR

QuerySubString as VT\_VARIANT (VT\_BSTR)

AllVersions as VT\_BOOL

TypeFilter as VT\_I2

SuspendFilter as VT\_I2

ProcessName as VT\_BSTR

StepName as VT\_VARIANT (VT\_BSTR)

Returns: VT\_DISPATCH (Item)

*ItemTypeName* is the name of the item type to which the item belongs. You can search all of the item types if you use the asterisk (\*) in place of a specific item type name for this parameter.

*QuerySubString* contains that part of the search criteria which is based on attributes of the item type.

Examples of QuerySubString are:

```
"@SOURCE LIKE ""IMPO%""
```

```
"@SOURCE = ""SCANNER""
```

```
"@SOURCE = ""SCANNER"" AND @USER_ID = ""SMITH""
```

To search on child component attributes, use the following QuerySubString syntax:

"ChildComponentName/@AttributeName CONDITION ""AttributeValue"""

A list of operators that you can use as conditions in the QuerySubString are:

Operator	Description
=	Equal to
!=	Not equal to
>	Greater than
>=	Greater than equal to
<	Less than
<=	Less than equal to
LIKE	Like
NOT LIKE	Not like
IS NULL	Is null
IS NOT NULL	Is not null
AND	And
OR	Or
BETWEEN	Between
%	Wild character for multiple character match
_	Wild character for single character match
(...)	Parentheses for scope resolution

More complex QuerySubString examples are:

```
"(@SOURCE = ""SCANNER"" OR @SOURCE = ""OLE"") AND (@SOURCE = ""CUSTOM_IMPORT"")"
```

```
"(@MIDDLE_INITIAL IS NULL AND @FIRST_NAME = ""G__"") OR (@LAST_NAME = "D%")"
```

```
"(@SALARY BETWEEN ""50000"" AND ""70000"") AND (@EXPERIENCE <= ""2"")"
```

*AllVersions* can be TRUE or FALSE. If set to TRUE, the Search method returns all versions of the items that match the search criteria. Also, if *AllVersions* is set to TRUE, then a process aware search is not possible, meaning that *SuspendFilter* should be set to 0, *ProcessName* should be set to Null, and *StepName* should be set to Null. If *AllVersions* is set to FALSE, it returns only the latest version of each item.

*TypeFilter* has the following values:

OLEAPI\_DOCUMENTS(111): Only Content Manager document items are returned.

OLEAPI\_FOLDERS(112): Only Content Manager folders are returned.

OLEAPI\_DOCS\_AND\_FLDRS(113): Both Content Manager documents and Content Manager folders are returned.

*SuspendFilter* has the following values:

OLEAPI\_ALL\_STATUS(0): All items, irrespective of status, are returned.

OLEAPI\_ACTIVE\_STATUS(1): Only active items are returned.

OLEAPI\_SUSPENDED\_STATUS(2): Only suspended items are returned.

**Important:** If the AllVersions flag is set to TRUE, SuspendFilter should be set to 0.

*ProcessName* is the name of the process that the item is in.

**Important:** If the AllVersions flag is set to TRUE, ProcessName should be set to Null.

*StepName* is the work node name that the item is in.

**Important:** If the AllVersions flag is set to TRUE, StepName should be set to Null.

## 6.3 Installing, Configuring, and Managing the eClient

The Content Manager eClient Version 8.1 is only supported on WebSphere application servers.

### 1. Update to the Installation Guide

In "Installing, Configuring, and Managing the eClient" (SC27-1350-00), under "Installing and configuring the eClient" in the left frame, the "Configuring your eClient as a Web application" section should read:

Configuring your eClient as a Web application

To manually configure the eClient with WebSphere Application Server AE or AES, open the idmwas.bat file, located in the \CMeClient\save directory on Windows and /opt/CMeClient/Save directory on AIX and Solaris, where /opt/CMeClient is the root directory where the eClient is installed.

After you install the eClient files, deploy the eclient81.ear file located in the root directory where the eClient is installed. Use the WebSphere Application Server administrative console to set token values for CLASSPATH and PATH. See the eClient Version 8.1 ReadMe for more information.

Also, in the "Hardware and software requirements" section under "Installing and configuring the eClient" in the left frame, "Hardware requirements" should read:

Hardware requirements

## Server

Follow the requirements for IBM WebSphere Application Server Version 4.0 (the recommended application server) Advanced Edition (AE) or Advanced Single Server Edition (AES). 25 MB of additional disk space is required.

## Client

You need the hardware required to support a browser with frame and JavaScript(TM) support (Netscape Navigator 4.76 or Microsoft(R) Internet Explorer 5.5 Service Pack 2 or later).

Additional updates may be available from the product ReadMe files.

## 2. Additional installation operations

If EIP is installed on a machine that does not share a Content Manager library server database, you need to install the ICMXLSLG.DLL file on the EIP system. Copy the following file from the Content Manager server:

```
ICMROOT\integration\peoplesoft\ICMXLSLG.DLL\
```

For Windows EIP servers, copy this file to the Windows EIP DLL directory:

```
CMBROOT\database name\DLL\
```

For UNIX EIP servers, copy this file to the UNIX EIP DLL directory:

```
PATHICMDLL\database name\DLL\
```

Where:

PATHICMDLL is the path specified for the DLLs in the column PATHICMDLL in the ICMSTSYSCONTROL table.

database name is the name of the EIP database.

If the EIP DLL directory does not exist, create that directory, then copy the ICMXLSLG.DLL file into it.

## 3. The eClient online help

You need to connect to a Content Manager OnDemand server to work with annotations.

The “Working with annotations” panel in the eClient online help should read:

Here you can view a list of the annotations added to the document that you retrieved directly from an OnDemand server. These textual annotations are different from the graphical annotations that are supported by Content Manager and later versions of OnDemand.

This list includes the date and time that each annotation was created, the page number on which the annotation appears, the sharing level and the creator's user ID. In the lower part of the window, the text of the annotation is displayed.

*To view an annotation:*

Select the items you want to view the annotations of and select **View annotations** from the Selected Items list. The annotation displays in a new window.

*To add an annotation:*

Select the items you want to add an annotation to and select **Add annotations** from the Selected Items list. In the Add Annotations window, type in the annotation, type in the group name in the Group Name field, and click **Save**.

If you want the new annotation to be public and allow users to copy it, leave the Public and the Ok To Copy check boxes selected.

*To find an annotation:*

From the View Annotation window, you can search for a specific annotation. In the Find field, type the text that you are searching, and click **Find**.

Also, the “Working with search results” panel should have a section for options available for each type of content server. The section for Content Manager OnDemand servers should read:

### **Options available for Content Manager OnDemand servers**

*To view annotations*

Select the item you want to view the annotations of and select **View annotations** from the Selected items list. The annotation displays in the eClient Annotations window.

*To add annotations*

Select the items you want to add an annotation to and select **Add annotations** from the Selected items list. The Add Annotations window opens.

## **6.4 Siebel Integration for IBM Content Manager Guide**

In “Siebel Integration for IBM Content Manager Guide”, the “Skill requirements” section in “Requirements” should read:



This document assumes that you know how to install and configure:

- Your Content Manager portfolio product
- Enterprise Information Portal Version 8.1
- Content Manager eClient Version 8.1
- Siebel Version 7.0.4 or 7.5
- Databases (primarily IBM DB2 Universal Database <sup>TM</sup> )

You should know how to install and manage:

- WebSphere Application Server Advanced Edition (AE) or Advanced Single Server Edition (AES)
- Web applications on WebSphere Application Server

2. In “Configuring”, the “Configuring other application servers to run the eClient” section is not valid.

3. In the “Configuring the eClient and Siebel to work together” section, the first and second paragraphs should read:

After you install Siebel Integration for IBM Content Manager, you must configure the eClient and the Siebel eBusiness applications to work together. To do so, you must:

- Configure WebSphere Application Server to run the eClient
- Configure the eClient
- Configure the Siebel eBusiness application(s) that you are using

You should ensure that the timeout session value is appropriately set within WebSphere Application Server for the Siebel user community.

4. The first paragraph of “Configuring WebSphere Application Server to run the eClient” should read:

You need to start WebSphere Application Server (WAS), and set the session timeout value before running the eClient.

## 6.5 Planning and Installing Your Content Management System Guide

Support for Terminal Server Edition (TSE) support

Book: "Planning and Installing Your Content Management System

Chapter 1: Introducing Content Manager

Section: Client for Windows (under Client options)

Page: 6

CLIENT FOR WINDOWS

The Client for Windows is installed on a Windows system. It provides an interface that enables you to import documents into the system, view them, work with them, store them, and retrieve them.

The Client for Windows can also be run in a Terminal Server Edition (TSE) environment. The number of users that can be supported on any one TSE server depends on the memory, processing power and other factors on the server, as well as on the amount of activity for each client user. All client actions are supported in this environment, except for scanning (which must be done on a local machine).

## 6.6 Workstation Application Programming Guide

DOCUMENT: "Workstation Application Programming Guide"

Chapter 8: Using non-visual and visual JavaBeans

Section: Using IBM VisualAge for Java (under Using JavaBeans in builders)

and: Using IBM Websphere Studio Application Developer (under Using JavaBeans in builders)

Page: 233 and 234

APAR IR50025

APAR DESCRIPTION:

Documentation calls for missing jar file

FIX DESCRIPTION:

Remove the following text from both sections. (no longer supported):

`\CMBROOT\lib\lotuskms.jar`

## 6.7 Client for Windows Online Help

**Performing basic searches:** From the Basic Search dialog, click **Help**. The Performing basic searches help panel opens. Expand the help topic **How to perform a basic search**. In step #3, it states that child components and their attributes are separated by dots (.). For example, in step #3, it shows that "PolicyHolder.Last.Name" represents a child component and its attribute. When, in fact, instead of "PolicyHolder.Last.Name", it should say "PolicyHolder/LastName". Attributes are NOT separated by dots (.), they are separated by slashes (/). Also, the client does not show three levels of an item, only two: the first level child component and an attribute of that child component.

**Working with index information:** In the help panel **Working With index Information**, expand the help topic, **Working with special attribute values**. Step #1 in the instructions about adding a new row tells users to add a row by clicking on the arrow in the bottom row. The word "arrow" should be replaced by "plus sign".

**Working with index information:** In the help panel **Working With index Information**, expand the help topic, **Working with special attribute values**. This section should include how to delete rows. To delete a row:

1. Select the row that you want to delete by clicking on the bullet.
2. Push the Delete key.

**Using the Versions List:** The Client for Windows online help, under Using the Versions List in the Versions List dialog, says:

If you select a previous version, the Client closes the current document and displays the selected version in its place. If you select any version other than the most recent one, the document is displayed in read-only mode.

Correction to the help: you can "browse" any version of the document, but you can only "open" the current version. If you do not first close a previous version of a document before attempting to browse/open a different version, the previous version remains open.

**The “Getting work process information” and “Item lists preferences” pages** of the online help refer to “Step type” and “Date and Time the item entered the step” columns. These columns are not available in this release of the Client for Windows.

**The "Keyboard shortcuts" section** of the documentation lists a number of shortcuts for actions that are not currently supported. These actions are: cut/copy/paste, undo/redo, move to front / send to back, resize selected annotation, view the first/last document, new document and toggle to next annotation. These entries should be ignored. Additionally, shortcuts are listed for show/hide thumbnails and close all documents, but these actions do not have shortcuts. Finally, the table lists "Ctrl + D" as the shortcut for opening the scan window. The correct shortcut is "Ctrl + Shift + I", as shown in program on the menu and toolbar.

## 7 Validation Utility

### 7.1 Overview

The purpose of the validation utilities is to analyze discrepancies between three components: the library server, the resource manager, and the storage system(s) used by the resource manager through its defined device managers. Any of these components could fail and require a restoration via a backup that could be out of synch with the other two components. Because there is no direct link between the library server and the storage system, differences must be reported between the library server and the resource manager and the resource manager and the storage system. Consequently, there are two separate utilities provided in this fix pack, the RM/LS validation utility and the RM/volume validation utility. These utilities generate reports of the different types of discrepancies they find.

The validation utilities described in this fix pack were developed and tested on AIX<sup>(R)</sup>.

**Important:** Currently, there is no support for validation of servers installed on other platforms.

The output reports are in XML. You can use commonly available XML tools like XMLSpy or Microsoft<sup>(R)</sup> Internet Explorer to manipulate the output as needed.

## 7.2 Configuration

The shell scripts that invoke the validation utilities are located in the bin directory in the resource manager installation directory. On AIX, the default is /usr/lpp/icm/bin. The validation shell scripts that you invoke to run the validation are icmrmlsval.sh and icmrmvolval.sh.

### 7.2.1 Shell script modifications

#### icmrmlsval.sh

The icmrmlsval.sh script creates and drops a temporary DB2<sup>(R)</sup> table. It requires the database user ID, password, schema, web application path, and DB2<sup>(R)</sup> instance. There are two ways to set up the system so the scripts work properly:

- You can update the following lines in the icmrmlsval.sh file to match your installation settings:

```
dbuser=rmadmin
dbpass=rmadmin
dbschema=rmadmin
rmwebpath=icrm
DB2INSTANCE=db2inst1
```

- Alternatively, you can connect to the database before calling the utility and comment out the following line:

```
#db2 connect to $dbname user $dbuser using $dbpass >/dev/null
```

And update following two lines if needed:

```
rmwebpath=icrm
DB2INSTANCE=db2inst1
```

#### icmrmvolval.sh

The icmrmvolval.sh script requires the web application path and DB2<sup>(R)</sup> instance to work properly. The script might need the following two lines to be modified to match your installation settings:

```
rmwebpath=icrm
DB2INSTANCE=db2inst1
```

### 7.2.2 Logging

By default, the validation utility logs to a file called icrm.validator.log file in the WebSphere logs directory. You can modify the level of information logged and the location of the output in the icrm\_validator\_logging.xml file. Ensure that the user ID that you use to run the utility has read permission to the .xml file and write permission to whatever log file that you configure for use.

The icrm\_validator\_logging.xml file is installed with the resource manager code in the Websphere Application Server installedApps path. The default path to the file is:

### 7.3 Resource manager - library server validation

The RM/LS validation utility queries the library server for all of the objects created or updated in a specified time period. It then searches the resource manager database and detects any discrepancies. The utility runs on the resource manager server and requires connectivity to the library server database.

#### 7.3.1 Invocation

The RM/LS validation shell script is icrmlsval.sh. You can invoke it from the command line or through a utility like cron.

#### Input Parameters

The RM/LS validation command has the following parameters. Both dashes (-) and forward slashes (/) are handled as the parameter separator. The parameter tags are supported in both lower and upper case.

<b>-B</b> YYYY-MM-DD-HH.MM.SS	<p>The beginning time and date of the objects to examine.</p> <p>Use this parameter with the <b>-E</b> parameter to restrict the number of objects that the utility must examine.</p> <p>This parameter is optional. If it is not present, all of the objects prior to the <b>-E</b> date are returned, or all of the objects are returned if <b>-E</b> is also not defined.</p>
<b>-E</b> YYYY-MM-DD-HH.MM.SS	<p>The ending time and date of the objects to synchronize.</p> <p>Use this parameter with the <b>-B</b> parameter to restrict the number of objects that the utility must examine.</p> <p>This parameter is optional. If it is not present, all of the objects after the <b>-B</b> date are returned, or all of the objects are returned if <b>-B</b> is also not defined.</p>
<b>-F</b> output-path	<p>The absolute path to be used for the output files.</p> <p>The utility creates the UTF-8 XML files in this directory.</p> <p>This parameter is required.</p> <p>If the files currently exist, they are overwritten.</p>

<b>-H</b>	This parameter displays help information about how to invoke the utility. All of the other parameters are ignored and no processing occurs.
-----------	---

### Temporary table RMLSITEMS

The icmrmlsval.sh script creates a temporary table that is used to accumulate object statistics for the validation. The definition of that table is in creatermllitems.ddl. At the end of the validation, this table is normally dropped. If the utility determines that the table is present, it presumes another version of the utility is operating, and exits. If the table was left behind due to an aborted run, you need to drop this table. Connect to the resource manager database and drop the table with the following command:

```
db2 drop table RMLSITEMS
```

### Example invocation in AIX

```
./icmrmlsval.sh -F /reportsdirectory -B 2002-08-30-00.00.00 -E 2002-09-01-00.00.00
```

### 7.3.2 Validation discrepancy reports

The base file names of the reports are “icmrmlsvalYYMMDDHHMMSS\_” + *Report Type* string + “.xml”. The *Report Type* string identifies the type of discrepancies a report contains. The description of the different report types are detailed later in this section. The timestamp allows the administrator to run the utility multiple times without overwriting the output files. Examples of default names with the default report type are:

- icmrmlsval200205311234\_ORPHAN.xml
- icmrmlsval200205311234\_NOTINRM.xml
- icmrmlsval200205311234\_SIZEMISMATCH.xml
- icmrmlsval200205311234\_COLLECTIONMISMATCH.xml
- icmrmlsval200205311234\_DATEMISMATCH.xml

### Orphan

Entries are added to the ORPHAN report if an object is on the resource manager, but the library server does not have a reference to the object. The report contains information about the object from the resource manager database.

### Sample orphan report

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="icmrmlsval.xsl"?>
<icmrmlsval>
  <reporttype>ORPHAN</reporttype>
  <reportattributes>
    <reportparameters>-f /tmp/newxml</reportparameters>
    <reportdate>2002-07-24-03.34.54</reportdate>
  </reportattributes>
  <rmlsvalorphan>
    <obj_library>ICMNLSDDB</obj_library>
    <obj_itemid>A1001001A02G24B51103H36065</obj_itemid>
    <obj_version>1</obj_version>
    <obj_collection>CBR.CLLCT002</obj_collection>
  </rmlsvalorphan>
</icmrmlsval>
```

```

    <obj_volume>/dev/lv07</obj_volume>
    <obj_size>145</obj_size>
    <obj_createdate>2002-07-24 10:11:04.536</obj_createdate>
    <obj_updatedate>2002-07-24 10:11:04.536</obj_updatedate>
    <obj_orgfilename>c:\icmtools\cm_objects\gif\sql.gif</obj_orgfilename>
    <obj_filename>L1.A1001001A02G24B51103H36065.V1</obj_filename>
    <obj_mimetype>image/gif</obj_mimetype>
  </rmlsvalorphn>
</rmlsvalorphn>
  <obj_library>ICMNLSDDB</obj_library>
  <obj_itemid>A1001001A02G24B51817D01832</obj_itemid>
  <obj_version>1</obj_version>
  <obj_collection>CBR.CLCT002</obj_collection>
  <obj_volume>/dev/lv07</obj_volume>
  <obj_size>132</obj_size>
  <obj_createdate>2002-07-24 10:18:18.411</obj_createdate>
  <obj_updatedate>2002-07-24 10:18:18.411</obj_updatedate>
  <obj_orgfilename>c:\icmtools\cm_objects\gif\prev_nav.gif</obj_orgfilename>
  <obj_filename>L1.A1001001A02G24B51817D01832.V1</obj_filename>
  <obj_mimetype>image/gif</obj_mimetype>
</rmlsvalorphn>
<returncode>9908</returncode>
<returnmsg>ICM9908: The Resource Manager Validation found ORPHAN type
synchronization problems</returnmsg>
</icmrmval>

```

## Not in RM

Entries are added to the NOTINRM report if the library server has a reference to an object, but the object is not on the resource manager. The report contains information about the object from the library server database.

## Sample not in RM Report

```

<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="icmrm.xsl"?>
<icmrmval>
  <reporttype>NOTINRM</reporttype>
  <reportattributes>
    <reportparameters>-f
/icm/fvt/rmlsresults/03/run_3-regression</reportparameters>
    <reportdate>2002-07-24-05.11.40</reportdate>
  </reportattributes>
  <rmlsvalrmnotfnd>
    <lsref_itemid>A1001001A02G24B31159I29592</lsref_itemid>
    <lsref_version>1</lsref_version>
    <lsref_collection>CBR.CLCT001</lsref_collection>
    <lsref_size>124</lsref_size>
    <lsref_createdate>2002-07-24 08:12:00.727349</lsref_createdate>
    <lsref_updatedate>2002-07-24 08:12:00.724</lsref_updatedate>
    <lsref_updateuserid>ICMADMIN</lsref_updateuserid>
    <lsref_extobjectname>L1.A1001001A02G24B31159I29592.V1</lsref_extobjectname>
  </rmlsvalrmnotfnd>
  <rmlsvalrmnotfnd>
    <lsref_itemid>A1001001A02G24B33935D82304</lsref_itemid>
    <lsref_version>1</lsref_version>
    <lsref_collection>CBR.CLCT001</lsref_collection>
    <lsref_size>132</lsref_size>
    <lsref_createdate>2002-07-24 08:39:36.351242</lsref_createdate>
    <lsref_updatedate>2002-07-24 08:39:36.458</lsref_updatedate>
    <lsref_updateuserid>ICMADMIN</lsref_updateuserid>
    <lsref_extobjectname>L1.A1001001A02G24B33935D82304.V1</lsref_extobjectname>
  </rmlsvalrmnotfnd>

```

```

</rmlsvalrmnotfnd>
<returncode>9908</returncode>
<returnmsg>ICM9908: The Resource Manager Validation found NOTINRM type
synchronization problems</returnmsg>
</icmrmval>

```

## Size mismatch

Entries are added to the SIZEMISMATCH report if the size of an object on the library server does not match the size of an object on the resource manager. The report contains information about the object from the resource manager and library server databases.

## Sample size mismatch report

```

<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XML Spy v4.4 U (http://www.xmlspy.com) by Keith Morea (IBM) -->
<?xml-stylesheet type="text/xsl" href="icrm.xsl"?>
<!DOCTYPE icmrmval SYSTEM "C:\CM\icmrmval.dtd">
<icmrmval>
  <reporttype>SIZEMISMATCH</reporttype>
  <reportattributes>
    <reportparameters>-f /tmp/newxml/ -E 2002-07-19-23.00.00 -B
2002-07-17-00.00.00</reportparameters>
    <reportdate>2002-07-22-06.19.47</reportdate>
  </reportattributes>
  <rmlsvalinfo>
    <obj_library>ICMNLSDDB</obj_library>
    <obj_itemid>A1001001A02G17C25415C32015</obj_itemid>
    <obj_version>1</obj_version>
    <obj_collection>CBR.CLLCT001</obj_collection>
    <obj_volume>lv05</obj_volume>
    <obj_size>232</obj_size>
    <obj_createdate>2002-07-17 17:54:17.895</obj_createdate>
    <obj_updatedate>2002-07-17 17:54:17.895</obj_updatedate>
    <obj_orgfilename>c:\icmtools\cm_objects\gif\prev_nav.gif</obj_orgfilename>
    <obj_filename>L1.A1001001A02G17C25415C32015.V1</obj_filename>
    <obj_mimetype>image/gif</obj_mimetype>
    <lsref_itemid>A1001001A02G17C25415C32015</lsref_itemid>
    <lsref_version>1</lsref_version>
    <lsref_collection>1</lsref_collection>
    <lsref_size>132</lsref_size>
    <lsref_createdate>2002-07-17 17:54:16.979166</lsref_createdate>
    <lsref_updatedate>2002-07-17 17:54:17.895</lsref_updatedate>
    <lsref_updateuserid>ICMADMIN</lsref_updateuserid>
    <lsref_extobjectname>L1.A1001001A02G17C25415C32015.V1</lsref_extobjectname>
  </rmlsvalinfo>
  <rmlsvalinfo>
    <obj_library>ICMNLSDDB</obj_library>
    <obj_itemid>A1001001A02G18A24919D34167</obj_itemid>
    <obj_version>1</obj_version>
    <obj_collection>CBR.CLLCT001</obj_collection>
    <obj_volume>lv05</obj_volume>
    <obj_size>245</obj_size>
    <obj_createdate>2002-07-17 21:49:19.829</obj_createdate>
    <obj_updatedate>2002-07-17 21:49:19.829</obj_updatedate>
    <obj_orgfilename>c:\icmtools\cm_objects\gif\sql.gif</obj_orgfilename>
    <obj_filename>L1.A1001001A02G18A24919D34167.V1</obj_filename>
    <obj_mimetype>image/gif</obj_mimetype>
    <lsref_itemid>A1001001A02G18A24919D34167</lsref_itemid>
    <lsref_version>1</lsref_version>
    <lsref_collection>1</lsref_collection>
    <lsref_size>145</lsref_size>
  </rmlsvalinfo>

```



```

    <lsref_createdate>2002-07-17 21:49:20.930223</lsref_createdate>
    <lsref_updatedate>2002-07-17 21:49:19.829</lsref_updatedate>
    <lsref_updateuserid>ICMADMIN</lsref_updateuserid>
    <lsref_extobjectname>L1.A1001001A02G18A24919D34167.V1</lsref_extobjectname>
  </rmlsvalinfo>
  <returncode>9908</returncode>
  <returnmsg>ICM9908: The Resource Manager Validation found SIZEMISMATCH type
synchronization problems</returnmsg>
</icmrmval>

```

## Collection mismatch

Entries are added to the COLLECTION report if the collection of an object on the library server does not match the collection of an object on the resource manager. The report contains information about the object from the resource manager and library server databases.

## Sample collection report

```

<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="icmrm.xsl"?>
<icmrmval>
  <reporttype>COLLECTIONMISMATCH</reporttype>
  <reportattributes>
    <reportparameters>-f /tmp/newxml -b 2002-07-24-08.19.00 -e
2002-07-24-08.21.00</reportparameters>
    <reportdate>2002-07-24-03.31.35</reportdate>
  </reportattributes>
  <rmlsvalinfo>
    <obj_library>ICMNLSDDB</obj_library>
    <obj_itemid>A1001001A02G24B31952J70657</obj_itemid>
    <obj_version>1</obj_version>
    <obj_collection>CBR.CLLCT002</obj_collection>
    <obj_volume>lv05</obj_volume>
    <obj_size>132</obj_size>
    <obj_createdate>2002-07-24 08:19:53.927</obj_createdate>
    <obj_updatedate>2002-07-24 08:19:53.927</obj_updatedate>
    <obj_orgfilename>c:\icmtools\cm_objects\gif\prev_nav.gif</obj_orgfilename>
    <obj_filename>L1.A1001001A02G24B31952J70657.V1</obj_filename>
    <obj_mimetype>image/gif</obj_mimetype>
    <lsref_itemid>A1001001A02G24B31952J70657</lsref_itemid>
    <lsref_version>lv05</lsref_version>
    <lsref_collection>CBR.CLLCT001</lsref_collection>
    <lsref_size>132</lsref_size>
    <lsref_createdate>2002-07-24 08:19:53.714861</lsref_createdate>
    <lsref_updatedate>2002-07-24 08:19:53.927</lsref_updatedate>
    <lsref_updateuserid>ICMADMIN</lsref_updateuserid>
    <lsref_extobjectname>L1.A1001001A02G24B31952J70657.V1</lsref_extobjectname>
  </rmlsvalinfo>
  <rmlsvalinfo>
    <obj_library>ICMNLSDDB</obj_library>
    <obj_itemid>A1001001A02G24B31953C55372</obj_itemid>
    <obj_version>1</obj_version>
    <obj_collection>CBR.CLLCT002</obj_collection>
    <obj_volume>lv05</obj_volume>
    <obj_size>124</obj_size>
    <obj_createdate>2002-07-24 08:19:54.13</obj_createdate>
    <obj_updatedate>2002-07-24 08:19:54.13</obj_updatedate>
    <obj_orgfilename>c:\icmtools\cm_objects\gif\syncpane_co.gif</obj_orgfilename>
    <obj_filename>L1.A1001001A02G24B31953C55372.V1</obj_filename>
    <obj_mimetype>image/gif</obj_mimetype>
    <lsref_itemid>A1001001A02G24B31953C55372</lsref_itemid>
    <lsref_version>1</lsref_version>

```

```

<lsref_collection>CBR.CLLCT001</lsref_collection>
<lsref_size>124</lsref_size>
<lsref_createdate>2002-07-24 08:19:54.118202</lsref_createdate>
<lsref_updatedate>2002-07-24 08:19:54.13</lsref_updatedate>
<lsref_updateuserid>ICMADMIN</lsref_updateuserid>
<lsref_extobjectname>L1.A1001001A02G24B31953C55372.V1</lsref_extobjectname>
</rmlsvalinfo>
<returncode>9908</returncode>
<returnmsg>ICM9908: The Resource Manager Validation found COLLECTIONMISMATCH
type synchronization problems</returnmsg>
</icmrmval>

```

## Date mismatch

Entries are added to the DATEMISMATCH report if the object update date on the library server does not match the object update date on the resource manager. Under normal circumstances, if there is any synchronization problem between the library server and the resource manager, the object update date does not match. In order to reduce redundant entries in the different reports, entries are not added to the DATEMISMATCH report if they have been added to the collection mismatch or size mismatch reports. The report contains information about the object from the resource manager and library server databases.

## Sample date mismatch report

```

<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="icmrm.xsl"?>
<icmrmval>
  <reporttype>DATEMISMATCH</reporttype>
  <reportattributes>
    <reportparameters>-f /tmp/newxml -b 2002-07-24-08.19.00 -e
2002-07-24-08.21.00</reportparameters>
    <reportdate>2002-07-24-03.31.49</reportdate>
  </reportattributes>
  <rmlsvalinfo>
    <obj_library>ICMNLSDDB</obj_library>
    <obj_itemid>A1001001A02G24B31955J71528</obj_itemid>
    <obj_version>1</obj_version>
    <obj_collection>CBR.CLLCT001</obj_collection>
    <obj_volume>lv05</obj_volume>
    <obj_size>145</obj_size>
    <obj_createdate>2002-07-24 08:19:56.63</obj_createdate>
    <obj_updatedate>2002-07-24 08:20:30.0</obj_updatedate>
    <obj_orgfilename>c:\icmtools\cm_objects\gif\sql.gif</obj_orgfilename>
    <obj_filename>L1.A1001001A02G24B31955J71528.V1</obj_filename>
    <obj_mimetype>image/gif</obj_mimetype>
    <lsref_itemid>A1001001A02G24B31955J71528</lsref_itemid>
    <lsref_version>1</lsref_version>
    <lsref_collection>CBR.CLLCT001</lsref_collection>
    <lsref_size>145</lsref_size>
    <lsref_createdate>2002-07-24 08:19:56.933956</lsref_createdate>
    <lsref_updatedate>2002-07-24 08:19:56.63</lsref_updatedate>
    <lsref_updateuserid>ICMADMIN</lsref_updateuserid>
    <lsref_extobjectname>L1.A1001001A02G24B31955J71528.V1</lsref_extobjectname>
  </rmlsvalinfo>
</rmlsvalinfo>
  <obj_library>ICMNLSDDB</obj_library>
  <obj_itemid>A1001001A02G24B31955J77364</obj_itemid>
  <obj_version>1</obj_version>
  <obj_collection>CBR.CLLCT001</obj_collection>
  <obj_volume>lv05</obj_volume>
  <obj_size>124</obj_size>

```

```

<obj_createdate>2002-07-24 08:19:56.74</obj_createdate>
<obj_updatedate>2002-07-24 08:20:30.0</obj_updatedate>
<obj_orgfilename>c:\icmtools\cm_objects\gif\syncpane_co.gif</obj_orgfilename>
<obj_filename>L1.A1001001A02G24B31955J77364.V1</obj_filename>
<obj_mimetype>image/gif</obj_mimetype>
<lsref_itemid>A1001001A02G24B31955J77364</lsref_itemid>
<lsref_version>1</lsref_version>
<lsref_collection>CBR.CLLCT001</lsref_collection>
<lsref_size>124</lsref_size>
<lsref_createdate>2002-07-24 08:19:56.933956</lsref_createdate>
<lsref_updatedate>2002-07-24 08:19:56.74</lsref_updatedate>
<lsref_updateuserid>ICMADMIN</lsref_updateuserid>
<lsref_extobjectname>L1.A1001001A02G24B31955J77364.V1</lsref_extobjectname>
</rmlsvalinfo>
<returncode>9908</returncode>
<returnmsg>ICM9908: The Resource Manager Validation found DATEMISMATCH type
synchronization problems</returnmsg>
</icmrmval>

```

## 7.4 Resource manager - volume validation

The RM/volume validation utility checks each object in its database that was added or changed in a specified date range. It queries the device manager for the attributes of that object and generates reports for each object whose information in the database is different than reported by the device manager.

The validation utility does not search the storage system for orphaned objects (objects not referenced by the resource manager). Because there are a wide variety of storage systems that are often used for storing files other than those managed by CM, the scanning for orphaned files could be extremely time consuming and might produce a large quantity of false positives.

The RM/volume validation utility runs on the resource manager server and only requires access to its own database and the device managers responsible for the volumes that are being checked.

### 7.4.1 Invocation

The RM/LS validation shell script is icmrmval.sh. You can invoke it from the command line or through a utility like cron.

### Input Parameters

The RM/Volume validation command has the following parameters. Both dashes (-) and forward slashes (/) are handled as the parameter separator. The parameter tags are supported in both lower and upper case.

<p><b>-B</b> <i>YYYY-MM-DD-HH.MM.SS</i></p>	<p>The beginning time and date of the objects to examine.</p> <p>Use this parameter with the <b>-E</b> parameter to restrict the number of objects that the utility must examine.</p> <p>This parameter is optional. If it is not present, all of the objects prior to the <b>-E</b> date are returned, or all of the objects are returned if <b>-E</b> is also not defined.</p>
---	--

<p><b>-E</b> YYYY-MM-DD-HH.MM.SS</p>	<p>The ending time and date of the objects to synchronize.</p> <p>Use this parameter with the <b>-B</b> parameter to restrict the number of objects that the utility must examine.</p> <p>This parameter is optional. If it is not present, all of the objects after the <b>-B</b> date are returned, or all of the objects are returned if <b>-B</b> is also not defined.</p>
<p><b>-F</b> output-path</p>	<p>The absolute path to be used for the output files.</p> <p>The utility creates the UTF-8 XML files in this directory.</p> <p>This parameter is required.</p> <p>If the files currently exist, they are overwritten.</p>
<p><b>-H</b></p>	<p>This parameter causes the program to display help information about how to invoke the utility. All of the other parameters are ignored and no processing occurs.</p>
<p><b>-V</b> volume-name</p>	<p>The logical volume name on which you want to perform the validation. Use this parameter to limit the number of storage systems to one volume.</p> <p>This parameter is optional. If not used, all storage systems are searched.</p> <p><b>Attention:</b> In the future, you will be able to select a group of volumes through the System Administration tool.</p>

### Example invocation in AIX

```
./icmrmvolval.sh -F /reportsdirectory -B 2002-08-30-00.00.00 -E
2002-09-01-00.00.00 -V "/dev/lv05"
```

### 7.4.2 Validation discrepancy reports

The base file names of the reports are "icmrmvolvalYYMMDDHHMMSS\_" + *Report Type* string + ".xml". The *Report Type* string identifies the type of discrepancies a report contains. The description of the different report types are detailed later in this section. The timestamp allows the administrator to run the utility multiple times without overwriting the output files. Examples of default names with the default report type are:

- icmrmvolval200205311234\_FILENOTFOUND.xml
- icmrmvolval200205311234\_SIZE\_MISMATCH.xml

## File not found

Entries are added to the FILENOTFOUND report if an object is in the resource manager database but it was not found on the volume recorded in the database. A file is considered "not found" if the volume's device manager reports it does not exist or reports that it has a zero file size when the size in the database is non zero. either reported that the file did not exist or reported that it had a zero file size when the size in the database is non zero. The report contains the object information from the resource manager database.

## Sample file not found report

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="icrmr.xsl"?>
<icrmrval>
  <reporttype>FILENOTFOUND</reporttype>
  <reportattributes>
    <reportparameters>-f /icm/fvt/rmvolreg/05 -b 2002-07-24-10.18.00 -E
2002-07-24-10.19.00 -v /dev/lv07</reportparameters>
    <reportdate>2002-07-24-04.03.23</reportdate>
  </reportattributes>
  <rmvolvalinfo>
    <obj_library>ICMNLSDDB</obj_library>
    <obj_itemid>A1001001A02G24B51801D14345</obj_itemid>
    <obj_version>1</obj_version>
    <obj_collection>CBR.CLLCT002</obj_collection>
    <obj_volume>/dev/lv07</obj_volume>
    <obj_size>132</obj_size>
    <obj_createdate>2002-07-24 10:18:02.255</obj_createdate>
    <obj_updatedate>2002-07-24 10:18:02.255</obj_updatedate>
    <obj_orgfilename>c:\icmtools\cm_objects\gif\prev_nav.gif</obj_orgfilename>
    <obj_filename>L1.A1001001A02G24B51801D14345.V1</obj_filename>
    <obj_mimetype>image/gif</obj_mimetype>
  </rmvolvalinfo>
  <rmvolvalinfo>
    <obj_library>ICMNLSDDB</obj_library>
    <obj_itemid>A1001001A02G24B51821H78005</obj_itemid>
    <obj_version>1</obj_version>
    <obj_collection>CBR.CLLCT002</obj_collection>
    <obj_volume>/dev/lv07</obj_volume>
    <obj_size>124</obj_size>
    <obj_createdate>2002-07-24 10:18:22.458</obj_createdate>
    <obj_updatedate>2002-07-24 10:18:22.458</obj_updatedate>
    <obj_orgfilename>c:\icmtools\cm_objects\gif\syncpane_co.gif</obj_orgfilename>
    <obj_filename>L1.A1001001A02G24B51821H78005.V1</obj_filename>
    <obj_mimetype>image/gif</obj_mimetype>
  </rmvolvalinfo>
  <returncode>9908</returncode>
  <returnmsg>ICM9908: The Resource Manager Validation found FILENOTFOUND type
synchronization problems</returnmsg>
</icrmrval>
```

## Size Mismatch

Entries are added to the SIZEMISMATCH report if the size of an object in the resource manager database does not match the size reported by the device manager. The report contains the object information from the resource manager database and the size reported by the device manager.

## Sample size mismatch report

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="icrmr.xsl"?>
<icrmrval>
  <reporttype>SIZEMISMATCH</reporttype>
  <reportattributes>
    <reportparameters>-f /icm/fvt/rmvolreg/05 -b 2002-07-24-10.18.00 -E
2002-07-24-10.19.00 -v /dev/lv07</reportparameters>
    <reportdate>2002-07-24-04.03.23</reportdate>
  </reportattributes>
  <rmvolvalinfo>
    <obj_library>ICMNLSDDB</obj_library>
    <obj_itemid>A1001001A02G24B51817B18517</obj_itemid>
    <obj_version>lv05</obj_version>
    <obj_collection>CBR.CLLCT002</obj_collection>
    <obj_volume>2</obj_volume>
    <obj_size>145</obj_size>
    <obj_createdate>2002-07-24 10:18:17.849</obj_createdate>
    <obj_updatedate>2002-07-24 10:18:17.849</obj_updatedate>
    <obj_orgfilename>c:\icmtools\cm_objects\gif\sql.gif</obj_orgfilename>

<obj_filename>/icm/rm2/db/lbosdata/00002/05/L1.A1001001A02G24B51817B18517.V1</obj_
filename>
    <obj_mimetype>image/gif</obj_mimetype>
    <vol_size>757</vol_size>
  </rmvolvalinfo>
  <rmvolvalinfo>
    <obj_library>ICMNLSDDB</obj_library>
    <obj_itemid>A1001001A02G24B51828J02405</obj_itemid>
    <obj_version>1</obj_version>
    <obj_collection>CBR.CLLCT002</obj_collection>
    <obj_volume>2</obj_volume>
    <obj_size>145</obj_size>
    <obj_createdate>2002-07-24 10:18:29.427</obj_createdate>
    <obj_updatedate>2002-07-24 10:18:29.427</obj_updatedate>
    <obj_orgfilename>c:\icmtools\cm_objects\gif\sql.gif</obj_orgfilename>

<obj_filename>/icm/rm2/db/lbosdata/00002/02/L1.A1001001A02G24B51828J02405.V1</obj_
filename>
    <obj_mimetype>image/gif</obj_mimetype>
    <vol_size>1099</vol_size>
  </rmvolvalinfo>
  <returncode>9908</returncode>
  <returnmsg>ICM9908: The Resource Manager Validation found SIZEMISMATCH type
synchronization problems</returnmsg>
</icrmrval>
```

### 7.4.3 XML DTD for validation reports

The “?” tag indicates that it is legal for that element to be missing. In the error information sections, the “?” implies that if the corresponding field of the database is empty, that tag is not in the report. If the “?” is not present, the element must be present with an empty value if the information is not available. The intent is that if it is a valid condition for fields to be empty there is no reason to list them in the report if they are not initialized. However, if it is invalid for the field to be empty, it is always explicitly listed.

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XML Spy v4.4 U (http://www.xmlspy.com) by Keith Morea (IBM) -->
<!-- icrmr resource manager Validation Report XML DTD -->
```

```

<!ELEMENT icrmval (reporttype?, reportattributes, rmlsvalinfo*, rmlsvalorphan*,
rmlsvalrmnotfnd*, rmvolvalinfo*, returncode?, returnmsg?)>
<!ENTITY % icmText "PCDATA">
<!--report type -->
<!ELEMENT reporttype %icmText;>
<!--return code -->
<!ELEMENT returncode %icmText;>
<!--return message -->
<!ELEMENT returnmsg %icmText;>
<!-- reportattributes -->
<!ELEMENT reportattributes (reportparameters*, reportdate)>
<!--Input Parameters -->
<!ELEMENT reportparameters %icmText;>
<!--Date report was run. Dates are in Resource Manager Local Time -->
<!ELEMENT reportdate %icmText;>
<!--Resource Manager/Library Server Validation Error Info -->
<!ELEMENT rmlsvalinfo (obj_library,
    obj_itemid,
    obj_version,
    obj_collection,
    obj_volume,
    obj_size,
    obj_createdate,
    obj_updatedate,
    obj_objectname?,
    obj_orgfilename?,
    obj_filename,
    obj_mimetype?,
    lsref_itemid,
    lsref_version,
    lsref_collection,
    lsref_size,
    lsref_createdate,
    lsref_updatedate,
    lsref_updateuserid?,
    lsref_extobjectname?)>
<!--Resource Manager/Library Server Orphan Info (Exists on RM, not on LS) -->
<!ELEMENT rmlsvalorphan (obj_library,
    obj_itemid,
    obj_version,
    obj_collection,
    obj_volume,
    obj_size,
    obj_createdate,
    obj_updatedate,
    obj_objectname?,
    obj_orgfilename?,
    obj_filename,
    obj_mimetype?)>
<!--Resource Manager/Library Server Not on RM Info (Exists on LS, not in RM) -->
<!ELEMENT rmlsvalrmnotfnd (lsref_itemid,
    lsref_version,
    lsref_collection,
    lsref_size,
    lsref_createdate,
    lsref_updatedate,
    lsref_updateuserid?,
    lsref_extobjectname?)>
<!--Resource Manager/Volume Validation Error Info -->
<!ELEMENT rmvolvalinfo (obj_library,
    obj_itemid,

```

```

        obj_version,
        obj_collection,
        obj_volume,
        obj_size,
        obj_createdate,
        obj_updatedate,
        obj_objectname?,
        obj_orgfilename?,
        obj_filename,
        obj_mimetype?,
        vol_size?)>
<!--RM library -->
<!ELEMENT obj_library %icmText;>
<!--RM itemid number -->
<!ELEMENT obj_itemid %icmText;>
<!--RM version number -->
<!ELEMENT obj_version %icmText;>
<!--RM collection name -->
<!ELEMENT obj_collection %icmText;>
<!--RM volume -->
<!ELEMENT obj_volume %icmText;>
<!--RM size -->
<!ELEMENT obj_size %icmText;>
<!--RM create date -->
<!ELEMENT obj_createdate %icmText;>
<!--RM last update date -->
<!ELEMENT obj_updatedate %icmText;>
<!--RM external object name -->
<!ELEMENT obj_objectname %icmText;>
<!--RM internal filename -->
<!ELEMENT obj_filename %icmText;>
<!--RM originall filename -->
<!ELEMENT obj_orgfilename %icmText;>
<!--RM mimetype -->
<!ELEMENT obj_mimetype %icmText;>
<!--LS itemid number -->
<!ELEMENT lsref_itemid %icmText;>
<!--LS version -->
<!ELEMENT lsref_version %icmText;>
<!--LS collection -->
<!ELEMENT lsref_collection %icmText;>
<!--LS resource size -->
<!ELEMENT lsref_size %icmText;>
<!--LS create date -->
<!ELEMENT lsref_createdate %icmText;>
<!--LS update date -->
<!ELEMENT lsref_updatedate %icmText;>
<!--LS update userid -->
<!ELEMENT lsref_updateuserid %icmText;>
<!--LS External Object Name -->
<!ELEMENT lsref_extobjectname %icmText;>
<!--Volume Reported Resource Size -->
<!ELEMENT vol_size %icmText;>

```

#### 7.4.4 Migration considerations

The validation utilities operates only on databases migrated to resource manager Version 8.1 and library server Version 8.1.



-----  
END OF README  
-----