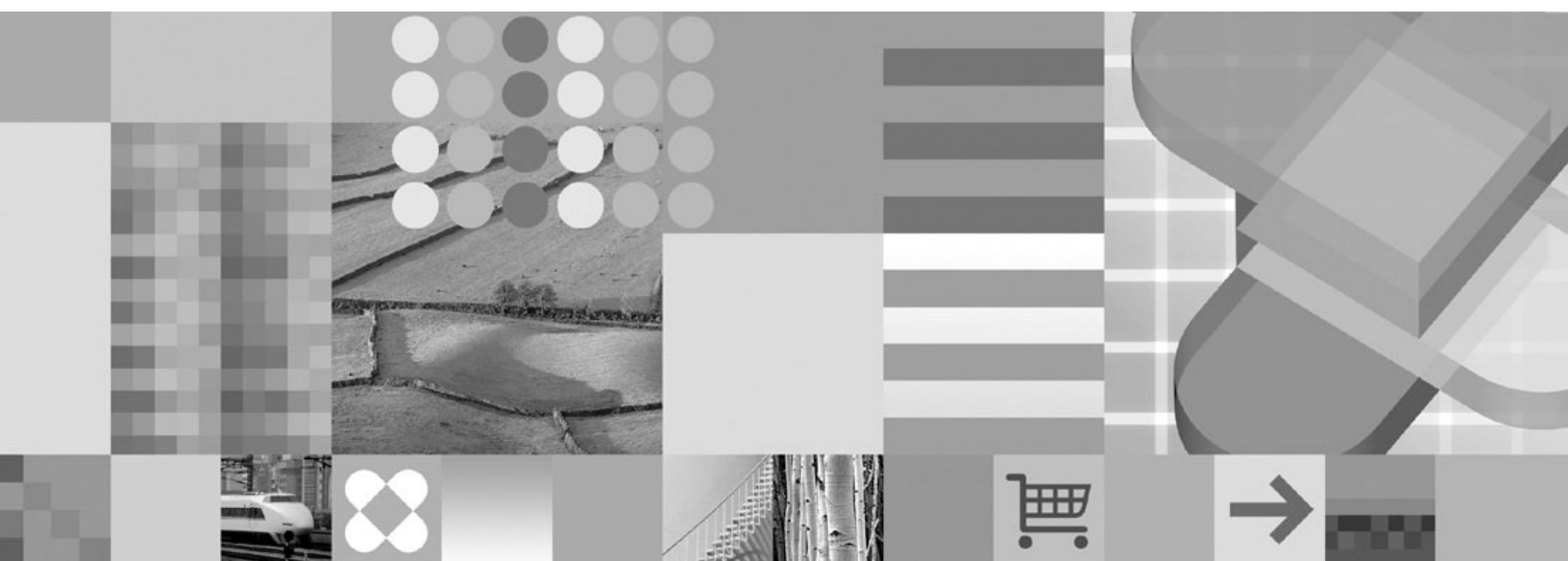




Common Configuration Problems



Common Configuration Problems

Note

Before using this information and the product it supports, read the information in "Notices" on page 163.

First Edition (August 2004)

This edition applies to the following products:

DB2 Content Manager

- Version 7 Release 1 of IBM Content Manager for Multiplatforms (product number 5697-G28)
- Version 8 Release 1 of IBM DB2 Content Manager for Multiplatforms (product number 5724-B19)
- Version 5 Release 1 of IBM Content Manager for iSeries (product number 5722-VI1)
- Version 8 Release 2 of IBM DB2 Content Manager for z/OS (product number 5697-H60)
- Version 2 Release 3 of IBM DB2 Content Manager for z/OS and OS/390 (product number 5697-250)
(also referred to as IBM EDMSuite™ ImagePlus VisualInfo)

DB2 Content Manager OnDemand

- Version 7 Release 1 of IBM Content Manager OnDemand for Multiplatforms (product number 5697-G34)
- Version 7 Release 1 of IBM DB2 Content Manager OnDemand for z/OS and OS/390 (product number 5655-H39)
- Version 5 of IBM DB2 Content Manager OnDemand for iSeries (product number 5722-RD1)

© Copyright International Business Machines Corporation 2004. All rights reserved.

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

About this guide	vii
Who should use this guide	vii
How this guide is organized	vii
Where to find more information	viii
Support available on the Web	ix
Education and training.	ix
How to send your comments	ix

Part 1. DB2 Content Manager 1

Chapter 1. Prerequisites. 3

IBM DB2 Universal Database	3
CLI0123E error	3
DGL5200A error	4
DGL2642A and ICM7978 errors	5
SQL0973N error	5
DB2 environment variables not recognized	6
IBM WebSphere Application Server.	6
Failure to process +GMT time zones	6
HTTPS snoop does not work	7
ICM9838 error	8
Resource manager does not start.	9
Resource manager fix pack errors	9
DGL5024A error.	10
LDAP	10
Supplied credentials are not valid	11
Not able to log on as LDAP import user.	11

Chapter 2. Applying fix packs and upgrading 13

Installation	13
CMBQueryService: method SetQueryParameters() not found	13
ICM7307 error	13
Out of range error	14
Cannot start the QVI400 prestart job	14
Over compliance limit logon error.	15
Upgrade	15
Upgrading from version 8.1 to version 8.2	15
Migration utility terminates abnormally	16
Slow performance after upgrade	18
FRN6259A error	20

Chapter 3. Configuring user access . . . 21

Authorization	21
User does not have privilege required	21
DGL5203A and ICM7172 errors.	21
Unable to add notes	22
Unable to remove documents from workbaskets	23
Authentication	24
DGL0583A	24
DGL3804A error.	24
Changing the system IDs of the CICS regions running ImagePlus	25

Host security error when displaying an object	25
ICM7194 error	26
Specifying the location of the WORK directory	26
Setting password duration	27

Chapter 4. Configuring product components 29

Resource manager	29
DGL3711A and ICM7307 errors.	29
DGL5161A error.	29
DGL7161A and ICM9804 errors.	30
Product checks failed	31
Unable to save changes to definition properties	31
Changing the password of the resource manager server	32
Resource manager processes do not function after applying version 8.2 fix pack 1	32
Resource manager not connecting to DB2	33
Installing databases in separate logical environments on one DB2 subsystem.	33
System outage with -805 SQL errors	34
Library server	35
Cataloging a remote library server database	35
Unable to catalog a remote library server database	36
Communication problems with remote clients	37
TRebuildCompTypeICM fails with return code 7022	38
DGL5410A error.	39
SQL0964C error	39
FRN6216 error	40
FRN7634A error when creating index classes	40
FRN7634A error when starting the library server	40
FRN8072A and FRN8073A errors	41
Return code -812	41
FRN7389A error	42
FRN7667A error	42
Necessary preparation for running FRII	44
Object server	45
FRN0306A error	45
FRN4003W error.	45
Manual shutdown of object server.	46
Excessive objects in staging area	46

Chapter 5. Configuring clients. 47

Error messages are garbled	47
Users cannot connect to the eClient servlet	47
Kofax release scripts	48
6288 error	48
Item type changes not visible	48

Chapter 6. Managing storage 51

CPF4131 error	51
EKD1008 error	51
EKD8553 error	52

Staying current on DB2 Content Manager for iSeries PTFs.	53
Old records have an in-process flag of 2.	54
DGL5162A and ICM9876 errors.	54
Moving platters between drives	54

Chapter 7. Troubleshooting 57

DGL0394 and ICM7978 errors	57
Unable to restart the prestart job	58
Configuring access to multiple environments	58
FRN6113A error	59
FRN7751A error	60

Part 2. DB2 Content Manager OnDemand 61

Chapter 8. Configuring the environment 63

SQL errors during configuration	63
ARSSOCKD errors	63
Cache is full	64
GIM23911E error	64
Configuring the time zone	65
ARSDOC unable to communication with the object server	65
Are multiple library servers on one database a good idea?	66
Enabling the send to function of MAPI	66
Full text searches on PDF documents.	66
Unable to archive files with Chinese characters	67
CPF9898 error	67
CPFA0A9 error	68
OND1005 and RDR2798 errors	68

Chapter 9. Upgrading 71

RDR2798 error	71
SQLCODE -812	71
ARS0024E and ARS0020E errors	72
QRLGMGR & QRLGSVR not in system QSYSWRK	73

Chapter 10. Configuring user access 75

Folder selection logic	75
Folder security not working after applying APAR PQ75080	76
Unable to delete applications groups	76
Unable to delete a report occurrence	77
Not authorized to use library QRDARS	78
Job schedule entries	78
JOBCTL special authority.	79
RDR0166 error	79
RDR0355 error	80

Chapter 11. Configuring databases . . . 81

IBM DB2 Universal Database	81
Expiration type	81
Archiving log files	82
Archive log directory and primary log directory	82
Deleting the primary log directory.	83
SQL0911N error	83
ARS2090E error	84

ARSSOCKD locks tables while user accesses reports	85
Oracle	86
One table per tablespace	86
ORA-01017 error	87
Others	87
DNST408I error	87
Access errors when backing up the database	88
Update application group to use SMS	89
Unable to back up database	90

Chapter 12. Configuring clients 91

OnDemand Web Enablement Kit	91
Retrieving documents after testing a failover	91
ODWEK limitations when accessing a version 2 server	91
UpdateDoc method fails	92
Connecting to a non-default port using Java APIs	92
AFP files are not displaying all overlays.	93
Clustering ODWEK on WebSphere Application Server	94
SQL0104N error	95
Configuring XENOS for AFP to PDF transform	96
Invalid segment number (2155).	96
Configuring WebSphere Application Server and the IBM HTTP Server	97
OnDemand client	98
Unable to initialize document	98
Failure to initialize document	98
PDF error: dispatch -acroexch.app could not be loaded	99
StoreDoc() API fails.	99
Error 1319: unable to find Courier New font	100
Text overwrites itself	100
AFP documents no longer display correctly	100
Unable to establish a connection with the server	101
AFP Viewer and AFP Web Viewer	102
Creating an AFP Viewer trace	102
Modifying parameters in the FTDPORT2.INI file	102

Chapter 13. Managing storage 105

IBM Tivoli Storage Manager	105
ARSADMIN import flag.	105
Migrating indexes to Tivoli Storage Manager	105
Retrieving expired documents.	106
Preempt option can cause loads to fail	106
Server fails when retrieving a resource group	107
Performing backups	108
Adding a new optical library	109
ANS0266I error.	110
Spool File Archive.	110
RDR0383 error	110
Report combining	111
Change in length of key field	112
RDR0375 error	113
OND1001 and CPF9898 errors	114
CPD4329 and SQL0332 errors	115
SQL0303 error	115
Invalid structured field header.	115
Specifying data types for printer devices	116

Other	116
ANS0266I error	116
Unable to delete application groups	117
Recovering data from a backup	118
RDR2789 errors	118

Chapter 14. Maintaining user-defined application group data 121

ARSMINT unloads documents early	121
ARS0020E error	122

Chapter 15. Document loading and indexing 123

Loading	123
Storing documents of different lengths in the same application	123
ARS0020E error	124
ACIF returns 0425-421 and 0425-423 errors	124
Performance degrades after loading PDF documents	125
Write error occurs when sorting	126
AFP load fails	126
Unavailable resources are still found	127
Incorrect date format	127
Data cannot be found	127
ARSLoad	128
ARS0114E and ARS0087I errors	128
LOADEXIT error	129
EDC5084I message	130
Application does not exist within application group	130
Combining two applications in one application group	131
ACIF returns 0425-415 and 0425-346 errors	132
ARSLoad can fail to start	133
ARSLoad can fail on a multiprocessor	134
Unable to store data to cache	134
Connection cannot be established.	135
Unable to open .out file	135
Indexing	136
Unable to allocate enough memory (1)	136
Unable to allocate enough memory (2)	137
APK408S error	138
Documents have incorrect page breaks	138

Structured field is not allowed.	139
Hit list references group not containing index field	140
Output/indexer file not created	140
ACIF returns 0425-346 and 0425-441 errors	142
ACIF returns 0425-421 error	143
ACIF returns 0425-459 error	143
ACIF returns 0425-462 error	144
Jumping to the right page in a line data report file	144
Font missing or word extraction error	145
Generic indexer error when loading PDF file	146
Document not segmented	146

Chapter 16. Distributing documents 149

OnDemand Distribution Facility	149
ARS04422E and ARS04457E errors	149
DD:ARSTRC1 and DD:ARSTRC2 files expanding	149
ODFMSG99 message file	150
ODF migration caused DB2 rollbacks	150
Report Distribution	151
Automatically starting the ARSRD program	151
Creating a server printer definition	152

Chapter 17. Printing 155

Printing reports	155
Disabling /9 option in Microsoft Windows GUI	155
Courier is substituted for all Type 1 fonts	156
Incorrect page orientation	156
Unable to print reports using PRTPRPTOND	157
Printout is truncated	157

Chapter 18. Troubleshooting 159

ARS04093E error	159
Interpreting time information in ARS006I and ARS0067I messages	161

Notices 163

Trademarks	165
----------------------	-----

Index 167

About this guide

One of the strengths of IBM® DB2® Content Manager and IBM DB2 Content Manager OnDemand is that these products can be installed and configured in many ways. However, providing a great degree of flexibility and allowing users to make choices during the installation and configuration process can also cause confusion and lead to mistakes. This troubleshooting guide attempts to address many of those mistakes by documenting the resolution for common configuration problems that can occur.

The information in this guide is culled from real-world customer experiences, primarily from interactions between IBM Support and our customers. Each configuration problem that is described identifies the version number of the product and the operating system on which the product was running when the problem occurred. The inclusion of this information does not imply that the problem is specific to the specified version and operating system. The solution might be applicable across other versions and operating systems as well.

Who should use this guide

This guide is for people who install, configure, and administer IBM DB2 Content Manager and IBM DB2 Content Manager OnDemand. It is not intended to replace any of the publications that ship with these products, but rather, to supplement this information. Use this guide to determine whether a problem that you are experiencing has already been identified, and if it has, use this guide to resolve it.

How this guide is organized

This guide is organized into two parts. The first part addresses configuration issues that are specific to DB2 Content Manager; the second part addresses configuration issues that are specific to DB2 Content Manager OnDemand. Within each part are chapters that logically categorize the configuration problems that can occur at each stage of installation, configuration, and use of these products.

Part 1, DB2 Content Manager contains the following chapters:

- Chapter 1, "Prerequisites," on page 3 discusses a number of problems that can occur when configuring DB2 Content Manager prerequisites.
- Chapter 2, "Applying fix packs and upgrading," on page 13 discusses a variety of problems that can occur when applying fix packs or upgrading DB2 Content Manager.
- Chapter 3, "Configuring user access," on page 21 covers configuration problems that are related to user authorization and authentication.
- Chapter 4, "Configuring product components," on page 29 discusses configuration problems that are related to the resource manager, library server, and object server components of DB2 Content Manager.
- Chapter 5, "Configuring clients," on page 47 discusses problems related to the configuration of DB2 Content Manager clients.
- Chapter 6, "Managing storage," on page 51 discusses different types of storage management problems that can occur when using DB2 Content Manager.
- Chapter 7, "Troubleshooting," on page 57 contains practical troubleshooting tips and helpful hints for installing and configuring DB2 Content Manager.

Part 2, DB2 Content Manager OnDemand contains the following chapters:

- Chapter 8, “Configuring the environment,” on page 63 discusses problems related to configuring the DB2 Content Manager OnDemand environment.
- Chapter 9, “Upgrading,” on page 71 covers problems that can occur when upgrading DB2 Content Manager OnDemand.
- Chapter 10, “Configuring user access,” on page 75 covers configuration problems that are related to user authorization, authentication, and security.
- Chapter 11, “Configuring databases,” on page 81 discusses problems that can occur when configuring and managing databases that are used by DB2 Content Manager OnDemand.
- Chapter 12, “Configuring clients,” on page 91 discusses problems related to the configuration of DB2 Content Manager OnDemand clients.
- Chapter 13, “Managing storage,” on page 105 covers different types of storage management problems that can occur when using DB2 Content Manager OnDemand.
- Chapter 14, “Maintaining user-defined application group data,” on page 121 addresses configuration problems related to the ARSMAINT program.
- Chapter 15, “Document loading and indexing,” on page 123 covers configuration problems that are related to document loading and indexing in DB2 Content Manager OnDemand.
- Chapter 16, “Distributing documents,” on page 149 covers configuration problems that are related to document distribution.
- Chapter 17, “Printing,” on page 155 provides information about common problems that can occur when printing.
- Chapter 18, “Troubleshooting,” on page 159 contains practical troubleshooting tips and helpful hints for installing and configuring DB2 Content Manager OnDemand.

Where to find more information

The product package includes a complete set of information to help you plan for, install, administer, and use your system. All product documentation is provided in portable document format (PDF). You can view the PDF files online using the Adobe Acrobat Reader for your operating system. If you do not have the Acrobat Reader installed, you can download it from the Adobe Web site at www.adobe.com.

IBM provides current product documentation online. Follow the Library link on one of the webpages listed below to access the appropriate platform-specific documentation for your product:

- IBM DB2 Content Manager for Multiplatforms:
www.ibm.com/software/data/cm/cmgr/mp/
- IBM DB2 Content Manager for iSeries™:
www.ibm.com/software/data/cm/cmgr/400/
- IBM DB2 Content Manager for z/OS® and OS/390®:
www.ibm.com/software/data/cm/cmgr/390/
- IBM DB2 Content Manager OnDemand for Multiplatforms:
www.ibm.com/software/data/ondemand/mp/
- IBM DB2 Content Manager OnDemand for iSeries:
www.ibm.com/software/data/ondemand/400/

- IBM DB2 Content Manager OnDemand for z/OS and OS/390:
www.ibm.com/software/data/ondemand/390/

Product documentation is also available from the IBM Publications Center (www.ibm.com/shop/publications/order).

Support available on the Web

IBM provides updated product information online. Follow the Support link on one of the webpages listed above for frequently asked questions, hints and tips, and technical notes.

Education and training

IBM offers several classes for administrators of DB2 Content Manager and DB2 Content Manager OnDemand. Follow the Training and certification link on one of the webpages listed above for course descriptions and prices.

How to send your comments

Your feedback helps IBM to provide quality information. Please send any comments that you have about this publication or other DB2 Content Manager or DB2 Content Manager OnDemand documentation. Visit the IBM Data Management Online Reader's Comment Form (RCF) page at www.ibm.com/software/data/rcf.

Be sure to include the name of the product, the version number of the product, and the name of the book. If you are commenting on specific text, please include the location of the text (for example, a chapter and section title, a table number, a page number, or a help topic title).

Part 1. DB2 Content Manager

Chapter 1. Prerequisites

This chapter discusses a number of problems that can occur when configuring any of these DB2 Content Manager prerequisites:

- IBM DB2 Universal Database™
- IBM WebSphere® Application Server
- LDAP

IBM DB2 Universal Database

The following are problems that are encountered while configuring DB2 Universal Database with DB2 Content Manager.

CLI0123E error

Product:	DB2 Content Manager
Version:	8.2
Operating system:	AIX®

Problem

The following error message was received while installing DB2 Content Manager:

```
[IBM][CLI Driver] CLI0123E  SQL data type out of range. SQLSTATE=HY004
```

In the database log:

```
Error creating item types: ,
exception=com.ibm.mm.sdk.common.DKDatabaseLogonFailure:
DGL0394A: Error in  ::DriverManager.getConnection;
[IBM] [CLI Driver] SQL1013N The database alias name or database name "ICMNLSDDB"
could not be found.
SQLSTATE=42705 (STATE) : ; [SERVER = ICMNLSDDB, USERID = icmadmin,
SQL RC = -1013, SQL STATE = 08001]
```

Solution

Try the following to eliminate this error:

1. Use the DB2 JDBC 1.22 driver.
2. Add the DB2LIBPATH environment variable to the profile.env file.
DB2ENVLIST='LIBPATH ICMROOT ICMDLL ICMCOMP EXTSHM CMCOMMON DB2LIBPATH'
3. As root, create another window and run the icmcr1sdb.sh command script from the /usr/lpp/icm/configto directory, to verify whether you can create a database.
4. After you have verified that you have the authority to create a database, return to the task of installing DB2 Content Manager.

If errors still occur, run the following commands in the AIX window by using the icmadmin profile:

1. run db2set DB2_STPROC_LOOKUP_FIRST=1
2. db2set db2_spnomems
3. db2set DB2_RR_TO_RS=YESet=1

4. `db2set DB2_FMP_COMM_HEAPSZ=12000`
5. `env > outputfile`
6. `grep icmadmin /etc/group`

You should see results similar to the following:

```
$ db2set DB2_STPROC_LOOKUP_FIRST=1
DB2SET processing complete, rc = -4400, SQLCODE = 0
$ db2set db2_spmemset=1
DB2SET processing complete, rc = -4400, SQLCODE = 0
$ db2set DB2_RR_TO_RS=YES
DB2SET processing complete, rc = -4400, SQLCODE = 0
$ db2set DB2_FMP_COMM_HEAPSZ=12000
DB2SET processing complete, rc = -4400, SQLCODE = 0
root@acme: / => grep icmadmin /etc/group
staff:!:1:icmadmin,icmconct,rmdadmin,db2inst1,db2as,pybarra,mgay,httpadm,
db2fenc1,xport
db2asgrp:!:101:rmdadmin,icmadmin,db2inst1,cmdbinst
db2fgrp1:!:103:icmadmin,db2fenc1
Here is the information you requested...
```

Issue the following at a command line:

```
suser -f icmadmin
```

In this case, the problem was that the DB2 administrative group, db2asgrp was not configured with the rights needed to create the icm1sdb database. The system administration user, icmadmin, needed to have the authority to create databases.

DGL5200A error

Product:	DB2 Content Manager
Versions:	8.1, 8.2
Operating systems:	AIX, Solaris, Microsoft® Windows®

Problem

Error DGL5200A occurs when updating or accessing a text index after installing DB2 Net Search Extender Fix Pack 2.

Solution

Before you can use the text search, you must migrate each database.

For UNIX® systems

Perform the following steps on the DB2 command line:

1. Migrate each database instance:
`db2iupdt instanceName`
2. Migrate each database:
`db2extmdb databaseName`
3. Start the text search processes:
`db2text start`

For Windows systems

Perform the following steps on the DB2 command line:

1. Migrate each database:


```
db2extmdb databaseName
```

2. Start the text search processes:

```
db2text start
```

See DB2 Net Search Extender Fix Pack 2 documentation for additional information:

www.ibm.com/support/docview.wss?uid=swg24004937

DGL2642A and ICM7978 errors

Product:	DB2 Content Manager
Versions:	8.1, 8.2
Operating systems:	AIX, Solaris, Microsoft Windows

Problem

The following SQL error occurs after rebinding a database:

DGL2642A: Fail to list workflow actions; ICM7978: This is an internal error.
Run the application again with server trace set to Detail and Data.
Save the server log and see your IBM service representative.
(STATE): [LS RC = 7978, SQL RC = -818]

Solution

Before rebinding a database, stop and restart DB2 Universal Database to unload the original library from memory. Then run the `icmbindlsdb.bat` file.

SQL0973N error

Product:	DB2 Content Manager
Versions:	8.1, 8.2
Operating systems:	AIX, Solaris, Microsoft Windows

Problem

The following error occurs:

COM.ibm.db2.jdbc.DB2Exception "SQL0973N Not enough storage is available in the 'QUERY_HEAP' heap to process the statement. SQLSTATE=57011

Solution

Increase the query heap size for each database instance.

To increase the query heap size on Microsoft Windows:

1. Open the IBM DB2 Control Center.
2. Expand the Instances folder.
3. Right-click the DB2 instance and select **Configure**.
4. Click the **Performance** tab.
5. Scroll to Query heap size,...,query_heap_sz.
6. Change the default value from 1000 to 2048.

If you still get an error that says the heap size is not large enough, increase the query heap size in increments of 1024 until the error no longer occurs.

DB2 environment variables not recognized

Product:	DB2 Content Manager
Versions:	8.1, 8.2
Operating systems:	Microsoft Windows

Problem

Some environment variables were modified before running the command `java TRebuildCompTypeICM`. But the command did not recognize the newly-modified values of the environment variables.

Cause

When DB2 starts, it initializes itself using the current values of certain environment variables. Changing the values of those environment variables after DB2 is running has no affect.

Solution

Stop and restart DB2, so that it reinitializes with the new values of the environment variables:

1. Issue a `db2stop FORCE` to stop DB2.
2. Issue a `db2start` command to restart DB2.
3. Issue the following command to run `java TRebuildCompTypeICM` again.
`java TRebuildCompTypeICM database_name user_id password schema_error_file`

IBM WebSphere Application Server

The following are problems that are encountered when configuring IBM WebSphere Application Server with DB2 Content Manager.

Failure to process +GMT time zones

Product:	DB2 Content Manager
Version:	8.2
Operating systems:	AIX, Microsoft Windows

Problem

The eClient fails to correctly process time zones that are + GMT.

Important: This does not effect all eClient installations.

Solution

After installing fix pack 2, eClient searches can fail to return results that contain an error. If you look in the `eClientTrace_XXXXXX.log` file, you will notice that the `srKey` values do not match. This problem can temporarily be solved by taking one of the following approaches:

- Check to see if and where the `-Duser.timezone` setting is `GMT+timezone` in WebSphere Application Server, for example:
`GMT+02:00`

If it is present, remove that function.

- Use *timezone_id* to replace the GMT offset string.

In **WebSphere Application Server, Version 4:**

1. Select **Administrative Console** -> **nodes** -> **cmrs6k1** -> **eClient server** -> **Installed EJB Modules**.

2. Click **JVM settings** and add the following command:

`-Duser.timezone=timezone_id`

3. Add the time zone command ID to the JVM Arguments.

For a complete list of time zone IDs, please refer to the *tzmappings* file, which is located in the WebSphere Application Server installation directory. Compare the time zone value to verify that the file exists in the *tzmappings* folder before use.

In **WebSphere Application Server, Version 5:**

1. Click **Servers** -> **Application Servers** -> **eClient_Server** -> **Process Definition** -> **Java Virtual Machine**.

2. Under Generic JVM Settings, add the string:

`-Duser.timezone=timezone_id`

where:

timezone_id is the spelled-out time zone value, for example:

`-Duser.timezone=Europe/Berlin`

- Change the *timezone_id* to a time zone that is not a GMT+ location in your system.

HTTPS snoop does not work

Product:	DB2 Content Manager
Versions:	8.1, 8.2
Operating systems:	AIX, Solaris, Microsoft Windows

Problem

After the installation of DB2 Content Manager, Version 8 with WebSphere Application Server, Version 5, HTTP snoop works, but HTTPS snoop does not.

Cause

Check the WebSphere Application Server error log file in the `WASHOME\AppServer\logs` directory (windows) or the `/opt/WebSphere/AppServer/logs` directory (UNIX) to determine the cause of the problem. See the "Resource Manager Troubleshooting" chapter in the *Planning and Installation Guide* for conditions that cause errors in WebSphere Application Server.

Solution

Check the configuration of the WebSphere Application Server:

1. In a Web browser, launch the following URL: `http://hostname:9090/admin`
2. Type **WASADMIN** and click **OK** to open the WebSphere Application Server Administrative Console.
3. Click **Environment** -> **Virtual Hosts** -> **default_host** -> **Host Aliases**.
4. Verify that port 443 is listed.

5. If it is not listed, add it.
6. Click the Save button (to save all changes).
7. In the left pane, click **Update Web Server Plug-in**.
8. In the right pane, click OK.
9. Click **Logout** and close the Web browser.
10. Restart the IBM HTTP Server:


```
#/opt/IBMHttpServer/bin/apachectl graceful 10
```
11. Stop WebSphere Application Server:


```
/opt/WebSphere/AppServer/bin/stopServer.sh server
```
12. Restart WebSphere Application Server.


```
/opt/WebSphere/AppServer/bin/startServer.sh server1
```
13. Test whether your ICMRM application deploys correctly by pointing your browser to the following URLs:


```
http://hostname
https://hostname
http://hostname/icrmr/snoop
https://hostname/icrmr/snoop
```

ICM9838 error

Product:	DB2 Content Manager
Versions:	8.1, 8.2
Operating system:	AIX

Problem

Error ICM9838 is written to the icrmr.log file after upgrading WebSphere Application Server.

```
ICMRM:ERROR 2004-02-05 10:51:29,151 [main] -
ICM9838: The existing key is generated using different version of JDK.
```

Cause

A newer version of the JDK is installed when you upgrade WebSphere Application Server.

Solution

Regenerate the encryption key in the resource manager:

1. Stop WebSphere Application Server.
2. Stop DB2.
3. Restart DB2.
4. Rename the ICMRMKeyStore file to ICMRMKeyStore.oldjdk in the following directory:


```
/usr/WebSphere/AppServer/installedApps/icrmr.ear/icrmr.war/WEB-INF/classes/
com/ibm/mm/icrmr/
```
5. Edit the ICMRM.properties file located in the same directory to update the DBPassword value:
6. Update the DBPassword value in ICMRM.properties:


```
DBPassword= new_rmadmin_password
```

7. Save and close the ICMRM.properties file.
8. Connect to DB2 by using the RMADMIN account:

```
db2 connect to rmdb
db2 select acc_userid,acc_username,svr_servertype,svr_schema,
svr_servername,svr_port,svr_protocol from rmdadmin.rmaccess,
rmdadmin.rmserver where svr_serverid=acc_userid
```
9. Using the acc_userid value returned by the preceding query, update the table:

```
db2 update rmdadmin.rmaccess set acc_password='<the password for rmdadmin>'
where acc_userid = 0
db2 update rmdadmin.rmaccess set acc_password='<the password for icmadmin>'
where acc_userid = 1
```
10. Commit the changes:

```
db2 commit
```
11. Disconnect from DB2:

```
db2 terminate
```
12. Restart WebSphere Application Server.

Resource manager does not start

Product:	DB2 Content Manager
Version:	8.2
Operating systems:	AIX

Problem

The resource manager does not start.

Cause

WebSphere Application Server is running under the non-root user ID "was".

Solution

To resolve the problem:

1. Investigate the various environment configurations such as root profile and was user ID profile.
2. Log in as the user was, and verify that the CLASSPATH environment variable is correctly defined before initializing the resource manager.
3. Refresh the encryption keys.

See "Defining and Configuring the Library Server" in the *Administration Guide*.

Resource manager fix pack errors

Product:	DB2 Content Manager
Version:	8.2
Operating systems:	AIX

Problem

The following resource manager update error occurs when attempting to install a DB2 Content Manager, Version 8.2 fix pack:

```

2003-12-04 12:08:28,815 INFO : UpgradeRMFiles :
PropDestDir =/usr/lpp/icm/config/WEB-INF/classes/com/ibm/mm/icmrm
2003-12-04 12:08:28,816 INFO : UpgradeRMFiles : Backing up the icmrm.ear
dir of the the original RM Application under WAS
2003-12-04 12:08:28,816 ERROR : UpgradeRMFiles : The dir selected for
backup does not exist
2003-12-04 12:08:28,816 ERROR : UpgradeRMFiles : Problem during backup of
the original RM Application icmrm.ear dir .. Terminating
2003-12-04 12:08:28,817 ERROR : UpdRM : Upgrade of the RM Application
icmrm under WAS failed
2003-12-04 12:08:28,817 INFO : UpdateRM : Return code from updRM: 87
2003/12/04 12:08:28> ERROR: /usr/lpp/icm/config/updateRM.sh script failed
/usr/sys/inst.images/CM/CM8.2/Server/820.20/updateCMcfg:
/usr/lpp/icm/config/updateRM.sh script failed with RC=87 (87)

```

Solution

Specify the correct node name in the DB2 Content Manager Version 8.2 fix pack installation screens. The node name you specify should be the current WebSphere Application Server node name. The node name value is reflected in the ICMROOT/*Fixpack_Version*/updateCM.cfg file.

DGL5024A error

Product:	DB2 Content Manager
Version:	8.2
Operating systems:	Unknown

Problem

The following exception occurs when creating resources via WebSphere Studio Application Developer in conjunction with DB2 Content Manager, Version 8.2:

```

Add File: com.ibm.websphere.personalization.resources.
AddResourceException: com.ibm.mm.beans.
CMBException: DGL5024A: Failed in parsing XML response.

```

The message output is: 'SCHEMA NOT FOUND.'

Solution

To resolve the problem:

1. Verify that you can add a file using the user interface.
2. If you cannot add a file, verify that you can create an instance of NOINDEX when using a file locally on the system.
3. Enable tracing on the EIP side.
4. Set the user role mapping for resource manager to everyone.
5. Restart DB2 Content Manager resource manager.
6. Regenerate the plug-in.
7. Restart WebSphere Application Server.

LDAP

The following problems can be encountered when configuring LDAP with DB2 Content Manager.

Supplied credentials are not valid

Product:	DB2 Content Manager
Versions:	8.1, 8.2
Operating systems:	AIX, Solaris, Microsoft Windows

Problem

When installing DB2 Content Manager, Version 8.2, the following message occurs:
The Supplied Credentials are not valid

This message occurs when the system is configured to use an LDAP server.

Cause

This problem is commonly caused by the LDAP server being offline.

Solution

To resolve the problem:

1. Check the DB2 Universal Database environment variables by issuing the following command in the DB2 command window:
`db2set -all`
2. If the DB2_ENABLE_LDAP environment variable is set to YES, set it to NO by issuing the following command in the DB2 command window:
`db2set DB2_ENABLE_LDAP=NO`
3. Continue the installation of DB2 Content Manager.
4. After the installation finishes, reset the value of the DB2_ENABLE_LDAP environment variable to YES.

Not able to log on as LDAP import user

Product:	DB2 Content Manager
Version:	8.2
Operating system:	Solaris

Problem

An error occurred when logging in to DB2 Content Manager as the LDAP import user when using DB2 Content Manager Client for Windows.

Solution

Here are some items to check in the LDAP configuration:

1. Verify that the IBM Tivoli® Directory Server Client is installed on the library server.
2. Verify that the bin directory of the IBM Tivoli Directory Server Client installation directory is in the PATH environment variable.
Note: The user exit fails if it cannot load the requisite IBM Tivoli Directory Server Client DLL files.
3. Validate the contents of the cmbenv.properties file, which resides in the CMCOMMON directory.

If the `cmbenv.properties` file does not contain a valid LDAP server configuration, it will not function. This problem can be a variety of things, including an invalid administrative user ID and password, a hostname for the LDAP server that is either bad or does not resolve through DNS, or problems with the DNS.

4. Verify that the LDAP server is running.

If the problem persists, try the following to help diagnose the issue:

1. Set the Library Server trace level to -15.
2. To enable the authentication process, perform the following:
Set the `LDAPDEBUG` environment variable to 1 in the `/home/db2inst1/sqllib/userprofile` directory and then export `LDAPDEBUG`.
Edit `/home/db2inst1/sqllib/profile.env` file and add the `LDAPDEBUG` environment variable to the `DB2ENVLIST` environment variable.
Tip: When attempting to authenticate, the LDAP user exit writes debugging information to the `/tmp/UE.log` file.
3. Stop and restart DB2.

Chapter 2. Applying fix packs and upgrading

This chapter discusses a variety of problems that can occur when applying fix packs or upgrading DB2 Content Manager.

Installation

CMBQueryService: method SetQueryParameters() not found

Product: DB2 Content Manager
Version: 8.2
Operating systems: AIX, Solaris, Microsoft Windows 2000

Problem

The DB2 Content Manager eClient, Version 8.2 fails to work after installing fix pack 1. Messages similar to this one are received:

CMBQueryService: method SetQueryParameters() not found

Cause

DB2 Content Manager eClient Version 8.2 is dependent on Enterprise Information Portal, Fix Pack 1.

Solution

When installing DB2 Content Manager eClient, Version 8.2 Fix Pack 1, you must also install Enterprise Information Portal, Fix Pack 1. Always maintain all components at the same fix pack level because fixes for one component might depend on fixes in another component (such as updated or additional API calls).

For more information on this topic, see section 5.2 of the DB2 Content Manager eClient, Version 8.2 fix pack readme file:

ftp://ftp.software.ibm.com/ps/products/content_manager/fixes/v8.2

ICM7307 error

Product: DB2 Content Manager
Versions: 8.1, 8.2
Operating systems: AIX, Solaris, Microsoft Windows 2000

Problem

ICM7307 errors are received when fix packs are applied.

Cause

These errors indicate that DLL files are not generated when fix packs are applied.

Solution

A common reason why this occurs is that the compiler license has expired. Other operating system licensing requirements include:

- AIX: IBM Visual Age C++ license
- Solaris: Sun Forte compiler license

DB2 Content Manager uses the `TRebuildCompTypeICM` command to regenerate the access modules as part of the post-installation configuration steps. If you installed a trial copy of a compiler to get the system working and removed the compiler, the `TRebuild` command will fail. To avoid failure, either uninstall the fix pack or install a production copy of the compiler.

For more information, see section 5.6 of the DB2 Content Manager, Version 8.2 fix pack readme file:

ftp://ftp.software.ibm.com/ps/products/enterprise_information_portal/fixes/v8.2

Out of range error

Product:	DB2 Content Manager
Version:	8.2
Operating systems:	Microsoft Windows 2000

Problem

After installing Microsoft IIS HTTP Server, DB2 Content Manager was not able to start. The system cannot retrieve objects, which causes the following SQL data type message:

out of range error SQLSTATE=HY004.

Solution

Disable Microsoft HTTP Server and restart DB2 Content Manager.

To resolve the SQL error:

1. Stop all DB2 services before running the DB2 JDBC driver files under **Start -> Settings -> Control Panel -> Administrative Tools -> Services**.
2. In a command window, run the `usejdbc1.bat` file to use the DB2 JDBC 1.22 driver.
3. In a command window, run the `usejdbc2.bat` file to switch to the DB2 JDBC 2.0 driver.
4. Restart DB2.

Cannot start the QVI400 prestart job

Product:	DB2 Content Manager
Version:	5.2
Operating systems:	OS/400®

Problem

Unable to start the QVI400 prestart job.

Solution

To start the prestart job, perform the following:

1. End all QVI400SRV jobs running in the subsystem where the QVI400 program is defined as a prestart job (QSERVER subsystem is the default).
There will always be one straggler job (in this case, QVI400SRV) left running after ending the QVI400 prestart job. Use option 4 and the *IMMED parameter to any of the QVI400SRV jobs in the WRKSBSJOB listing for the subsystem to end any jobs that are using the port. No jobs can be using port 31015 when you try to start the QVI400 prestart job.
2. On a command line type NETSTAT.
3. Select option 3 to work with the TCP/IP connection status.
4. Verify that the port being used (31015 is the default) is in "Listen" status or is not listed at all.
5. If the port is in a "Cancel wait" or recovery status, end that TCP/IP connection so the port returns to "Listen" status or not to be listed at all.
6. While signed on as QVIADMIN, type the following command to start the prestart job anew:
STRPJ SBS(QSERVER) PGM(QVI400)
Substitute the name of the subsystem where QVI400 runs if you are not using the default QSERVER subsystem.

Over compliance limit logon error

Product: DB2 Content Manager
Version: 5.1
Operating system: OS/400

Problem

The following error occurs when running the verification script command VI400VFY:
Over Compliance Limit Logon continued in the VI400.log file.

Solution

Change the usage limit for the feature code, 5722VI1 in the Work with License Information (WRKLICINF) file.

Upgrade

Upgrading from version 8.1 to version 8.2

Product: DB2 Content Manager
Versions: 8.1, 8.2
Operating systems: Microsoft Windows

The following are common errors that can occur when upgrading from DB2 Content Manager, Version 8.1 to DB2 Content Manager, Version 8.2.

Problem: Temporary directory location

The upgrade process fails if the temporary directory used for the upgrade is on a different drive than the one which DB2 Content Manager, Version 8.1 is installed.

Solution

If you have an UPDATEDIR system environment variable, set its value to point to a temporary directory on the same logical drive where DB2 Content Manager, Version 8.1 is installed.

If you do not have an UPDATEDIR system environment variable, create and define one to point to a temporary directory on the same logical drive where DB2 Content Manager, Version 8.1 is installed.

Problem: ICM7978 error

The following error occurs after upgrading to DB2 Content Manager, Version 8.2:
ICM7978 with SQL -818

Solution

To resolve the ICM7987 error:

1. Verify that the icmnlssp.dll file in the SQLLIB\FUNCTION directory has the date, timestamp, file size, and file name as shown:
04/23/2003 02:00p 5,191,984 icmnlssp.dll
2. Copy ICMNLSSP.DLL to the CM81\bin directory.
3. At a command prompt, change to the CM81\CONFIG directory and run the icmbindlsdb.bat file to rebind the stored procedures for the DB2 Content Manager database.

Problem: Read-only file

If a CD-ROM was used to apply any temporary fixes to DB2 Content Manager, the files copied during the installation of the temporary fix inherited read-only attributes from the CD. This causes the file copy process during the upgrade to fail because the read-only file cannot be modified.

Solution

Change the read-only attribute of affected files.

Migration utility terminates abnormally

Product:	DB2 Content Manager
Version:	8.2
Operating system:	AIX

Problem

The following error occurs when migrating from DB2 Content Manager, Version 7.1 to Version 8.2:

failing/ stack pointer=36651bf8 jvmxm004 jvm

Cause

The migration utility terminates abnormally or fails if the DB2 Content Manager database has the following errors:

- There are extra rows in the tables AVT00004 or AVT00005.
- The AVT table definition in DB2 Universal Database does not match the definition in the DB2 Content Manager database.

Solution

The migration utility does not verify the DB2 Content Manager database. Nor does it automatically correct any errors that exist in the database. The migration utility bypasses orphan data, such as:

- Parts in the SBTPARTS table without matching ITEM IDs in the SBTITEMS table.
- Items in the AVT table without matching ITEM IDs in the SBTITEMS table.

Follow this procedure to determine whether either of these two errors exists:

1. Verify that AVT00004 includes only one row for each index class ID (ATTRIBUTE00012) and that AVT00005 includes only one row for each view ID (ATTRIBUTE00033).
 - a. To identify index classes or views with duplicate rows, execute the following commands:

```
SELECT ATTRIBUTE00012
FROM AVT00004
GROUP BY ATTRIBUTE00012
HAVING COUNT(*) > 1

SELECT ATTRIBUTE00033
FROM AVT00005
GROUP BY ATTRIBUTE00033
HAVING COUNT(*) > 1
```
 - b. If duplicate rows for the index class ID or view ID are found, execute the following commands to display rows:

```
SELECT * FROM AVT00004 WHERE ATTRIBUTE00012 = x
SELECT * FROM AVT00005 WHERE ATTRIBUTE00033 = y
```

where:
x is index class ID
y is view ID
 - c. Delete the extra rows.

To determine which rows to delete, use the ITEM ID returned in the preceding queries to find and display the corresponding row or rows in the SBTITEMS table. If all of the values are identical except the fields of ITEM ID and timestamp, delete either row; the older row is the correct one. If values in other fields, such as AccessListCode, are different, decide which one is correct based on those values.
2. Ensure that each AVT table definition in DB2 Universal Database matches its definition in DB2 Content Manager database.

For example:

If a column ATTRIBUTE0000*x* is nullable in the table AVT0000*y*, bit 0 of ATTRFLAGS should equal 1 in the table SBTCLASSATTRS, where CLASS ID=*y* and ATTRIBUTE ID=*x*.

If ATTRIBUTE0000*x* is defined as NOT NULL, then bit 0 of ATTRFLAGS must be 0.

- a. To identify incorrect ATTRFLAGS, execute the following SQL to replace *schema* with the schema name of the DB2 Content Manager 7.1 library server database:

```
SELECT B.*
FROM SYSIBM.SYSCOLUMNS A,
SBTCLASSATTRS B,
SBTCLASSDEFS C
WHERE A.TBNAME=C.CLASSTABLENAME
AND B.CLASSID=C.CLASSID
AND CONCAT ('ATTRIBUTE', DIGITS(B.ATTRIBUTEID)) = A.NAME
AND A.TBCREATOR = schema
AND NOT ( (MOD(B.ATTRFLAGS,2) = 0 AND A.NULLS = 'N')
OR (MOD(B.ATTRFLAGS,2) = 1 AND A.NULLS = 'Y')
```

- b. If the number of rows displayed is greater than zero, correct the value of ATTRFLAGS that displays in the results.

After the DB2 Content Manager database has been cleaned up, drop and recreate the DB2 Content Manager 8.2 library server database. Then try the migration again.

Slow performance after upgrade

Product:	DB2 Content Manager
Version:	8.2
Operating systems:	Microsoft Windows

Problem

After performing an upgrade to DB2 Content Manager, Version 8.2, performance is extremely slow.

Cause

Global WebSphere Security was enabled in WebSphere Application Server, Version 4 Advanced Edition, and is probably blocking access to the resource manager. Because the resource manager provides its own security mechanisms, disable security for the resource manager Web application.

Solution

Stop the library server monitor process and install DB2 Content Manager, Version 8.2, Fix Pack 2. If this does not resolve the problem, disable security on selected application servers.

This procedure disables the default application server and checks the behavior with the *default_app* Web module.

Global settings

1. Verify that global security is enabled and that the administrative server has restarted at least once.

This process ensures that the correct security settings are in the *sas.server.props* file. The snoop servlet supplied with the *icmm* Web module has a security constraint that allows only authenticated users to access it. Access to the Web module is unrestricted without security enabled. If you

enable security and attempt to access the snoop servlet at <http://localhost/icmrm/snoop>, the basic authentication challenge login prompt appears.

2. Stop the administrative server in **Start -> Programs -> IBM WebSphere Application Server Version 4, Advanced Edition**.
3. Delete the `WAS_HOME\properties\sas.server.props.future` file.
If this file is present when an application server restarts, information from it is copied to the `sas.server.props` file, overwriting information in the `sas.server.props` file.
4. Make a backup copy of the `WAS_HOME\properties\sas.server.props` file.
5. Edit the `sas.server.props` file and modify the settings as described below.
Make these changes carefully because incorrect settings can result in unwanted security behavior or prevent the administrative server from starting with security enabled. Do not change any values other than the ones listed here.
 - a. If the value of the `com.ibm.CORBA.authenticationTarget` property is `LTPA`, set the following property values:
Client-association properties:
`com.ibm.CORBA.SSLTypeIClientAssociationEnabled=true`
`com.ibm.CORBA.LocalOSClientAssociationEnabled=false`
`com.ibm.CORBA.LTPAClientAssociationEnabled=true`
Server-association properties:
`com.ibm.CORBA.SSLTypeIServerAssociationEnabled=true`
`com.ibm.CORBA.LocalOSServerAssociationEnabled=false`
`com.ibm.CORBA.LTPAServerAssociationEnabled=true`
 - b. If the value of the `com.ibm.CORBA.authenticationTarget` property is `localos`, set the following property values:
Client-association properties:
`com.ibm.CORBA.SSLTypeIClientAssociationEnabled=true`
`com.ibm.CORBA.LocalOSClientAssociationEnabled=true`
`com.ibm.CORBA.LTPAClientAssociationEnabled=false`
Server-association properties:
`com.ibm.CORBA.SSLTypeIServerAssociationEnabled=true`
`com.ibm.CORBA.LocalOSServerAssociationEnabled=true`
`com.ibm.CORBA.LTPAServerAssociationEnabled=false`
6. Restart the administrative server.

Application server settings

1. Start the administrative console.
2. Right click the application server that you want to disable and select **Properties** from the pop-up menu.
3. In the Application Server Properties window, click the **JVM Settings** tab and set the following system properties:
 - a. If the value of the `com.ibm.CORBA.authenticationTarget` property in `sas.server.props` is `LTPA`, set the following property values:
Client-association properties:
`com.ibm.CORBA.SSLTypeIClientAssociationEnabled=false`
`com.ibm.CORBA.LocalOSClientAssociationEnabled=false`
`com.ibm.CORBA.LTPAClientAssociationEnabled=false`
`com.ibm.CORBA.DCEClientAssociationEnabled=false`
Server-association properties:

```
com.ibm.CORBA.SSLTypeIServerAssociationEnabled=true
com.ibm.CORBA.LocalOSServerAssociationEnabled=false
com.ibm.CORBA.LTPAServerAssociationEnabled=true
```

- b. If the value of the `com.ibm.CORBA.authenticationTarget` property in `sas.server.props` is `localos`, set the following property values:

Client-association properties:

```
com.ibm.CORBA.SSLTypeIClientAssociationEnabled=false
com.ibm.CORBA.LocalOSClientAssociationEnabled=false
com.ibm.CORBA.LTPAClientAssociationEnabled=false
com.ibm.CORBA.DCEClientAssociationEnabled=false
```

Server-association properties:

```
com.ibm.CORBA.SSLTypeIServerAssociationEnabled=true
com.ibm.CORBA.LocalOSServerAssociationEnabled=true
com.ibm.CORBA.LTPAServerAssociationEnabled=false
```

4. Stop and restart the application server to load the new property values.
5. Verify that security is disabled for the application server by accessing the snoop servlet at `http://localhost/icmm/snoop`. If security is disabled, you will not be prompted for credentials verification.

FRN6259A error

Product: DB2 Content Manager
Version: 5.2
Operating system: OS/400

Problem

An FRN6259A error is received after upgrading DB2 Content Manager.

Solution

Prestart jobs are sometimes removed from the subsystem during an upgrade. Check that the Prestart Job Entry is still listed in the QSERVER subsystem.

If the Prestart Job Entry is not listed, perform the following on a command line to add the prestart job entry to the subsystem, and to start the listener job:

```
ADDPJE SBS(QSERVER) PGM(QVI/QVI400)
USER(QVITCP) THRESHOLD(1) ADLJOBS(0) JOB(QVI400)
INLJOBS(1) MAXUSE(*NOMAX) CLS(*LIBL/QINTER)
```

When the listener job is started, you will see the following entries in the QSERVER subsystem:

QVI400	QVITCP	PJ	ACTIVE	
QVI400SRV	QVITCP	BATCHI	ACTIVE	PGM-QVI400SRV

Note: QVI400 is the common program name used for prestart jobs. However, if your organization created multiple ports and renamed the QVI400 program to something such as QVI31015, that would be the prestart job name you are looking for in QSERVER:

QVI31015	QVITCP	PJ	ACTIVE	
QVI400SRV	QVITCP	BATCHI	ACTIVE	PGM-QVI400SRV

Chapter 3. Configuring user access

This chapter covers configuration problems that are related to user authorization and authentication.

Authorization

User does not have privilege required

Product: DB2 Content Manager
Versions: 8.1, 8.2
Operating systems: AIX, Solaris, Linux[™], Microsoft Windows

Question

Two users belong to the same access control list (ACL). Why can one user delete an item and the other user cannot?

Answer

The maximum action that a user can perform on an item depends not only on the user's profile privilege (general privilege, defined in the create user interface), but also on the privilege that is defined in the item's access control list. For example, if one user's profile has an assigned general privilege set, ItemDelete privilege, but the other user's profile does not, the first user can delete an item and the other user cannot. The other user gets the error message:

The user does not have the privilege required to perform the requested operation

As another example, if one user has the ItemDelete privilege, but the item's ACL does not have the ItemDelete privilege, this user cannot delete the item.

Essentially, the first user must have the privilege ItemDelete associate with him both at the general privilege setting and at the item's ACL setting.

DGL5203A and ICM7172 errors

Product: DB2 Content Manager
Versions: 8.1, 8.2
Operating systems: AIX, Solaris, Microsoft Windows

Problem

The following error is received while updating, reorganizing, or using text indexes for text searchable components:

DKUsageError: DGL5203A: The password is invalid for the user ID used to administer text indexes.
ICM7172: The password provided is invalid for this user ID, or it is NULL. (STATE) : [LS RC = 7172, SQL RC = -1].

Solution

The DB2 Text Information Extender for DB2 Universal Database, Version 7, or DB2 Net Search Extender for DB2 Universal Database, Version 8, password is not set, or is not set correctly. Reset the password in the DB2 Content Manager system administration client.

Setting the DB2 Text Information Extender/Net Search Extender password:

1. Log on to the system administration client.
2. Expand the **Library Server Parameters** category in the left pane.
3. Select **Configurations** in the left pane.
The library server configuration properties are displayed in the right pane.
4. Click the **Features** tab.
5. Enter the correct DB2 Text Information Extender and Net Search Extender user ID and password.
6. Click **OK**.

Unable to add notes

Product:	DB2 Content Manager Server
Version:	5.2
Operating system:	OS/400

Question

How can user profiles other than QVIADMIN add notes?

Answer

Verify that the ID of the user that is attempting to add a note has the authority to the DB2 Content Manager environment (*ALL objects in the QUSRVI and QVI libraries). Authority to the environment is most commonly performed by associating the user ID with the group profile defined to the DB2 Content Manager environment, for example, QVIGROUP. Additionally, make sure that the privilege set involved has the "Documents Table of Contents" privilege set to 3 or higher. For example, in Figure 1 on page 23 the document table of contents privileges is 4:

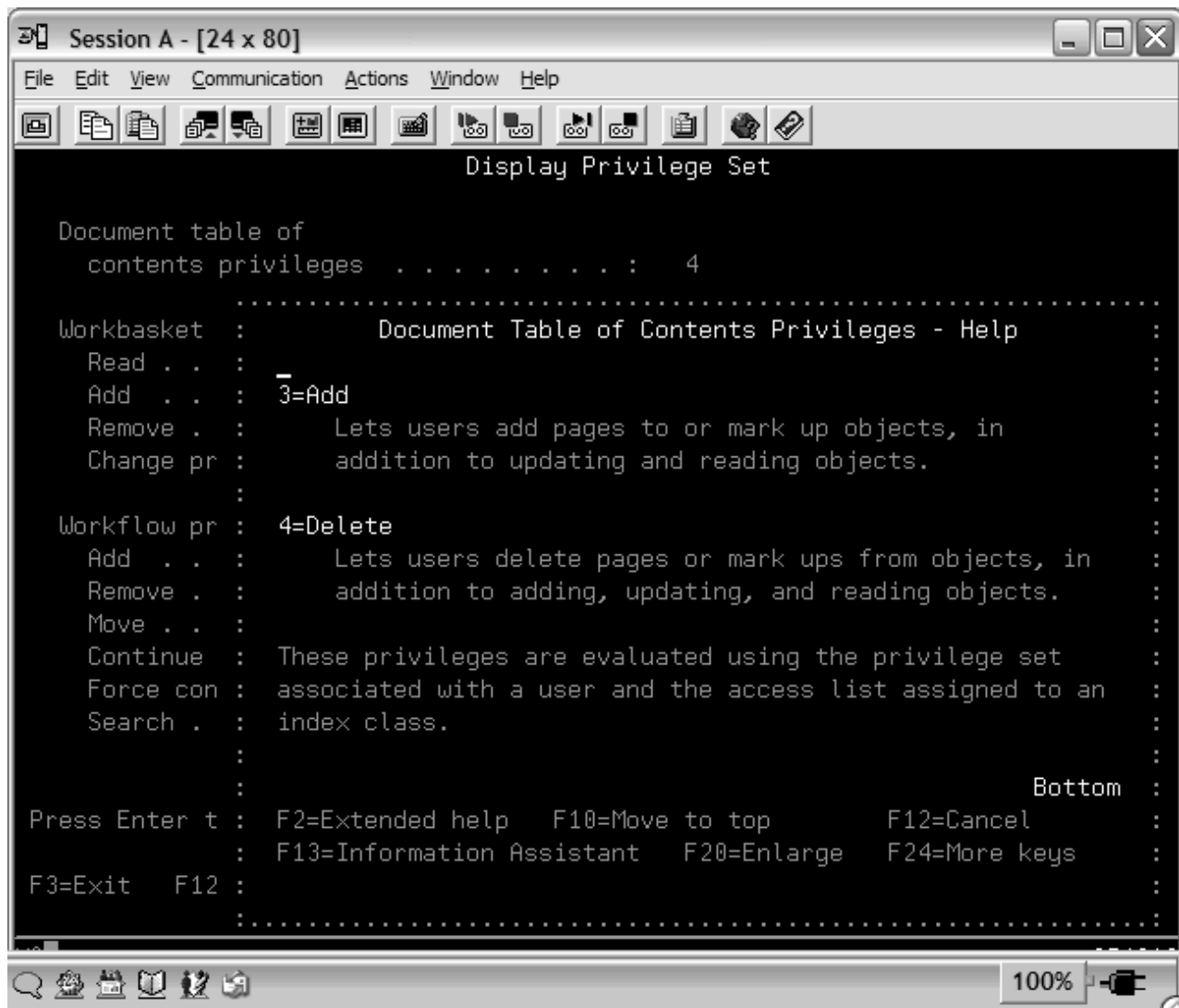


Figure 1. Displaying a privilege set

Unable to remove documents from workbaskets

Product: DB2 Content Manager

Version: 5.1

Operating system: OS/400

Question

How can you remove documents or work packages from workbaskets?

Cause

In December 2003, there was a change made to APAR SE11711 that modified the way workflow information was sent to the Client. The original problem that was fixed in the APAR pertained to workflow information that was not sent to the Client unless the "Folder Table of Contents" privilege was a 1 or higher. APAR

SE11711 moved the responsibility of Workflow security to the "Search Workflow" privilege such that now, you must have "Workflow Search=Y in order to send workflow information to the client. This will be a permanent change and is available in PTF SI10259 or any of its supersedes.

Solution

If your privilege setting does not include Workflow Search=Y, you will notice that certain functions are grayed out in the client (for example, Remove from workbasket) because the functions require workflow information. Search Workflow is also known as View Workflow because every time you put an object in a workbasket, you add that object to a workflow. For this reason, you must be able to view workflow information to remove the object from a workbasket.

If your privilege setting includes Workflow Search=N and you open an object from the workbasket, the client cannot see the workflow information and therefore, cannot remove the document from the workbasket.

You can specify Workflow Search=Y at either the user level or at the workbasket level. To make the change at the workbasket level:

1. Look at the workbasket information and note the Access List to which it is assigned.
2. Look at the Access List by typing "8" in front of the workbasket information.
3. Note the groups and privilege set in the workbasket information that is assigned to in the Access List.
4. Determine the appropriate privilege sets to modify.
5. Change the Workflow Search=Y in the privilege sets.

Authentication

DGL0583A

Product:	DB2 Content Manager
Versions:	8.1, 8.2
Operating systems:	AIX, Solaris, Microsoft Windows

Problem

The following error occurs:

DGL0583A: Invalid password length

Solution

The length of the specified password exceeds the 32-character limit. Change the password to be 32 characters or less.

DGL3804A error

Product:	DB2 Content Manager
Version:	8.2
Operating systems:	AIX, Solaris, Microsoft Windows 2000

Problem

A DGL3804 error occurs when a user tries to edit the user definitions.

Solution

Users cannot edit their own user definitions. If their privilege set contains the following privileges, they can only change other users' definitions:

- SystemDefineUser
- SystemDomainQuery
- SystemQueryUserPrivs

Changing the system IDs of the CICS regions running ImagePlus

Product:	DB2 Content Manager
Version:	8.1
Operating systems:	Microsoft Windows

Question

What is the easiest way to transition from one system administration ID of the CICS® regions running on IBM DB2 Content Manager ImagePlus® for OS/390 to another in regard to table changes?

Answer

There are four tables that must be updated if you are changing the names of the CICS regions where IODM and FAF run:

- IDFSIDTB (column SCICSID)
- IDOSIDTB (column TCICSID)
- IDPARMTB (column OCICSID)
- EYPTSYMB (column SYMBVAL)

Characters 5-12 of the values in the columns that are specified above contain the network connection name between IPFAF, APT, CICS region, and IODM CICS region.

Review and perform the installation instructions for DB2 Content Manager ImagePlus to verify this as well.

Host security error when displaying an object

Product:	DB2 Content Manager
Version:	8.2
Operating systems:	z/OS, OS/390

Problem

When trying to display an object in DB2 Content Manager, the following error occurs:

HTTP server(RM) ... Authenticate.. no authorization data found, authenticate failed
Authentic User... -nobody- Denied..... Authentic User required.

Cause

A host security error in the Resource Access Control Facility (RACF®).

Solution

To resolve the authentication problem:

1. Modify the C:\WINNT\ICMClient.ini file to have the following parameters and values:

```
[Options]
DisableURLCode=yes
[Scan]
PagesInFirstFile=5
PagesInRemainingFiles=15
```

2. Stop and restart the client for Windows.

ICM7194 error

Product:	DB2 Content Manager
Version:	8.1
Operating system:	AIX

Problem

After rebooting the server and restarting all DB2 Content Manager and related servers, users are unable to log on to the library server. The following error message is displayed:

Error message ICM7194: Environment variable ICMCOMP is not defined

Cause

The ICMCOMP environment variable must be defined to the DB2 instance. After completing the installation of DB2 Content Manager, the ICMCOMP variable is set when a user logs into the system. Because DB2 was started in the /etc/inittab directory, DB2 does not define the ICMCOMP variable.

Solution

If ICMCOMP environment variable is not defined, add it to the profile.env file.

Specifying the location of the WORK directory

Product:	DB2 Content Manager
Version:	7.1
Operating systems:	Microsoft Windows

Question

How do you change the location of the WORK directory in DB2 Content Manager?

Answer

When viewing a document, a temporary copy of the document is stored on the client machine. By default, the directory is FRNROOT\WORK. However, if users do not have write access to the FRNROOT directory, the location of the WORK directory must be changed. There are several options for specifying the location of the WORK directory, based on the following rules:

- If the FRNCACHE environment variable is defined, it is used as the WORK directory location. When defining this variable, specify the full path to the desired location.
- If there is no FRNCACHE variable, but the HOMEPATH variable is set, the *HOMEDRIVE\HOMEPATH\FRNWORK* directory is used.
- If FRNCACHE and HOMEPATH are not defined (or if HOMEPATH=\\), the *FRNROOT\ WORK* directory is used.
- If none of the above options are available, the location of the work directory is *CURRENT DIRECTORY\WORK*.

Setting password duration

Product:	DB2 Content Manager
Versions:	2.1, 2.3
Operating system:	z/OS, OS/390

Question

How do you set the password duration for DB2 Content Manager for OS/390?

Answer

Use the system administration client to set password duration:

1. Go to the **Library Server Parameters tab** -> **Configurations tab** -> **FRNI transaction**.
2. Set the password duration within the properties of the FRNI transaction.
The password duration field is in the FRNCNTL table of the library server database.
The PasswdChngDt column of the FRNPATRONS table is updated by taking the current date and adding the number of days specified in the PasswordDuration column of the FRNCNTL table.

Chapter 4. Configuring product components

This chapter discusses configuration problems that are related to these specific components of DB2 Content Manager:

- Resource manager
- Library server
- Object server

Resource manager

DGL3711A and ICM7307 errors

Product:	DB2 Content Manager
Versions:	8.1, 8.2
Operating systems:	Microsoft Windows

Problem

The access modules for system-defined item types are not generated successfully, and the ICMROOT\Logs\database.log file displays the following message:

```
Error creating item types: exception=com.ibm.mm.sdk.common.DKUsageError:
DGL3711A: Error occurred while compiling the component type;
ICM7307: An error occurred while creating the DLL to access a component table.
Review the server log for the name of the access module, and
then review the corresponding ICMxxxx.TX files
(for example, ICMVxxxx.tx3) for details.
(STATE) : [LS RC = 7307, LS reasonCode = 2]
```

Cause

There are configuration errors in the LIB, PATH, or INCLUDE environment variables.

Solution

See the "Installing and updating prerequisite programs for Windows" chapter in the *Planning and Installation Guide* for information on configuring the LIB, PATH, and INCLUDE environment variables properly.

DGL5161A error

Product:	DB2 Content Manager
Versions:	8.1, 8.2
Operating systems:	AIX, Solaris, Linux, Microsoft Windows

Problem

The following error occurs when selecting or saving resource manager properties:
DGL5161A: Get output stream for connection to resource manager failed.

Solution

This error occurs if you choose not to perform the optional, additional configuration, and it can safely be ignored. If you choose to configure the resource manager more thoroughly, see the DB2 Content Manager *Planning and Installation Guide* for complete information.

DGL7161A and ICM9804 errors

Product:	DB2 Content Manager
Version:	8.2
Operating system:	Microsoft Windows

Problem

The password for the user ID that was used to access the resource manager database expired, and this error message was generated:

DGL7161A: Failed to retrieve data from the resource manager.

ICM9804: The security token supplied with order retrieve was invalid.

[RM RC = 9722, HTTP RC = 204: No Content]

Solution

To solve the problem:

1. Change the password for your resource manager user ID.
 - a. Click **Start** -> **Settings** -> **Control Panel** -> **Users and Passwords**.
 - b. Click the resource manager user ID, and click **Set Password**
 - c. Type and confirm the new password, and click **OK**.
 - d. Click **OK**.
2. Update the password value for the resource manager user ID in the databases of the library server and the resource manager.

Open a DB2 command prompt and type the following commands:

```
connect to library_server_database user
library_server_userid using password
update icmstresourcemgr set rmpassword = 'new password for
resource_manager_userid'
connect reset
connect to resource_manager_database user
resource_manager_userid using
resource_manager_password
update rmaccess set acc_password = 'new password for
resource_manager_userid'
```
3. Refresh the encryption key by using the administration client.
 - a. Click **Start** --> **Programs** --> **IBM Content Manager for Multiplatforms V8.2** --> **System Administration Client**.
 - b. Enter the library server user ID and library server password, and click **OK**.
 - c. Click **Content Manager** -> **library server database** -> **Library Server Parameters** -> **Configurations**.
 - d. Right-click **Library Server Configuration** and select **Properties**.
 - e. Click the **Refresh encryption key**.
4. Using the WebSphere Application Server Administrator's Console, stop and restart the resource manager.

- a. Start WebSphere Application Server, Version 4.0 Advanced Edition Administrator's Console by clicking **Start -> Programs -> IBM WebSphere -> Application Server V4.0 AE -> Administrator's Console**.
- b. If you use WebSphere Application Server, Version 4.0 Advanced Edition, select your resource manager name in the administrative domain.
For example: **WebSphere Administrative Domain -> Nodes -> *machine name* -> Application Servers -> *resource manager***.
- c. Right-click the resource manager name and click **Stop**.
- d. Click **OK** in the **command completed successfully** window.
- e. Right-click the resource manager name and click **Start**.
- f. Click **OK** in the **command completed successfully** window.

Product checks failed

Product:	DB2 Content Manager
Version:	8.2
Operating system:	Microsoft Windows

Problem

The following message occurs when attempting to install the resource manager component of DB2 Content Manager:

This wizard cannot continue because one or more product checks failed.
The Version and Release detected on the machine is not at the expected level of 8.2.

Cause

Two resource manager components are installed on separate servers, and both components are using the same database name.

Solution

Install resource manager by using DB2 Content Manager, Version 8.1 media, and then upgrade to Version 8.2.

Unable to save changes to definition properties

Product:	DB2 Content Manager
Versions:	8.1, 8.2
Operating systems:	AIX, Solaris, Linux, Microsoft Windows

Problem

Users cannot save changes to the properties of a resource manager definition.

Cause

The token duration is set to zero, which means that no duration is specified. Token duration is the length of time that an object's security token, which is passed to the resource manager on all requests, is valid before it expires.

Solution

If the token duration is set to zero, the **OK** and **Apply** buttons are not enabled until a non-zero token duration is entered. This is possible and valid through the API interface, but not in the system administration client.

Set the duration to 172 800 seconds (recommended).

Changing the password of the resource manager server

Product:	DB2 Content Manager
Versions:	8.1, 8.2
Operating systems:	AIX, Solaris, Linux, Microsoft Windows

Question

How do you notify DB2 Information Integrator for Content and DB2 Content Manager Enterprise Edition when a password has been changed for the resource manager server?

Answer

DB2 Information Integrator for Content and DB2 Content Manager Enterprise Edition use the resource manager definitions to store and manage relationships with resource manager servers. Each definition that pertains to the resource manager with the changed password needs updating.

1. Open the System Administration Client.
2. Log on to library server database, ICMNLSDB.
3. Click **Resource Managers** in the left pane.
4. From the resource manager definitions listed in the right pane, select the one that describes the resource manager with the changed password.

Tip: Error DGL5161A is expected if the optional additional configuration has not taken place. You can ignore this error.

5. Right-click and select **Properties**.
6. Be sure that the **Hostname** matches the one that you intend to update.
7. Replace the contents of the **Password** field with the new resource manager password.
8. Click **OK**.

Resource manager processes do not function after applying version 8.2 fix pack 1

Product:	DB2 Content Manager
Version:	8.2
Operating systems:	AIX, Solaris

Problem

The resource manager processes do not function after applying DB2 Content Manager, Version 8.2, Fix Pack 1.

Solution

The resource manager settings for the non-servlet processes need to be reinstated in the `setprocenv.sh` script for them to work. This script resides in the `/usr/lpp/icm/config` directory on AIX, and in the `/opt/IBMi/cm/config` directory on Solaris.

Run the `updateenvinfo.sh` script, which accepts positional parameters *dbname*, *rmappname*, *nodename*, *was_home*, *instowner*, and *ora_jdbc_abspath*.

dbname

Resource manager database name.

rmappname

Resource manager application name.

nodename

WebSphere Application Server node name.

was_home

WebSphere Application Server home directory.

instowner

DB2 instance name.

ora_jdbc_abspath

Fully qualified Oracle JDBC driver file name, `classes12.zip`, for resource manager with an Oracle database.

If you choose not to update a parameter, specify a value of `NULL` for that parameter. This maintains positional parameter integrity for the script, for example:
`updateenvinfo.sh RMDB icmrm rmserver /usr/WebSphere/AppServer db2inst1 NULL`

For more information, see section 5.8 of the DB2 Content Manager, Version 8.2 Fix Pack 1 readme file. The readme is located in the same directory as the latest fix pack:

`ftp://ftp.software.ibm.com/ps/products/content_manager/fixes/v8.2/`

Resource manager not connecting to DB2

Product:	DB2 Content Manager
Version:	8.2
Operating system:	Solaris 8

Problem

Resource manager, running under WebSphere Application Server, Version 5.0, Fix Pack 2, is not connecting to DB2 Universal Database, Version 7.2, Service Pack 10.

Solution

Enter the following command at a command line so that the resource manager connects to the database:

```
source /root_directory/ db2inst
```

Installing databases in separate logical environments on one DB2 subsystem

Product:	DB2 Content Manager
-----------------	---------------------

Version: 8.2
Operating systems: z/OS, OS/390

Question

Can a user install databases for the library server and resource manager in two separate logical environments on one DB2 subsystem? The ultimate goal is to have one LPAR devoted to application testing.

Logical partitioning (LPAR)

The allocation of system resources in such a way to create systems that are contained in the same physical footprint but are logically separated from each other.

Solution

You can install databases for the library server and resource manager in two separate logical environments. In the ICJCL data set, the member ICMMLSCR is the build of the stored procedure. In the name of the stored procedure, there is a qualifier or prefix that makes the stored procedure unique for a given library server. A collection name or a collection ID is the package name you bind later; this must also be unique for a given library server.

Next, there is an input file in the ICMINS1 data set I1mmbind. Change the package name of this sample to match the collection ID. The qualifier is the same as the prefix of the stored procedure. This makes the package unique to the stored procedure in question.

There is also a plan that is bound as part of the ICMINS1 data set I1mmbind. In the I1MMCACL job of the icmins1 file, specify the program and plan names. Define the unique plan name to match in the icmins1 file.

If the icmins1 file is configured as described, there is a unique plan for the stored procedure. The plan is unique to the DB2 subsystem by the qualifier and the prefix that also match the package build.

System outage with -805 SQL errors

Product: DB2 Content Manager
Version: 2.3
Operating system: z/OS, OS/390

Problem

The system receives an -805 SQL error when running the FRNMMLTU program.

Cause

The cause of the problem is a mismatch between the load module and the database request module (DBRM) that are undergoing the bind process.

Solution

The solution is to ensure that you use the correct copy of the load module, and the database request module when you perform the bind. Rebuild and rebind the database.

Library server

Cataloging a remote library server database

Product:	DB2 Content Manager
Versions:	8.1, 8.2
Operating systems:	AIX, Solaris, Linux, Microsoft Windows

Question

How do you catalog a remote library server database for use on a multiplatform machine?

Answer

First, you need the port number. If you have the IBM DB2 Database Client Configuration on your machine, you can do a search instead of manually entering the information.

- AIX users can view the services file in the /etc folder of the root path.
- Windows clients use port 50000.

Configuring a local Windows machine

1. Start the DB2 Client Configuration Assistant by clicking:
For IBM DB2 Universal Database , Version 7: **Start ->Programs -> IBM DB2 -> Configuration Assistant.**
For IBM DB2 Universal Database, Version 8: **Start -> Programs -> IBM DB2 -> Setup Tools -> Configuration Assistant.**
2. Click **Add**.
3. Identify the remote database.
 - **Search network (recommended)**
 - a. Select **Search the Network**, and click **Next**.
 - b. Select **Expand Other Systems** (Search the Network).
 - If you do not find it here, check under **Known Systems**.
 - If you still do not find the port, click **Add System**, and add it manually to **Known Systems** by typing in the name of the computer, for example:
`mycomputer.ibm.com`
 - c. Choose the computer that you want and expand it, for example:
`mycomputer`
 - d. Choose the database you want, for example:
`ICMNLSDDB`
 - e. Click **Finish**.
 - **Manually configure**
 - a. Select **manually configure** a connection to the database and click **Next**.
 - b. Choose **TCP/IP** and click **Next**.

- c. Enter the host name (for example, mycomputer.ibm.com) and port number (for example, 50000) and click **Next**.
- d. Enter the database that you want to connect to, for example, ICMNLSDB.
- e. Click **Finish**.

Testing the connection

Test the connection by selecting a database and clicking **test**. You must enter a user name and password for that database. For example, the user name for ICMNLSDB is icmadmin, and the password is a user-defined value.

Configuring a local AIX machine

From a DB2 command prompt, issue the following commands.

```
db2 catalog tcpip node node_name remote remote_machine_name server port
db2 catalog database database_name_on_remote as database_name at node node_name
```

where:

node_name is a user-defined name for the machine being used.

remote_machine_name is the user-defined name for the other machine being used.

port is the port that the database instance on the remote machine is running on; most likely 50 000. If you have problems when cataloging the port, check the /etc/services directory on the remote machine to find the correct port.

database_name is the name that you want to use for the database on the local machine.

database_name_on_remote is the database name on the remote machine.

For example, assume that ICMNLSDB is on mycomputer2, and it needs to be cataloged on mycomputer1. On mycomputer1, enter the following commands:

```
db2 catalog tcpip node testnode remote mycomputer2.ibm.com server 50000
db2 catalog database icmnlbdb as testlsdb at node testnode
```

Testing the connection

If the catalog commands completed successfully, and the user ID and password were entered correctly, execute the following command:

```
db2 connect to database database_name user dbuser using password
```

For example:

```
db2 connect to database icmnlbdb user icmadmin using *****
```

Unable to catalog a remote library server database

Product:	DB2 Content Manager
Versions:	8.1, 8.2
Operating systems:	AIX, Solaris, Microsoft Windows
Problem	

A system administrator is unable to catalog the remote library server database from other systems after installing DB2 Universal Database, Version 8.1, Fix Pack 2.

Cause

The port is not set correctly or is not set at all.

Solution

To reset or set a port:

1. Determine the port number:
 - a. Open the DB2 Control Center by typing the following command on the command line:
`db2cc`
 - b. In the expanded tree view under the system name, find the DB2 instance under the Instances section.
 - c. Right-click the DB2 entry and select **Setup communications**.
 - d. Click **Properties(2)**.
 - e. Note the port number listed in the Port number text box. If you found a port number, use that port number when you catalog the database.
You do not need to complete steps 2 and 3 if you found a port number. If you did not find a port number, continue with the remaining steps.
2. Check the services file.
On the library server system, check the port at which the library server database is listed as running under in the services file. The port number is listed in the C:\WINNT\Service32\drivers\etc\services directory. Try using the related port values listed. Try to catalog the library server database.
If you are successful, you do not need to complete the remaining step. If you are still unable to catalog the database, continue with step 3.
3. Set the port and reboot:
 - a. Open the DB2 Control Center by typing the following command on the command line:
`db2cc`
 - b. In the expanded tree view under the system name, find the DB2 instance under the Instances section.
 - c. Right-click the DB2 entry and select **Setup communications**.
 - d. Click **Properties(2)**.
 - e. Set the port number in the Port number text box to 6.
 - f. Reboot the system.

Communication problems with remote clients

Product:	DB2 Content Manager
Versions:	8.1, 8.2
Operating systems:	AIX, Solaris, Microsoft Windows

Problem

Database connection errors are received when setting up DB2 Content Manager, Version 8, and attempting to connect to the library server using the Windows client from a remote machine.

Solution

Make sure that DB2 Universal Database is configured properly:

- Verify that other computers are able to connect to the library server machine when using the DB2 Universal Database connection. To do so, check the existence of the following text inside your services file in the `c:\WINNT\SYSTEM32\DRIVERS\ETC\` directory:
`db2cDB2 50000/tcp #connection port for the DB2 instance DB2`
- Verify that the server databases are cataloged on the remote client machine by using the Client Configuration Assistant.
- Ensure that the DB2 Universal Database runtime client is installed properly on the client machine.

TRebuildCompTypeICM fails with return code 7022

Product: DB2 Content Manager

Version: 8.2

Operating systems: AIX, Solaris

Problem

The utility to rebuild library server access modules (TRebuildCompTypeICM) fails with a return code of 7022 when deferred DDL execution is enabled. The following error messages are displayed:

```
Generating access module for view with ID: 200
Error generating access module:  IRC = 7022 IReason = 0
IExtRC = 0 IExtReason = 0
```

Additional symptom: Fix Pack install script (updateLS.sh) may fail with return code 203. (TRebuildCompTypeICM is executed during Fix pack install).

The error messages look like this:

```
Upgrading and re-binding the server are successful, but
re-generating the access modules failed.
UpdateLS completed with exit code 203
2003/10/29 14:01:09> ERROR: /opt/IBMicm/config/updateLS.sh
script failed with RC=203
/tmp/cmfp2/updateCMcfg: /opt/IBMicm/config/updateLS.sh script
failed with RC=203 (203)
```

The TRebuildCompTypeICM job generates the table access information which will be used when generating dynamic SQL statements. TRebuildCompTypeICM, when running with the GenerateDDL feature on, creates the UserDDLdirectory, if it does not exist.

Cause

The library server did not create the UserDDL directory to deploy the script necessary for GenerateDDL.

Solution

Manually create the UserDDL directory.

DGL5410A error

Product:	DB2 Content Manager
Version:	8.2
Operating system:	Microsoft Windows 2000

Problem

When initializing an application that sends to, or creates a document in DB2 Content Manager, the following error message is displayed:

DGL5410A no answer from resource manager.
Make sure that it is running <http rc=500>.

Solution

Perform the following steps to resolve this error:

1. Stop the migrator.
2. Add the following command to the RMDB instance:
DB2SET DB2_RR_TO_RS=YES
3. Start the import function again to import documents.

SQL0964C error

Product:	DB2 Content Manager
Versions:	8.1, 8.2
Operating system:	AIX

Problem

The following error message appears in the library server log:

<SQL0964C The transaction log for the database is full.
SQLSTATE=57011><SQLSTATE 57011: Virtual storage or
database resource is not available.>

Cause

Too many objects have been loaded into the library server. Additionally, the process to delete rows in the library server transaction tracking table is overfilling the DB2 Universal Database transaction logs.

Solution

To update the number of secondary log files in the library server:

1. Stop the migrator process.
2. Open a DB2 command prompt.
3. Stop all DB2 Universal Database applications by issuing the following command at the DB2 command prompt.
force applications all
4. Increase the number of the secondary log files in the DB2 Universal Database configuration to a larger number.
 - a. To see the database configuration settings, issue the following command at a DB2 command prompt:

- ```
get db cfg
```
- b. To update the number of secondary log files to 100, enter the following command on a command line:  

```
command db2 update dbm cfg using LOGSECOND=100
```
  5. Restart DB2 for settings to take place.
  6. Start the migrator process.

## FRN6216 error

**Product:** DB2 Content Manager  
**Version:** 7.1  
**Operating system:** Microsoft Windows

### Problem

An attempt to delete an index class from the DB2 Content Manager library server database resulted in an FRN6216 error.

### Solution

Using DB2 Content Manager utilities, back up the database files and create new databases.

## FRN7634A error when creating index classes

**Product:** DB2 Content Manager  
**Version:** 7.1  
**Operating system:** AIX

### Problem

When attempting to create an index class, the following error is written to the library server's frndiag.log file:

```
FRN7634A: The system cannot create the dynamic link library (DLL).
Module = FRNA01B0, Status = 7365, Return code = 6
4256.
```

### Solution

To resolve this error, reset the VisualAge® C++ (VACPP), Version 5.1 softlinks so that the compiler can start using the binaries, then reboot the server.

## FRN7634A error when starting the library server

**Product:** DB2 Content Manager  
**Version:** 7.1  
**Operating systems:** Microsoft Windows

### Problem

When a user starts the library server, the following message is displayed:  
cannot create DLL, frn7634a

## Solution

Move the Microsoft Visual C++ environment variables from user variables to system variables.

## FRN8072A and FRN8073A errors

**Product:** DB2 Content Manager  
**Version:** 7.1  
**Operating system:** Microsoft Windows 2000

### Problem

The library server optimizer fails while running a bind operation. A review of the frndiag.log file indicates that the optimizer encountered an 8635 timeout. The frndiag.log file reports:

```
2003-12-07-03.32.03.505000 Instance:FRN Node:000
PID:4636(FRNSACL.exe) TID:4668 Appid:none
CLIENT UT Probe:1
<2003-12-07 03:32:03.50 Type: ERRLOG File: utputil.c Line: 541
ProcessUtility
2003-12-07-10.16.50.151000 Instance:FRN Node:000
PID:4704(FRNNUTDB.EXE) TID:3556 Appid:none
LIBRARY SERVER UT Probe:1
<2003-12-07 10:16:50.13 Type: ERRLOG File: utodb.ccc Line: 875
RC: -40 MsgCode: 8072>
```

FRN8072A: The utility server cannot bind database LIBSRVCM. SQLcode -40  
Messages might be logged in D:\CM\log\frnnutdb.msg.

```
2003-12-07-10.16.50.666000 Instance:FRN Node:000
PID:4704(FRNNUTDB.EXE) TID:3556 Appid:none
LIBRARY SERVER UT Probe:1
<2003-12-07 10:16:50.66 Type: ERRLOG File: utodb.ccc Line: 961
```

FRN8073A: The utility received SQLCODE -900 while updating table SBTSBTA

### Cause

The DB2 backup function was running at the same time that the optimizer received the SQL -900 and -1224 errors.

## Solution

Stop all processes when the library server optimizer is running.

## Return code -812

**Product:** DB2 Content Manager  
**Version:** 8.2  
**Operating systems:** z/OS, OS/390

### Problem

After installing PTF UQ81734, the resource manager asynchronous delete job works, but the resource manager asynchronous recovery job produces the following error:

```

IBM Content Manager V8R2
Asynchronous Recovery Process
Built on Nov 11 2003 at 11:04:00
ICMMOSAR VALIDATEINPUT Parm Parsed is 2
ICMMOSAR VALIDATEINPUT Finished Parsing Parms
Parameter Count: 9
ICMMOSAR VALIDATEINPUT Input Parameters Parsed
DB2SubSysID : <DB0G>
DataBaseName : <PCMLX>
LSDB : <LOCAL>
DB2PlanName : <ICMMOSRX>
szUserID : <ICMAINT>
szPassword : <MAINT>
szRMName : <PCMRX>
szISleep : <0>
ISleep : <0>
*psTrace : <2>
ICMMOSAR VALIDATEINPUT Exit
ICMMOSAR initOAMBuffers 03800 Entry
ICMMOSAR initOAMBuffers 03852 Exit rc=0, reason=0
0 CAF_Connect successful.
ICMMOSR1 IsLogon 00205 Entry
0 Logon to LS failed.
return code is -812

```

### Solution

Rerun the resource manager bind job, ICMMRMBD.

## FRN7389A error

**Product:** DB2 Content Manager  
**Version:** 2.3  
**Operating systems:** z/OS, OS/390

### Problem

When an access module of an index class or view is not available, a user receives an FRN7389A error.

### Solution

Check the class table for the dllstatus. If the dllstatus has a value of 7376, stop the library server. Change the dllstatus value to zero and restart the library server.

If that does not resolve the problem, run the bind job for the dllstatus index class. Set the new value to -1, rebuild the access module, and bind it.

## FRN7667A error

**Product:** DB2 Content Manager  
**Version:** 2.3  
**Operating systems:** z/OS, OS/390

### Problem

Deleting the metadata on the library server for objects that do not exist causes the following errors:

FRN7667A  
-204  
GetNetTable(): FRNNETT file Read error.

### Cause

These errors are a result of initializing the object server databases without performing the prerequisite work on the library server to delete the associated objects.

#### **FRN7667A (refers to the program FRNMHLD5)**

The library server cannot talk to the object server.

-204 There is a bind problem.

#### **GetNetTable(): FRNNETT file Read error**

Cannot read the file referenced by the //FRNNETT DD statement.

### Solution

Make sure that you have provided a network table file in the information CICS job control language (JCL):

```
//FRNNETT DD DISP=SHR,DSN=?FRN?.FRNNETT/*
```

- Make sure that you included the FRNNETT entry in your destination control table (DCT).
- Make sure that you have a network table data set for the library client to communicate with the other machine.

To run the FRNMHLD5 job, you must have a library client on DB2 Content Manager that will interface with the library server. Look at the error message you are getting; the DELE transaction is calling on the FRNMLCII, which is the library client. Within the JCL that you use to run the library client, you must also specify that FRNNETT DD is pointing to a data set. After this, you should be able to run the FRNMHLD5 job.

If the object server on which this object used to be stored no longer exists (but the object server code still exists in the library server database), then the delete request is rejected. The delete request is rejected because the library server attempts to contact the object server before it sends the delete request to the object server.

To solve this problem, DB2 Content Manager has modified the library server code in PTF UQ44129. If the transaction ID for a delete request is FRNB, the library server bypasses the routine to contact and send the request to object server. The library server will delete the item and all the related data of this object without checking whether the object server is up.

To use the FRNB transaction:

1. Add an FRNB transaction (copy from the regular FRNI transaction) in the CICS CSD entry.
2. Create an FRNB configuration (again copy from FRNI) via the system administration client.
  - If you want to run the client application to send the delete without the object server involved.
  - In FRNOLINT.TBL, change TP = FRNI to TP = FRNB.

This change must be performed on the workstation which will complete the delete. After you clean up all the items and related data of non-existing objects, change FRNB back to FRNI. This enables the workstation to continue to use the normal FRNI transaction.

- If you want to run the client application to send the delete function without the object server involved, change FRNI to FRNB as the transaction ID of library server. This must be completed in the FRNNETT network table used by the library client.

FRNMHLD5 requires that you have a library client that operates on MVS™ for the OS/390 to interface with the library server. You do not have to use OS/390 library client to delete an item or object for an object server that no longer exists in object access method (OAM). The only reason to use the OS/390 library client batch to delete FRNMHLD5 is to improve performance. For example, you might have to delete or clean up large amounts of data every day. You would want to run the OS/390 client application FRNMHLD5 (which issues the delete request to the library server) on the OS/390 to reduce transaction requests between the workstation and OS/390.

- The FRNNETT file is used by the OS/390 library client, so the library server name and IP address must be identified in the FRNNETT file.
- You can install the OS/390 library client in the same CICS region or a different CICS region than that of your OS/390 library server. However, the OS/390 library client still needs to know whether the library server is remote or local.
- You do not need to specify the object server name in the FRNNETT file, the first line identifies the OS/390 library client, and the second line identifies the library server.

**Reminder:** Remember to switch FRNB back to FRNI so you can logon from the client application. Change the network table, FRNOLINT.TBL, to include TP = FRNI to prevent the error message FRN6740A: The logon was not successful because of error 6288.

If you continue to have problems, refer to your library server CICS logs for a security violation for transaction FRNB. It is possible that transaction FRNB was not defined to your security system.

If this is the case, define FRNB with the same properties that are used for FRNI. Recycle the library server CICS region, and change the network table, FRNOLINT.TBL to include TP = FRNB. You should be able to log on to the client application and delete specific library server item information for objects that are stored in the object server.

The library client \*.SFRNLMD4 load library might not have been included originally in the library server CICS region if you chose not to use library client on OS/390. If you add the \*.SFRNLMD4 transaction, FRNB is activated (FRNT 20020411112104 FRNMHBLT: Enabling transaction FRNB).

## Necessary preparation for running FRII

|                           |                     |
|---------------------------|---------------------|
| <b>Product:</b>           | DB2 Content Manager |
| <b>Version:</b>           | 2                   |
| <b>Operating systems:</b> | z/OS, OS/390        |

### Question



What is required for the FRII CICS transaction to work?

**Answer**

Create an entry in the system administration (SYSADMIN) client. To create an entry:

1. Extend the Library Server Parameters window.
2. Right-click the **Configurations** tab.
3. Click **new** for a new configuration.
4. Use the FRNI parameter value for FRII and apply the changes.

---

## Object server

### FRN0306A error

|                          |                        |
|--------------------------|------------------------|
| <b>Product:</b>          | DB2 Content Manager    |
| <b>Version:</b>          | 7.1                    |
| <b>Operating system:</b> | Microsoft Windows 2000 |

**Problem**

An attempt to restart the object server service failed with the following error:  
exit code 1 FRN0306A

**Cause**

All of the DB2 Content Manager object server processes were not shut down correctly.

**Solution**

Using the Windows Task Manager, end all DB2 Content Manager object server processes. When this is complete, clear the frnroot/temp directory of all pass files.

### FRN4003W error

|                          |                        |
|--------------------------|------------------------|
| <b>Product:</b>          | DB2 Content Manager    |
| <b>Version:</b>          | 7.1                    |
| <b>Operating system:</b> | Microsoft Windows 2000 |

**Question**

How can the following error be solved?  
FRN4003W the drive does not contain the volume

**Answer**

The error indicates that there is a zero-length file in the staging area. To resolve the problem, delete the zero-length file.

## Manual shutdown of object server

**Product:** DB2 Content Manager

**Version:** 7.1

**Operating system:** AIX

### Problem

Periodically, the object server must be shut down manually for maintenance.

### Solution

Update the shutdown script to allow for more time between the object server shutdown command and the `frnkill.all` command. Update the sleep time in 30 second intervals until the shutdown has enough time to finish.

## Excessive objects in staging area

**Product:** DB2 Content Manager

**Version:** 7.1

**Operating system:** AIX

### Problem

When the staging area has approximately 40 000 files, the system slows down significantly when the purger function initializes.

### Cause

The reason that the purger is not working is that the staging area has not reached its full start value of 80%.

### Solution

To resolve this situation, reset the purger percent start value through the system administration client. Restart the object server to pick up the new value.

If the stopping and starting the operating system is not possible during the middle of the day, disable the purger by using the following command:

```
frncmd objbrkln purger disable
```

---

## Chapter 5. Configuring clients

This chapter discusses problems related to the configuration of DB2 Content Manager clients:

- pClient
- eClient

---

### Error messages are garbled

|                          |                             |
|--------------------------|-----------------------------|
| <b>Product:</b>          | DB2 Content Manager pClient |
| <b>Version:</b>          | 8.2                         |
| <b>Operating system:</b> | OS/400                      |

#### Problem

After applying DB2 Content Manager pClient, Fix Pack 2, and Fix Pack 3, the DLL messages are not updated correctly. The result is garbled error messages.

#### Solution

If DB2 Information Integrator for Content Fix Pack 3 is installed, perform the following:

1. Make backup copies of the messages.
2. Copy these message files from the *II4C\_install\_directory*\DLL directory to the *pClient\_install\_directory* directory:

```
cmbmsg816.dll
cmbmsgicm816.dll
cmbmsgls816.dll
```

3. Restart the pClient.

**Note:** This problem has been fixed, and the fix is available in DB2 Content Manager pClient, Fix Pack 4.

---

### Users cannot connect to the eClient servlet

|                           |                             |
|---------------------------|-----------------------------|
| <b>Product:</b>           | DB2 Content Manager eClient |
| <b>Versions:</b>          | 8.1, 8.2                    |
| <b>Operating systems:</b> | Microsoft Windows           |

#### Problem

After installing the DB2 Content Manager eClient, users cannot connect to the eClient servlet.

#### Cause

The value of the PATH environment variable is too long.

#### Solution

To shorten the PATH environment variable:

1. Open the `idmwas.bat` file.
2. Shorten the names in the paths. For example, change Program Files to Progra~1
3. Run the `idmwas.bat` file from a command prompt on the machine where DB2 Content Manager eClient is installed.

---

## Kofax release scripts

**Product:** DB2 Content Manager client  
**Version:** 5.1  
**Operating system:** OS/400

### Problem

The Kofax release script tells the user to install DB2 Content Manager client on the same workstation.

### Solution

To gain access to DB2 Content Manager:

1. Verify that you can see servers when attempting to login from the client.
2. Make sure that the `FRNOLINT.TBL` file has an entry for the appropriate server for Kofax Ascent Capture to release into.

If this works on another workstation, copy the `FRNOLINT.TBL` file from the other workstation to the root of the DB2 Content Manager Windows client installation directory (by default, this is `c:\Program Files\IBM\CM for iSeries`) on the non-working workstation.

---

## 6288 error

**Product:** DB2 Content Manager client  
**Versions:** 2.1, 2.3  
**Operating systems:** z/OS, OS/390

### Problem

A 6288 error with a return code of 9126 was received on the DB2 Content Manager client.

### Solution

A return code of 9126 indicates that there is not enough memory. The return code does not indicate that the client workstation is out of memory; it means that the folder manager does not have enough memory allocated to buffer the file. The default amount of memory on the workstation for file buffering is 64 KB. Increasing the value of the `FRNHEAPSIZE` system variable gives the client more memory to buffer the files requested.

---

## Item type changes not visible

**Product:** DB2 Content Manager client

**Versions:** 8.1, 8.2

**Operating system:** AIX, Solaris, Linux, Microsoft Windows

### **Problem**

Changes made to item types when using the system administration client are not visible to client applications.

### **Solution**

If the changes are made in the same connected datastore session (DKDatastoreICM instance), the cache is updated with the new information. However, changes made by different connected datastore sessions are not propagated to each connected session.

Reconnect to refresh the cache.

Alternatively, turn off caching in the DKDatastoreICM object to enable client applications to see all changes immediately. Turning off the cache results in some loss of performance.



---

## Chapter 6. Managing storage

This chapter identifies different types of storage management problems that can occur when using DB2 Content Manager.

---

### CPF4131 error

**Product:** DB2 Content Manager  
**Version:** 5.1  
**Operating system:** OS/400

#### Problem

When running the delete workflow profiles command, the following error message is received:

CPF4131 on EKD0740L3 in library QVI

#### Cause

This error is the result of the logical file, EKD0740L3, being created from an incorrect DDS source. The source for this file exists in QDDSSRC, in the file library, and in the QVI library. The file is built on QTEMP from the QDDSSRC highest in the library list. The source is updated by the EKDPOST process.

#### Solution

To resolve this error, ensure that the source for the EKD0740L3 file does not exist in QDDSSRC or in any library higher in the library list than the file library.

- If the EKD0740L3 file does exist in QDDSSRC or in any library list higher in the library than the file library, retry the "delete workflow profiles" option again.
- If the EKD0740L3 file does not exist, delete the source, QDDSSRC, in the file library. Replace the logical file, EKD0740L3 with the version that is present in the QVI library, and try the delete procedure again.

**Tip:** If you encounter this same problem with any of the EKD0740L0, EKD0740L1, or EKD0740L2 source files, perform the same steps to resolve the problem.

---

### EKD1008 error

**Product:** DB2 Content Manager  
**Version:** 5.1  
**Operating system:** OS/400

#### Problem

When documents are available on optical store but not available on direct access storage device (DASD), the following error occurs:

EKD1008:  
Message . . . . : EKD-1008 No folders available on system  
Cause . . . . : Either no folders were defined on the AS/400 system  
or all folders defined on the AS/400 system are full  
No new documents input.

### **Solution**

EKD-1008 is returned during scanning, importing, adding notes or other modifications, or retrieving a document that is only on optical when all defined folders (CM/400 object directories) are full.

One of the object server profiles specifies the number of documents that are allowed per folder. When the maximum number defined in the profile has been met, the folder is closed. When all folders defined in the object server profile are full, no more documents are added to DB2 Content Manager for iSeries until either one of the existing folders is reopened (modify the number of documents in the folder to greater than current value), or by creating a new folder. Use option 10 from the CMPRF menu to work with CM/400 object directories, and make necessary adjustments. When you are creating object directories, determine how many documents you want to have online, on direct access storage devices (DASD) at any time. Then, verify that there are enough folders to hold all these documents.

---

## **EKD8553 error**

|                          |                     |
|--------------------------|---------------------|
| <b>Product:</b>          | DB2 Content Manager |
| <b>Version:</b>          | 5.1                 |
| <b>Operating system:</b> | OS/400              |

### **Problem**

An EKD8553 error message was received when trying to retrieve a document from a LAN-attached 3995 optical jukebox.

### **Solution**

To resolve the problem:

1. Sign on as the Image Administrator (for example, QVIADMIN).
  - a. Go to the "Work with jobs" menu option from the DB2 Content Manager menu.
  - b. Type a "2" next to Optical distribution, Optical store, Optical retrieve, and Interactive retrieve.



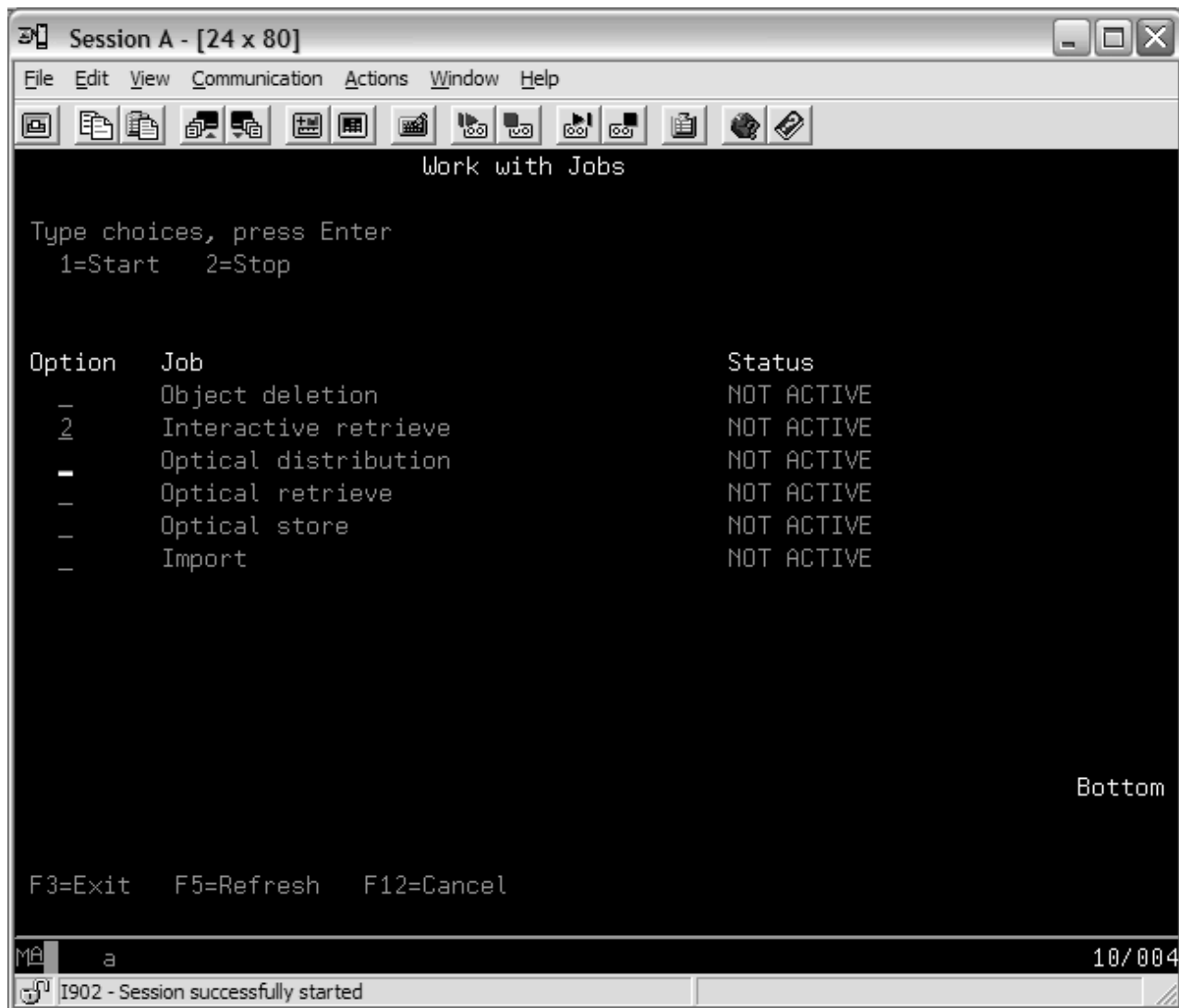


Figure 2. Stopping jobs on the Work with Jobs screen

2. Vary off the LU3995X controller.
3. Go into the Data Center and reboot the 3995 optical jukebox.
4. Vary on the LU3995X control unit and specify RESET(\*YES), even if the system displays that it is not valid in this environment.
5. Start the same optical processes you stopped from the "Work with jobs" menu.

## Staying current on DB2 Content Manager for iSeries PTFs

**Product:** DB2 Content Manager  
**Version:** 5.1  
**Operating system:** OS/400

### Question

How can you make sure that you have all the current PTFs?

### Answer

The IBM Content Manager for iSeries and AS/400® Version 5, Release 1 support information website provides a link to informational APAR II12727 (II12727.html), which contains a current list of PTFs:

<ftp://ftp.software.ibm.com/as400/products/contentmanager/v510/server>

---

## Old records have an in-process flag of 2

**Product:** DB2 Content Manager  
**Version:** 5.1  
**Operating system:** OS/400

### Problem

When attempting to clean up the optical store request file (EKD0371), there are old records that have an in-process flag of 2.

### Solution

To remove the in-process flag of 2, perform the following:

1. Stop all optical processes in DB2 Content Manager.
2. Sign on as the administrative user in DB2 Content Manager.
3. Issue the STROPTST command.

When the optical store stops, an error report is generated.

4. View the error report by executing the WRKSPLF command.

This command provides information on why the documents are not stored.

When the problems reported in the error have been fixed, the next run of the optical processor modifies the record from a 2 and processes the request.

---

## DGL5162A and ICM9876 errors

**Product:** DB2 Content Manager  
**Version:** 8.2  
**Operating system:** Microsoft Windows 2000

### Problem

DGL5162A and ICM9876 errors are received when trying to create a Tivoli Storage Manager volume.

### Solution

To resolve the errors:

1. Verify that the icmm.properties file contains the IBM Tivoli Storage Manager parameters in the following form:  
DSMI\_CONFIG=C:\program~1\tivoli\tsm\dsm.opt
2. Restart WebSphere Application Server.

---

## Moving platters between drives

**Product:** DB2 Content Manager Server

**Versions:** 5.1, 5.2  
**Operating system:** OS/400

### Question

How do you store data to a new LAN-attached 3995 optical library and move platters from a completely full direct-attached 3995 optical jukebox?

### Answer

To store data to a new LAN-attached 3995:

1. Create an optical system ID for the new LAN-attached jukebox, X. The old optical system ID is the same as the CM/400 server ID because it is direct-attached.
2. Create a storage class named ABCSTRX that points to the new optical system ID of X, from step 1.
3. Change the current collection being used to point to the new storage class.
4. Verify that the old storage class has the **Activate for optical distribution** and **Activate for optical store** parameters set to N.
5. Set the new storage class ABCSTRX to "Activate for optical distribution = Y" and "Activate for optical store = Y."
6. Run the Move Platter option 5 from the CMDDBU menu to move the platters from the old drive (for example, E), to the new drive X.

See Figure 3 on page 56 for an example of a snapshot of the Move Platter screen.

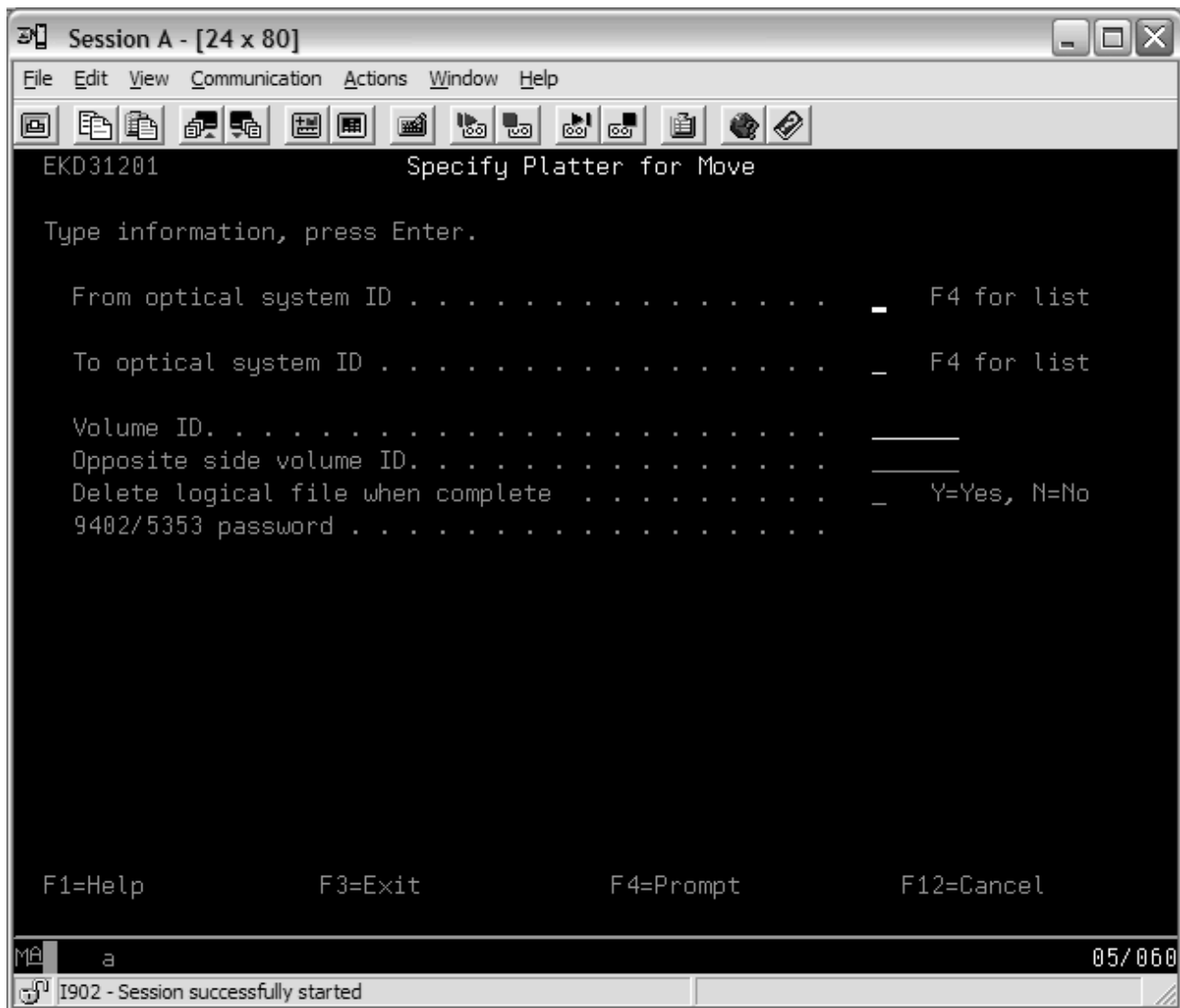


Figure 3. Specifying a platter for a move

---

## Chapter 7. Troubleshooting

This chapter contains practical troubleshooting tips and helpful hints for installing and configuring DB2 Content Manager.

This chapter is just a sampling of Technotes from the technical support sites that are available for reference. See the following website for more information about your DB2 Content Manager product:

<http://www.ibm.com/software/data/cm/support.html>

---

### DGL0394 and ICM7978 errors

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager                    |
| <b>Versions:</b>          | 8.1, 8.2                               |
| <b>Operating systems:</b> | AIX, Solaris, Linux, Microsoft Windows |

#### Problem

The following exception is received when attempting to run the Java™ API test case to connect to the database:

```
Exception in thread "main" com.ibm.mm.sdk.common.DKDatastoreAccessError:
DGL0394 A: Error in : DKDatastoreICM.connect; [SERVER = icmnlssdb,
USERID = icmadmin]; ICM7978: This is an internal error.
Run the application again with server trace set to Detail and Data.
Save the server log and see your IBM service representative.
(STATE) : [LS RC = 7978, SQL RC = -818] at
com.ibm.mm.sdk.server.DKDatastoreICM.logon(DKDatastoreICM.java(Compiled Code))
at com.ibm.mm.sdk.server.DKDatastoreICM.connect(DKDatastoreICM.java(Compiled Code))
at TSRetrieveSingleItemICM.main(TSRetrieveSingleItemICM.java(Compiled Code))
```

#### Cause

The timestamp that is generated by the precompiler is not the same as the timestamp that is stored with the package at bind time.

#### Solution

To resolve the exception:

1. Determine whether there are multiple copies of ICMNLSSP.dll on the local machine.
2. If there are multiple copies of ICMNLSSP.dll, leave one copy in the *DB2HOME*/FUNCTION directory. Rename or delete all other copies.
3. Recycle the database by issuing the following commands:  
db2stop  
db2start
4. Try to run the application again. If the problem persists, continue with step 5.
5. Copy all files under the bind directory from *Y*:\\Release\\CM83\\CD1\\db2cmv8\\bin, where *Y* is the directory of the installed application.  
Place the files in the *ICMROOT*\\bind directory, where *ICMROOT* is C:\\program files\\ibm\\cm82.

6. Rebind the database and run the following command:  
`ICMROOT\config\icmbindlsdb.bat`
7. Initialize ACL binding and run the following command:  
`ICMROOT\bin\icmpcac1 database userid password`  
where:  
*database* is the database used in step 6.  
*userid* and *password* are user-defined values.
8. Rerun the application to connect to the datastore.

**Tip:** This procedure uses Windows NT® as the example for file names and location. See DB2 Content Manager *Planning and Installation guide* for the corresponding names on AIX and Sun systems.

---

## Unable to restart the prestart job

|                          |                     |
|--------------------------|---------------------|
| <b>Product:</b>          | DB2 Content Manager |
| <b>Version:</b>          | 5.1                 |
| <b>Operating system:</b> | OS/400              |

### Problem

The prestart job, QVI400, is stopped, and cannot restart.

### Solution

If the prestart job is unable to start immediately after a system IPL, it may be that TCP/IP has not completely come up before the prestart job was started.

1. Run the STRTCP, STRHOSTSVR \*ALL, and STRTCPSVR \*NETSVR commands to make sure that all of the necessary TCP/IP components are active before you try to restart the prestart job.
2. If the prestart job is unable to start at any time other than after a system IPL, make sure that there are no QVI400SRV jobs running in the subsystem where the QV400 program is defined as a prestart job (QSERVER subsystem is the default).
3. If there are QVI400SRV jobs running, stop the jobs and type the NETSTAT command on the command line and take option 3 to work with the TCP/IP connection status.
4. Verify that the port you are using (31015 is the default) is in "Listen" status or is not listed at all. If the port is in a "Cancel wait" or recovery status, end that TCP/IP connection to get the port back to "Listen" status.
5. While signed on as QVIADMIN, type the following command to start the prestart job anew.  
`STRPJ SBS(QSERVER) PGM(QVI400)`  
Substitute the name of the subsystem where QVI400 runs if you are not using the default QSERVER subsystem.

---

## Configuring access to multiple environments

|                 |                            |
|-----------------|----------------------------|
| <b>Product:</b> | DB2 Content Manager Client |
| <b>Version:</b> | 5.1                        |

**Operating system:** OS/400

### Question

How do you access a number of multiple environments on DB2 Content Manager Client for OS/400 or iSeries?

### Answer

On the client, configure separate entries for each port in the FRNOLINT.TBL file:

1. Copy the member QVI400 in the QCLSRCfile in the QVI library twice, giving each copy a new name.
2. Change each source member so that the port number is changed. The change needs to occur on line 93 of the source:

```
0092.00 CALL PGM(*LIBL/EKDCSCOM1) +
0093.00 PARM('31077 QSYS.LIB/QVI.LIB/QVI400SRV.PGM 1')
```

3. Compile each member into the appropriate file library.

**Note:** If you put the programs in the QVI library, they can be deleted when you upgrade to a new release.

4. Create three job descriptions that will contain the correct file libraries for each environment. The order of the libraries in the LIBL should be QTEMP, QUSRVI (substitute appropriate file library), QVI, and QGPL.
5. Create three QVITCPxxx user profiles that reference the correct job descriptions for each environment.
6. Call the ADDPJE command to the QSERVER subsystem, and execute the command three times. Specify the correct QVITCPxxx user profile to call the appropriate QVI400xxx program in QUSRVI, where xxx are user defined variables.

---

## FRN6113A error

**Product:** DB2 Content Manager

**Version:** 2.3

**Operating systems:** z/OS, OS/390

### Problem

A FRN6113A error is written to the client's FRNDIAG.log file after the SimLibGetItemSnapshot() function is called.

### Cause

FRN6113A is a folder manager error which indicates that the SimLibGetItemSnapshot() function found information in the database that was inconsistent with the information found by a previous SimLibLogon() function call. The mismatch is most likely caused by upgrading DB2 Universal Database, but not updating the DB2 Content Manager ImagePlus VisualInfo™ tables.

### Solution

Rebind the tables in the DB2 database.

---

## FRN7751A error

|                           |                     |
|---------------------------|---------------------|
| <b>Product:</b>           | DB2 Content Manager |
| <b>Version:</b>           | 2.3                 |
| <b>Operating systems:</b> | z/OS, OS/390        |

### Problem

A user receives the following error message when attempting to retrieve an object:  
FRN7751A:The host-based object server received an Object Access Method (OAM)  
return code = 00000008 and reason code = 24030808

### Cause

The PartLen column in DB2 Content Manager VisualInfo library server FRNPARTS table is out of sync with the ODSIZE column in OAM tables for this object.

This error occurs when the server tries to retrieve the object:  
PRP484LY.U\$\$KS7A1.FRN\$NULL.P1.V0, in collection FRN.CLLCTD03. The VI.FRNPARTS table has a PARTLEN value of 3973, and GROUP03.V\_OSM\_OBJ\_DIR has an ODSIZE value of 13204.

### Solution

To fix the error, type the following command at a DB2 command prompt:

```
UPDATE ?CREATOR?.FRNPARTS
 SET PARTLEN = (size_of_part)
WHERE ITEMID = (ITEMID) AND
 REPTYPE = 'FRN$NULL' AND
 PARTNUM = (part_number) AND
 VERSIONNUM = 0;
```

where:

*size\_of\_part* = the size of the parts retrieved from FRNPARTS.

*part\_number* = the part number retrieved from FRNPARTS.



---

## **Part 2. DB2 Content Manager OnDemand**



---

## Chapter 8. Configuring the environment

This chapter discusses problems related to configuring the DB2 Content Manager OnDemand environment.

---

### SQL errors during configuration

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** z/OS, OS/390

#### Problem

When configuring DB2 Content Manager OnDemand, SQL errors occur that prevent the system log folder from displaying.

#### Solution

DB2 Content Manager OnDemand does not support the RRSF value of the MVSATTACHTYPE keyword in the CLI.INI file. If the MVSATTACHTYPE keyword is specified, the value must be CAF (that is, MVSATTACHTYPE=CAF).

#### RRSAF

A value used to connect to the DB2 address space.

**CAF** A default setting used to determine which call attach facility is used when setting up an ODBC file.

To resolve the SQL errors:

1. Check for the existence of the MVSATTACHTYPE parameter in the CLI.INI file of the appropriate DB2 subsystem.
2. If the value of the MVSATTACHTYPE is RRSF, change its value to CAF, or delete it entirely.

---

### ARSSOCKD errors

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1.1  
**Operating systems:** z/OS, OS/390

#### Problem

After installing DB2 Content Manager OnDemand, Version 7.1.0.3, and initializing the ARSSOCKD program, the following errors appear on the system console:

```
System will only be using TSM (Tivoli Storage Manager) client APIs arsockd.
arsockd (cold): ARSSOCKD 2 160 unable to load module
/opt/ondemand/bin/exits/arssmtsm rc=2
```

```
arsockd (ARCHIVE): ARSMMSG 2 146 The communications layer was unable to receive data
arsockd (cold): ARSSOCKD 2 179 License Server Failed.
```

#### Cause

The 64-bit Tivoli Storage Manager API is installed on the machine.

### Solution

DB2 Content Manager OnDemand currently uses the 32-bit Tivoli Storage Manager API.

---

## Cache is full

**Product:** DB2 Content Manager OnDemand

**Version:** 7.1.1

**Operating systems:** z/OS, OS/390

### Problem

A user receives an error when the cache is full.

### Solution

To determine how much space remains in the DB2 Content Manager OnDemand cache:

1. Review the `/path/ars.cache` file for available space.
2. Issue the following UNIX System Services (USS) command:

```
df -kP /ars_dir
```

where `ars_dir` is a directory specified in `ars.cache`.

---

## GIM23911E error

**Product:** DB2 Content Manager OnDemand

**Version:** 7.1

**Operating systems:** z/OS, OS/390

### Problem

Performing an SMP/E APPLY CHECK received return code 04, then return code 08. The result of the SMP/E job is the following message:

```
GIM23911E ** LINK-EDIT PROCESSING FOR SYSMOD UQXXXXX
FAILED FOR MODULE ARSXXX
THE RETURN CODE (12) EXCEEDED ALLOWABLE VALUE. DATE...
```

Later in the linkage edit section, the following message occurred:

```
IEW2606S 4B39 MODULE INCORPORATES PROGRAM MANAGEMENT 3
FEATURES AND CANNOT SAVED IN LOAD MODULE FORMAT
```

### Cause

This problem is caused by using a partitioned data set (PDS) other than PDSE for certain libraries, most likely, SMPLTS.

### Solution

Change the allocation of the library. The library type for certain libraries that are used by DB2 Content Manager OnDemand must be defined as PDSE. These libraries include:

- AARSOBJ1
- SARSDFS
- SARSLOAD
- SMPLTS

Member ARSBALLO in the SARSINST library AARSOBJ1 should be allocated as "DSNTYPE=LIBRARY".

**Other SMP/E tips:**

- Use FORFMID(XXX) for the apply process.
- Resolve all ++HOLD system actions after the apply process.
- Refresh LLA after link-editing.
- Reapply customization to user exits if the supplied source code is changed.

---

## Configuring the time zone

|                           |                              |
|---------------------------|------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand |
| <b>Version:</b>           | Unknown                      |
| <b>Operating systems:</b> | z/OS, OS/390                 |

### Problem

When using the default value of "t" on the Load Information tab of an application to force a posting date, continues returning to tomorrow's date. It almost seems like DB2 Content Manager OnDemand is using the GMT value for the date.

### Solution

Add the time zone variable to the ars.cfg file, not to the time zone of the server.

**Tip:** If you are using the /bin/sh shell, set system-wide environment variables in the /etc/profile file.

If you are using the /bin/tsch shell, set system-wide environment variables in the /etc/csh.cschr file.

---

## ARSDOC unable to communication with the object server

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

### Problem

Changing the port address in ars.ini from port 1445 to port 1446 results in the message:

arsdoc add is unable to communicate with the object server

The environment consists of a DB2 Content Manager OnDemand library server, two object servers, a production environment, and a test environment, all on the same system.

#### **Solution**

Whenever there is more than one instance, use the `-h` parameter for ARSDOC to specify the instance name to process.

For more information on working with multiple instances, see the IBM Content Manager OnDemand for Multiplatforms, Version 7.1 *Installation and Configuration Guide*.

---

## **Are multiple library servers on one database a good idea?**

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

#### **Question**

Is there any benefit to having a DB2 Content Manager OnDemand system with two library servers run on different machines, and access parallel databases?

#### **Answer**

No, this configuration does not provide any real benefit because distributing the library server does not increase performance.

**Recommendation:** Have a single library server and distribute the database across multiple nodes or machines.

---

## **Enabling the send to function of MAPI**

|                           |                              |
|---------------------------|------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand |
| <b>Version:</b>           | 7.1.2                        |
| <b>Operating systems:</b> | Microsoft Windows            |

#### **Question**

How do you enable the "send to" function after installing MAPI on DB2 Content Manager OnDemand?

#### **Answer**

Verify that the value of the following registry key is non-zero, which indicates that the "send to" function is enabled:

HKEY\_LOCAL\_MACHINE\Software\Microsoft\Windows Messaging Subsystem.

---

## **Full text searches on PDF documents**

|                 |                              |
|-----------------|------------------------------|
| <b>Product:</b> | DB2 Content Manager OnDemand |
| <b>Version:</b> | 7                            |

**Operating systems:** Microsoft Windows

### Problem

When attempting a text search on PDF documents, the ARSDOC module does not load.

### Cause

The arsvie.exe program does not have everything that it needs on the server to execute properly.

### Solution

Note the DB2 Content Manager OnDemand client installation directory on the server. Add that directory to the PATH environment variable.

Restart the server so that DB2 Content Manager OnDemand reinitializes with the new value of the PATH environment variable.

---

## Unable to archive files with Chinese characters

**Product:** DB2 Content Manager OnDemand Common Server

**Version:** 5.2

**Operating system:** OS/400

### Problem

PDF files with Chinese characters are not archived after copying the fonts to the appropriate IFS directory and creating an environment variable on the OS/400 system.

### Solution

Add the Arco\_Res\_Dir and PSRESOURCEPATH environment variables to the system and give them values that reflect where the fonts reside.

For example:

```
Display Environment Var (*SYS)
Name : Arco_Res_Dir
Value :
 '/QIBM/ProdData/OnDemand/Adobe/Resource/
```

and

```
Display Environment Var (*SYS)
Name : PSRESOURCEPATH
Value :
 '/Qibm/ProdData/OnDemand/Adobe/Fonts; /Qibm/ProdData
 /Resource/CMap'
```

---

## CPF9898 error

**Product:** DB2 Content Manager OnDemand Common Server

**Versions:** 5

**Operating system:** OS/400

## Problem

When running any command that needs to log onto a DB2 Content Manager OnDemand instance to perform a function, the following information is logged into the job log of the job running the command:

```
QSH0005 Command ended normally with exit status 1.
CPF9898 Connection cannot be established for the >Instance_Name< server.
CPF9898 arsload: Could not connect to server to establish log id.
ONDxxxx yyyyyyOND command ended in error.
```

## Cause

The LOOPBACK/LOCALHOST entry was deleted from the TCP/IP host table.

## Solution

Make sure that the default LOOPBACK/LOCALHOST entry exists.

1. Check the host table for the iSeries system using the CFGTCP command.
2. Select option 10 "Work with TCP/IP host table entries".

The internal IP address of 127.0.0.1 is used for TCP/IP local host processing, which is used by DB2 Content Manager OnDemand to access the server.

---

## CPFA0A9 error

|                          |                                            |
|--------------------------|--------------------------------------------|
| <b>Product:</b>          | DB2 Content Manager OnDemand Common Server |
| <b>Version:</b>          | 5.2                                        |
| <b>Operating system:</b> | OS/400                                     |

## Problem

The following error occurs when creating an instance:

```
CPFA0A9 Object not found. LOCALE /QSYS.LIB/EN_GB_E.LOCALE NOT FOUND
```

## Cause

A locale that does not exist on the system was specified.

## Solution

Either specify a locale that does exist on the system, or create the locale that you need using the CRTLOCALE command.

---

## OND1005 and RDR2798 errors

|                          |                                            |
|--------------------------|--------------------------------------------|
| <b>Product:</b>          | DB2 Content Manager OnDemand Common Server |
| <b>Version:</b>          | 5.2                                        |
| <b>Operating system:</b> | OS/400                                     |

## Problem

The following error occurs when creating an instance:

```
OND1005 OnDemand instance MYINSTANCE failed to instantiate. (V5R1)
```



or

or OND1005 OnDemand instance MYINSTANCE was not created.  
(V5R2 and higher).

The job log also contains the following:

RDR2798 YOU MUST SET A LOCALE.

### **Cause**

You did not specify a locale in the user profile creating the instance, or you did not sign off and sign on again after changing the user profile to specify a locale.

### **Solution**

To resolve the errors:

1. Delete the IFS directories created for the instance.
2. Delete the instance user profile and authorization list.
3. Delete the instance library.
4. Restart the instance creation process after verifying that the user profile that is creating the instance is configured correctly.



---

## Chapter 9. Upgrading

This chapter highlights problems that can occur when upgrading DB2 Content Manager OnDemand.

---

### RDR2798 error

**Product:** DB2 Content Manager OnDemand Common Server  
**Version:** 5.2  
**Operating system:** OS/400

#### Problem

After upgrading DB2 Content Manager OnDemand from Version 5, Release 1, an instance's server does not start. The following error message occurs:

Error message in start up RDR2798 - Locale not set.

#### Cause

The user profile that was running the STRTCPSVR command or QRLRCTL program did not have locale information set.

#### Solution

Add locale information to the user profile that is running the STRTCPSVR command or QRLRCTL program.

For more information, see the "Defining a locale" chapter of the *Planning and Installation Guide* for Version 5, Release 3 or above.

---

### SQLCODE -812

**Product:** DB2 Content Manager OnDemand  
**Versions:** 2.1, 7.1  
**Operating systems:** z/OS, OS/390

#### Problem

After upgrading to DB2 Content Manager OnDemand for z/OS, Version 7, Release 1, and operating in compatibility mode, SQLCODE -812 errors are written to the MSGUSR log file:

```
FRI FEB 28 06:40:30 2003 IODCSADR SQL ERROR:
SQLCODE = 00000812 VARIABLES = IODCSADR.16CEC2DB08ED20D8?ODASVR?
Fri Feb 28 06:40:30 2003? IODAG Error - IODCSADR (After Link)
comm_area.tsq_name follows:?
Fri Feb 28 06:40:30 2003? IODAG Error - D0000056?
Fri Feb 28 06:40:30 2003? IODAG Error - cics_item_count=0?
Fri Feb 28 06:40:30 2003? IODAG Error - comm_area.cics_retcode=16?
Fri Feb 28 06:40:30 2003? IODAG Error - resp=0 resp2=0?
Fri Feb 28 06:40:30 2003? IODAG Error - ArcDB_AplGroupQuery
IODCSADR OD390 Database Error?
```

## Solution

An SQLCODE -812 indicates that the last entry in the package list for the plan contained an asterisk (\*) for the collection ID. The collection ID requires the CURRENT PACKAGESET special register to be set to a non-blank value order to form a qualified package name.

Review the package list for the ODASRV plan (member IODLSRV of library SIODDB2). Determine whether \*.CBRIDBS is added as the last package in the list. \*.CBRIDBS should be the **first** package in the list. If \*.CBRIDBS is **not** the first package in the plan's package list, this is the likely cause of the SQLCODE -812. Alter the package list to make \*.CBRIDBS the first package in the list and rebind the plan. See Informational APAR II12318 for other DB2 Content Manager OnDemand servers to verify that all package lists are properly specified.

---

## ARS0024E and ARS0020E errors

|                           |                              |
|---------------------------|------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand |
| <b>Versions:</b>          | 2.1, 7.1                     |
| <b>Operating systems:</b> | z/OS, OS/390                 |

### Problem

A user is unable to retrieve documents from the DB2 Content Manager OnDemand server when accessing the Windows client.

### Cause

Check the ARSSOCKD started task for the following messages:

```
ARS0024E ODUSR OBJECT >1FAAA< IN APPLICATION GROUP >xxx< NOT FOUND
IN NODE >IOD.COLLECT.SGROUP00.M1DT03D<
SRVR->hostname.your.company.com ipaddr<-
ARS0020E ODUSR SM ERROR: ARSZDOCG: 00000017(00000010)
OAM ERROR: FUNCTION= ACCESS RETURN CODE= 000000C8 REASON-CODE= 00C10208,
RC=23, REASON=0, FILE=ARSSMSMS.C, LINE=794
SRVR->hostname.your.company.com ipaddr<-
```

The ARS0020E message indicates an object access method (OAM) error. The OAM return code, 000000C8, reflects a DB2 Call Attachment Facility (CAF) error. The CAF received requests from the same task control block (TCB) to CONNECT to the DB2 subsystem and to another subsystem.

### Solution

Specify the correct subsystem ID (SSID) with the ARS\_MIGRATE\_SSID parameter in the ars.cfg file. For example, if the DB2 SSID is DSNA, add the following to /usr/lpp/ars/config/ars.cfg:

```
ARS_MIGRATE_SSID=DSNA
```

If you chose a plan name other than ARSZDOCG in member ARSLDOCG of library SARSDDB2 when you performed the plan bind, you should also specify the ARS\_MIGRATE\_PLAN parameter in /usr/lpp/ars/config/ars.cfg. Specifying the parameter properly identifies the plan that DB2 Content Manager OnDemand should use for the ARSZDOCG program.

---

## **QRLGMGR & QRLGSRV not in system QSYSWRK**

**Product:** DB2 Content Manager OnDemand Spool File  
Archive

**Version:** 5.1

**Operating system:** OS/400

### **Problem**

When issuing the STRTCPSVR \*ONDMD command to start the server jobs, QRLGMGR and QRLGSRV are not displayed in subsystem QSYSWRK.

### **Solution**

Reinstall DB2 Content Manager OnDemand for iSeries, option 5, and apply current PTFs.



---

## Chapter 10. Configuring user access

This chapter covers configuration problems that are related to user authorization, authentication, and security.

---

### Folder selection logic

|                           |                              |
|---------------------------|------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand |
| <b>Version:</b>           | 7.1                          |
| <b>Operating systems:</b> | z/OS, OS/390                 |

#### **Problem: User-folder Permissions tab does not display**

When using the DB2 Content Manager OnDemand administrator to configure users, folders selected on the user-folder Permissions tab do not display on the folder list. Instead, unselected folders are displayed.

#### **Solution**

The privileges of a user ID override the privileges of a group. In this instance, the group has permissions on a folder, and the user does not. The user does not see that folder, although the user is a member of the group.

Set the permission on a folder to \*PUBLIC if the users satisfy the following:

- If the user is either an "Application Group, Folder Administrator," or "System Administrator", use \*ALL.

**Tip:** At the group level, setting permissions provides all the users that you assign to the group with the permissions that you define. Therefore, group level permissions override folder level permissions. At the user level, setting permissions provides a specific user with the permissions that you define; therefore, user level permissions override group level permissions.

For more information on this topic, see the *Introduction and Planning Guide*.

#### **Question**

Is there a way to configure a large number of users all at once?

#### **Answer**

There are two approaches to this question:

1. Put the users into a group that represent the security attributes that you want various users to have.  
For example, you have one user group that has document view permissions and copy permissions in the application group permissions, but does not have any annotation capability.
2. Configure another user group that has the same view. Copy permissions from the previous group, but do not allow the particular permissions you want to exclude. When you add a new user with ARSADM, you can specify the user group for the new user.

---

## Folder security not working after applying APAR PQ75080

**Product:** DB2 Content Manager OnDemand  
**Versions:** 7.1  
**Operating systems:** z/OS, OS/390

### Question

After installing APAR PQ75080, user authentication works, but folder security is no longer in place. Did this change the Assembler ARS.SECURITY exit point so it does not call ARSUSECZ? Is the same ARS.SECURITY exit point used for both the ARSUSEC and ARSUPERM DLLs?

### Answer

The security exit is in place with ARSUSECZ written in Assembler. It is being used to validate the user against RACF, and to check access against folders.

1. Assemble the ARSUSECX and ARSUSECZ exits found in SARSINST by using the assembly steps provided in ARSUSECJ.
2. When testing, add a write-to-operator (WTO) message after the HACFLDR label in ARSUSECZ to determine whether folder validation is called.
3. Define the logical MVS exit point ARS.SECURITY to the ARSUSECZ module as follows:

```
SETPROG EXIT,ADD,EXITNAME=ARS.SECURITY,MODname=arsusecz,
dsname=HLQ.v7r1m0.userload
```

4. Ensure that the assembled exits are in the ARSSOCKD STEPLIB.  
Create another ID with user authority to check the WTO statements that appear in the log file. If folder security is explicitly defined for the non-administrative user in DB2 Content Manager OnDemand, security settings using the administration client and the ARSUSECZ exit will not be called to perform additional verification. The explicit DB2 Content Manager OnDemand folder permissions take precedence.
5. Verify that you have the following parameter defined in the ARS.INI file to tell DB2 Content Manager OnDemand to check folder security:

```
SRVR_FLAGS_FOLDER_APPLGRP_EXIT=1
```

**Recommendation:** For more information, see:

<http://www.ibm.com/support/docview.wss?uid=swg27004070>

When implementing a COBOL runtime environment, ensure that COBOL maintenance is recent. There are problems with linking the COBOL exits when the LAN emulation (LE) environment is missing its maintenance. COBOL, Version 3.1, is required because the exits use the THREAD compiler option.

Review the ARS.INI file located in **Administration Client -> User Type -> Folder Permissions**, to check the maintenance level of COBOL.

---

## Unable to delete applications groups

**Product:** DB2 Content Manager OnDemand  
**Versions:** 7.1  
**Operating systems:** AIX



## Problem

When using Tivoli Storage Manager, the DB2 Content Manager OnDemand administrative client is unable to delete application groups.

## Solution

DB2 Content Manager OnDemand does not allow deleting application groups unless the application groups have been archived. Use the `arsadmin retrieve` and `arsadmin store` commands together to copy storage objects from one storage location to another. For example, you can use these commands to copy objects from Tivoli Storage Manager to cache storage.

---

## Unable to delete a report occurrence

|                           |                                                 |
|---------------------------|-------------------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand Spool File Archive |
| <b>Version:</b>           | 5.1                                             |
| <b>Operating systems:</b> | OS/400                                          |

## Problem

When issuing the Spool File Archive Delete Report (DLTRPTRDAR) command to delete an archived report occurrence, the record in the QARLSRT file was deleted successfully, but the actual integrated file system (IFS) object was not deleted. This is probably due to authority problems because the user profile issuing the DLTRPTRDAR command does not have enough authority to delete the IFS object. Because the QARLSRT record was deleted, the report does not display in the DB2 Content Manager OnDemand client, even though the IFS object still exists. However, when the DB2 Content Manager OnDemand administrator tries to archive the report again using the same date, version number, and report sequence number, an error message is issued because the IFS object already exists.

## Solution

To perform administrative tasks such as report deletion using the DLTRPTRDAR command, the user profile issuing the command must have both QRDARS400 and QRDARSADM profiles set as group or supplemental group profiles. This enables you to perform all the administrative functions necessary in DB2 Content Manager OnDemand Spool File Archive. The DLTRPTRDAR command can be executed regardless of whether the administrator has explicit authority to the report, or is listed with \*ALL privileges because the command list in QRDARS400 has \*ALL authority and QRDARSADM has \*CHANGE authority.

When the delete process begins, information is deleted from the DB2 Content Manager OnDemand control files and finds all other objects related to the report. The IFS object is secured by an authorization list with the same name as the report. In the case where the IFS object fails to be deleted, the administrator performing the delete may be listed in the authorization list with only \*USE authority. Following OS/400 security standards, the delete process uses the most restrictive authority. Although QRDARS400 and QRDARSADM might be listed in the report authorization list with \*ALL, the administrator is explicitly listed with \*USE. As a result, the deletion of the IFS object fails.

If an administrator with proper administrative authority performs a DLTRPTRDAR command with the CLEANUP parameter set to \*YES, the orphan IFS object will be deleted.

---

# Not authorized to use library QRDARS

**Product:** DB2 Content Manager OnDemand Common Server  
**Version:** 5.1  
**Operating system:** OS/400

**Problem**

The QRLGMGR job ends abnormally when signed on the system as QSECOFR, and the server is started. The following message is displayed in the job log:  
Not authorized to use library QRDARS

**Solution**

To resolve the error, perform the following steps:

1. Enter EDTOBJAUT OBJ(QSYS/QRDARS) OBJTYPE(\*LIB) on a command line.
2. Change the "Object secured by authorization list" field to QRDARS400.
3. Change \*PUBLIC from \*USE to \*AUTL.

The results should look similar to this:

```
Edit Object Authority
Object : QRDARS Owner: QSYS
Library : QSYS Primary group: *NONE
Object type : *LIB
Type changes to current authorities, press Enter.
Object secured by authorization list QRDARS400

 Object
User Group Authority
QSYS
*PUBLIC *ALL
 *AUTL
```

If you do not have sufficient authority to perform step 2 and then attempt to perform step 3, the following message occurs:

```
Message ID : CPF22A9
Message : Authority of *AUTL cannot be specified.
Cause : Object QRDARS in QSYS, type *LIB is not secured
 by an authorization list. The user is trying to
 specify that the authority for *PUBLIC is
 specified in the authorization list, but there is
 not an authorization list securing this object.
Recovery : Change the authority for *PUBLIC to a value other
 than *AUTL and use the command again or use the
 GRTOBJAUT or EDTOBJAUT command to secure object
 QRDARS in QSYS type *LIB with an authorization
 list.
```

---

# Job schedule entries

**Product:** DB2 Content Manager OnDemand Common Server  
**Versions:** 5  
**Operating system:** OS/400

### Problem

When attempting to schedule DB2 Content Manager OnDemand jobs to run automatically, the jobs fail with authority problems.

### Cause

Job schedule entries default to a user of \*CURRENT (the user who is adding the job schedule entry).

### Solution

Specify QRDARS400 as the user for all job schedule entries that run on DB2 Content Manager OnDemand commands, such as STRRMCRDAR and STRMONRDAR.

---

## JOBCTL special authority

|                          |                                            |
|--------------------------|--------------------------------------------|
| <b>Product:</b>          | DB2 Content Manager OnDemand Common Server |
| <b>Versions:</b>         | 5                                          |
| <b>Operating system:</b> | OS/400                                     |

### Problem

DB2 Content Manager OnDemand monitor will not work on one output queue, but will work on others.

### Cause

The output queue with the failing monitor was created with OPRCTL (\*NO). This means that users with \*JOBCTL special authority cannot manage the spooled files in this output queue. The QRDARS400 user profile has \*JOBCTL special authority by default.

### Solution

Change the QRDARS400 user profile to add \*SPLCTL special authority. DB2 Content Manager OnDemand is able to work with all output queues.

Alternatively, change the output queue in question to have OPRCTL(\*YES) authority, if this does not cause security exposure.

---

## RDR0166 error

|                          |                                            |
|--------------------------|--------------------------------------------|
| <b>Product:</b>          | DB2 Content Manager OnDemand Common Server |
| <b>Versions:</b>         | 5                                          |
| <b>Operating system:</b> | OS/400                                     |

### Problem

A report can be viewed, but not printed when using the PRTRPTRDAR command. The following error message is received:  
RDR0166: not authorized to report xxxxx

### Cause

The report might have key security enabled and defined in DB2 Content Manager OnDemand option 13 - Work with Key Security from the Report Administration Menu. You define user authorizations based on a range of key values by using option 13.

PRTRPTRDAR will not work if the user does not have authority for a range of values from \*ALL to \*ALL for every key that is secured. Not having this full range of authority prevents you from printing a report to obtain data that you are otherwise not authorized to see.

### Solution

Change the key security for the user who needs to print the report to give them authority for a range of values from \*ALL to \*ALL for every key that is secured.

---

## RDR0355 error

|                          |                                            |
|--------------------------|--------------------------------------------|
| <b>Product:</b>          | DB2 Content Manager OnDemand Common Server |
| <b>Versions:</b>         | 5                                          |
| <b>Operating system:</b> | OS/400                                     |

### Problem

One user cannot retrieve reports that all other users can retrieve. An RDR0355 error occurs with return code CRTUSURSPC.

### Cause

When retrieving reports, DB2 Content Manager OnDemand creates user space objects in QTEMP that are owned by the user. If creating the user space objects cause the user to exceed the maximum storage allowed, the retrieval operation will fail. This problem does not occur with the DB2 Content Manager OnDemand client.

### Solution

Use the DSPUSRPRF command to check the maximum storage allowed and storage used parameters for the user profile in question. Use the CHGUSRPRF command to increase the value for the maximum storage allowed in the user profile; a value of \*NOMAX is recommended.

---

## Chapter 11. Configuring databases

This chapter discusses problems that can occur when configuring and managing databases that are used by DB2 Content Manager OnDemand.

---

### IBM DB2 Universal Database

#### Expiration type

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

#### Question

If multiple loads per database table are allowed, is it better to set an expiration type of Segment and reduce the number of records in a segment to fit the actual needs of the application group? Or is it better to specify an expiration type of Load?

#### Scenario

Assume that application groups have been defined with an expiration type of Segment, a database organization of Multiple Loads per Database Table, and a default of 2.5 million rows per table. After storing a limited amount of data in these application groups, the system administrator notices that the indexes expire more than one year after the documents expire from Tivoli Storage Manager.

#### Answer

If a database is open, close the table with the ARSTBLSP command.

1. Configure DB2 Content Manager OnDemand and Tivoli Storage Manager for the following:  
Content Manager OnDemand Life of Data and Indexes: 3 Years.  
Tivoli Storage Manager Copygroup: 4 Years.  
Tivoli Storage Manager must keep the data longer than DB2 Content Manager OnDemand so there is time to fill the table.
2. After ten months, determine the number of records that were loaded to this Application Group.
3. Use the DB2 Content Manager OnDemand administration GUI to change the maximum number of rows to the number of rows per year.
4. Close the first table with the following DB2 Content Manager OnDemand command:  

```
arstblsp -a 1 -g applgroup
```

  
The next time you load a report to the Application Group, DB2 Content Manager OnDemand creates a new table with a new maximum record number.

The three-year expiration date for DB2 Content Manager OnDemand applies only after the table is closed. This means that DB2 Content Manager OnDemand deletes

the table after every document exceeds an age of three years and one day, even though the first document in the table might be three years and eleven months old.

Specifying an expiration type of Segment directs DB2 Content Manager OnDemand to delete the entire table at the same time. Tivoli Storage Manager works differently. The RETVER parameter within the Tivoli Storage Manager copygroup tells Tivoli Storage Manager how long to keep an object. For example, if you specify RETVER=1460 (four years), Tivoli Storage Manager drops the object after 1461 days from the date that the object was loaded. Because you do not load much to this application group, you have an extra option to the one above for expiring by segment. Reduce the maximum number of rows for the table and specify an expiration type of Load.

## Archiving log files

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

### Question

After performing both offline and online backups, it appears that the primary archive log directory is still full. Does this mean that users must delete the logs from the primary log directory since the logs are not deleted when they are backed up?

### Answer

DB2 Content Manager OnDemand copies the DB2 log files from the primary log directory to the archive log directory. The database configuration parameter LOGPRIMARY sets the number of primary log files DB2 expects. The DB2 database manager removes any log files that are in excess of this number, if the log files have been copied to the archive log directory. The primary log files are copied to the archive log as soon as they are no longer in active status. After copying the archive log file, the database manager takes over managing the primary log file.

## Archive log directory and primary log directory

|                           |                              |
|---------------------------|------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand |
| <b>Version:</b>           | 7.1                          |
| <b>Operating systems:</b> | AIX, Windows NT              |

### Question

Do the archive log directory and the primary log directory operate differently on Windows NT and AIX?

The Windows NT archive log directory was empty, whereas the AIX archive log directory was full of logs.

### Answer

Archiving works identically on Windows NT and AIX. Check the log file that contains error messages that are produced by the user exit. The log file is in the directory indicated by the ARSTMP program.

Also check the DB2 Content Manager OnDemand configurator by selecting the database option from the Archive Properties menu. If the ADSM check box is selected, the logs are on ADSM. Otherwise, open Advanced Options and check the paths selected. Define paths for both the primary and archive logs in Advanced Options.

## Deleting the primary log directory

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** AIX, HP-UX, Solaris, Microsoft Windows

### Question

After a system backup or log backup has completed, can the log files in the primary log directory be deleted to free up space?

### Answer

Never delete primary log files. Deletion of primary log files can corrupt a database. See the "Storage Management" chapter in the *Introduction and Planning Guide* for more information about database log file storage.

## SQL0911N error

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** AIX, HP-UX, Solaris, Microsoft Windows

### Problem

The following error occurred while performing an online backup:

SQL0911N: The current transaction has been rolled back because of a deadlock or timeout

### Solution

To check for deadlocks in the system:

1. Turn on monitor switches for locks by executing the following command at the DB2 command line:  
`UPDATE MONITOR SWITCHES USING LOCK ON`
2. Perform a DB2 online backup.
3. Issue the GET SNAPSHOT command:  
`GET SNAPSHOT FOR LOCKS ON database-alias`  
This command searches for any locked files in the database. If no files are locked, a timeout issue exists. Check your DB2 settings.

Tips for tuning a database for backups.

When backing up a large (200 GB or larger) database, use these backup parameters to accelerate the process:

- **Parallelism:** Set to the number of tablespaces. This is true whether the `intra_parallel` parameter is set to on or off.
- **Number of buffers:** Set to twice the number of devices or directories that are being backed up.
- **Buffer sizes = multiple of extentsize.** A bigger buffer size leads to better performance. Increase the `util_heap_sz` parameter temporarily if the buffer size is big. The general rule is `numbuffers * buffer size <= util_heap_sz`. If `util_heap_sz` is too small, you get the error : SQL2009 not enough memory for the utility. Change `util_heap_sz` back to its original value after the backup. The settings for the `util_heap_sz` parameter reduce the wait time.

## ARS2090E error

|                           |                              |
|---------------------------|------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand |
| <b>Version:</b>           | 7.1                          |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris          |

### Question

When generating a hit list, why does an ARS2090E error occur?

### Answer

Answer the following questions:

- Can you make updates in DB2 Content Manager OnDemand administrator?
- Can you logon to the client?
- Can you see and select all folders?
- Are you unable to generate a hit list?

If you answered Yes to all of these questions, it means that you are able to retrieve information from the user-defined tables, but not from the data tables. Take these steps to resolve the problem:

1. Because you are unable to access the system log for additional information, you must re-route error messages to a second console session:
  - Open another AIX console session.
  - In your primary session, type: `swcons tty`.
2. Check for a message in the second console session that reads:  
Unable to find SMS tablespace file systems.  
This message indicates that either the defined SMS file systems are full or there are no SMS file systems defined. If you receive this message, make sure that the database (SMS or DMS) file system is not full and is mounted.
3. Connect to the database manually:  
DB2 connect to archive
4. Verify that the data tables exist by issuing the following command at the DB2 command line:  
`list tables for schema root |pg`
5. Verify that information exists by issuing the following command at the DB2 command line:  
`select * from root.tablename |pg`



6. Check the ars.dbfs file in the /usr/lpp/ars/config directory to verify that the file systems are defined like the example below. If they are not, edit the file systems, save the ars.dbfs file, and then restart ARSSOCKD.

```
DEFINITIONS
File system Tablespace Type (SMS)
#-----

/arsdb/SMS SMS
```

7. Issue the ARSDB command with the -sm parameters to optimize the database table.
8. Restart the database.

## ARSSOCKD locks tables while user accesses reports

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1.1  
**Operating systems:** z/OS, OS/390

The following messages are written to the DB2 logs while performing daily incremental backup by using the COPY utility with the SHRLEVEL REFERENCE option:

```
DSNT376I -DBP1 PLAN=DSNACLI WITH
CORRELATION-ID=ARSSOCKD
CONNECTION-ID=DB2CALL
LUW-ID=NET1.A06DBP1.BA39C5E61E6C=15
THREAD-INFO=ARSSVR:*:*:*
IS TIMED OUT. ONE HOLDER OF THE RESOURCE IS PLAN=DSNUTIL WITH
CORRELATION-ID=ODIMGCPY
CONNECTION-ID=UTILITY
LUW-ID=NET1.A06DBP1.BA3C00DEE93F=5720
THREAD-INFO=OPCC:*:*:*
ON MEMBER DBP1
DSNT501I -DBP1 DSNILMCL RESOURCE UNAVAILABLE
CORRELATION-ID=ARSSOCKD
CONNECTION-ID=DB2CALL
LUW-ID=*
REASON 00C900BA
```

The following message was written to the ARSSOCKD log:

```
STC05356 ARS0013E XMDEST DB ERROR: {DB2 FOR OS/390}{ODBC DRIVER}
SQLSTATE=HY010 ERRLOC=2:107:4 -- SQLSTATE=HY010, SQLCODE=-99999,
FILE=ARSSEG.C, LINE=3175
STC05356 ARS0013E XMDEST DB ERROR: {DB2 FOR OS/390}{ODBC DRIVER} &0 0
^ 2 -- SQLSTATE= ^ , SQLCODE=1352679760, FILE=ARSSEG.C, LINE=4055
STC05356 ARS0013E XMDEST DB ERROR: {DB2 FOR OS/390}{ODBC DRIVER}{DSN07011}
DSNT408I SQLCODE = -510, ERROR: THE TABLE DESIGNATED BY THE CURSOR
OF THE UPDATE OR DELETE STATEMENT CANNOT BE MODIFIED DSNT418I
SQLSTATE = 42828 SQLSTATE RETURN
CODE DSNT415I SQLERRP = DSNXODML
SQL PROCEDURE DETECTING ERROR DSNT416I SQLERRD= -530 0 0 -1 0 0
SQL DIAGNOSTIC INFORMATION DSNT416I
SQLERRD = X'FFFFFFDEE' X'00000000' X'00000000' X'FF --
SQLSTATE=42828, SQLCODE=-510, FILE=ARSSEG.C, LINE=3145
```

### Solution

To identify the DB2 Content Manager OnDemand process that requested the write claims during the image copy, check the DB2 Content Manager OnDemand system log for that same time period by using DB2 Content Manager OnDemand client.

Select the system log folder, input the date in the **Time Stamp** field, and click **Search**. Determine if any applications were running at the same time as the copy utility.

The incremental copy job finishes in one minute. Adjust the setup of the IRLM deadlock accordingly. Keep in mind that this change impacts all DB2 processes in the same DB2 subsystem.

Inform users of the DB2 utility jobs schedule and encourage them to use applications at other times or to retry the job in few minutes.

Use the SHRLEVEL CHANGE option for all utility jobs.

---

## Oracle

### One table per tablespace

|                           |                              |
|---------------------------|------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand |
| <b>Version:</b>           | 7.1                          |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Linux   |

#### Question

Is it a good idea to have one table per tablespace when using Oracle?

#### Answer

To have one table per tablespace is convenient for the Oracle database administrator, who can easily move tables among volumes by performing the following tasks:

- Taking the tablespace offline.
- Moving the tablespace's data file to a new location.
- Renaming the data file in the database.
- Bringing the tablespace back online.

Some Oracle database administrators notice performance improvement when each table has its own tablespace. But other database administrator tasks can become taxing, especially when monitoring the growth of tablespaces because there are more tablespaces.

A policy of one table per tablespace makes the job of the DB2 Content Manager OnDemand administrator difficult because it requires more frequent updates to the `ars.dbfs` file. Also, each DB2 Content Manager OnDemand application group has its own data table. When a new application group is created, a new application group data table and an associated tablespace are also created.

**Recommendation:** Bundle the tablespace into one single logical unit and spread that logical unit over as many devices as possible, using striping or a logical volume manager.

**Note:** Oracle, Version 8, allows a maximum of 1023 data files per tablespace. If your operating system allows a maximum size of 2 GB per file, the maximum size for a tablespace is 2 terabytes (TB) minus 2 GB.

## ORA-01017 error

|                           |                              |
|---------------------------|------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand |
| <b>Version:</b>           | 7.1.1                        |
| <b>Operating systems:</b> | Microsoft Windows 2000       |

### Problem

The following error occurs when executing an ARSDB command:

DB Error: ORA-01017: invalid username/password; logon denied -- SQLSTATE DE=1017  
arsdb: Unable to connect to ORACLE ARCHIVE database.

### Solution

If the user ID that is specified in the `ars.cfg` file is different than the user ID of the root user, perform either of the following actions to configure DB2 Content Manager OnDemand to work with Oracle:

- Add the following parameter to the Oracle instance `&oracleInstanceName.ora` file:

```
remote_os_authent = true
```

Re-initialize Oracle so that it picks up the new parameter:

```
init &oracleInstanceName.ora
```

where:

`&oracleInstanceName` is the name of the Oracle instance file.

- Add the following parameters to the `ARS.CFG` file:

```
ARS_ORACLE_USERID=root
```

```
ARS_ORACLE_PASSWD=xxxxxxx
```

Where `xxxxxxx` is the password of the DB2 Content Manager OnDemand user.

See the *Installation and Configuration Guide* for more information on the parameters in the `ARS.CFG` file.

---

## Others

## DNST408I error

|                           |                              |
|---------------------------|------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand |
| <b>Version:</b>           | 7.1                          |
| <b>Operating systems:</b> | z/OS, OS/390                 |

### Problem

ARSLOAD receives the following error message when running ARSDB:

```
DSNT408I SQLCODE = -904, ERROR: UNSUCCESSFUL EXECUTION CAUSED
BY AN UNAVAILABLE RESOURCE.
REASON 00D70025, TYPE OF RESOURCE 00000220
```

### Cause

Volume or space not available in IBM DB2 Universal Database for z/OS and OS/390.

### Solution

According to DB2 Universal Database for z/OS and OS/390 *Messages and Codes* (GC26-9940), this error indicates a resource allocation or resource recall issue, or possibly a disk error.

To resolve the problem:

1. Locate the full data set name from the error message. Under RESOURCE NAME, you will see something like this:

XXXXX.DSNDBC.DDDDD.SSSSS.I0001.ANNN XXXXX

where:

**XXXXX**

Is the high-level qualifier where user-managed data sets (VCAT) can be up to 8 bytes in length.

**DSNDBC**

Indicates that this is the cluster where you can find the corresponding DSNDBD (the data component for the VSAM data set).

**DDDDD**

Is the database name. It can be up to 8 characters in length. ARSDBASE is the default value in DB2 Content Manager OnDemand, Version 7.

**SSSSS**

Is the tablespace or index space name.

**I0001** Is fixed. However, you might see J0001 in some cases if any of the DB2 online utilities were used.

**ANNN**

Is the data set number for the index space or tablespace.

2. Use the above information to identify the storage group name by performing the following SQL query from a DB2 command prompt:

```
SELECT STGROUP FROM SYSIBM.SYSDATABASE WHERE NAME= 'database_name';
```

For example:

```
SELECT STGROUP FROM SYSIBM.SYSDATABASE WHERE NAME= 'ARSDBASE';
```

3. Identify the volume ID by performing the following query from a DB2 command prompt:

```
SELECT VOLID FROM SYSIBM.SYSVOLUMES WHERE SGNAME='STGROUP_NAME';
```

**Tip:** The default storage group in DB2 Content Manager OnDemand, Version 7, is ARSSG.

4. If one or more rows of asterisks (\*) are returned, this is an indication that SMS is used. Make sure that at least two rows are returned so the data set can be allocated in multiple volumes.

If only one row of asterisks is returned, issue the ALTER command to add the volume to the following storage group:

```
ALTER STOGROUP STGROUP_NAME ADD VOLUMES('*');
```

5. Check with the storage management area to determine if there is enough space available by providing them the full data set name.
6. For any volume IDs returned, check that the volume is still online and that there is enough space available on each.

## Access errors when backing up the database

**Product:** DB2 Content Manager OnDemand

**Version:** 2.1.1

**Operating systems:** z/OS, OS/390

### **Problem**

When DB2 tables are being backed up, an error occurs on the DB2 Content Manager server.

### **Solution**

There are two options:

- Do not put the database in utility mode during a backup. If the database is in utility mode, database objects (for example indexes) become unavailable to DB2 Content Manager OnDemand and can return a DB2 SQL CODE of -904. The utility mode results in more significant errors in the DB2 Content Manager OnDemand server because the database objects are being removed at unexpected points in the processing. The DB2 Content Manager OnDemand server does not tolerate using the utility mode during a backup because the server has expectations that the database will be available throughout the user's session. If objects become unavailable unexpectedly, unpredictable results occur. Placing the database in a read-only access mode allows the DB2 Content Manager OnDemand server to access the database objects while preventing updates during the backup.
- Temporarily stop the DB2 Content Manager OnDemand server while the backups are being done, and do not restart the server until the database objects are available again. This option allows you to continue placing the database in the utility mode during the backups.

## **Update application group to use SMS**

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.0  
**Operating systems:** AIX, HP-UX, Solaris, Microsoft Windows

### **Questions**

The tablespace of an application group was defined as None. Does this mean that all data in this application group uses the default USERSPACE1 tablespace?

Also, the `ars.dbfs` file does not list any database file systems. This causes the default tablespace to become very large and reach file system limits. Is it possible to update the application group definition to use SMS instead? In this case, the `ars.dbfs` file would be updated with an SMS file system name, and the file system created. Would this cause DB2 Content Manager OnDemand to create a new tablespace for each application group on the next load? If not, what must be done to the Application Group to use its own SMS tablespace to store subsequent or existing data?

### **Answers**

You can change the value in the application group from None to SMS by changing or adding file systems to the `ars.dbfs` file, and then updating the application group. Subsequently use the `ARSTBLSP` command to move the data out of the `USERSPACE1` tablespace and into the new tablespace or tablespaces.

## Unable to back up database

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Versions:</b>          | 7.1–7.1.1                              |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

### Question

Issuing the following command produces a return code of -2036.:

```
arsdb -vy /arsbup/arsdb.backup
```

Similarly, when attempting to back up the database with the DB2 BACKUP command, SQL2036N was received. Issuing the command as root and as archive (the database instance owner), the same error is received.

What is causing these errors?

### Answer

Do not specify a file name for the backup image, because that is done by DB2. Specify the file system (directory) where you want to place the backup.

For ARSDB, make sure that arsd.b.backup is the directory, and make sure that the permissions of the backup directory allow access by the DB2 instance owner.

---

## Chapter 12. Configuring clients

This chapter discusses problems related to the configuration of DB2 Content Manager OnDemand clients.

---

### OnDemand Web Enablement Kit

#### Retrieving documents after testing a failover

|                          |                                        |
|--------------------------|----------------------------------------|
| <b>Product:</b>          | ODWEK                                  |
| <b>Version:</b>          | 7.1                                    |
| <b>Operating system:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

##### Problem

High availability cluster multi-processing (HACMP<sup>™</sup>) is set up to provide a failover for the DB2 Content Manager OnDemand server. When using ODWEK to connect to the library server, the failover is tested, the logon is successful, opens a folder, and gets a hit list, but is unable to retrieve the actual object.

##### Cause

The application server where ODWEK is running has the logon information and the object information stored in cache. When attempting to retrieve the document after the failover test, the information from cache is used instead of gathering new information.

##### Solution

Clean out the ODWEK cache directory.

#### ODWEK limitations when accessing a version 2 server

|                           |                                               |
|---------------------------|-----------------------------------------------|
| <b>Product:</b>           | ODWEK                                         |
| <b>Versions:</b>          | 7.1.0.6–7.1.0.12                              |
| <b>Operating systems:</b> | AIX, Solaris, Linux, HP-UX, Microsoft Windows |

##### Problem

The following discusses the support for, and limitations to, retrieving documents from the DB2 Content Manager OnDemand for z/OS and OS/390 server.

##### Solution

IBM provides a migration or coexistence strategy that allows all DB2 Content Manager OnDemand, Version 7.1 clients (Windows end-user and administrative, CICS, ODWEK) to access DB2 Content Manager OnDemand, Version 7.1 and Version 2.1 servers. ODWEK Version 7.1.0.6 or later supports direct access to the DB2 Content Manager OnDemand for OS/390, Version 2.1 server. However, due to architecture differences between Version 2.1 and Version 7.1 servers, there are some

functions in ODWEK that are not supported when accessing a DB2 Content Manager OnDemand for OS/390, Version 2.1 server.

The functions that are not supported are:

- The Common Gateway Interface (CGI) and Servlet do not support the caching of user IDs. The CACHEUSERIDS parameter in the ARSWWW.INI configuration file has no effect in this environment.
- The CGI, Servlet, and Java API do not support display or retrieval of the document location. The SHOWDOCLOCATION parameter in the ARSWWW.INI configuration file has no effect in this environment.
- The CGI, Servlet, and Java API does not support the Add Annotation function. The ADDNOTES parameter in the ARSWWW.INI configuration file has no effect in this environment.
- The CGI, Servlet, and Java API do not support the View Annotations function. The VIEWNOTES parameter in the ARSWWW.INI configuration file has no effect in this environment.
- The CGI, Servlet, and Java API do not support the Update Document function.

## UpdateDoc method fails

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | ODWEK                                  |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, Solaris, HP-UX, Microsoft Windows |

### Problem

The UpdateDoc method fails, and the following error occurs in ODWEK:

DB Error: Warning: Unexpected SQL\_NO\_DATA SQLSTATE=Not Defined,  
SQLCODE=100, File=arsdoc.c, Line=1719

### Cause

The AddFieldStodocID parameter in ARSWWW.INI is set to 0.

### Solution

The default value for AddFieldStodocID is 0, which means that the field values are not added to the document identifiers. If you plan to use the UpdateDoc method, change the value of AddFieldStodocID from 0 to 1.

## Connecting to a non-default port using Java APIs

|                           |                                               |
|---------------------------|-----------------------------------------------|
| <b>Product:</b>           | ODWEK                                         |
| <b>Version:</b>           | 7.1                                           |
| <b>Operating systems:</b> | AIX, Solaris, HP-UX, Linux, Microsoft Windows |

### Question

How does a system administrator access a non-default port when using ODWEK Java APIs?



For example, a system administrator has two instances of DB2 Content Manager OnDemand on the server. One instance uses the default port, and the other uses a different port. When a Java program executes, the following error occurs.

Connection cannot be established to the instance2 server

### Answer

Call the `ODServer.setPort()` API before logging on the system within the Java source. Specify the host name for your server instead of the instance host name. The APIs do not use that part of the `ARSWWW.INI` file to resolve instances.

## AFP files are not displaying all overlays

|                           |                   |
|---------------------------|-------------------|
| <b>Product:</b>           | ODWEK             |
| <b>Version:</b>           | 7.1               |
| <b>Operating systems:</b> | Microsoft Windows |

### Problem

ODWEK does not display Advanced Function Printing™ (AFP™) files correctly. For example, the AFP file has two overlays, but when viewed with ODWEK, it only displays the first overlay. Viewing the same AFP file with the DB2 Content Manager OnDemand client displays correctly.

### Cause

The overlay resource was not found by the AFP Web Viewer.

### Solution

To configure the AFP Web Viewer to display the overlay, specify the resource directory in the `FTDPORT2.INI` file. Use a text editor to open the `FTDPORT2.INI` file, and find the entry named `ResourceDataPath` under [Preferences]. For example:

```
[Preferences]
DefaultView=DEFAULT
ViewDataPath=C:\AFPPLGIN\DATA
ResourceDataPath=C:\AFPPLGIN\RESOURCE
FontDataPath=C:\AFPPLGIN\FONT
```

The `ResourceDataPath` entry that is used for the DB2 Content Manager OnDemand Client must match the same entry used for the AFP Web Viewer. Both the DB2 Content Manager OnDemand Client and the AFP Web Viewer must have an `FTDPORT2.INI` file.

**Tip:** External overlay resources are not downloaded with the AFP document. If the resource is not stored in the same file as the AFP document, download the resource with the AFP document. If the resource is external, store the resource in the directory specified by the `ResourceDataPath` parameter.

The AFP Web Viewer does not download overlays to the resource directory specified by the `ResourceDataPath`. If the resource cannot be downloaded to the client workstation, modify the AFP data stream so that the AFP document and the AFP resource reside in the same file.

## Clustering ODWEK on WebSphere Application Server

|                           |                        |
|---------------------------|------------------------|
| <b>Product:</b>           | ODWEK                  |
| <b>Version:</b>           | 7.1                    |
| <b>Operating systems:</b> | Microsoft Windows 2000 |

### Question

What is the best way to configure WebSphere Application Server, Version 4.0, for horizontal clustering, and installation of the ODWEK application?

### Answer

Assuming that DB2 Universal Database, Version 7.1 and WebSphere Application Server, Version 4.0, have been set up on the intended servers, verify the following requirements:

There are three servers, A, B, and C. Server A contains the WebSphere Application Server, DB2 Universal Database, and IBM HTTP Server. Server B contains the WebSphere Application Server. Server C operates as an HTTP server.

#### *Make both servers point to the same repository*

1. Stop WebSphere Application Server on both machines.
2. On Server B, using the DB2 Client Configuration Assistant, configure a client database connection to Server A's WebSphere Application Server database.  
Assign Server B a different alias from Server A, such as, WAS40A. You may leave the local WebSphere Application Server client configuration there and test the connection.
3. On Server B, in the C:\WebSphere\AppServer\bin\admin.cfg file, make the following lines point to Server A's database. Use the database alias name from previous step to execute the following commands:

```
Repository database settings
com.ibm.ejs.sm.adminServer.dbdatabaseName=WAS40A
com.ibm.ejs.sm.adminServer.dbuser= db_user name
com.ibm.ejs.sm.adminServer.dbpassword= db_user password
install.initial.config=false
com.ibm.ejs.sm.adminServer.createTables=false
```

#### *Cluster the application on WebSphere Application Server (horizontal clone)*

1. Launch the Administrator Console on Server A.
2. Create a server group.
  - a. Right-click on **Server Group**.
  - b. Select **New**.
  - c. Specify a name for the new server group.
  - d. Click **OK**.
3. Create a clone on Server A:
  - a. Right-click on the new server group.
  - b. Select **New → Clone**.
  - c. Specify a name for the server group.
  - d. Choose Server A.
4. Repeat steps 1 through 3 for Server B.

### *Install the ODWEK.ear file*

1. Remove the ODWEK application if it already exists on either machine.
2. Reinstall ODWEK on Server A.
3. At the **Selecting Application Servers** step of the ODWEK ear file install, select a server. Choose the server group that was created in the previous section.
4. Copy the ODWEK.ear file to the C:\WebSphere\AppServer\installedApps\ directory on Server B.
5. Start the server groups and check the status of the ODWEK application. The application will be running on both servers.

### *Configure server plug-ins*

Install WebSphere Application Server, Version 4.0 Advanced Edition on Server C.

1. Perform a custom installation of WebSphere Application Server, Version 4.0 Advanced Edition, and select Web plug-ins only.
2. Regenerate the plug-in by right-clicking on NODE A.
3. Copy the c:\websphere\appserver\config\plugin-cfg.xml file from Server A to the C:\websphere\appserver\config directory of the HTTP Server (Server C).
4. Restart the HTTP Server.

## **SQL0104N error**

|                          |          |
|--------------------------|----------|
| <b>Product:</b>          | ODWEK    |
| <b>Version:</b>          | 7.1.0.13 |
| <b>Operating system:</b> | Solaris  |

### **Problem**

The following class in a Java application:

```
public class ODTTest {
 public static void main(String[] args) {
 ODServer odServer = new ODServer();
 try{
 odServer.initialize(args[0],""); // /opt/e4payment/od
 odServer.setServer(args[1]); // server
 odServer.setPort(0);
 odServer.setUserId(args[2]); // user
 odServer.setPassword(args[3]); // password
 /* logon */
 odServer.logon();
 System.out.println("Logged in");
 /* fetch folder */
 ODFolder odFolder = odServer.openFolder("PaymentFolder");
 System.out.println("Opened folder PaymentFolder");
 String query = "WHERE (brn = '62370157804275100IP') AND
 (batchdate >= 12207) AND (batchdate <= 12211)
FETCH FIRST 101 ROWS ONLY ";
 System.out.println("Query="+query);
 Vector hits = odFolder.search(query);
 System.out.println("Got "+hits.size()+" hits.");
 /* logoff */
 odServer.logoff();
 System.out.println("Logged off");
 }
 catch(Exception e){
```

```

 e.printStackTrace();
 }
}
}

```

produces the error:

```

ADMIN 7104 Error No 13 DB Error: IBM CLI Driver DB2/SUN SQL0104N
An unexpected token "SELECT root.GAA2.*, 'GAA2'FROM r" was found
following "BEGIN-OF-STATEMENT". Expected tokens may
include: "<query_expr_body>". SQLSTATE=42601 -- SQLSTATE=42601,
SQLCODE=-104, File=ar.

```

and writes the error to the e4p\_all.log file:

```

25 Jun 2003 09:50:36,669, QueryDAOOnDemand ERROR - error on getting odHitlist
de.comline.apps.e4doc.server.search.dao.MessageQueryException: error on
getting odHitlist.

```

### Cause

com.ibm.edms.od.ODException: The server failed during a search operation.

### Solution

Instead of specifying the 'FETCH FIRST 101 ROWS ONLY' clause in the SQL query statement, set Maximum Hits to 101 Hits in the Folder/Permission page using the DB2 Content Manager OnDemand Administration Client.

Java servlets use the MAXHITS setting in the [DEFAULT BROWSER] section of the ARSWWW.INI file. But Java applications run from the command line ignore this setting and use the Maximum Hits parameter instead.

## Configuring XENOS for AFP to PDF transform

|                          |                     |
|--------------------------|---------------------|
| <b>Product:</b>          | ODWEK               |
| <b>Version:</b>          | 7.1                 |
| <b>Operating system:</b> | Unknown; not OS/400 |

### Problem

The conversion of an AFP document to a PDF document using ODWEK and Xenos D2E does not work. The following errors are written to the arswww.log file:

```

CallExe: Running command 'SRZMHO.D2E.DOCS.LOAD(A2PDMAN)/JS -OE -parm
={MVS-CRLF}/usr/adm/ars/arstmp/xpraAbhFCECA
-report=/usr/adm/ars/arstmp/xreDghACgecA
-scriptvar=inputfile=/usr/adm/ars/arstmp/xinCBHfabECA
-scriptvar=outputfile=/usr/adm/ars/arstmp/xotCdCCfaFgA -license
='DSN:SRZMHO.D2E.LICENSES.CNTL(LICINFO)' > /dev/null 2>&1'
50049536:84148533 - 11/10/03 15:25:58 - CallExe: errnojr value rc= (0516006C)
750049536:84148533 - 11/10/03 15:25:58 - CallExe: return value rc = (1)

```

### Solution

As a workaround, remove the reference to A2PDMAN in the arswww.cfg file.

## Invalid segment number (2155)

|                 |       |
|-----------------|-------|
| <b>Product:</b> | ODWEK |
|-----------------|-------|

**Version:** 7.1  
**Operating system:** Unknown; not OS/400

### **Problem**

When using the ODLineDataViewer applet to view line data through ODWEK, a logic error occurs:

MESSAGE\*\*\*LOGIC ERROR: Invalid segment number (2155)  
Warning: Applet window

### **Cause**

Users do not have administrative rights at the workstation they are using.

### **Solution**

The ODLineDataViewer applet attempts to use the value of the AppletCacheDir parameter to determine a place to use the temporary file. The AppletCacheDir parameter is found in the [Configuration] section of the ARSWWW.INI file.

If all of your users are Microsoft Windows users with a common directory, you can specify an existing directory for the value of the AppletCacheDir parameter. The applet uses the specified LAN directory or local directory on the workstation for temporary storage. For example:

AppletCacheDir=C:\odv7web1\html\cache

**Important:** Users must have write access privileges on the specified directory.

If the specified directory is not available, the applet writes the temporary files to the java.home (C:\WINNT\java) directory.

## **Configuring WebSphere Application Server and the IBM HTTP Server**

**Product:** ODWEK  
**Version:** Unknown  
**Operating systems:** z/OS, OS/390

### **Question**

What is the best way to configure WebSphere Application Server and the IBM HTTP Server for ODWEK?

### **Answer**

See instructions for configuring your system available on IBM DeveloperWorks:

<http://www.ibm.com/developerworks/db2/library/techarticle/0206stephens/0206stephens.html>

---

## OnDemand client

### Unable to initialize document

|                           |                                     |
|---------------------------|-------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand client |
| <b>Version:</b>           | 7.1                                 |
| <b>Operating systems:</b> | Microsoft Windows                   |

#### Problem

The following message occurs when attempting to review a PDF document:  
Unable to Initialize Document

#### Cause

The DB2 Content Manager OnDemand PDF plug-in file was not found in the Adobe Acrobat plug-in directory.

#### Solution

This message means that the client was not able to start the Adobe Acrobat software. Verify that the DB2 Content Manager OnDemand PDF plug-in file is located in the Adobe Acrobat plug-in directory.

The name of the DB2 Content Manager OnDemand PDF plug-in file is ARSPDF32.API. A copy of the ARSPDF32.API file is installed in the \Program Files\IBM\Ondemand32\PDF directory. The Adobe Acrobat plug-in directory is \Program Files\Adobe\Acrobat x.y\Acrobat\Plug\_ins, where x.y is the version of Adobe Acrobat.

**Important:** IBM does not provide Adobe Acrobat viewing software with DB2 Content Manager OnDemand. You should either purchase the full Adobe Acrobat product or obtain Adobe Acrobat Approval to view PDF documents. Contact Adobe for more information.

### Failure to initialize document

|                           |                                     |
|---------------------------|-------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand client |
| <b>Version:</b>           | 7.1                                 |
| <b>Operating systems:</b> | Microsoft Windows                   |

#### Problem

The following messages occur when a user attempts to view a PDF document in Adobe Acrobat, Version 6.0, from the Microsoft Windows Client:  
Unable to Initialize Document  
Failure to Initialize Document

#### Cause

There is an incorrect value for a particular key in the Windows Registry.

#### Solution

To resolve the problem:

1. In a text editor, create a reg file with the following two lines:  

```
[HKEY_CLASSES_ROOT\AcroExch.Document\DefaultIcon]
@="C:\\Program Files\\Adobe\\Acrobat 6.0\\Acrobat\\Acrobat.exe,1
```
2. If Adobe Acrobat, Version 6.0 is installed in a directory other than the path shown in step 1, modify the two-line reg file to reflect the change.
3. Save the reg file and double-click on it to merge this particular value into the Windows Registry.
4. Restart the DB2 Content Manager OnDemand Windows Client.

## PDF error: dispatch -acroexch.app could not be loaded

**Product:** DB2 Content Manager OnDemand client  
**Version:** 7.1  
**Operating systems:** Microsoft Windows

### Problem

After installing Adobe Acrobat Reader, the following error occurs:  
dispatch -acroexch.app could not be loaded

### Solution

To resolve the error:

1. Copy the ARSPDF32.API file from the /ars32/pdf/ directory to the adobe/acrobat/plugin directory.  
**Important:** Do not copy this file to the Adobe Acrobat Reader directory.
2. If you have chosen data type PDF in **Update Application** → **View information** window, verify that you have Adobe Acrobat Exchange or Adobe Acrobat installed.

If you have a user-defined data type and use the PDF extension selected, the system launches a separate window. In this case, Adobe Acrobat Reader can be used.

## StoreDoc() API fails

**Product:** DB2 Content Manager OnDemand client  
**Version:** 7.1  
**Operating systems:** Microsoft Windows

### Question

Why does calling the StoreDoc() API return an error code of 2?

### Answer

There are two attributes that must be set for the StoreDoc() API to successfully load a document:

- The application group database must have the Multiple Loads per Table attribute for the StoreDoc() method to succeed. The Multiple Loads per Table attribute is set under the **General** → **Advanced** tab in the Properties window of the application group.
- The application group's Expiration Type in Storage Management must be set to Expiration Type: Segment for the StoreDoc() to succeed. The Expiration Type attribute is set in the **Storage Management** tab in the Properties window of the application group.

## Error 1319: unable to find Courier New font

**Product:** DB2 Content Manager OnDemand client  
**Version:** 7.1.0.9  
**Operating systems:** Microsoft Windows XP

### Problem

A user on Microsoft Windows XP receives the following error message:  
 1319 Unable to find Courier New Font

### Solution

Upgrade DB2 Content Manager OnDemand client, from Version, 7.1.0.9 to Version 7.1.0.12.

## Text overwrites itself

**Product:** DB2 Content Manager OnDemand client  
**Version:** 7.1.0.9  
**Operating systems:** Microsoft Windows

### Problem

Text overwrites itself after upgrading to DB2 Content Manager OnDemand, Version 7.1.0.12.

### Solution

Verify whether you have **Clear Type** font settings enabled:

1. Right-click the desktop.
2. Select **Properties**.
3. Select **Appearance**.
4. Click on **Effects**.
5. Select **Standard**, not clear type.

## AFP documents no longer display correctly

**Product:** DB2 Content Manager OnDemand Client  
**Version:** Unknown  
**Operating systems:** Microsoft Windows

### Problem



After upgrading the DB2 Content Manager OnDemand client, AFP documents no longer display correctly.

### **Cause**

When upgrading the client, any font mapping changes that were made in the previous release were lost.

### **Solution**

In the future, always make copies of any files that you modify and place the copied files outside of the installation directory structure. Doing so prevents them from being overwritten during an upgrade.

Files that are commonly created or modified for font mapping are located in the C:\Program Files\IBM\OnDemand32\FONT directory, and are named:

```
csdef.fnt
alias.fnt
cpdef.fnt
coded.fnt
```

It is also possible that you have created or modified code page files that are located in the C:\Program Files\IBM\OnDemand32\FONT\maps directory. These files end with the extension of .cp. You only need to backup copies of code page files that you create or modify.

If you have just upgraded your DB2 Content Manager OnDemand client code and documents display incorrectly, restore the changes you previously made. If you did not save the changes, you might be able to find someone else at your company who has not yet upgraded and copy their customized files.

## **Unable to establish a connection with the server**

|                          |                                     |
|--------------------------|-------------------------------------|
| <b>Product:</b>          | DB2 Content Manager OnDemand client |
| <b>Version:</b>          | 7.1                                 |
| <b>Operating system:</b> | Unknown; not OS/400                 |

### **Problem**

The DB2 Content Manager OnDemand client is unable to establish a connection with the OnDemand server. The ARSSOCKD start task did not produce any error messages, and the NETSTAT command indicated that ARSSOCKD was listening on port 1445.

### **Cause**

There are incorrect settings for the ARS\_SRVR and ARS\_LOCAL\_SRVR parameters in the ars.cfg file.

### **Solution**

If you are configuring an object server, set the ARS\_SRVR and ARS\_LOCAL\_SRVR parameters to the TCP/IP host name alias, fully qualified host name, or IP address of the library server.

If you are configuring a library server, either omit this parameter from the `ars.cfg` file or set this parameter to a blank value: `ARS_SRVR=` .

---

## AFP Viewer and AFP Web Viewer

### Creating an AFP Viewer trace

**Product:** AFP Web Viewer  
**Version:** 7.1  
**Operating systems:** Microsoft Windows

#### Question

How do you enable the trace for the Advance Function Presentation (AFP) Viewer?

#### Answer

To create a trace file for the AFP Web Viewer, set `TRACE=TRUE` in the `FTDPORT2.INI` file. The file is located in the `\Program Files\IBM\OnDemand AFP Web Viewer` directory.

To create an AFP Viewer trace log:

1. Find the following section in the registry:  
`HKEY_CURRENT_USER\Software\IBM\Ondemand32\Client\Misc`
2. Add the string `TRACE` with a value of 1.

The trace file, `VIEWER.LOG`, is placed in the `\Program Files\OnDemand2` directory.

### Modifying parameters in the `FTDPORT2.INI` file

**Product:** AFP Web Viewer  
**Version:** 2.1  
**Operating systems:** Unknown; not OS/400

#### Question

When using the AFP Web Viewer plug-ins with ODWEK, how do you modify parameters in the `FTDPORT2.INI` file?

#### Answer

DB2 Content Manager OnDemand AFP Web Viewer is used by ODWEK when viewing AFP reports that are stored in DB2 Content Manager OnDemand, Version 2.1. The `FTDPORT2.INI` file contains some modifiable parameters that affect how the AFP report is displayed. You can find the `FTDPORT2.INI` file in the directory where the DB2 Content Manager OnDemand AFP Web Viewer is installed.

The following list describes the parameters that you can specify in the `FTDPORT2.INI` file and their possible values:

#### Rules or Lines that Do Not Display

If the rules or lines are not displayed correctly when you view an AFP report, the problem might be due to display driver differences. You should

use another method for displaying rules. In the Miscellaneous Section, change RuleFix=FALSE to RuleFix=TRUE.

### **Text Fidelity**

If fonts are not substituted correctly and the text alignment is not correct, especially if the Text Fidelity parameter is set to Character, your report was created with 300-pel metrics rather than 240-pel metrics. If you specify 240Fidelity=FALSE, the report is presented using 300-pel metrics. If you specify 240Fidelity=TRUE, the report is presented using 240-metrics, which is the default value.

### **Print Dialog box**

When the Print Dialog box is presented, the default is to print the current page of the report. You can change the default to print all the pages in the report by specifying PrintAllPages=TRUE in the Settings section.

### **User-Defined Page Sizes**

You can define two page sizes, U1 and U2, for viewing reports that contain non-standard sized pages. The two page sizes are added to the list of page sizes that can be selected when viewing a report. To define the two page sizes, modify the following two lines:

```
PaperSize1=12240, 15840
PaperSize2=12240, 15840
```

Change these numbers to the width and length of the pages in the report. All values must be in units of 1440ths of an inch. If the page size is in inches, multiply the page size by 1440. If the page is in millimeters, multiply the page size by 56.7, and round to the nearest whole number. If no values are set, the default size is 8.5 x 11 inches.

### **TrueType Fonts**

To view your reports using True Type fonts:

1. If Adobe Type Manager (ATM) is installed on your PC, disable or remove it.  
If Type 1 fonts are installed, they must be removed.
2. Add the following line in the Miscellaneous section of the FTDPOR2.INI file:  
TTONLY=TRUE

For more information on the IBM AFP Viewer plug-in, go to:

<http://www.printers.ibm.com/pbin-afp/go?/pdocs/fldu3mst.html>



---

## Chapter 13. Managing storage

This chapter covers different types of storage management problems when using DB2 Content Manager OnDemand.

---

### IBM Tivoli Storage Manager

#### ARSADMIN import flag

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

##### Question

The syntax of ARSADMIN includes an import flag. Does this mean that if data is migrated to an optical volume using Tivoli Storage Manager and has expired from cache, access to the data requires that the system administrator run an ARSADMIN command first with the flag? Or is this done automatically by DB2 Content Manager OnDemand and Tivoli Storage Manager?

##### Answer

The ARSADMIN import flag is for migrated index data as opposed to actual data. If an object has expired from cache but exists on an optical volume that is accessible using Tivoli Storage Manager, the data is retrieved as long as the actual data table still exists in the working database. However, if the index table has expired from the database, you must run the ARSADMIN command to retrieve the table back into the working database.

#### Migrating indexes to Tivoli Storage Manager

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

##### Question

When loading reports, they are stored in cache, and the indexes are stored in the ARCHIVE database. After a predefined period, the reports are migrated to the optical jukebox that is managed by Tivoli Storage Manager. Are the indexes in the ARCHIVE database for those reports also migrated to Tivoli Storage Manager?

##### Answer

Only the data (reports) are migrated to Tivoli Storage Manager; the indexes remain in the ARCHIVE database. You can migrate the indexes to the optical jukebox at a later date by configuring the data migration application group.

**Requirement:** After the index table is migrated to the optical jukebox, you must use the ARSADMIN command if you want to make it available for client queries.

## Retrieving expired documents

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating system:** Microsoft Windows 2000

### Question

Why is DB2 Content Manager OnDemand unable to retrieve documents directly from Tivoli Storage Manager optical platters?

### Cause

The document and indexes have expired from the cache.

### Solution

You must restore the indexes in order to be able to retrieve the documents from Tivoli Storage Manager. Also, enable the **Display Documentation Location** setting.

## Preempt option can cause loads to fail

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** AIX, HP-UX, Solaris, Microsoft Windows

### Question

Why does the Tivoli Storage Manager preempt option cause loads to fail?

### Answer

Tivoli Storage Manager can preempt server or client operations for a higher priority operation when all available device mount points are in use, or access to a specific volume is required. ARSLOAD can fail with the Tivoli Storage Manager message ANR0487W. ARSLOAD can also fail if a user attempts to retrieve a document that is archived on an unmounted volume. Tivoli Storage Manager can terminate the load to free up the mount point for the document retrieval.

### *Mount Point Preemption*

These are high priority operations that can preempt operations for a mount point:

1. Backup database
2. Export
3. Hierarchical Storage Management (HSM) recall
4. Import
5. Restore
6. Retrieve

The following operations can be preempted and are listed in order of priority. Tivoli Storage Manager selects the lowest priority operation to preempt.

1. Moving data
2. Migration from disk to sequential media
3. Backup, archive, or HSM migration
4. Migration from sequential media to sequential media
5. Reclamation

**Disabling mount point preemption:** You can disable preemption by specifying NOPREEMPT in the server options file. When this option is specified, the BACKUP DB command is the only operation that can preempt other operations.

### *Volume Access Preemption*

A high priority operation that requires access to a specific volume currently in use by a low priority operation can automatically preempt the operation. For example, if a restore request requires access to a volume in use by a reclamation process and a drive is available, the reclamation process is canceled. The reclamation process produces the ANR0494I message or issues ANR1441I. The following are high priority operations that can preempt operations for access to a specific volume:

- HSM recall
- Restore
- Retrieve

The following operations can be preempted, and are listed in order of priority. Tivoli Storage Manager preempts the lowest priority operation, for example, reclamation.

1. Moving data
2. Migration from disk to sequential media
3. Backup, archive, or HSM migration
4. Migration from sequential media
5. Reclamation

**Disabling volume access preemption:** You can disable preemption by specifying NOPREEMPT in the server options file. When this option is specified, no operation can preempt another operation for access to a volume.

**Tip:** If a load is in progress, you can force user queries to wait for the load to complete by adding the NOPREEMPT option to the bottom of the /usr/lpp/admserv/bin>dmserv.opt file. User queries may wait longer than they expect, but on most loads, this delay will probably be minimal. Use of NOPREEMPT resolves the problem of failed loads that are caused by client searches preempting the loads. Tivoli Storage Manager should be bounced to implement the new option.

## **Server fails when retrieving a resource group**

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |
| <b>Problem</b>            |                                        |

The following error message occurs when a hit list is generated in the DB2 Content Manager OnDemand client:

Server failed while retrieving a resource group.

The following errors appear in the system log:

```
11/15/01 16:07:38 D36573 73448 Error No 20
SM Error: ANSI302E (RC2) No objects on server match query,
RC=2, Reason=0, File=arssms.C, Line=533 Srvr->rsr30-1 160.81.16.5<-
11/15/01 16:07:37 D36573 73448 Error No 24
OPTIONS==> 'ENTER' TO PAGE PROB -OR- 'DC' TO PAGE CALL -OR- 0
```

```
Object >2< in Application Group >VAA< not found in node
>WITH03< Srvr->rsr30-1 160.81.16.5<-
1/15/01 16:07:36 D36573 73448 Info N/A 66
ApplGroup DocGet: Name(WT-UNISYS-TRANSCRIPTS)
Agid(571) ApplName(WTUNITrans) Aid(572) NodeName(WITH03) Nid(3)
Server(-LOCAL-) Time(13.089) FlDs()
```

### Cause

The error statements above show that DB2 Content Manager OnDemand could not retrieve a resource group (in this case, group 2) from Tivoli Storage Manager. It is possible that the resource expired from Tivoli Storage Manager and must be restored. Unless configured as in the example below, DB2 Content Manager OnDemand automatically checks the cache for the resource group before attempting to retrieve it from Tivoli Storage Manager.

```
*** STORAGE MANAGEMENT ***
STORAGE SET NAME: WITH03
APPLICATION GROUP IDENTIFIER: VAA
OBJECT SIZE (K): 10000
LENGTH OF TIME TO CACHE DATA ON MAGNETIC (DAYS): Cache is Not Used
LENGTH OF TIME BEFORE COPYING CACHE TO ARCHIVE MEDIA (DAYS):
When Data is Loaded
LENGTH OF TIME BEFORE MIGRATING INDEXES (DAYS): No Migration
LENGTH OF TIME TO KEEP IMPORTED MIGRATED INDEXES (DAYS): 0
LIFE OF DATA AND INDEXES (DAYS): Never Expires
EXPIRATION TYPE: Segment
```

### Solution

To resolve the problem:

1. Verify that the resource group is in the /arscache/0/VAA/RES/ directory.
2. Use the ARSADMIN command to restore the resource to the Tivoli Storage Manager storage node that is identified in the system log error.

In the preceding example, you would restore the object to the node named WITH03.

## Performing backups

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

### Questions

Can the standard Tivoli Storage Manager backup commands be used to perform file system backups from the server? Can the file system backups be written to the



same optical library as the DB2 Content Manager OnDemand data? Are there any other configuration tasks, in Tivoli Storage Manager or in DB2 Content Manager OnDemand, that need to be prepared for the system?

#### Answer

You can use the standard Tivoli Storage Manager backup commands to perform file system backups. See the Tivoli Storage Manager *Administrator's Reference* for information about the commands that you can use to schedule backups.

**Reminder:** If you use the standard Tivoli Storage Manager backup commands to back up file systems on the server, exclude the database file systems and the cache file systems from the backup. The database file systems should be backed up using the facilities provided by DB2 Content Manager OnDemand, such as the ARSDB program. Use the data loading and migration facilities of DB2 Content Manager OnDemand to make sure that the data in cache storage is copied to storage managed by Tivoli Storage Manager throughout as needed.

You can store the file system backups in the same optical library as the DB2 Content Manager OnDemand data, and should define different client nodes to hold the file system backups. The client nodes should be assigned to a different domain than the DB2 Content Manager OnDemand data. The retention period of the file system backups will be different than the retention period for the OnDemand data.

File system backups generally require re-writable media. Many customers use write-once optical disks for DB2 Content Manager OnDemand data.

You should plan an optical library with at least two drives:

- One for the file system backup.
- One for the OnDemand data.

If you plan to run the file system backups at the same time as you load data into DB2 Content Manager OnDemand, then plan to have a library with four drives, or store the file system backups in a different library than the DB2 Content Manager OnDemand data.

## Adding a new optical library

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

#### Question

Can you add an optical library to a DB2 Content Manager OnDemand system?

#### Answer

Yes, you can add an optical library. To do so:

1. Update the existing storage sets.  
There is no need to create a new storage set, or to create or modify application groups.
2. Add the new library and storage pool in Tivoli Storage Manager.

3. Create a new Tivoli Storage Manager node, domain, and so on.
4. Add the new storage node to the storage sets that you want to write to the new library.

Designate the new storage node as the primary storage node:

1. The primary storage node logon and password will be the new Tivoli Storage Manager node you just created. The ADSM node is called newjukebox.
2. Put a check mark in the **Load Data** checkbox to tell DB2 Content Manager OnDemand that you want data loaded, and ultimately stored, in the new jukebox using this new node.
3. Uncheck **Load Data** in the existing storage node to complete this action.

DB2 Content Manager OnDemand will still retrieve data from the old jukebox because the node information for the jukebox still exists in the old Storage Node. Everything which uses this Storage Set will begin using the new jukebox, so there is no need to update application groups.

## ANS0266I error

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Versions:</b>          | 7.1-7.1.0.13                           |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

### Question

What caused the following error message?

ANS0266I (RC2302) dsmEndTxn vote is ABORT, check the source field., RC=2302, Reason=12.

### Answer

Reason code 12 indicates that a mount error has occurred. Check the Tivoli Storage Manager or ADSM devices for scratch tapes or platters, as applicable.

See the Messages and Problem Determination chapter in the Tivoli Storage Manager documentation for more information about this error.

---

## Spool File Archive

### RDR0383 error

|                          |                                                 |
|--------------------------|-------------------------------------------------|
| <b>Product:</b>          | DB2 Content Manager OnDemand Spool File Archive |
| <b>Version:</b>          | 5.2                                             |
| <b>Operating system:</b> | OS/400                                          |

### Problem

Archiving reports resulted in the following error message:

RDR0383 - An error occurred processing report XXX version YY occurrence ZZZ

### Solution

This error message has many possible causes. One common cause that is very easy to investigate and resolve involves a restart indicator that may have been turned on during a previously failed attempt to store a spooled file.

To determine if this is the cause of the error message:

1. Query the QARLSRT file in QUSRRDARS library, selecting any records where the restart indicator (RESTIND field) is not equal (NE) to blank.
2. Use DFU or SQL against the QARLSRT file to change the restart indicator (RESTIND field) to a blank value.
3. Issue the DLTRPTRDAR command with parameter CLEANUP set to \*YES to clean up any other parts of the report that may have been created during the previous failure.

## Report combining

|                          |                                                 |
|--------------------------|-------------------------------------------------|
| <b>Product:</b>          | DB2 Content Manager OnDemand Spool File Archive |
| <b>Version:</b>          | 5.1                                             |
| <b>Operating system:</b> | OS/400                                          |

### Problem

A line of business application creates one spooled file per individual document (such as individual invoices). Archiving the individual invoice spooled files fails when more than 999 spooled files are processed for a particular date. The system fails to archive the remaining documents.

### Solution

DB2 Content Manager OnDemand provides a report combining function that is intended to be used in cases where you need to archive more than 999 spooled files per day for the same report definition name. Consider these aspects of report combining:

- Report combining reduces the disk space requirements that require fewer individual records written to one of the DB2 Content Manager OnDemand files.
- Report combining reduces the time required for the data to be moved to optical or tape because a small number of larger files is much faster to process than a large number of small files.
- Report combining may slightly increase the time it takes to archive the spooled files (due to the need to append to existing data rather than simply archive separately).
- Individual spooled files cannot be processed with the PRTRPTRDAR or DLTRPTRDAR commands if report combining has been used (since report combining appends the small files together into larger, more manageable files).

Report combining can be enabled using the iSeries Navigator OnDemand Archive plug-in. Within a particular report definition, on the **Archive** tab, there is a set of radio buttons under the heading of "Combine report occurrences." You can select either "Do not combine" (which is the default), "Maximum size," or "Limit size to" with a field available to specify the maximum size limit of the combined file of data.

**Recommendation:** Do not select "Maximum size" but instead, experiment with setting a maximum size limit that works best in your DB2 Content Manager OnDemand environment. The maximum value should be set to a value that avoids the 999 archive limit, but is small enough so that not all archives end up in one huge sequence number 001. For example, if you have more than 999 archives, but never as many as 2000, determine the average size of a single archive and set the maximum combined size value such that there are 10 archives per combined file. This reduces the amount of combining activity and processing time, and allows the sequence number to increment to a safe value (something less than 999).

In this example, there would be approximately 200 sequence numbers for 2000 archives. Note that the version differences and the resource differences can affect this number. Additionally, the maximum size of the combined file is equal to the value you specify multiplied by 100 000. For example, if the "Limit size to" field is set to 50, the size of the combined file would never be larger than 5 MB (50 X 100 000).

To enable report combining, from the iSeries Navigator, select the **OnDemand Archive plug-in**, and select **Report definitions**. Right-click on the Report definition you wish to change and select **Properties**. Go to the **Archive** tab where you can select and set the option to combine report occurrences, and the size limit value can be specified.

Assuming that you have successfully archived 999 sequence numbers for a given day, and still have additional spooled files to archive, you will need to make the last few sequence numbers to be used for combining available. You must rearchive the last few sequence numbers, along with the others above the 999 limit, using report combining to combine them and "fit" into the last few sequence numbers. Use the following steps to accomplish this:

1. To make the last few sequence numbers (such as 995, 996, 997, 998, and 999) available so that the remaining spooled files for that particular date can be archived, issue the following command:  
PRTRPTRDAR with the PRINTER(\*OUTQ)  
Performing this command also designates an output queue to place the spooled files prior to rearchiving the files.
2. Verify that all the spooled files have been created with the following command:  
WRKOUTQ
3. Delete the individual sequence numbers (such as 995, 996, 997, 998, and 999) for the spooled files you have respoiled and are about to rearchive with the following command:  
DLTRPTRDAR
4. Verify that the Combine report occurrences parameter on the Archive tab is properly set.
5. Rearchive the spooled files in the output queue and the remaining spooled files that had failed due to the 999 limit, using either of the following commands:  
STRCDSRDAR or STRMONRDAR

## Change in length of key field

|                           |                                            |
|---------------------------|--------------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand Common Server |
| <b>Version:</b>           | 5.2                                        |
| <b>Operating systems:</b> | OS/400                                     |

## Question

How can you handle an increase in length (for example, from 7 to 9 characters) for a key value in a report after you already archived some of the reports?

## Answer

Depending on the exact nature of the change you need to make, you may be able to choose from either of the following suggestions.

- For simple changes such as an increase in key length, you can copy your current report definition to create a new version of the same report definition. For example, if the current report definition is version 01, you could copy it to create version 02. Modify version 02 to increase the field length from 7 to 9. DB2 Content Manager OnDemand can handle this difference internally when it performs a document search, even if you are searching across a date range that includes both old (7-character customer numbers) and new (9-character customer numbers) documents.
- For a significant change, you may need to respool and rearchive your data. DB2 Content Manager OnDemand has the capability to automate respooling and rearchiving data. For example, if the original report definition only extracted the customer number but now require a customer prefix to be included in the key value, you would need to consider following the process outlined below:
  1. Query the QARLSRT file in the QUSRRDARS library for the particular report definition name.

This becomes the work list for all of the archived report occurrences for that report definition.
  2. Working from the query list, use the PRTRPTRDAR command with parameter PRINTER set to \*OUTQ.

The PRTRPTRDAR with PRINTER(\*OUTQ) command recreates the spooled files and places them in an output queue.
  3. Change the report definition to modify the starting column and key field length to reflect the new requirements.
  4. To rearchive the spooled files, use the STRMONRDAR (or STRCDSRDAR) command.
  5. After verifying that the rearchived spooled files stored correctly, use the DLTRPTRDAR command to delete the original archived data that had the smaller key field defined.

Rearchiving the spooled files with the newly modified report definition ensures that the key values captured have the proper key length and values. Deleting the previously archived data ensures that no duplicate data exists within DB2 Content Manager OnDemand.

## RDR0375 error

|                          |                                            |
|--------------------------|--------------------------------------------|
| <b>Product:</b>          | DB2 Content Manager OnDemand Common Server |
| <b>Versions:</b>         | 5                                          |
| <b>Operating system:</b> | OS/400                                     |

## Problem

The following error occurs when archives fail:

RDR0375 Resource S1MED3AA in library type \*PAGSEG not available.

### Cause

The AFP resources are not found in the library list of the archive job.

### Solution

There are two options to resolve the error:

- Option 1
  1. Create a library for the AFP resources.
  2. Place the library name in the system value QUSRLIBL. This ensures that the AFP resources are available to all jobs on the system, and makes AFP resources easier to manage.
  3. Restart the system.
- Option 2
  1. Copy the AFP resources into a library that is already in the library list, such as QGPL.

## OND1001 and CPF9898 errors

|                          |                                            |
|--------------------------|--------------------------------------------|
| <b>Product:</b>          | DB2 Content Manager OnDemand Common Server |
| <b>Versions:</b>         | 5                                          |
| <b>Operating system:</b> | OS/400                                     |

### Problem

When archiving a report, the following messages appear in the job log:

OND1001 - An error occurred in Arc400.GetInstance at codepoint 14 with ERRNO.  
The technical description: ERRNO 3401: 'Permission denied.' PGM: QRDARS/ARSOS

CPF9898 - INSTANCE QUSROND HAS NOT BEEN DEFINED. From program QRDARS/QRLMQADD  
module QRLMQADD, procedure QRLMQADD and statement 156.

### Cause

The/QIBM/UserData/OnDemand/CONFIG directory does not have the correct authority.  
The directory needs to have \*PUBLIC authority set to \*RX rather than \*R.

These errors can occur when the ADDRPTOND, PRTRPTOND, or RMVRPTOND command tries to validate the instance name.

These errors could also occur in the job log for STRMONDOND because the monitor uses the ADDRPTOND command to store report data.

### Solution

Change the authority by using the following command:

```
CHGAUT OBJ('/QIBM/UserData/OnDemand/CONFIG') USER(*PUBLIC) DTAAUT(*RX) OBJAUT(*NONE)
```

**Note:** If the CPF9898 error appears in the job log without the OND1001 error, it indicates that the instance is not actually defined and you need to create the instance named in the message.

## CPD4329 and SQL0332 errors

**Product:** DB2 Content Manager OnDemand Common Server  
**Versions:** 5  
**Operating system:** OS/400

### Problem

The following errors occur in the instance job log when archiving reports fail:

CPD4329 Selection for operator X'0001' not valid. Reason code 7.  
[7 -- The CCSIDs (Coded Character Set Identifiers) of the operands  
cannot be made compatible.]

SQL0332 Character conversion between CCSID 937 and CCSID 1141 not valid.

### Cause

The CCSID of the QARLCPT file is set to the 937 instead of 65535.

### Solution

Change the CCSID of the QARLCPT file to 65535 by using the following command:  
CHGPF FILE(QUSRRDARS/QARLCPT) CCSID(\*HEX)

## SQL0303 error

**Product:** DB2 Content Manager OnDemand Common Server  
**Versions:** 5  
**Operating system:** OS/400

### Problem

When the Add report to OnDemand (ADDRPTOND) command is issued, the following error is displayed in the job log:

SQL0303 - Host variable APP-LEN not compatible

### Cause

The SQL0303 error is displayed in the job log if you define a date or a decimal field, and if you fail to remove leading blank spaces.

### Solution

Modify the application definition for your date field or decimal field.

1. On the **Load Information** tab, select the date or decimal field.
2. In the **Character Removal** section, under the **Leading** category, press the space bar to indicate that you wish to remove the leading spaces.
3. You may also wish to remove Embedded and Trailing spaces as well.

## Invalid structured field header

**Product:** DB2 Content Manager OnDemand Common Server  
**Versions:** 5

**Operating system:** OS/400

### **Problem**

The following error occurs when the archiving function fails:

```
Invalid structured field header in the file
./SP_LATECHARGE_DSP02_DBRYANT_190151_000004_RDR400B_1031028_ 212931.out
```

### **Cause**

An SCS spooled file is defined with data type AFP in the application.

### **Solution**

Change the application to specify data type SCS.

## **Specifying data types for printer devices**

**Product:** DB2 Content Manager OnDemand Common Server

**Versions:** 5

**Operating system:** OS/400

### **Problem**

Spool file attributes show the printer device type as \*SCS, but DB2 Content Manager OnDemand will not store the spooled files when using the report definition.

### **Cause**

When creating a report definition, data type \*SCS was specified instead of data type \*OTHER.

### **Solution**

Data type \*OTHER should be used for the majority of the spool files with printer device type \*SCS. Data type \*OTHER is for the normal AS/400 reports that might have printed on "green-bar" paper or on a line printer in the past.

Data type \*SCS should only be used for spooled files that have both printer device type \*SCS and extended attributes (found in the spooled file attributes under Device requirement) such as Variable font, Variable LPI, and so on, set to Y. Data type \*SCS is typically required for OfficeVision/400™ documents.

If you have any doubts about which data type to specify, use \*OTHER.

---

## **Other**

### **ANS0266I error**

**Product:** DB2 Content Manager OnDemand

**Version:** 7.1

**Operating systems:** AIX, HP-UX, Solaris, Microsoft Windows



## Question

How can you resolve the following error?

```
0425-440 ACIF HAS COMPLETED PROCESSING NORMALLY, WITH RETURN CODE 0.
ars_load: Thu Oct 28 17:30:55 BST 2003 Indexing completed.
ars_load: Thu Oct 28 17:30:55 BST 2003 -- Loading started,
2598689 bytes to process.
Resource /arsacif/acif2/lrp.o501rf54.fiche.loans.mwf.br054.ard.res matches the
resource >2-7-0<
OnDemand Load Id = >5268-7-0-2339FAA-10893-10893<

SM Error: ANS0266I (RC2302) The dsmEndTxn is ABORT, so check
the reason field., RC=2302, Reason=29, File=arssms.C, Line=744, Srvr->snode05<-
An unexpected error occurred. Contact your System Administrator
and/or consult the System Log. File=arsadmin.c, Line=576
Unable to store the object >2339FAAA<. Object size 239831.
Loaded 0 rows into the database.
ars_load: Thu Oct 28 17:31:04 BST 2003 -- Loading failed
```

## Answer

This error indicates that no optical platters are available for the storage set that is used by the application group. Determine whether:

- There are scratch platters available.
- The Max-Scratch value is set high enough.
- The platters in the storage pool have read and write permission.

## Unable to delete application groups

|                          |                              |
|--------------------------|------------------------------|
| <b>Product:</b>          | DB2 Content Manager OnDemand |
| <b>Version:</b>          | 7.1                          |
| <b>Operating system:</b> | AIX                          |

### Problem

Unable to delete application groups when using Tivoli Storage Manager.

### Solution

To delete an application group and any applications that are contained in it:

1. Issue an ARSADM APPLGRP command:

```
arsadm applgrp -a d -h instance name -n Folder name
-u userid -P password -v
```

where:

*instance\_name* is located in the ARS.INI file.

2. If the problem persists, issue the following SQL commands to delete an application group.
  - a. Get the internal identifier of the application group that you want to delete:

```
select agid from root.arsag where name = 'application_group_name'
```
  - b. Using the internal identifier , delete the application group and any applications that are contained in it:

```
delete from root.arsag2fol where agid = application_group_id
delete from root.arsagfld where agid = application_group_id
delete from root.arsag2fldalias where agid = application_group_id
delete from root.arsagperms where agid = application_group_id
```

```

delete from root.arsann where agid = application_group_id
delete from root.arsapp where agid = application_group_id
delete from root.arsappusr where agid = application_group_id
delete from root.arsseg where agid = application_group_id
delete from root.arsag where agid = application_group_id

```

## Recovering data from a backup

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating system:** Microsoft Windows 2000

### Problem

ARS0084I and ARS0085I error messages are received when recovering data from a backup.

### Solution

Restore the ARCHIVE database and cache because an application group has been unloaded from the cache and from the Tivoli Storage Manager tape.

**Reminder:** You cannot partially restore the unloaded application group data table to the ARCHIVE database because the restore function can break the integrity of the system. Restore the good ARCHIVE database images and cache images, then apply the loads of the application groups.

## RDR2789 errors

**Product:** DB2 Content Manager OnDemand Common Server  
**Versions:** 5  
**Operating systems:** OS/400

### Problem

The Archive Storage Manager fails with a permissions error in the job log:

```

RDR2798 Permission denied.
RDR2798 /QIBM/USERDATA/ONDEMAND/ONDLAB/ASMASP01/PRIMARY/1
RDR2798 PO CREATE FILE - ACTION FAILED FOR
OBJECT-ONDLAB/BAA/2FAAA OBJNBR-1 INSTANCE-ONDLAB, POLICY-CLASSPOLICY

```

### Cause

Authority to the ASMASP01/PRIMARY directory is incorrect. The object owner should be the instance owning profile:

```

Owner : QDFTOWN
Primary group : *NONE
Authorization list : *NONE
Data --Object Authorities--
Opt User Authority Exist Mgt Alter Ref
 *PUBLIC *RX
 QDFTOWN *RWX X X X X

```

### Solution

Correct the authority to the ASMASP01/PRIMARY directory with the following command:

```
CHGOWN OBJ('/QIBM/UserData/OnDemand/ONDLAB/ASMASP01/PRIMARY') NEWOWN(ONDLAB)
```



---

## Chapter 14. Maintaining user-defined application group data

The chapter address configuration problems related to the ARSMAINT program.

---

### ARSMAINT unloads documents early

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** z/OS, OS/390

#### Question

An application group (AG1) is setup with the following storage set:

name = Cache Only - Library Server  
Cache Date = cache data for 10 days  
Life of Data and Indexes = Expire in 10 days

This is the output from the load, which occurred on November 4, 2002:

```
arsload: Processing file >/fsl/OD/test04/<
arsload: 11/04/02 16:59:40 -- Loading started, --UNKNOWN-- bytes to process
OnDemand Load Id = >5081-1-0-7faa-11985-11985<
Loaded 4 rows into the database
Document compression type used - None. Bytes Stored = >320940<
arsload: 11/04/02 16:59:56 Loading Completed
```

When ARSMAINT was run with options -cdrsv on November 6, 2002, the report index rows and data were deleted. This is the ARSMAINT output in the DB2 Content Manager OnDemand system log folder hitlist:

```
11/06/2002 13:02:41 ARSMAINT 10202 Info No 84 ApplGroup Unload
DB: Name(AG1) Agid(5081) LoadId(7FAA-11985-11985) Rows Deleted(4)
11/06/2002 13:02:41 ARSMAINT 10202 Info No 85 ApplGroup Unload
SM: Name(AG1) Agid(5081) NodeName(-CACHE-) Nid(0) Server(-LOCAL-)
LoadId(7FAA) Objects Deleted(2)
11/06/2002 13:02:41 ARSMAINT 10202 Info No 127 ApplGroup Load
Expire: Name(AG1) LoadId(5081-1-0-7FAA-11985-11985)
11/06/2002 13:02:41 ARSMAINT 10202 Info No 164 ApplGroup Segment
Maintenance: Name(AG1) Agid(5081) SegName(YAA1) Action(3) Time(0.014)
```

Why did ARSMAINT unload the report, which was not yet 10 days old?

#### Answer

If the Expiration Type specified in the application group is Load, ARSMAINT uses the last date value in the report for expiration processing. In this case, the first date, and the last date in the report were the same: 11985. Use of ARSDATE converts that value from DB2 Content Manager OnDemand internal date format produces to 10/24/2002. The difference between 10/24/2002 and 11/06/2002 is 13 days, which is why ARSMAINT unloaded the report.

**Tip:** The Expiration Type setting on the Storage Management page indicates at what level of granularity data should expire. The Segment and Expire Dates on the Field Information page also influence expiration processing.

---

## ARS0020E error

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** z/OS, OS/390

### Problem

The following error message occurs in ARSMaint:

```
ARS0020E ARSMaint SM ERROR: ARSMVSDW: 0000000B(0000000C-7412FCDB)
PROD.ONDEMAND.DATA(BAA.R11), RC=11, REASON=0, FILE =ARSSMS.C,
LINE=304 SRVR->SERVER.FQDN.COM 10.10.1.2<-
```

### Solution

When RC=11 is present in the ARS0020E message, 0000000C-7412FCDB corresponds to the OAM return code-reason code. In this case, the OAM return code is 12 (hexadecimal C). Byte 0 of the OAM reason code is hexadecimal 74, which indicates a DB2 error with SQLCODE of bytes 2 and 3 of the OAM reason code (hexadecimal FCDB, which is decimal -805). SQLCODE = -805 indicates DBRM or PACKAGE NAME ... NOT FOUND IN PLAN.

As an additional diagnostic aid, issuing the following TSO OSREQ command using the collection and object name from the ARS0020E message yields the same OAM return code or reason code:

```
OSREQ QUERY PROD.ONDEMAND.DATA BAA.R11
OSREQ QUERY unsuccessful. Return code = 0000000C, reason code = 7412FCDB.
OSREQ QUERY response time is 53 milliseconds.
```

This error indicates that a bind is needed for the CBRIDBS plan. If you recently applied OAM maintenance, ensure that the binds that are indicated by hold data have been performed.

---

## Chapter 15. Document loading and indexing

This chapter covers configuration problems that are related to document loading and indexing.

---

### Loading

#### Storing documents of different lengths in the same application

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** z/OS, OS/390

##### Question

How do you store documents with different record lengths in the same application?

##### Answer

All reports have similar content and a fixed length, however, that length changes over time. For example, some reports have a logical record length (LRECL) of 130, and others have a LRECL of 133. ACIF is used to index the reports.

One way to address the situation is to add a preceding step to the store job that formats the data so that every report is the same length. For example, the new step could pad all data to the largest record length. A method of doing this is to use a standard sort routine:

```
//SORT EXEC PGM=SORT
//SYSOUT DD SYSOUT=*
//SORTIN DD DISP=SHR,DSN=
//SORTIN DD DISP=SHR,DSN=
```

The sort output, temporary data set &&TEMP values are placed into ARSLOAD. This causes all records to be padded by low-values, X'00', to the fixed length specified on the SORTOUT DCB, LRECL=133. This accomplishes the goal of storing various record lengths into a single application defined as fixed blocked with a length of 133.

Another way to address this situation is to modify the application on the **View Information** tab:

1. Clear **Update Indexer Parameters**, and choose the *RECFM* variable.
2. Select the appropriate CC and TRC values, and proceed to **Indexer Information** tab.
3. Choose Keyboard as the **Parameter Source**.
4. In the **Edit Indexer Parameters** window, select modify, and specify the following value:

FILEFORMAT=HFSOUT

HFSOUT causes ACIF to output the data with a two-byte length value preceding each record. For example, if a record begins with X'F1' and is 133 bytes, ACIF outputs X'0085F1' as the beginning of the record for DB2 Content Manager OnDemand to store (Note: X'85' = 133).

When the data is viewed with the DB2 Content Manager OnDemand user client, the variable record format on the View Information tab of the administration client will display the document correctly. This should provide a solution for storing various record lengths in DB2 Content Manager OnDemand. However, the data records are treated as having a variable length. Log off of the user client when viewing results following any application changes in the administration client. This will insure that the updates have been received by the user client.

## ARS0020E error

|                           |                              |
|---------------------------|------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand |
| <b>Version:</b>           | 7.1                          |
| <b>Operating systems:</b> | z/OS, OS/390                 |

### Problem

When attempting to archive a document in Object Access Method (OAM), the following error message occurs:

```
ARS0020E SM ERROR: RC=9, REASON=0, FILE=ARSSMS.C, LINE=431
```

### Solution

RC=9 indicates that DB2 Content Manager OnDemand OAM support is not enabled. Check that the following `ars.cfg` parameters are set correctly (shown here with sample values):

```
ARS_NUM_OAMSRVR=4
ARS_OAM_DB2SSID=DSNA
ARS_OAM_PLAN=CBRIDBS
```

**ARS\_NUM\_OAMSRVR** specifies the number of OAM interface tasks to create within the ARSSOCKD address space. A value of zero disables all OAM support within DB2 Content Manager OnDemand.

**ARS\_OAM\_DB2SSID** specifies the name of the DB2 subsystem that interacts with OAM. The specified name must be the same as the operand of the DB2SSID parameter specified within the IGDSMSxx member of SYS1.PARMLIB. See the *OAM Planning, Installation, and Storage Administration Guide for Object Support* (SC35-0391) for further details.

**ARS\_OAM\_PLAN** specifies the name of the DB2 application plan used by OAM. See the *OAM Planning, Installation, and Storage Administration Guide for Object Support* for further details.

## ACIF returns 0425-421 and 0425-423 errors

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |



## Problem

ACIF returns the following errors when loading a 1.3 GB file:

```
0425-421 An error occurred while attempting to
close './mede.adat.out' return code 6
```

```
0425-423 An error occurred while attempted to
write './mede.adat.out' return code 12
```

## Cause

The memory limit of the load command is too low.

## Solution

On the AIX operating system, perform the following:

1. Start the System Management Interface Tool (SMIT).
2. Open Security → Users → Users → Change / Show Characteristics of a User.
3. Enter a user ID.
4. Select Soft File Size and Hard File Size, and set both values to -1 (unlimited).
5. Check the root user to verify that the change has taken effect.

## Performance degrades after loading PDF documents

|                          |                                        |
|--------------------------|----------------------------------------|
| <b>Product:</b>          | DB2 Content Manager OnDemand           |
| <b>Version:</b>          | 7.1                                    |
| <b>Operating system:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

## Problem

After loading Adobe Acrobat PDF files onto the server, performance degrades as the AdobeFnt05.lst file increases in size. An excerpt of the AdobeFnt05.lst file looks like this:

```
%BeginFont
Handler:DirectoryHandler
FontType:Invalid
OutlineFileName:/home/archive/ficheros/CM_ERRORES.pdf
%EndFont
%BeginFont
Handler:DirectoryHandler
FontType:Invalid
OutlineFileName:/home/archive/ficheros/EI_bancaprivada.pdf
%EndFont
%BeginFont
Handler:DirectoryHandler
FontType:Invalid
OutlineFileName:/home/archive/ficheros/EXTRACT010.pdf
%EndFont
```

## Cause

Adobe Acrobat fonts are not installed on the server.

## Solution

The AdobeFnt05.lst file contains a list of all the fonts that are used in the PDF documents that are loaded. It also contains pointers to those fonts, if DB2 Content

Manager OnDemand can find the fonts. If DB2 Content Manager OnDemand cannot find the fonts, it records this fact in the file.

Each time a new PDF document is loaded, DB2 Content Manager OnDemand checks the AdobeFnt05.lst file to verify whether mappings of the document's fonts already exist. If they do, DB2 Content Manager OnDemand uses them. If the mappings do not exist because DB2 Content Manager OnDemand cannot find the fonts, it records this information in the file. Thus, the AdobeFnt05.lst file grows if the fonts are not installed on the server.

To prevent the AdobeFnt05.lst file from growing and degrading performance, either delete the file periodically, or install the fonts on the server.

## Write error occurs when sorting

|                          |                              |
|--------------------------|------------------------------|
| <b>Product:</b>          | DB2 Content Manager OnDemand |
| <b>Version:</b>          | 7.1                          |
| <b>Operating system:</b> | AIX                          |

### Problem

If you are loading files that are 2 GB or larger, enable the large file system option in SMIT. After you enable the large file system option and run the ARSDD program, you might receive the following error:

0653-657 A write error occurred while sorting.

### Answer

In the DB2 Content Manager OnDemand Administrator, check the **Application -> Load Information** tab to verify whether you have a unique sort in your post-processing parameters. If you do, the load is failing because the /tmp directory has insufficient space to process the unique sort of the 2 GB file. (By default, the unique sorts take place in the /tmp directory.) Enable the large file system option on the /tmp directory or remove the unique sort.

## AFP load fails

|                          |                              |
|--------------------------|------------------------------|
| <b>Product:</b>          | DB2 Content Manager OnDemand |
| <b>Version:</b>          | 7.1.0.12                     |
| <b>Operating system:</b> | AIX                          |

### Problem

When attempting to load a new AFP file, an error message displays that the load failed.

### Cause

The failing file is an MVS AFPDS file that has been converted several times. Additionally, TLEs and the ACIF have been added on the mainframe.

### Solution

Use the AFPDMP tool to determine whether the index file is valid.

## Unavailable resources are still found

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating system:** AIX

### Problem

Resources are still being found, even though the resources have been made unavailable.

### Cause

Resource library parameters in the indexer are still referencing paths that contain the resources.

### Solution

Comment out the parameters so that the resources, which still reside in the paths referenced, cannot be found.

## Incorrect date format

**Product:** DB2 Content Manager OnDemand Common Server  
**Versions:** 5  
**Operating systems:** OS/400

### Problem

The loading process fails with the following error:

Row 1: The string "November 03, 1998" could not be converted to a date from the format of %B %e, %Y.

or:

Row 1: The string "November 03, 1998" could not be converted to a date from the format of %B %d, %Y .

### Cause

The date format is incorrect.

There is an extra space after the %Y. This space is actually present in the **Application -> Load Information** format setting for the date field.

### Solution

A two digit day that will contain a leading zero should be represented as %d.

Remove the extra space from the date format.

## Data cannot be found

**Product:** DB2 Content Manager OnDemand Common Server  
**Versions:** 5

**Operating systems:** OS/400

### Problem

When loading, the data can no longer be found.

### Cause

The migration policy uses a disk pool, and the user-defined file system (UDFS) was unmounted when the Archive Storage Manager was run.

### Solution

Install the PTF specified and follow the instructions:

- V5R1 – SI13099
- V5R2 – SI13098
- V5R3 – SI13166

You must mount the UDFS before starting the DB2 Content Manager OnDemand servers.

```
MOUNT TYPE(*UDFS) MFS('/dev/qasp01/ondemand_qusrond_primary_01.udfs')
MNTOVRDIR('/qibm/userdata/ondemand/QUSROND/ASMASP01/PRIMARY')
```

---

## ARSLOAD

### ARS0114E and ARS0087I errors

**Product:** DB2 Content Manager OnDemand

**Version:** 7.1

**Operating systems:** z/OS, OS/390

### Problem

The following error occurs when using ARSLOAD:

```
>/usr/lpp/ondem/ars/tmp/afp67240258
(DD:INPUT-AUIMNT.CD131AT.UVT00132.UVT00299.DEC)<
An unexpected error occurred. Contact your System Administrator
and/or consult the System Log. File=arsadmin.c, Line=149
0arsload: Unable to log load information
arsload: Processing has stopped. The remaining files will NOT be processed.
```

The output file contains the following errors:

```
--- THURSDAY, 11 DEC 2003 ----
IEF695I START ARSSOCKD WITH JOBNAME ARSSOCKD IS ASSIGNED TO USER
STCARST, GRO
$HASP373 ARSSOCKD STARTED
--- MONDAY, 05 JAN 2004 ----
ARS0114E A00765 UNABLE TO OPEN FILE >/USR/LPP/ONDEM/ARS1/ARSTST1/22396 181
/SL/DOC/17FAA<. ERRNO=141 SRVR->IBMSYSF2.ODC.VZWCORP.COM<-
ARS0114E A00765 UNABLE TO OPEN FILE >/USR/LPP/ONDEM/ARS1/ARSTST1/22423 182
/SL/DOC/18FAA<. ERRNO=129 SRVR->IBMSYSF2.ODC.VZWCORP.COM<-
ARS0087I A00765 APPLGROUP LOAD: NAME(VER2FOR7) LOADID(5062-14-0-13FAA 183
-12423-12423) FILE(/USR/LPP/ONDEM/ARS/TMP/AFP67240258 (DD:INPUT-AUIMNT
.CD131AT.UVT00132.UVT00299.DEC)) INPUTSIZE(414101087) OUTPUTSIZE
(870103)
```

## Solution

ERRNO=141 means "Read-only file system", and ERRNO=129 means "No such file or directory". Verify whether the file that is being loaded actually exists and whether permissions are correct.

Check the directories and the files that are indicated in ARSSOCKD /USR/LPP/ONDEM/ARS1/ARSTST1 directories. Use the **ls -l** command to check permissions.

Verify that there is enough space that is allocated for the HFS file. Use the **df -kP** command to check the availability. For example, check in the TMP file directory, which contains the **ars.cfg** file (ARS\_TMP). Cache files can be found in **ars.ini** (SRVR\_SM\_CFG) file.

## LOADEXIT error

|                           |                              |
|---------------------------|------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand |
| <b>Version:</b>           | 7.1                          |
| <b>Operating systems:</b> | z/OS, OS/390                 |

### Problem

When running ARSLOAD, the following errors occur:

```
Allocation of connection handle failed LOADEXIT entry print_error rtn
LOADEXIT SQLSTATE: 58004 LOADEXIT Native Error Code: -99999
LOADEXIT buffer: {DB2 for OS/390}{ODBC Driver} SQLSTATE=58004 ERRLOC=2
CAF "CONNECT" failed using DB2 system:DSN
RC=0c and REASON=00f30006
>
LOADEXIT exit print_error rtn Loaded 1 rows into the database
Document compression type used - 0D77. Bytes Stored = >9999<
arsload: 01/01/04 12:00:00 Loading completed
arsload: Processing successful for file >/ars/tmp/HLQ.SYSTEM.LLQ
```

### Cause

The DSNAOINI DD statement is missing from the ARSLOAD JCL.

## Solution

The LOADEXIT processing that is failing exists to insert rows in the proper ODF tables. The LOADEXIT processing is used to notify ODF when the report has been successfully stored and is ready for distribution.

Review the ARSLOAD JCL that was submitted to verify whether the DSNAOINI DD statement is properly specified. The ARSLOAD JCL should be similar to what is in the ARSSOCKD job and, should point to the **cli.ini** file for ODBC. If you have the DSNAOINI DD statement defined, be sure it is correctly directed to the proper ODBC parameter file.

If you do not use ODF, rename the ARSULOAD exit in the /usr/lpp/ars/bin/exits directory to ARSULOAD.bak so that the program is not executed during report loading with ARSLOAD. The ARSULOAD exit is only necessary for ODF. Rename the ARSULOAD exit to ARSULOAD.BAK, if the exit exists and you do not have ODF installed.

## EDC5084I message

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** z/OS, OS/390

### Problem

A user receives the following error when using the ARSLOAD program:  
EDC5084I The program was not run because of redirection errors on the command line

### Cause

ARSLOAD uses the `ars.cfg` parameters (in order) to determine the temporary directory: `ARS_TMP`, `TEMP`, and `TMP`. The first parameter found is used. If none of these parameters are set:

1. Use the `-c idx_dir` option on the ARSLOAD command line to specify the director to run the indexer.
2. ARSLOAD uses the current working directory (as returned by `getcwd()`).

If the directory is not writable, ARSLOAD will fail.

### Solution

To resolve the error:

1. Set the `ARS_TMP` parameter in the `ars.cfg` file to a writable directory. (Be sure to modify the `ars.cfg` file that is specified by the `SRVR_OD_CFG` parameter in the `/usr/lpp/ars/config/ars.ini` file.)
2. Use the `CHMOD 1777` command to set the directory permissions correctly.

## Application does not exist within application group

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating system:** z/OS, OS/390

### Problem

The following JCL is used when a user attempts to load a report from a spool file:

```
//ARSLOAD EXEC PGM=ARSLOAD,REGION=0M,
// PARM=('/' -A JOBNAME -uadmin -ppassword -v -C F
// -g "ClaseU" -f -c /u/u1/ctemp '
//STEPLIB DD DISP=SHR,DSN=ARS.V710.SARSLOAD
// DD DISP=SHR,DSN=SYS1.DSN610M.SDSNEXIT
// DD DISP=SHR,DSN=DSN610M.SDSNLOAD
// DD DISP=SHR,DSN=APK.ACIF.ONDE.SAPKMOD1
//SYSPRINT DD SYSOUT=*
//SYSOUT DD SYSOUT=*
```

The following error is received from ARSLOAD:

The application >< does not exist within the application group >ClaseU<

### Cause

If you use -g to specify an application group, ARSLOAD is unable to determine the application or application group from the spool file. In other words, -G and -A are ignored if you specify -g. As a result, ARSLOAD tries to perform a load to application group ClaseU with no application specified, and it fails.

### Solution

To resolve the error use the following phrase:

```
-G WRITER -W "ClaseU" -A JOBNAME,
```

where:

WRITER is the JES WRITER that ARSLOAD monitors when looking for the spool files to load.

ClaseU is the name of the WRITER and the name of the application group in this example (a user-defined value).

Have the jobs specify a writer name of ClaseU.

Example:

```
PARM=('/-G WRITER -W "ClaseU" -A JOBNAME -v -f')
```

**Important:** This solution requires you to define each job name as an application.

## Combining two applications in one application group

|                           |                              |
|---------------------------|------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand |
| <b>Version:</b>           | 7.1                          |
| <b>Operating systems:</b> | z/OS, OS/390                 |

### Problem

The following error occurs when specifying more than one application per application group:

```
Processing file /ars1/ATEST.TST.TST11.SYS001.1285.021030.075349.ARD<
The application >< does not exist within the application group >ATEST<
```

### Solution

When you are loading applications from the JES SPOOL, and there is more than one application in the application group, ARSLOAD has two parameters that are required: -A and -G. The default for -G is FORMS. There is no default for -A.

For example, if an IEBGENER job that sends the report to the spool specifies:

```
//OUTPUT1 OUTPUT WRITER=TESTAPP1,FORMS=TESTAPG
```

The corresponding -G and -A parameters on ARSLOAD would be:

```
-G FORMS -A WRITER
```

In this case, ARSLOAD would use the TESTAPG application group and the TESTAPP1 application.

For more information about the –A and –G parameters, see the ARSLOAD chapter in the DB2 Content Manager OnDemand for z/OS and OS/390 *Administration Guide*.

### Advantages to combining two applications per application group

There are advantages to including multiple applications in the same application group if those applications share the same indexing attributes and the same storage management attributes. Combining the applications saves you from having to create and maintain a separate, identical application group for each of those applications. For example, if you have two different reports and want to index them both on the same values and store them both for five years, consider creating the corresponding applications for those reports in the same application group.

**Important:** There are also potential performance implications to combining applications in an application group. See the article *OnDemand: Designing a Solution for Performance and User Satisfaction* for more information at:

<http://www.ibm.com/developerworks/db2/library/techarticle/0205hann/0205hann.html>

## ACIF returns 0425–415 and 0425–346 errors

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

### Problem

The following message occurs when attempting to load a file:

```
arsload: Processing file >d:\dados_cold\teste<.
arsload: 05/10/99 18:25:48 -- Indexing started, 688205268 bytes to process.
```

```
0425-415 CC=YES
0425-415 CCTYPE=Z
0425-415 CONVERT=NO
0425-415 CPGID=850
0425-415 MCF2REF=CPCS
0425-415 TRC=NO
0425-415 FILEFORMAT=STREAM,(NEWLINE=X'0A')
0425-415 TRIGGER1=*,1,X'31',(TYPE=GROUP)
0425-415 FIELD1=2,2,4,(TRIGGER=1,BASE=0)
0425-415 FIELD2=2,7,8,(TRIGGER=1,BASE=0)
0425-415 FIELD3=2,19,38,(TRIGGER=1,BASE=0)
0425-415 INDEX1=X'4167656E636961',FIELD1,(TYPE=GROUP,BREAK=YES)
0425-415 INDEX2=X'436F6E7461',FIELD2,(TYPE=GROUP,BREAK=YES)
0425-415 INDEX3=X'4E6F6D65',FIELD3,(TYPE=GROUP,BREAK=YES)
0425-415 DCFPAGENAMES=NO
0425-415 UNIQUEBNGS=YES
0425-415 IMAGEOUT=ASIS
0425-415 INDEXOBJ=GROUP
0425-415 INDEXSTARTBY=1
0425-415 INSERTIMM=NO
0425-415 RESTYPE=NONE
0425-415 inputdd=d:\dados_cold\teste
0425-415 outputdd=NUL
0425-415 indexdd=.\teste.ind
0425-415 resobjdd=NUL
0425-346 DATA IN AN INPUT RECORD OR PAGEDEF RESOURCE IS
INVALID: A SKIP TO A NONEXISTENT CHANNEL = '0D'X ON RECORD
```



```

NUMBER = 4 WAS DETECTED WITHIN THE LND STRUCTURED FIELDS.
OUTPUT WAS FORCED TO SINGLE SPACING, WHICH MAY CAUSE BLANK PAGES.
0425-346 DATA IN AN INPUT RECORD OR PAGEDEF RESOURCE IS
INVALID: A SKIP TO A NONEXISTENT CHANNEL = '0D'X ON
RECORD NUMBER = 36 WAS DETECTED WITHIN THE LND STRUCTURED FIELDS.
OUTPUT WAS FORCED TO SINGLE SPACING, WHICH MAY CAUSE BLANK PAGES.
0425-346 DATA IN AN INPUT RECORD OR PAGEDEF RESOURCE IS
INVALID: A SKIP TO A NONEXISTENT CHANNEL = '0D'X ON RECORD
NUMBER = 41 WAS DETECTED WITHIN THE LND STRUCTURED FIELDS.
OUTPUT WAS FORCED TO SINGLE SPACING, WHICH MAY CAUSE BLANK PAGES.
0425-441 ACIF HAS COMPLETED PROCESSING ABNORMALLY, WITH
RETURN CODE 8, REASON CODE 8.
arsload: 05/10/99 18:25:53 Indexing failed.
arsload: Processing failed for file >d:\dados_cold\teste<.

```

### Solution

Remove the X'0D0A' parameter. ACIF only supports a single end of line character, but this file contains both X'OD and X'0A. You can either strip the file of the X'0D or write an ACIF user exit to do this.

## ARSLOAD can fail to start

|                           |                              |
|---------------------------|------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand |
| <b>Version:</b>           | 7.1                          |
| <b>Operating systems:</b> | Microsoft Windows            |

### Problem

ARSLOAD can fail to start if DB2 Content Manager OnDemand instance name is not ARCHIVE.

### Cause

A server is affected by this problem if ARSLOAD was created by a DB2 Content Manager OnDemand Version 7.1.0.6 or earlier Windows server. The server can also be affected if the instance is not named ARCHIVE, and if you have configured the service to automatically load data into that instance.

### Solution

Perform the following to resolve the problem:

**Important:** Follow these instructions only once after installing DB2 Content Manager OnDemand, Version 7.1.0.7 or later PTF, and only if the instance name is not ARCHIVE.

1. Start the DB2 Content Manager OnDemand for Windows, Configurator program and select the server on which the affected ARSLOAD service is configured.
2. Stop the ARSLOAD service.
3. Uninstall the ARSLOAD service.
4. Reinstall the ARSLOAD service.

**Recommendation:** Reinstall the service by using the same user ID that was defined to the service when the instance was created.

5. Restart the ARSLOAD service.

See the online help in the Configurator program for more information on these actions. If you have questions about this procedure or if you encounter any problems, please contact the IBM support center.

## ARSLOAD can fail on a multiprocessor

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** Microsoft Windows

### Problem

A Microsoft Windows 2000 server that is running multi-processors suffered ARSLOAD failures. The following is displayed in the system log 88 message:

```
OnDemand Load Id = >8219-1-0-2FAA-0-0< Connection cannot be
established for the >s< server Failed while attempting to
load the database The last row successfully loaded was 25000
```

### Solution

The load can fail at any number of rows. Microsoft Knowledge Base Article Q305227 provides an explanation and fix for this problem. This patch is recommended for any Microsoft Windows 2000 server with multi-processors.

## Unable to store data to cache

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** AIX, HP-UX, Solaris, Microsoft Windows

### Problem

In an environment with two object servers, and a storage set with a Load Type of Local, the following error occurred:

```
x087770@njroslud202[/home/x087770] /usr/lpp/ars/bin/arsload -nfv
-hnjroslud199 -u... -gAH115 -aAH115DCK /ODDownload/AH115DCK.RPT
OnDemand Load Id = 5013-8-0-8FAA-12041-12041
Loaded 616 rows into the database
Document compression type used - OD77. Bytes Stored = 42406<
arsload: 01/30/03 14:02:54 Loading completed
arsload: Processing successful for file /odarsacif/acif1/AH115DCK.RPT<
An unexpected error occurred. Contact your System Administrator
and/or consult the System Log. File=arsadmin.c, Line=121
```

```
arsload: Unable to log load information
arsload: Processing has stopped. The remaining files will NOT be processed.
```

### Cause

The object server storage set with load type "local" for the system log application group is incorrect.

### Solution

For an environment of multiple object servers, the storage set of the system log must use cache-only on the library server, or use load type 'fixed' on the object server.

Reinstall DB2 Content Manager OnDemand and rebuild the library server. Verify that viewable messages are now loading properly. Make sure that the system log is set to SMS with cache on the library server and rebuild the object servers.

## Connection cannot be established

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** AIX, HP-UX, Solaris, Microsoft Windows

### Problem

When using ARSLOAD, the error "connection cannot be established" occurs.

### Solution

If you only specify the -h parameter, you must set the instance name to ARCHIVE and the port number to 1445 or 0. If the port number is not 1445 or 0 and the instance name is not ARCHIVE, you must specify the instance name with the parameter -I.

## Unable to open .out file

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1.0.15  
**Operating systems:** Unknown

### Problem

When using Kofax's Ascent Capture, Version 6.05, the release script places files that Kofax creates into a directory on the DB2 Content Manager OnDemand server. Each time new data from Kofax is placed into the directory, the load fails, and the following error message occurs:

```
Processing file
>e:\kofax\IBMCM.ODKREL.HE3020.HE3020.20040126.100304.ARD<
arsload: 01/26/04 10:05:21 -- Loading started, 50468 bytes to process
Unable to open the file:
IBMCM.ODKREL.HE3020.HE3020.20040126.100304.ARD.out
Loaded 0 rows into the database
arsload: 01/26/04 10:05:23 Loading failed
arsload: Processing failed for file
>e:\kofax\IBMCM.ODKREL.HE3020.HE3020.20040126.100304.ARD<
```

### Cause

The ARSLOAD program fails because it cannot find the .out file.

### Solution

The .out file must be fully qualified in the generic index file, or it must reside in the directory where ARSLOAD starts.

### Unable to allocate enough memory (1)

|                           |                                 |
|---------------------------|---------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand    |
| <b>Version:</b>           | 7.1                             |
| <b>Operating systems:</b> | AIX, Solaris, Microsoft Windows |

#### Problem

ARSLOAD produces the following message:

```
Unable to allocate enough memory.
File=arsadmin.c, Line=604 Loaded 0 rows into the database.
```

The input files were not large, and ACIF completed with a return code of 0.

#### Cause

The index file contained no Tag Logical Element (TLE) structured fields, and no group-level Index Element (IEL) structured fields. The index file only contained page-level IELs.

The fact that the index file contained no group-level IELs and TLEs implies that ACIF did not find any index values. The most common reason that ACIF does not find index values is that a TRIGGER parameter is specified incorrectly.

**Tip:** To differentiate between group-level and page-level IELs, run the AFPDMP utility with the -d option against the index file and then examine the IELs. This utility can also show whether an index file contains any TLEs. (IBM Printing Systems makes the AFPDMP utility available free of charge on its website: <http://...>) The utility displays AFP index files (which are binary files) in a readable format. Below is an example of a group-level IEL and a page-level IEL, as displayed by the AFPDMP utility.

#### Group-level IEL:

```
...2 - IEL (Index Element) SFI 006E D3B2A7 000000
IEL: Object Byte Extent Triplet (57):
IEL: - byte extent of object = 6226 (001852)
IEL: Direct Byte Offset Triplet (2D):
IE - byte offset = 170 (0000AA)
IEL: Object Structured Field Extent Triplet (59):
IEL: - num of structured fields in object = 40 (000028)
IEL: Object Structured Field Offset Triplet (58):
IEL: - structured field offset = 3 (000003)
IEL: Medium Map Page Number Triplet (56):
IEL: - sequence num of page = 1 (000001)
IEL: Fully Qualified Name Triplet (02):
IEL: - use = 0D (begin page group reference) <===== this indicates group level
IEL: - name = '8000-015-3024 00000001'
IEL: Fully Qualified Name Triplet (02):
IEL: - use = 8D (begin medium map reference)
IEL: - name = 'F28177 '
IEL: unrecognized triplet type (5e)
IEL: Process Level Triplet (81):
IEL: - process level = 97 (61)
```

#### Page-level IEL:

```

...6 - IEL (Index Element) SFI 0054 D3B2A7 000000
IEL: Object Byte Extent Triplet (57):
IEL: - byte extent of object = 3417 (000D59)
IEL: Direct Byte Offset Triplet (2D):
IEL: - byte offset = 665 (000299)
IEL: Object Structured Field Extent Triplet (59):
IEL: - num of structured fields in object = 17 (000011)
IEL: Object Structured Field Offset Triplet (58):
IEL: - structured field offset = 7 (000007)
IEL: Medium Map Page Number Triplet (56):
IEL: - sequence num of page = 1 (000001)
IEL: Fully Qualified Name Triplet (02):
IEL: - use = 87 (begin page reference) <===== this indicates page level
IEL: - name = '00000001'
IEL: Fully Qualified Name Triplet (02):
IEL: - use = 8D (begin medium map reference)
IEL: - name = 'F28177 '
IEL: Process Level Triplet (81):
IEL: - process level = 3 (03)
IEL: unrecognized triplet type (83)

```

The memory allocation error occurred because of the following TRIGGER parameter:

```
TRIGGER2=0,90,X'3120',(TYPE=GROUP)
```

ACIF was looking for an ASCII '1' followed by a space. Looking at the input file in a text editor, '1' is at the end of the line, in the correct column. However, looking at the input file in a **hexadecimal** editor, '1' is the last character in the line, with no subsequent space. The '1' is followed by the stream delimiter X"'0A', that signifies the start of the next line. For this reason, ACIF never found TRIGGER2.

Additionally, the INDEXSTARTBY parameter was set to a value larger than the number of pages in the file. When the INDEXSTARTBY parameter was changed to 1 and the load was run again, ACIF produced the following error message:

```

APK448S Indexing was requested, but neither 'TRIGGER1' nor
any 'FIELD' was satisfied within the page
range specified by the INDEXSTARTBY parameter.

```

Since ACIF was not able to index the input file, it did not create any groups.

ARSLOAD can run out of memory looking for the beginning and end of groups when loading files that do not contain groups.

### Solution

The problem was fixed by changing the value of TRIGGER2 in the following way:

```
TRIGGER2=0,90,X'31',(TYPE=GROUP)
```

## Unable to allocate enough memory (2)

|                           |                                 |
|---------------------------|---------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand    |
| <b>Version:</b>           | 7.1                             |
| <b>Operating systems:</b> | AIX, Solaris, Microsoft Windows |

### Problem

ARSLOAD produced the following error:

Unable to allocate enough memory.  
File=arsadmin.c, Line=604 Loaded 0 rows into the database

### Cause

The value of the group-breaking field never changed. The following are relevant ACIF parameters:

```
TRIGGER1 = *,1,X'F1',(TYPE=GROUP)
FIELD1 = 0,9,3
INDEX1 = X'D985979699A340D5A494828599',field1,(TYPE=GROUP,BREAK=YES)
```

If the value of FIELD1 never changes, the whole document will be one group. ACIF starts a new group when the value of FIELD1 changes, if that field is used for an index defined as TYPE=GROUP, BREAK=YES. If the value never changes, ACIF can run out of storage processing the file, or ARSLOAD can run out of memory trying to load the data.

### Solution

There are several solutions to this problem, depending on the format of your data:

- Use OnDemand Large Object Support in the application definition.
- Use a different field to break the groups, one that changes when you want a new group to start.

## APK408S error

|                           |                                 |
|---------------------------|---------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand    |
| <b>Version:</b>           | 7.1                             |
| <b>Operating systems:</b> | AIX, Solaris, Microsoft Windows |

### Problem

The following ACIF error message was received:

```
APK408 A VIRTUAL STORAGE REQUEST WAS UNSUCCESSFUL - REQUEST
SIZE 80 RETURN CODE 8
```

### Cause

The data was line data being converted to AFP. There were no carriage controls in the data, so ACIF thought that the whole file was a single page. ACIF holds a page at a time in memory until it processes the beginning of the next page. ACIF then writes the page in memory to the output file. In this case, the page turned out to be 225 MB because there were no carriage controls.

### Solution

Use the ASCIINPE user exit, or a user exit to insert carriage controls. Alternately, use the ACIF LINECNT parameter if all the pages have the same number of lines.

## Documents have incorrect page breaks

|                           |                                 |
|---------------------------|---------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand    |
| <b>Version:</b>           | 7.1                             |
| <b>Operating systems:</b> | AIX, Solaris, Microsoft Windows |

## Problem

Line data is converted to AFP data, ACIF completes with a reason code of 0, and the data loads. But when the data is viewed, successive groups have the page break in the wrong place.

The following ACIF parameters were used:

```
CC=NO
CCTYPE=A
CONVERT=YES
CPGID=500
MCF2REF=CF
TRC=NO
FILEFORMAT=RECORD
TRIGGER1=*,143,X'D781878540D5964B
FIELD1=0,55,45,(TRIGGER=1,BASE=0)
INDEX1=X'D9D7E3D5C1D4C5',
FIELD1,(TYPE=GROUP, BREAK=YES)
DCFPAGENAMES=NO
UNIQUEBNGS=YES
IMAGEOUT=ASIS
INDEXOBJ=ALL
INDEXSTARTBY=99
INSERTIMM=NO
FORMDEF=F1PPHR
PAGEDEF=P1PPHR
USERL B=\acif\reslib2
RESTYPE=none
```

## Cause

ACIF was run with CC=NO when it should have been run with CC=YES. This caused ACIF to use the "number of lines per page" that is defined in the PAGEDEF for the AFP conversion. Since the actual data did not have the same number of lines per page, the page break drifted around in the pages.

## Solution

Reload the data with the CC parameter set to YES.

## Structured field is not allowed

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

### Problem: LIN structured field is not allowed

The following ACIF error message is received:

LIN Structured Field is not allowed

## Solution

The LIN structured field does not exist. ACIF was trying to read line data in an AFP file. The problem is most likely a bad AFP structured field length.

### Problem: EOF structured field is not allowed

The following ACIF error message is received:  
EOF Structured Field is not allowed

### **Solution**

The EOF structured field does not exist. A resource or the print file has ended prematurely. The file in error has probably been truncated.

## **Hit list references group not containing index field**

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** AIX, HP-UX, Solaris, Microsoft Windows

### **Problem**

Hits in the hit list reference a group that does not contain the index field.

### **Cause**

The ACIF parameter GROUPMAXPAGES=*n* forces a new group every *n* pages. This ACIF parameter is commonly used when there is no "natural" break in the data, for example, when the value of the index fields never change. When ACIF forces a new group, it copies the TLEs from the previous group to the new group. Copying TLEs can produce strange and unwanted results, including hits in the hit list that reference a group that does not contain the index field.

### **Solution**

Instead of using GROUPMAXPAGES, use OnDemand Large Object support instead. Remember, in order to use large object support you must specify INDEXOBJ=ALL in the ACIF parameters.

## **Output/indexer file not created**

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** AIX, HP-UX, Solaris, Microsoft Windows

### **Problem**

When running ARSLOAD, the following error occurs:  
Output/Indexer file not created

### **Cause**

The data does not contain standard ANSI carriage controls, but rather "PC style" carriage returns and form feeds: X'"0D0A' and X'"0D0C'.

### **Solution**

Because ACIF does not recognize X'"0D0A' and X'"0D0C' as carriage controls, use the DB2 Content Manager OnDemand provided user exits ASCIINP and ASCIINPE to remove the '0C' and '0D'. Because ASCIINP and ASCIINPE insert carriage



controls, they change the position of the TRIGGER and FIELD parameters. When you use these exits, add 1 to the column offsets for the trigger and field parameters.

The following demonstrates how the exits change the data:

1. Set ACIF to run with the exit enabled, and no indexing parameters.
2. Set the ACIF parameter CONVERT=NO.
3. Run ARSLOAD so that the files are not loaded.
4. Look at the .out file.

The .out file is now in the format that the ACIF indexer will receive.

By examining the .out file, you will see how the exit changed your data. When reading the .out file, verify that you have the correct column offsets for the TRIGGER and FIELD parameters.

ASCIPE and ASCIINP make the following conversions:

- Insert a '31'X (new page) as the first byte.
- Change '0C'X (form feed) to '31'X (new page).
- Change '0D'X (carriage return) to '20'X (new line).
- Leave '0A'X in file.

For example, hex string '0A 0D 0C' becomes '0A 20 0A 31'.

Notice that an extra line has been added. Depending on how you set up indexing, this line might have to be taken into account when calculating offsets for fields from the triggers.

Here are some sample parameters for using ASCIINPE:

```
CC=YES
CCTYPE=Z
CPGID=500
MCF2REF=CPCS
CONVERT=YES
TRC=NO
FILEFORMAT=STREAM, (NEWLINE=X'0A')
TRIGGER1=*. . .
TRIGGER2=*. . .
FIELD1=
FIELD2=
INDEX1=
INDEX2=
DCFPAGENAMES=NO
UNIQUEBNGS=YES
IMAGEOUT=ASIS
INDEXOBJ=GROUP
INPEXIT=<path>asciinpe
```

If you are using ASCIINPE, the value of the TRIGGER parameter must be in EBCDIC, and you must set CPGID=500. CPGID parameter must be set because the exit converts the data to EBCDIC before ACIF performs the indexing.

If you forget to set the CPGID parameter and you provide an ASCII value for the TRIGGER parameter, you can get this error message from the loading process:

```
Output/indexer file not created
```

The error occurs because ACIF could not find the TRIGGER parameter.

The file that is loaded into DB2 Content Manager OnDemand with CC=NO and CONVERT=NO appears as one page when viewed, unless the LINECNT parameter is used. Therefore, LINECNT is required under these circumstances.

## ACIF returns 0425–346 and 0425–441 errors

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** AIX, HP-UX, Solaris, Microsoft Windows

### Problem

The ACIF user exit ASCIINPE does not work correctly when CONVERT=NO is specified.

The following is displayed when CCTYPE=A is specified:

```
0425-415 CCTYPE=A
0425-415 CONVERT=NO
0425-415 CPGID=500
0425-415 FILEFORMAT=STREAM, (NEWLINE=X'0A')
0425-415 CC=YES
0425-415 MCF2REF=CPCS
0425-415 TRIGGER1=*,*,X'C340C840D640C940C340C5', (TYPE=GROUP)
0425-415 FIELD1=9,25,8, (TRIGGER=1,BASE=0)
0425-415 INDEX1=X'D7D6D3D5D6', FIELD1, (TYPE=GROUP,BREAK=YES)
0425-415 INDEXOBJ=GROUP
0425-415 INPEXIT=/usr/lpp/ars/exits/acif/asciinpe
0425-415 inputdd=/arsdata/customers/testfile
0425-415 indexdd=/arsdata/customers/testfile.ind
0425-415 outputdd=/arsdata/customers/testfile.out
0425-346 DATA IN AN INPUT RECORD OR PAGEDEF RESOURCE IS
INVALID: A SKIP TO A NONEXISTENT CHANNEL = '31'X ON RECORD
NUMBER = 1 WAS DETECTED WITHIN THE LND STRUCTURED FIELDS.
OUTPUT WAS FORCED TO SINGLE SPACING, WHICH MAY CAUSE
BLANK PAGES. 0425-346 DATA IN AN INPUT RECORD OR PAGEDEF
RESOURCE IS INVALID: A SKIP TO A NON EXISTENT
CHANNEL = '20'X ON RECORD NUMBER = 2 WAS DETECTED WITHIN
THE LND STRUCTURED FIELDS. OUTPUT WAS FORCED TO SINGLE
SPACING, WHICH MAY CAUSE BLANK PAGES.
0425-346 DATA IN AN INPUT RECORD OR PAGEDEF RESOURCE
IS INVALID: A SKIP TO A NONEXISTENT CHANNEL = '20'X ON RECORD
NUMBER = 3 WAS DETECTED WITHIN THE LND STRUCTURED FIELDS.
OUTPUT WAS FORCED TO SINGLE SPACING, WHICH MAY CAUSE BLANK PAGES.
0425-441 ACIF AT PQ69181 HAS COMPLETED ABNORMALLY WITH RETURN CODE 8.
```

The following is displayed when CCTYPE=Z is specified:

```
0425-415 CCTYPE=Z
0425-415 CONVERT=NO
0425-415 CPGID=500
0425-415 FILEFORMAT=STREAM, (NEWLINE=X'0A')
0425-415 CC=YES
0425-415 MCF2REF=CPCS
0425-415 TRIGGER1=*,*,X'C340C840D640C940C340C5', (TYPE=GROUP)
0425-415 FIELD1=9,25,8, (TRIGGER=1,BASE=0)
0425-415 INDEX1=X'D7D6D3D5D6', FIELD1, (TYPE=GROUP,BREAK=YES)
0425-415 INDEXOBJ=GROUP
0425-415 INPEXIT=/usr/lpp/ars/exits/acif/asciinpe
0425-415 inputdd=/arsdata/customers/testfile
0425-415 indexdd=/arsdata/customers/testfile.ind
0425-415 outputdd=/arsdata/customers/testfile.out
0425-440 ACIF AT PQ69181 HAS COMPLETED NORMALLY WITH RETURN CODE 0.
```

### Cause

The errors occur because the ASCIINPE user exit does not convert the carriage controls to EBCDIC, and CCTYPE=A is specified in the ACIF parameters.

### Solution

ACIF process the input file, however the output is encoded in EBCDIC with ASCII carriage control characters, which is not acceptable. The solution is to modify and recompile the ASCIINPE user exit.

To modify the user exit , locate this line:

```
start_index = 1
```

Change the line to:

```
start_index = 0
```

The ASCIINPE user exit will now convert the carriage controls to EBCDIC. The first set of indexing parameters will work correctly when the *start\_index* variable is changed.

## ACIF returns 0425-421 error

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

### Question

Why does the APK421S error occur while running ACIF?

### Answer

This error indicates that the ULIMIT is not properly set. Change the ULIMIT value to a setting of -1 (unlimited).

## ACIF returns 0425-459 error

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

### Problem

The following error occurs when trying to load a line data file:

```
0425-459 INDEX NEEDED FOR THE GROUPNAME WAS NOT FOUND.
```

The user provided the following indexing parameters for the load:

```
CC=YES
CCTYPE=Z
CONVERT=NO
CPGID=850
MCF2REF=CPCS
TRC=NO
FILEFORMAT=STREAM, (NEWLINE=X'0A')
```

```

TRIGGER1=*,116,X'50414745',(TYPE=GROUP) /* PAGE */
TRIGGER2=0,2,X'4D435830353230',(TYPE=GROUP) /* MCX0520 */
FIELD1=*,*,8,(OFFSET=(56:63),MASK='#####',ORDER=BYROW)
FIELD2=2,16,8,(TRIGGER=2,BASE=0)
INDEX1=X'47726F7570204E756D626572',FIELD1,(TYPE=GROUPRANGE) /* Group Number */
INDEX2=X'70726F63647465',FIELD2,(TYPE=GROUP,BREAK=YES) /* procdte */
DCFPAGENAMES=NO
UNIQUEBNGS=YES
GROUPMAXPAGES=500
IMAGEOUT=ASIS
INDEXOBJ=ALL
INDEXSTARTBY=1
INSERTIMM=NO
RESTYPE=NONE
INPEXIT=/usr/lpp/psf/bin/asciinp

```

### Solution

The field referenced by the INDEX1 parameter must have record values and column values. The field should also specify TYPE=GROUP and BREAK=YES. The GROUPRANGE=indexing parameter is not valid when the field reference in the INDEXn parameter is based on a floating trigger.

## ACIF returns 0425-462 error

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

### Problem

A load fails with the following error message:

0425-462 - A trigger parameter was specified, but the input file is already indexed

### Cause

You have specified indexing parameters (for example, TRIGGER, FIELD, INDEX ) in the application, but the data is already indexed.

### Solution

To resolve this error, remove the indexing parameters from the application and reload the data.

## Jumping to the right page in a line data report file

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

### Question

Two separate application groups, each containing one application, is used for indexing line data reports.

In the first application group, a user opens a folder, performs a search, and clicks on an item in the hit list returned from the database. The document is retrieved

from the server, and the DB2 Content Manager OnDemand client opens the report at the page in the document that contains the index values.

In the second application group, the report always opens at the first page, regardless of which item is selected from the hit list. The index parameters in each are very similar. The only difference is that user input exits and output exits are used when loading the second application group. Could this difference cause this behavior?

#### **Answer**

Review the index definitions for the second application. The second application should be defined with BREAK=YES.

## **Font missing or word extraction error**

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

#### **Problem**

The PDF indexer fails with a font missing or word extraction error when processing a document that contains double-byte CID fonts.

#### **Cause**

The PDF indexer is unable to locate the double-byte CID fonts and the corresponding CMap files. The PDF indexer cannot extract the text from the PDF input file.

#### **Solution**

To resolve the problem, perform the procedure appropriate for your operating system:

##### ***For UNIX Servers:***

1. Export the environment variable PSRESOURCEPATH to point to the location of the CID Font files, CMap files, and font files.

By convention, the files are located in the following directories:

- For AIX: /usr/lpp/Acrobat3/Fonts
- For HP-UX and Solaris: /opt/Acrobat3/Fonts

**Tip:** The PDF indexer always searches the Acrobat3 directory. If you installed Adobe Acrobat Version 4 or later, copy the CID Font files, CMap files, and font files to the Acrobat3 directory.

2. Export the environment variable ACRO\_RES\_DIR to point to the location of the CMap files.

By convention, the CMap files are located in the following directories:

- For AIX: /usr/lpp/Acrobat3/Fonts/Resources/CMap
- For HP-UX and Solaris: /opt/Acrobat3/Fonts/Resources/CMap

**Tip:** The PDF indexer always searches the Acrobat3 directory. If you installed Adobe Acrobat Version 4 or later, copy the CMap files to the Acrobat3 directory.

3. Run the PDF indexing job.

***For Microsoft Windows Servers:***

1. Verify that the CID font files are located in the *SystemRoot*\Fonts\Resource\CIDFonts directory.
2. Verify that the CMap files for the CID Font files are located in the *SystemRoot*\Fonts\Resource\CMap directory.
3. Run the PDF indexing job.

## Generic indexer error when loading PDF file

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** AIX, HP-UX, Solaris, Microsoft Windows

### Problem

The following error occurs when a user attempts to load a PDF document using the generic indexer:

application error: the instruction at "0x00410d2d" referenced memory at "0x00000144". The memory could not be "read".

### Solution

Review the \*.ind file that is read by the generic indexer. Look for blank lines or extra spaces in the values, or fields that are too long.

## Document not segmented

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** z/OS, OS/390

### Problem

Using the DB2 Content Manager OnDemand for OS/390 Indexer, a report is loaded, but the document is not segmented.

### Solution

Add a new field to the application group (for example seg) and define it as "Not in database." Change the existing fields to BREAK=NO and add a new field or index to the indexer parameters for the entire 18-byte string with BREAK=YES. The results should look similar to the following:

```
CC=YES
CCTYPE=A
CONVERT=NO
CPGID=500
FILEFORMAT=RECORD,133
MCF2REF=CPCS
TRC=NO
TRIGGER1=*,1,X'F1',(TYPE=GROUP) /* 1 */
FIELD1=0,41,8,(TRIGGER=1,BASE=0)
FIELD2=0,49,3,(TRIGGER=1,BASE=0)
FIELD3=0,52,4,(TRIGGER=1,BASE=0)
```

```

FIELD4=0,56,3,(TRIGGER=1,BASE=0)
FIELD5=0,41,18,(TRIGGER=1,BASE=0)
INDEX1=X'8481A3819496A5',FIELD1,(TYPE=GROUP,BREAK=NO) /* datamov */
INDEX2=X'839684998593',FIELD2,(TYPE=GROUP,BREAK=NO) /* codrel */
INDEX3=X'9799858689A7',FIELD3,(TYPE=GROUP,BREAK=NO) /* prefix */
INDEX4=X'A2A3A7',FIELD4,(TYPE=GROUP,BREAK=NO) /* stx */
INDEX5=X'A28587',FIELD5,(TYPE=GROUP,BREAK=YES) /* seg */

```





---

## Chapter 16. Distributing documents

This chapter details problems that are related to document distribution.

---

### OnDemand Distribution Facility

#### ARS04422E and ARS04457E errors

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1.2  
**Operating systems:** z/OS, OS/390

##### Problem

OnDemand Distribution Facility (ODF) can distribute a bundle that is defined as a segment of a report, but it fails to distribute a bundle that is defined as an entire report. The following two message numbers are issued:

ARS04422E: SEVERE ERROR IN ARSPUNIX. SEE STATSOUT

ARS04457E: SEND TO DATASET FAILED. DYNAMIC ALLOCATION ERROR  
DUE TO INSUFFICIENT AUTHORITY. SEE ICH408I.

##### Cause

The failure occurred because the DB2 Content Manager OnDemand server was not able to create a file in the temporary directory when using the USS.

##### Solution

When ODF is executing a function, the ARS04422E, and ARS04457E errors occur because there is a problem at the operating system level. See *MVS Programming: Authorized Assembler Services Guide* for an interpretation of dynamic allocation reason codes and information codes.

#### DD:ARSTRC1 and DD:ARSTRC2 files expanding

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** z/OS, OS/390

##### Problem

There are two files, DD:ARSTRC1 and DD:ARSTRC2, in HFS that are increasing in size. Is there any way to prevent these files from being created?

##### Solution

These two files are ODF trace files, which are created in the default directory of the user under which the ODF started task runs. To prevent the trace files from being created, insert DD DUMMY statements for the ARSTRC1 and ARSTRC2 data sets into the ODF procedure (for example, ARSODF or ARSPSUB).

## ODFMSG99 message file

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1.2  
**Operating systems:** z/OS, OS/390

### Question

After running the ARSLOAD program, ARSRPSUB runs and submits the user batch job to print the selected reports. Within the user batch job, the following information is displayed:

```
***** Top of Data *****
IAT6140 JOB ORIGIN FROM GROUP=ANYLOCAL, DSP=SR , DEVICE=STC , 0000
//LNE10DF JOB 12003-11-24-12.07.07 REPORT MANIFEST - RECIPIENT=ODFUSR2
DISTRIBUTION NAME=ODFV7 REPORT NAME TIMESTAMP FROM PAGE
TO PAGE PAGE CO OCGTEST 2003-11-24-12.06.51 ERROR: SEE ODFMSG99 0000000
```

### Answer

ODFMSG99 is not a message, but a message file. Open the ODFMSG99 file to find additional information about the cause of the error.

The ODFMSG99 file is dynamically allocated and does not need to have a DD statement in the JCL. Be sure that the routing options for your jeslog and jesmsgs do not direct this file into a "bit bucket" class. The ODFMSG99 file is typically only a few lines in length. If the ODFMSG99 file is routed to a printer, it might have been missed. Verify that you are capturing the output that you anticipate.

## ODF migration caused DB2 rollbacks

**Product:** DB2 Content Manager OnDemand  
**Version:** Unknown  
**Operating systems:** z/OS, OS/390

### Scenario

When migrating a DB2 Content Manager OnDemand environment from a test system to a production system, the following ODF tables were copied: ARSUOT, ARSLIS, ARSDCT, ARSBDT, ARSBQT, ARSPQT, and ARSCRT. Subsequently, the following errors were received in ARSODF:

```
ARS04324E <ARSRDIST> ERR UPD DRT SQLCODE 100
ARS04323I <ARSRDIST> SHUTDOWN COMPLETE
ARS04241S *** SUBTASK "ARSRDIST", #= 4 FAILED, S-000, U-0008
```

Simultaneously, these messages were displayed by DB2:

```
14.26.31 STC14225 DSN3201I |DBP2 ABNORMAL EOT IN PROGRESS FOR.
701 USER=ARSSRVER CONNECTION-ID=DB2CALL CORRELATION-ID=ARSODFG
701 JOBNAME=ARSODFG TCB=009E2430
14.26.31 STC14225 DSN3201I |DBP2 ABNORMAL EOT IN PROGRESS FOR.
702 USER=ARSSRVER CONNECTION-ID=DB2CALL CORRELATION-ID=ARSODFG
702 JOBNAME=ARSODFG TCB=009DE288
14.26.31 STC14225 DSN3201I |DBP2 ABNORMAL EOT IN PROGRESS FOR.
703 USER=ARSSRVER CONNECTION-ID=DB2CALL CORRELATION-ID=ARSODFG
703 JOBNAME=ARSODFG TCB=009F9258
14.26.31 STC14225 DSN3201I |DBP2 ABNORMAL EOT IN PROGRESS FOR.
704 USER=ARSSRVER CONNECTION-ID=DB2CALL CORRELATION-ID=ARSODFG
704 JOBNAME=ARSODFG TCB=009F94E8
```

The two rows that were removed from the ARSDRT table and the ARSODF task were restarted. Shortly after this, DB2 started to do rollbacks and nearly locked up the entire system.

1. What is the best way to move the ODF environment from one system to another? Are there more tables to move, or are there other tables to delete?
2. If other DB2 Content Manager OnDemand tasks are started, will that cause DB2 to perform the rollback again?

### Answers

To resolve the errors in ARSODF:

1. Move the following tables:
  - ARSBDT
  - ARSBQT
  - ARSCRT
  - ARSDCT
  - ARSDRT
  - ARSDST
  - ARSHMT
  - ARSHPT
  - ARSLIS
  - ARSNMT
  - ARSPPT
  - ARSPQT
  - ARSSDT
  - ARSUOT
2. Update the ARSCRT and ARSSDT tables with the new URL, user ID, and password.
3. Update both occurrences of the user ID and password in ARSSDT table.
4. Use the cleanup program to delete the entries in ARSDRT, ARSDST, and ARSPPT.

The cleanup program will also delete any orphaned ARSPQT entries.

Starting other DB2 Content Manager OnDemand tasks does not result in too many updates of activities when ARSODF initializes.

---

## Report Distribution

### Automatically starting the ARSRD program

|                           |                              |
|---------------------------|------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand |
| <b>Version:</b>           | 7.1.1                        |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris          |

#### Question

How can you configure report distribution to start automatically?

#### Answer

The configuration is slightly different for each operating system.

The sample INIT records automatically start the ARSRD program when the operating system is initialized on the library server. The INIT record resides in the `/etc/inittab/` file.

For AIX:

```
ard1:2:/usr/lpp/ars/bin/arsrd -u user -p password
-I instance -d work_dir >> /dev/null 2>&1
```

For HP-UX and Solaris:

```
ard1:2:/opt/ondemand/bin/arsrd -u user -p password
-I instance -d work_dir >> /dev/null 2>&1
```

where:

*user* is the user ID of the report distribution administrator.

*password* is the password of the report distribution administrator.

*instance* is the name of the DB2 Content Manager OnDemand library server to access.

*work\_dir* is the name of the user-defined directory.

**Important:** When the report distribution program is running on the library server, make sure that you place the ARSRD record after the record that starts the DB2 Content Manager OnDemand library server.

## Creating a server printer definition

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1.1                                  |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

### Question

Can a local printer be used with report distribution?

### Answer

The DB2 Content Manager OnDemand Server Printer definition is meant to be used with IBM Infoprint<sup>®</sup> printers. See the DB2 Content Manager OnDemand for Multiplatforms *Installation and Configuration Guide* for setting up server printers and configuring OnDemand to work with IBM Infoprint printers.

Report Distribution can also use native printer devices and queues. You can use the server printer definition to store the queue name of a printer queue on the machine running the ARSRD program. For example, you can set up a printer queue which points to a network-attached printer.

Complete the following steps to create a server printer definition with the name of NETWORK\_PRT:

1. Open the administrative client.
2. Right-click **Printers** and select **New Printer**.

3. Enter a name and description for the new printer.
4. Type NETWORK\_PRT in the Server Queue Name field.
5. Select PRINTER as the Printer Type.

Completing these steps does not actually define a true server printer because the DB2 Content Manager OnDemand server can only use server printers which are configured with Infoprint. However, the report distribution feature can use this definition to send completed distributions to the printer.

**Tip:** The Report Distribution process uses the ARSRDPRT script on UNIX platforms (AIX, HP-UX, and Solaris) and the arsrprt.bat file on Microsoft Windows platforms. You can edit these files to take advantage of unique print environments and to interface to your printers. These files affect only the ARSRD program, and can be edited without affecting normal DB2 Content Manager OnDemand library server operations.



---

## Chapter 17. Printing

This chapter provides information about common problems that can occur when printing.

---

### Printing reports

|                          |                                     |
|--------------------------|-------------------------------------|
| <b>Product:</b>          | DB2 Content Manager OnDemand client |
| <b>Version:</b>          | 7.1                                 |
| <b>Operating system:</b> | Microsoft Windows                   |

#### Problem

Printing a report when using ODF does not produce the same results as printing the report from the DB2 Content Manager OnDemand client.

#### Solution

This is a text positioning problem, which can be resolved by setting the text fidelity to 240-pel Font Adjustment with the DB2 Content Manager OnDemand, Version 7.1.0.12 client. By default, DB2 Content Manager OnDemand uses line fidelity for each document opened.

**Tip:** Changing the fidelity of a single document does not change the fidelity for all documents. This setting is not retained across documents.

You can change the default fidelity for all users. This allows the document to be displayed correctly for all users.

To specify a new, default text fidelity value:

1. Open the Administration client and update the application.
2. In the Logical Views tab, click **View -> Set Text Fidelity -> 240-pel Font Adjustment**.
3. Verify that the **Default View** check box is selected.

---

### Disabling /9 option in Microsoft Windows GUI

|                           |                              |
|---------------------------|------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand |
| <b>Version:</b>           | 7.1                          |
| <b>Operating systems:</b> | Microsoft Windows 2000       |

#### Question

If a user removes the /9 option from the client startup, does that mean that all notes (including those in Version 7 and Version 2 folders) are public, and private notes are not allowed?

#### Answer

The /9 option is a required Microsoft Windows GUI command line parameter for accessing a DB2 Content Manager OnDemand, Version 2 server. The /9 option checks and disables the "Note can be copied to another server" option to allow for ad-hoc CD-ROM creation with annotations from a DB2 Content Manager OnDemand, Version 2 server.

If you are using the DB2 Content Manager OnDemand, Version 7.1.0.15 client and you remove the /9 command line option, the following changes occur:

- Version 2 folder notes are public.
- Version 7 folder notes are public by default, but have the option of being public or private.
- You cannot print Version 2 documents from the hit list to a local printer.
- You can print Version 7 documents from the hit list to a local printer.

**Important:** The behavior of the DB2 Content Manager OnDemand, Version 7.1.0.15 client differs from the behavior of previous clients.

- If you are using a client older than DB2 Content Manager OnDemand, Version 7.1.0.15, specify the /9 option.
- If you are using DB2 Content Manager OnDemand, Version 7.1.0.15, the /9 option is essentially in effect whenever a Version 2 folder is accessed (even if the /9 option is not specified on the command line).

---

## Courier is substituted for all Type 1 fonts

|                           |                                        |
|---------------------------|----------------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand           |
| <b>Version:</b>           | 7.1                                    |
| <b>Operating systems:</b> | AIX, HP-UX, Solaris, Microsoft Windows |

### Problem

When trying to print to a printer that uses a driver that is specific to either Printer Control Language (PCL) or PostScript (PS). A PCL XL error is received, which indicates that the Courier font is substituted for all Type 1 fonts.

### Cause

Adobe Type Manager (ATM) is not sending the correct fonts to the printer. The workstation's print driver (or ATM's interpretation of the driver) believes that the printer is adapted to PS. This is true even if the printer that you selected is using the driver that is specific to PCL. As a result, ATM does not convert the Type 1 fonts for use with a PCL printer. Instead, it sends the PS fonts to the printer, which does not recognize them and substitutes the Courier font.

### Solution

If the printer that you selected is PCL-specific, ATM will send the Type 1 fonts, and the file will print correctly.

---

## Incorrect page orientation

|                 |                                            |
|-----------------|--------------------------------------------|
| <b>Product:</b> | DB2 Content Manager OnDemand Common Server |
| <b>Version:</b> | 5.2                                        |



**Operating system:** OS/400

**Problem**

A report that has an overlay displays in portrait format, but prints in landscape format.

**Solution**

Change the page orientation in the client print dialog box.

---

## Unable to print reports using PRTRPTOND

**Product:** DB2 Content Manager OnDemand Common Server

**Versions:** 5

**Operating system:** OS/400

**Problem**

Unable to print reports using the PRTRPTOND command after specifying a printer file. The following is displayed in the QPRLCERR report of the output queue QUSRRDARS/QRDARS400:

```
ERROR LOG FOR SERVER PRINT
APPLICATION GROUP: FLASHSALES
APPLICATION: FLASHSALES
USER ID: DBRYANT
INPUT FILE: /QIBM/USERDATA/ONDEMAND/QUSROND/PRTTMP/ARS.1937.63.7.27
PRINTER FILE REPORTS/FLASHPRTF COULD NOT BE OPENED:
ERROR: A non-recoverable I/O error occurred.
```

**Cause**

The problem is caused by specifying a printer file that is externally described:

```
DSPFD REPORTS/FLASHPRTF
Device File Attributes
Externally described file : Yes
```

**Solution**

Specify a printer file that is not externally described. You may have to create your own printer file to duplicate the settings of the externally described printer file.

---

## Printout is truncated

**Product:** DB2 Content Manager OnDemand Common Server

**Versions:** 5

**Operating system:** OS/400

**Problem**

When reprinting a segment of a report that has 198 columns, the printout is truncated at 132 columns.

**Cause**

The report definition does not specify what printer file to use. As a result, DB2 Content Manager OnDemand uses printer file QPRLR133 when reprinting report segments.

### **Solution**

Create a printer file that has the correct page size, lines per inch, characters per inch, and overflow line for the report. If you are not sure what the attributes of the printer file should be, check the attributes of the spooled file before it is stored to DB2 Content Manager OnDemand, and use the attributes when creating your printer file.

The printer file is specified on the **Retrieval** tab of the report definition when using the **Operations Navigator**, or in the **Environment** section of the report definition when using "green-screen". When segments of the report are reprinted, the segments will use the specified printer files to determine the spooled file attributes to use. You can check the existing printer files by using the DSPFD command. An example of how to create a printer file is shown in the following:

```
CRTPRTF FILE(QGPL/OND198) PAGESIZE(68 198) LPI(8) CPI(18) OVRFLW(68)
```

---

## Chapter 18. Troubleshooting

This chapter contains practical troubleshooting tips and helpful hints for installing and configuring DB2 Content Manager OnDemand.

This chapter is just a sampling of Technotes from the technical support sites that are available for reference. See the following website for more information about your DB2 Content Manager OnDemand product:

<http://www.ibm.com/software/data/cm/support.html>

---

### ARS04093E error

|                           |                              |
|---------------------------|------------------------------|
| <b>Product:</b>           | DB2 Content Manager OnDemand |
| <b>Version:</b>           | 7.1                          |
| <b>Operating systems:</b> | z/OS, OS/390                 |

#### Question

What does the return code (RC) value mean in the following error message? The error occurs when attempting to access the DB2 Content Manager OnDemand for z/OS server during an administrative session in CICS.

ARS04093E Server Database not accessed, server maybe down. RC = 0004

#### Answer

There is a variety of things that can go wrong when requesting information from the DB2 Content Manager OnDemand server. The four-character return code that follows the message helps to categorize the error.

The meaning of the return codes is:

|      |                              |
|------|------------------------------|
| 0001 | NOT_ENOUGH_MEMORY            |
| 0002 | INCOMPAT_CLIENT_SERVER       |
| 0003 | SERVER_CANNOT_INIT           |
| 0004 | SERVER_CANNOT_CONNECT        |
| 0005 | SERVER_DLL_NOT_FOUND         |
| 0006 | SERVER_TIMEOUT               |
| 0007 | SERVER_DATA_CHANGED          |
| 0008 | SERVER_FAILED_LOGON          |
| 0009 | SERVER_FAILED_SEARCH         |
| 0010 | SERVER_FAILED_FOLDER         |
| 0011 | SERVER_FAILED_NQ_RET         |
| 0012 | SERVER_FAILED_NQ_UPD         |
| 0013 | SERVER_FAILED_DOC_RET        |
| 0014 | SERVER_FAILED_DOC_UPD        |
| 0015 | SERVER_FAILED_DOC_STO        |
| 0016 | SERVER_FAILED_DOC_DEL        |
| 0017 | SERVER_FAILED_RES_RET        |
| 0018 | SERVER_FAILED_STOSET         |
| 0019 | SERVER_FAILED_STOSET_ADD     |
| 0020 | SERVER_FAILED_STOSET_NODEADD |
| 0021 | SERVER_FAILED_USER           |
| 0022 | SERVER_FAILED_NOTE_RET       |
| 0023 | SERVER_FAILED_NOTE_STO       |
| 0024 | SERVER_FAILED_NOTE_DEL       |

|      |                             |
|------|-----------------------------|
| 0025 | SERVER_FAILED_APPL          |
| 0026 | SERVER_FAILED_QPRT          |
| 0027 | SERVER_FAILED_PRT           |
| 0028 | INVALID_USER_OR_PASS        |
| 0029 | PASSWORD_TOO_SHORT          |
| 0030 | PASSWORD_EXIT_ERROR         |
| 0031 | NEW_PASSWORD_MISMATCH       |
| 0032 | INCORRECT_OLD_PASSWORD      |
| 0033 | OPERATION_IN_PROGRESS       |
| 0034 | DATA_CONVERSION_ERROR       |
| 0035 | NO_PERMISSION               |
| 0036 | READ_ONLY                   |
| 0037 | NO_APPL_GROUPS              |
| 0038 | NO_VALUES_SPECIFIED         |
| 0039 | VALUE_NOT_SPECIFIED         |
| 0040 | TOO_MANY_VALUE_CHARS        |
| 0041 | ONLY_ONE_VALUE_GIVEN        |
| 0042 | INVALID_INTEGER             |
| 0043 | INVALID_DECIMAL             |
| 0044 | INVALID_DATE                |
| 0045 | INVALID_RANGE               |
| 0046 | INCOMPATIBLE_VALUES         |
| 0047 | LATEST_CANNOT_BE_USED       |
| 0048 | TOO_MANY_HITS               |
| 0049 | DOC_UNAVAILABLE             |
| 0050 | MISC_UNAVAILABLE            |
| 0051 | DEF_LOGVIEW_DELETED         |
| 0052 | TOO_MANY_LOGVIEWS           |
| 0053 | CDROM_VERSION               |
| 0054 | CDROM_PROC_ADDRESS          |
| 0055 | CDROM_FOLDER_EXISTS         |
| 0056 | CDROM_STAGING_DRIVE         |
| 0057 | CDROM_CLEAN                 |
| 0058 | CDROM_SETUP                 |
| 0059 | CDROM_DATA                  |
| 0060 | CDROM_RESOURCE              |
| 0061 | CDROM_INDEX_OPEN            |
| 0062 | CDROM_INDEX_VERSION         |
| 0063 | CDROM_INDEX_UPDATE          |
| 0064 | CDROM_UNKNOWN_FIELD         |
| 0065 | CDROM_ANNOTATION            |
| 0066 | CDROM_ARS_LAYOUT            |
| 0067 | CDROM_FLD_LAYOUT            |
| 0068 | CDROM_SOFTWARE              |
| 0069 | CDROM_VOLUME                |
| 0070 | CDROM_MANIFEST_OPEN         |
| 0071 | CDROM_ORIGINAL_OPEN         |
| 0072 | CDROM_DESTINATION_OPEN      |
| 0073 | CDROM_FILE_COPY_READ        |
| 0074 | CDROM_INVALID_FOLDER        |
| 0075 | EXT_SERVER_ERROR            |
| 0076 | EXT_SERVER_RC_ERROR         |
| 0077 | INVALID_FOLDER_NAME         |
| 0078 | INVALID_OPERATOR            |
| 0079 | INVALID_CHOICE              |
| 0080 | INVALID_SEGMENT_NUM         |
| 0081 | INVALID_CDROM_FOLDER        |
| 0082 | INVALID_LOGVIEW_OPR         |
| 0083 | INVALID_NO_OPERATION        |
| 0084 | INVALID_PRTOPT              |
| 0085 | SERVER_FAILED_GROUP         |
| 0086 | SERVER_FAILED_PRINTER       |
| 0087 | SERVER_FAILED_APPLGROUP     |
| 0088 | SERVER_FAILED_STOSET_DELETE |

```
0089 SERVER_FAILED_STOSET_UPDATE
0090 SERVER_FAILED_STOSET_NODEDELETE
0091 SERVER_FAILED_STOSET_NODEUPDATE
0092 APPLGRPS_EXISTS_IN_SET
```

---

## Interpreting time information in ARS006I and ARS0067I messages

**Product:** DB2 Content Manager OnDemand  
**Version:** 7.1  
**Operating systems:** Microsoft Windows

### Question

What do the time values in messages ARS0066I and ARS0067I represent?

### Answer

Both messages display the amount of time between when the server receives a document or resource retrieval request, and when the server delivers a response (to the client). The time that it takes for a client to open the document or resource is excluded from this measure.



---

## Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing  
IBM Corporation  
North Castle Drive  
Armonk, NY 10504-1785  
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

IBM World Trade Asia Corporation  
Licensing  
2-31 Roppongi 3-chome, Minato-ku  
Tokyo 106, Japan

**The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:**

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation  
J46A/G4  
555 Bailey Avenue  
San Jose, CA 95141-1003  
U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

#### COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. You may copy, modify, and distribute these sample programs in any form without payment to IBM for the purposes of developing, using, marketing, or distributing application programs conforming to IBM's application programming interfaces.



---

## Trademarks

The following terms are trademarks of International Business Machines Corporation in the United States, other countries, or both:

|                            |                   |
|----------------------------|-------------------|
| 400 <sup>®</sup>           | ImagePlus         |
| Advanced Function Printing | Infoprint         |
| AFP                        | iSeries           |
| AIX                        | MVS               |
| AS/400                     | OS/2 <sup>®</sup> |
| AT <sup>®</sup>            | OS/390            |
| CICS                       | OS/400            |
| DB2                        | RACF              |
| DB2 Connect <sup>™</sup>   | Tivoli            |
| DB2 Universal Database     | VisualAge         |
| HACMP                      | VisualInfo        |
| IBM                        | WebSphere         |
| ibm.com <sup>®</sup>       | z/OS              |

Java and all Java-based trademarks and logos are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Intel<sup>™</sup>, Intel Inside (logos), MMX<sup>™</sup> and Pentium<sup>®</sup> are trademarks of Intel Corporation in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.



---

# Index

## Special characters

- 805 SQL error 34
- 812 return code 41
- /9 option 155
  - public and private notes 155
- .out file
  - error opening 135
- +GMT time zones
  - failure to process 6

## Numerics

- 0425-346 error 132
- 0425-364 error 142
- 0425-415 message 132
- 0425-421 error 124, 143
- 0425-423 error 124
- 0425-441 error 142
- 0425-459 error 143
- 6288 error 48
- 8635 timeout 41

## A

- about this information vii
- Access Control List (ACL) 21
- ACIF
  - structured fields 139
- acroexch.app file 99
- AddFieldStodocID parameter 92
- AddResourceException 10
- Adobe Acrobat 98
- Adobe Acrobat fonts 125
- Adobe Type Manager (ATM)
  - sending fonts to printer 156
- AdobeFnt05.lst file 125
- Advanced Function Printing (AFP) files
  - external overlay resources 93
- AFP Web Viewer
  - creating a trace 102
  - displaying AFP files 93
  - FTDPORT2.INI file 102
  - overlays 93
- AFPDMP utility 136
- ANR0487W message 106
- ANS0266I error 110, 116
- ANS1302E error 107
- APAR II12318 71
- APAR PQ75080 76
- APK346W error 132
- APK408S error 138
- APK414I message 132
- APK421S error 124, 143
- APK423S error 124
- APK4595 error 143
- application group
  - combining applications 131
  - default tablespace 89
  - deleting 117
  - expiration type setting 121

- application group (*continued*)
  - SMS tablespace 89
- applications
  - combining in application group 131
- archive log directory 82
- archive log files 82
- Arco\_Res\_Dir environment variable 67
- ARS errors and message
  - ARS0087I error 128
  - ARS0114E error 128
- ARS errors and messages
  - ARS0020E error 72, 122, 124
  - ARS0024E error 72
  - ARS0066I message 161
  - ARS0067I message 161
  - ARS0084I error message 118
  - ARS0085I error message 118
  - ARS04093E error
    - return codes 159
  - ARS04422E error 149
  - ARS04457E error 149
  - ARS2090E error 84
- ARS\_LOCAL\_SVR parameter 101
- ARS\_MIGRATE\_SSID parameter 72
- ARS\_NUM\_OAMSRVR parameter 124
- ARS\_OAM\_DB2SSID parameter 124
- ARS\_OAM\_PLAN parameter 124
- ARS\_ORACLE\_PASSWD parameter 87
- ARS\_ORACLE\_USERID parameter 87
- ARS\_SVR parameter 101
- ARS\_TMP environment variable 130
- ars.cfg file 87
- ars.dbfs file 86, 89
- ARS.SECURITY exit point 76
- ARSADM APPLGRP command 117
- ARSADMIN
  - import flag 105
- ARSDB
  - failure 87
- ARSDB command 90
- ARSLOAD 128
  - A parameter 130
  - g parameter 130
  - G parameter 130
  - h parameter 135
  - I parameter 135
  - W parameter 130
  - application 130
  - application group 130
  - heap corruption 134
  - instance name 135
  - memory allocation 136, 137
  - opening .out file 135
  - port number 135
  - temporary directory 130
- ARSMaint program 121
  - timing of unloading documents 121
- ARSODF errors 150
- ARSRD program
  - library server 151
  - starting automatically 151

- ARSSOCKD errors 63
- ARSSOCKD program 85
- ARSULOAD exit 129
- ASCIINP user exit 140
- ASCIINPE user exit 140, 142
- audience, for information vii
- authorization 21
- AVT00004 table 16
- AVT00005 table 16

## B

- BREAK parameter 144, 146

## C

- cache, full 64
- carriage controls 140
- CICS regions
  - changing system IDs 25
- CID fonts 145
- CLI errors
  - 0123E 3
- Client
  - Adobe Acrobat 98
  - failure to initialize document 98
  - unable to find font 100
  - unable to initialize document 98
- CMBQueryService error 13
- COPY utility
  - SHRLEVEL REFERENCE option 85
- CPD4329 error 115
- CPF22A9 message 78
- CPF4131 error 51
- CPF9898 error 114
- CPFA0A9 error 68
- CPGID parameter 140

## D

- data
  - recovering from backup 118
- databases
  - backing up
    - access errors 88
  - configuring 81
  - installing in logical environments 33
  - Oracle 86
  - tuning for backups 83
  - unable to backup 90
- DB2 Call Attachment Facility (CAF) 72
- DB2 Content Manager
  - migration utility 16
  - not starting 9
  - prerequisites 3
  - slow performance 18
  - system outage 34
  - temporary directory location 15
  - upgrading problems 15
- DB2 Content Manager ImagePlus 25

- DB2 Content Manager OnDemand
  - Client configuration 91
  - document retrieval limitations 91
  - instances 65
- DB2 subsystem
  - multiple logical environment 33
- DB2\_ENABLE\_LDAP environment variable 11
- DD:ARSTRC1 files 149
- DD:ARSTRC2 files 149
- deadlocks
  - detecting 83
- description, of information vii
- DGL0394 error 57
- DGL0583A error 24
- DGL2642A error 5
- DGL3711A error 29
- DGL3804A error 24
- DGL5024A error 10
- DGL5161A error 29
- DGL5162A error 54
- DGL5200A error 4
- DGL5203A error 21
- DGL5410A error 39
- DGL7161A error 30
- DLTRPTRDAR command 111, 112
- document
  - indexing 136
  - loading 123
  - not segmented 146
- documents
  - different record lengths 123
- DSNAOINI DD statement 129
- DSNT376I error 85
- DSNT408I error 87

## E

- EDC5084I message 130
- EKD1008 error 51
- EKD8553 error 52
- encryption key
  - regenerate 8
- environments
  - configuring access to 58
- error messages, garbled 47
- expiration type
  - load 121
- Expiration type setting 99
- expiration types
  - Load 81
  - Segment 81
- external overlay resources 93

## F

- FIELD parameter 140
- folder
  - permissions 75
- folder security 76
- folder selection logic 75
- font missing error 145
- font substitution 156
- fonts
  - unable to find 67

- FRII utility
  - requirement 44
- FRN0306A error 45
- FRN4003W error 45
- FRN6113A error 59
- FRN6216 error 40
- FRN6259A error 20
- FRN7389A error 42
- FRN7634A error
  - Microsoft Windows 40
- FRN7634A errors
  - AIX 40
- FRN7667A error 42
- FRN7751A error 60
- FRN8072A error 41
- FRN8073A error 41
- FTDPORT2.INI file 93

## G

- generic indexer error
  - loading PDF file 146
- GIM23911E error 64
- group
  - privileges 75
- group-level IELs 136
- GROUPMAXPAGES parameter 140

## H

- hit list
  - group reference 140
- host security error 25
- HTTPS snoop failure 7

## I

- IBM DB2 Universal Database 3, 81
  - environment variables 6
- IBM HTTP Server
  - configuring for ODWEK 97
- IBM Tivoli Storage Manager 105
  - 64-bit API 63
  - adding optical library 109
  - creating a volume 54
  - deleting application groups 76
  - file system backups 108
  - migrating indexes 105
  - nopreempt option 106
  - performing backups 108
  - preempt option 106
  - retrieving expired documents 106
  - RETVAR parameter 81
  - storage nodes 109
- IBM WebSphere Application Server
  - configuring for ODWEK 97
- ICM7172 error 21
- ICM7194 error 26
- ICM7307 error 13, 29
- ICM7978 error 5, 16, 57
- ICM9804 error 30
- ICM9838 error 8
- ICM9876 error 54
- ICMClient.INI file 25
- ICMCOMP environment variable 26

- IELs
  - group-level 136
  - page-level 136
- in-process flag 54
- INCLUDE environment variable 29
- index element (IEL) structured fields 136
- indexes
  - expiring 81
- indexing documents 136
- INDEXOBJ parameter 140
- Invalid segment number (2155) 96

## K

- key length
  - modifying 112
- Kofax Ascent Capture 135
  - release script 48

## L

- large object support 140
- LDAP 10
  - credentials invalid 11
  - unable to log on as import user 11
- LIB environment variable 29
- library server 35
  - database, cataloging 35, 36
  - optimizer 41
  - rebuilding access modules 38
  - receiving database connection errors 37
- library servers
  - distributing 66
- LINECNT parameter 140
- Load expiration type 81
- LOADEXIT errors 129
- loading documents 123
- locale 71
- log backup 83
- logical environments
  - installing databases in 33
- logical record length (LRECL) 123
- LOGPRIMARY parameter 82

## M

- MAPI
  - "send to" function 66
- memory
  - unable to allocate enough 136, 137
- Microsoft IIS HTTP Server 14
- Microsoft Knowledge Base Article Q305227 134
- Microsoft Windows 2000
  - heap corruption 134
- Multiple Loads per Table attribute 99
- MVSATTACHTYPE keyword
  - CAF value 63
  - RRSAF value 63

## N

- nopreempt option 106

notes, public and private  
/9 option 155

## O

object server 45  
    ARSDOC unable to communicate with 65  
    maintenance 46  
    manual shutdown 46  
    restarting 45  
ODFMSG99 message file 150  
ODLineDataViewer applet 96  
ODServer.setPort() API 92  
OND1001 error 114  
OND1005 error 68  
OnDemand Distribution Facility (ODF) 149  
    ARSODF errors 150  
    Moving from test to production 150  
OnDemand Web Enablement Kit (ODWEK) 91  
    accessing a non-default port 92  
    AddFieldStodocID parameter 92  
    administrative results of users 96  
    cache directory 91  
    clustering on WebSphere Application Server 94  
    developing AFP files 93  
    number of hit lists 95  
    overlays 93  
    UpdateDoc method 92  
online backup  
    SQL error 911 83  
optical library  
    adding to existing system 109  
optical platters  
    availability 116  
optical store request file (EKD0371) 54  
ORA-01017 error 87  
Oracle  
    instance 87  
    tables per tablespace 86  
organization, of information vii  
outage 34  
Over compliance limit logon error 15

## P

page breaks  
    incorrect placement 138  
Page Rotation option, changing 156  
page-level IELs 136  
password duration  
    setting 27  
PATH environment variable 29  
PCL XL error 156  
performance  
    DB2 Content Manager 18  
    degrades with PDF documents 125  
platters  
    moving between drives 54  
PostScript (PS) 156  
preempt option 106  
prerequisites  
    DB2 Content Manager 3

primary log directory 82  
Print Orientation option, changing 156  
PrintAllPages parameter 102  
Printer Control Language (PCL) 156  
PRTRPTRDAR command 111, 112  
PSRESOURCEPATH environment variable 67  
PTF UQ81734 41  
purger function 46

## Q

QRLGMGR job  
    ends abnormally 78  
QUSROND startup profile 71  
QVI400 prestart job 14  
    unable to restart 58  
QVIADMIN user profile 22  
QVIGROUP group profile 22

## R

RDR0166 error 79  
RDR0355 error 80  
RDR0375 error 113  
RDR0383 error queue message 110  
RDR2798 error 71, 118  
    2798 68  
record lengths 123  
recovering data 118  
report combining  
    archive limit 111  
report occurrence  
    unable to delete 77  
Resource Access Control Facility (RACF) 25  
resource manager 29  
    ceases to function 32  
    changing server password 32  
    definition properties 31  
    not connecting to DB2 33  
    product checks fail 31  
resources, unavailable  
    found by system 127  
restore function 118  
RETVAR parameter 81

## S

Segment expiration type 81  
server printer definition  
    Report Distribution 152  
setprocenv.sh script 32  
SMP/E APPLY CHECK 64  
SMS file system 89  
sorting  
    write error 126  
SQL error 911 83  
SQL errors 63  
SQL0104N error 95  
SQL0303 error 115  
SQL0332 error 115  
SQL0911N error 83  
SQL0964C error 39  
SQL0973N error 5  
SQL2036N error 90

SQLCODE -812 71  
SQLCODE -904 88  
staging area  
    start value 46  
startup profile  
    locale information 71  
StoreDoc() API 99  
STRCDSRDAR command 111  
STRMONRDAR command 111, 112  
STRTCPSVR \*ONDMMD command 73  
structured fields 139  
supplied credentials 11  
system backup 83

## T

tablespace  
    Oracle recommendation 86  
    reaching file system limits 89  
tag logical element (TLE) structured fields 136  
TEMP environment variable 130  
text fidelity  
    default value 155  
time zone  
    configuring 65  
TMP environment variable 130  
token duration 31  
TRIGGER parameter 140

## U

ULIMIT parameter 143  
unavailable resources  
    found by system 127  
UPDATEDIR system environment variable 15  
updateenvinfo.sh script 32  
user definitions 24  
user privileges 75  
user profile privilege 21

## W

word extraction error 145  
WORK directory  
    specifying the location of 26  
Work with licence information (WRKLCINF) file 15  
workbaskets 23  
write error  
    while sorting 126

## X

Xenos D2E transform 96







Printed in USA