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News

About this newsletter

This newsletter is designed to keep you better informed about IBM® Content Manager OnDemand on all platforms. The newsletter is published quarterly.

Previous editions of this newsletter can be found in [support item 628001](#).

Correspondence related to this newsletter should be directed to darrell.bryant@unicons.com.

This newsletter is formatted so that it is easier to read on wide screen devices. Use the full screen viewing option in Adobe Reader or Acrobat (Ctrl+L) for best results.

Server and client version 10.5.0.5 available

Multiplatforms

The V10.5.0.5 fix pack installation files are available from [IBM Fix Central](#). The fix pack includes the Content Manager OnDemand for Multiplatforms server as well as the OnDemand Administrator and OnDemand end-user clients.

z/OS

To upgrade your system, choose the applicable PTF from the list in [support item 347373](#).

IBM i

See the PTF List for a list of the PTF numbers for your release. You should also review the corresponding Read This First document before installing the PTFs. We recommend that you order the Content Manager OnDemand for i PTF group when upgrading your system to V10.5.0.5.

| Release | PTF Group | PTF Lists | Read This First |
|---------|-----------|------------------------|-----------------------|
| V7.5 | SF99669 | 335651 | 82189 |
| V7.4 | SF99652 | 335651 | 82189 |
| V7.3 | SF99252 | 335651 | 82189 |

IBM Content Manager OnDemand education

Still working from home? Now is a great time to get educated on several of the newer features of Content Manager OnDemand V10.5. Make sure your Content Manager OnDemand team has a strong understanding of the fundamentals of the system, how to administer it, and its purpose. All IBM Content Manager OnDemand education is available for remote learning.

Instructor-led

OnDemand University (ODU) instructor-led online training courses from enChoice provide all the benefits of live instruction without the hassle of travel time and costs – students can learn virtually from wherever an internet connection is available.

More dates will be scheduled soon!

Self-paced

Self-paced online training courses from enChoice are perfect for busy professionals who require flexibility with their class schedules. Classes may be taken anytime, anywhere at the student’s own pace. Courses are created and taught in English by certified, IBM-authorized Content Manager OnDemand instructors.

Two self-paced courses are available:

IBM Content Manager OnDemand Administration

This is the foundational course for individuals interested in learning about the major functions of the IBM Content Manager OnDemand system. The course starts with a basic overview of the system, and then teaches students how to:

- Create and maintain Content Manager OnDemand objects such as applications, application groups, and folders
- Index, load, and retrieve various types of documents and report files in a Content Manager OnDemand system

IBM Content Manager OnDemand Advanced System Administration

This self-paced course builds on the foundational course by providing system administration concepts for

the Content Manager OnDemand solution. It provides students with a thorough understanding of Content Manager OnDemand architecture and system object concepts as well as storage administration, document storage and indexing components such as the PDF indexer, the 390 indexer, and the XML indexer.

The course also covers database configurations, command utilities, server APIs and the Web Enablement Kit (ODWEK).

To register for any of these classes, visit the [enChoice Education](#) page, the IBM Education website, or contact your TechData/Exit Certified, or Learn Quest training coordinator.

Custom or private remote or onsite classes are also available – contact ODU@enchoice.com for more information.

Tips – Cross Platform

How to best upgrade or modify your Content Manager OnDemand environment

Content Manager OnDemand can be successfully modified in areas such as updating or changing the operating system platform, changing the database, reconfiguring established storage nodes and devices, moving cache file systems, or leveraging cloud storage. However, it is recommended that you engage with Content Manager OnDemand Services first. These are complex activities that require a deeper understanding of Content Manager OnDemand and knowledge of the internal workings of the software. Many of these complex activities are also outside the scope of Content Manager OnDemand Support coverage.

Attempting to make these types of major modifications on your own often leads to problems that are not easy to solve and require significantly more time, effort, and resources than if the project is guided by Content Manager OnDemand Services.

This tip adapted from [support item 6615671](#).

ARSDOC GET output file naming

When you run the ARSDOC GET command, you might wonder why a number (represented here as .n) is appended to the end of the file name that is specified by using the -o parameter (Output file name)?

If you have an Application ID (AppID) field defined, with data loaded to the different applications, AND you run an ARSDOC GET command that spans data retrieval from the different applications, there will always be a .n value appended to the -o file name.

If you:

- use the -c parameter (Store documents in one file), it will group document(s) into one file per application with a .n (the internal alias DB value of the AppID) appended to the -o file name.
- don't use the -c option, it will create a file with a .n (sequential number starting from 1 to the number of documents retrieved) appended to the -o file name.

Tips – Multiplatform

How do you verify ZooKeeper configurations?

The Zookeeper configurations for the Content Manager OnDemand for Multiplatforms Active/Active environments on Windows, AIX, and Linux can be verified by using the telnet command.

In the ARS.CFG configuration file on AIX and Linux, or the Registry on Windows, find the entry for ARS_LOCK_HOSTS.

For example:

```
ARS_LOCK_HOSTS=zoo1.mycompany.com:2181,zoo2.mycompany.com:2181,zoo3.mycompany.com:2181
```

Then use the telnet or tn command to test the zookeeper configuration by using the command "telnet <host or IP> port" or "tn <host or IP> port". Do this for every ZooKeeper host from every Content Manager OnDemand server system.

For example, on Windows:

```
telnet zoo1.mycompany.com 2181
```

Then type:

```
ruok
```

It will respond:

```
imok
```

For example, on AIX or Linux:

```
# tn zoo1.mycompany.com 2181
Trying...
Connected to zoo1.mycompany.com.
Escape character is '^T'.
```

Then type:

```
ruok
```

It will respond:

```
imokConnection closed.
```

If ZooKeeper is not configured correctly, the Content Manager OnDemand servers in the Active/Active environment might have locking conflicts when updating the same application group. This is particularly serious for the System Log and might result in deadlocks, incomplete messages inserts, or the System Log failing entirely.

This tip adapted from [support item 6621637](#).

Installing Content Manager OnDemand for Multiplatforms in a non-default directory

What considerations should you be aware of when installing Content Manager OnDemand for Multiplatforms into a non-default directory?

The Content Manager OnDemand for Multiplatforms base installation allows you to install to a non-default directory. When doing this, there are some things to consider so that the Content Manager OnDemand for Multiplatforms server and commands are able to find libraries and International Components for Unicode (ICU) converters.

If you install the Content Manager OnDemand server into a non-default directory, you have to specify the library path environment variable for the PDF indexer commands named ARSPDOCI and ARSPDUMP.

On AIX, this is specified as LIBPATH=<install directory>/lib64 where <install directory> is the non-default directory in which you installed Content Manager OnDemand.

On Linux, this is specified as LD_LIBRARY_PATH=<install directory>/lib64 where <install directory> is the non-default directory in which you installed Content Manager OnDemand. The PDF indexer is not supported on Linux for System z.

The Content Manager OnDemand server and commands also need to be able to find the arscpcs.cfg and ICU Data files named icudt58b.dat (on AIX and Linux for System z) or icudt58l.dat (on Linux). These files are located in the <install directory>/locale directory where <install directory> is the non-default directory in which you installed Content Manager OnDemand. The Content Manager OnDemand server and commands use the execution path returned by the operating system to build the path to this locale directory.

This tip adapted from [support item 6824175](#).

How do you confirm that you are using the correct version of GSKit?

Db2 includes its own version of the IBM Global Security Kit (GSKit) that is intended for use with Db2. It is not supported for use with Content Manager OnDemand for Multiplatforms.

You might not realize that you are using the version of the GSKit that is included with Db2, because many functions of Content Manager OnDemand will work correctly with it. The most obvious errors occur when you are trying to create a Content Manager OnDemand or LDAP SSL connection, which is an encrypted environment. Errors can also occur with the use of native encryption of data at rest within Content Manager OnDemand. Therefore, using Content Manager OnDemand for with the version of the GSKit that is included with Db2 is not supported.

Most customers are using a single ID to manage both the Db2 and Content Manager OnDemand environments. This is the reason for the GSKit conflict. When the Db2 instance owners db2profile is included in a user's environment, it updates the LIBPATH or LD_LIBRARY_PATH with the paths to the Db2 libraries.

For example, on AIX:

```
# echo $LIBPATH
/home/archive/sqllib/lib64:/home/archive/sqllib/lib64/gskit:/usr/lib:/lib
```

For example, on Linux:

```
$ echo $LD_LIBRARY_PATH
/home/archive/sqllib/lib64:/home/archive/sqllib/lib64/gskit:/home/archive/sqllib/lib32
```

Unfortunately, this puts the version of the GSKit that is included with Db2 ahead of the GSKit that is installed on the system in /usr/lib (AIX) or /lib64 (Linux). These GSKit installs for the system are provided with the Content Manager OnDemand server installation and create the needed links in /usr/lib and /lib64.

The easiest way to separate the two environments is to use two IDs. One ID, such as odadmin or cmodadmin, is to manage the Content Manager OnDemand server configuration and environment. Then use a second ID, such as archive, to manage the Db2 environment and instance.

Not using the correct GSKit can result in errors such as this:

```
Error No 384 LDAP Error: The SSL library cannot be loaded. --
ldap_rc=118, -- extended_rc=-1, Unknown error --
ldap_errno=-1, extra_rc=118, File=arsldap.c, Line=1729
```

You can use the ldd command on AIX and Linux to determine what libraries are needed for the arsockd and arsd2 modules and where they are being found on the system.

To verify that you are loading the correct GSKit libraries, run the following ldd command as the user that starts the Content Manager OnDemand server:

For example, on AIX:

```
# ldd /opt/IBM/ondemand/V10.5/bin/arssockd
```

The output from the command should look similar to the following:

```
/opt/IBM/ondemand/V10.5/bin/arssockd needs:
/usr/lib/libgsk8ssl_64.so
/usr/lib/libgsk8iccs_64.so
/usr/lib/libgsk8km_64.so
/usr/lib/libodm.a(shr_64.o)
:
/usr/lib/libcrypt.a(shr_64.o)
```

For example, on Linux:

```
# ldd /opt/ibm/ondemand/V10.5/bin/arssockd
```

The output from the command should look similar to the following:

```
linux-vdso.so.1 => ...
libgsk8ssl_64.so => /lib64/libgsk8ssl_64.so ...
libgsk8iccs_64.so => /lib64/libgsk8iccs_64.so ...
libgsk8km_64.so => /lib64/libgsk8km_64.so ...
libdl.so.2 => /lib64/libdl.so.2 ...
:
libgsk8cms_64.so => /lib64/libgsk8cms_64.so ...
/lib64/ld-linux-x86-64.so.2 ...
```

If you are using the incorrect GSKit from Db2 it would look like this:

For example, on AIX:

```
# ldd /opt/IBM/ondemand/V10.5/bin/arssockd
```

The output from the command would look similar to the following:

```
/opt/IBM/ondemand/V10.5/bin/arssockd needs:
/home/archive/sqllib/lib64/gskit/libgsk8ssl_64.so
/home/archive/sqllib/lib64/gskit/libgsk8iccs_64.so
/home/archive/sqllib/lib64/gskit/libgsk8km_64.so
/usr/lib/libodm.a(shr_64.o)
:
/usr/lib/libcrypt.a(shr_64.o)
```

For example, on Linux:

```
$ ldd /opt/ibm/ondemand/V10.5/bin/arssockd
```

The output from the command would look similar to the following:

```
linux-vdso.so.1 => ...
libgsk8ssl_64.so =>
/home/archive/sqllib/lib64/gskit/libgsk8ssl_64.so ...
libgsk8iccs_64.so =>
/home/archive/sqllib/lib64/gskit/libgsk8iccs_64.so ...
libgsk8km_64.so =>
/home/archive/sqllib/lib64/gskit/libgsk8km_64.so ...
libdl.so.2 => /lib64/libdl.so.2 ...
:
/lib64/ld-linux-x86-64.so.2 ...
```

You can see in the first set of listings that the GSKit libraries, libgsk8ssl_64.so, libgsk8iccs_64.so, libgsk8km_64.so, and libgsk8cms_64.so are being loaded correctly from the /usr/lib and /lib64 directories. In the second listings, they are being loaded from Db2's environment. This needs to be corrected to be supported by Content Manager OnDemand. This can be accomplished by setting the LIBPATH or LD_LIBRARY_PATH to an empty string.

For example, on AIX:

```
export LIBPATH=
```

For example, on Linux:

```
export LD_LIBRARY_PATH=
```

Then run the above ldd commands again to verify the correct GSKit libraries are being loaded.

The next problem you will encounter is that the Content Manager OnDemand server will be unable to load the Db2 client library named libdb2.a (AIX) or libdb2.so.1 (Linux). This is because the link to that library does not exist in the /usr/lib or /lib64 directory. This can be resolved by running the Db2 configuration command named db2ln. This command will create links to the needed Db2 libraries in the /usr/lib directory or /lib64 directory. The db2ln command can be found here: /opt/IBM/db2/V11.1/cfg/db2ln (AIX) or /opt/ibm/db2/V11.1/cfg/db2ln (Linux). The db2ln command is a script. The links it creates can be removed using the db2rm1n command.

You can again use the ldd command to verify that you have all the requisite libraries needed for the Content Manager OnDemand version of GSKit and the Db2 client library.

For example, on AIX:

```
# ldd /opt/IBM/ondemand/V10.5/bin/exits/arsdb2
```

The output from the command should look similar to the following:

```
/opt/IBM/ondemand/V10.5/bin/exits/arsdb2 needs:
/usr/lib/libdb2.a(shr_64.o)
:
Cannot find libdb2osse.a(shr_64.o)
:
/usr/lib/libcrypt.a(shr_64.o)
```

On AIX, the Db2 client library knows where to find its other requisite libraries.

For example, on Linux:

```
$ ldd /opt/ibm/ondemand/V10.5/bin/exits/arsdb2
```

The output from the command should look similar to the following:

```
linux-vdso.so.1 => ...
libdl.so.2 => /lib64/libdl.so.2 ...
libdb2.so.1 => /home/archive/sqllib/lib64/libdb2.so.1 ...
:
libcap-ng.so.0 => /lib64/libcap-ng.so.0 ...
```

You can confirm that the correct GSKit libraries will be loaded by setting the Content Manager OnDemand user's LIBPATH or LD_LIBRARY_PATH to blank and running the Db2 db2ln command.

Next, if you have configured a system with two user environments, you need to give the Content Manager OnDemand user (such as odadmin or cmodadmin in the previous example) DBADM access to the Db2 database. This can be accomplished by adding this user to the same group as the database owner, typically named archive (as mentioned in the previous example). You can also run the command "db2 grant dbadm on database to odadmin" after connecting to the respective database as the instance owner, typically named archive. See the Db2 authorization information for more details, as well as information on the GRANT and REVOKE commands.

This tip adapted from [support item 6621629](#).

Tips – z/OS

Quick Hits

Operating system enhancements

Make sure you have enabled these operating system enhancements in the next rollout of z/OS:

The JES2 enhancements for loading from spool:

SAPI_OPT=YES,WS_OPT=YES

Two Db2 performance enhancements:

USEZOSV1R9RULES(NO)
MEMDSENQMGMT: ENABLE

Details are available on the OnDemand User Group forum in this thread: [List of Performance Related Fixes plus a Brief Checklist, Upgrading CMOD on z](#)

Rule for OAM collection names and Content Manager OnDemand instances

In general, here is a simple but very important rule to keep in mind when considering Content Manager OnDemand and OAM:

- Each Content Manager OnDemand instance (which accesses a single set of Content Manager OnDemand system tables and application group data tables) must ensure the OAM collection names that are used are not used by any other Content Manager OnDemand instance.

If the collection names are not unique, then unrecoverable data corruption can occur as the two instances can interfere with each other.

Note: Since z/OS V2.3, you can now have two separate OAMs on the same LPAR. Follow this link to the OnDemand User Group for more information on [OAM at z/OS V2.3](#).

Tips – IBM i

Converting spooled files to PDF before indexing

Content Manager OnDemand for i now has a process for converting spooled files to PDF stream files before indexing and storing. This process is intended for the conversion of spooled files that you want to store (and later retrieve) in a PDF format rather than in an SCS or AFPDS format. The conversion process is resource intensive and might not be suitable for some spooled files or archive environments.

The device type of the input spooled files that you convert must be *SCS or *AFPDS.

When you store a spooled file (either by using an output queue monitor or the Add Report (ADDRPTOND) command with the Input (INPUT) parameter set to *SPLF) with an application definition that has the Indexer set to PDF, the input spooled file is first converted to a PDF stream file and then that stream file is used as the input.

The conversion of spooled files to PDF stream files is supported at V7.3 and later with Content Manager OnDemand server version 10.5.0.5 and later plus the following PTF or its superseding PTF.

| Version | PTF |
|---------|---------|
| V7.5 | SI80802 |
| V7.4 | SI80803 |
| V7.3 | SI80804 |

The Content Manager OnDemand for i PDF Indexer feature (5770-RD1 option 12) must be installed. Also required are 5770-SS1 option 43 - Additional Fonts, and 5770-TS1 - IBM Transform Services for i, option *BASE and option 1 - AFP to PDF Transform. Both option 43 and 5770-TS1 are included with the IBM i operating system at no charge.

Because this support uses the PDF Indexer, the person who is creating the indexer parameters with the OnDemand Administrator client must have the full Adobe Acrobat product installed on their workstation, not just the Adobe Acrobat Reader. Note that the 32-bit OnDemand Administrator client must be used; Adobe Acrobat does not support the 64-bit clients.

See [support item 6610028](#) for additional information.

Heritage IBM Navigator for i - action required

The heritage IBM Navigator for i is stabilized and will be removed from support completely by the end of 2022. The heritage Navigator contains a log4j vulnerability that will not be remediated by IBM. Customers still using the heritage Navigator should switch to the new IBM Navigator for i immediately.

New IBM Navigator for i

The Content Manager OnDemand component for the new IBM Navigator for i is available at V7.5, V7.4 and V7.3.

The following table lists the minimum Content Manager OnDemand PTF or group level and IBM Navigator for i PTF to enable this support.

| Release | OnDemand PTF | OnDemand Group | Navigator PTF |
|---------|--------------|--------------------|---------------|
| V7.5 | SI80383 | SF99669 – level 2 | SI79801 |
| V7.4 | SI80384 | SF99652 – level 11 | SI79800 |
| V7.3 | SI80385 | SF99252 – level 21 | SI79798 |

Note that some functions of the new Content Manager OnDemand component are not yet available. If you click on an item that is not yet available, you will receive a message that indicates “Requested function is planned but not yet available”. Future PTF(s) will enable support for these items.

Note that server version 10.5.0.4 is a prerequisite for the Content Manager OnDemand for i Navigator component. When you order and apply the OnDemand PTF for Navigator for i, the PTFs that upgrade your Content Manager OnDemand server version to 10.5.0.4 will also be ordered and applied.

See [support item 6486565](#) for more information on IBM Navigator for i PTFs.

See [support item 6578747](#) for details on which Content Manager OnDemand for i functions are currently available.

Deprecated functions at V7.5

Content Manager OnDemand for i V7.5 deprecates or removes the following functions previously supported:

Version 7.4 of Content Manager OnDemand for i was the last release to include Spool File Archive (SFA) Report Management Cycle (RMC) functionality and the Media Migration Facility (MMF; the Migrate Media (MGRMEDRDAR) command). RMC was used to manage data that was archived in SFA that had not yet been migrated to the Archived Storage Manager (ASM) of Content Manager OnDemand for i Common Server. MMF was used to migrate archived data from SFA to ASM.

Before upgrading to Content Manager OnDemand for i V7.5, all SFA data that has not already been migrated to ASM must be migrated or you will lose access to that data.

If you migrated from Spool File Archive to Common Server by respooling your data and archiving it directly into Common Server or if you have already used the Media Migration Facility (MMF; the Migrate Media (MGRMEDRDAR) command) to migrate your SFA data to ASM, this information does not impact you. If you never implemented Spool File Archive, but instead implemented Common Server at Version 5.1 or later, this information does not impact you.

For more information on how to use the Media Migration Facility and the Migrate Media (MGRMEDRDAR) command to migrate your Spool File Archive data to ASM, see [support item 318763](#).

If you have further questions, contact IBM support in your geography.

Additional Information

Documentation

Content Manager OnDemand for Multiplatforms [Documentation](#)

Content Manager OnDemand for z/OS [Documentation](#)

Content Manager OnDemand for i [Documentation](#)

Content Navigator [Documentation](#)

Publication libraries - PDF versions of the documentation

| | |
|----------------|---|
| Multiplatforms | Version 10.5 |
| z/OS | Version 10.5 |
| IBM i | Version 7.5 Version 7.4 Version 7.3 |

More Content Manager OnDemand web sites

IBM Content Manager OnDemand [Product Overview](#)

[Compatibility Matrix](#) for the Content Manager OnDemand clients and servers

[Hardware and software requirements](#) for all versions of Content Manager OnDemand

IBM Software [Support Lifecycle](#) Policies (search for Content Manager OnDemand)

OnDemand User Group

The primary objective of the [OnDemand User Group](#) (ODUG) is to create an environment and network encouraging the exchange and development of information regarding Content Manager OnDemand and its associated products.

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