IBM Content Manager OnDemand Newsletter

In This Issue

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. They are also available on the OnDemand User Group web site under the heading 'Presentations, Newsletters, and such'.

Correspondence related to this newsletter should be directed to darrell.bryant@unicomsi.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 version 10.1.0.8 available

Multiplatforms

The V10.1.0.8 fix pack installation files are available from IBM Fix Central. You can use either the 10.1.0.5 or 10.5.0.x version of the OnDemand Administrator and OnDemand end-user clients with the 10.1.0.8 server version.

z/OS

To upgrade your system, choose the applicable PTF from the list in support item 1260192.

EOS announced for Content Manager OnDemand for z/OS V10.1

End of support (EOS) for Content Manager OnDemand for z/OS V10.1 will be on April 30, 2022.

For more information, see IBM United States Withdrawal Announcement 921-056.

EOS announced for Content Manager OnDemand for Multiplatforms V10.1

End of support (EOS) for Content Manager OnDemand for Multiplatforms V10.1 will be on April 30, 2022.

For more information, see IBM United States Withdrawal Announcement 921-071.

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.

The following public instructor-led online classes are scheduled for the following weeks in 2021:

- August 23-27, 2021
- October 18-22, 2021

If these weeks don't work for you or your team, no worries! Ask about our custom classes and select the timing, and topics you would like for your class.

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 – simply contact ODU@enchoice.com for more information.

Tips – Cross Platform

Distributing a predefined list of servers

You can predefine the list of servers that appear when users open the OnDemand client so that users do not need to manually add each server.

Before you proceed, you should make a backup copy of the Registry and you should be familiar with how to restore the Registry to the same version you were using when you last successfully started the computer. For instructions, see your Windows information.

To create a list of servers to share with other users, export the `HKEY_CURRENT_USER\SOFTWARE\IBM\OnDemand32\Common` registry key on a workstation that already has the required servers defined. Note that OnDemand32 is correct, even for the 64-bit clients. The export function creates a .reg file.

If you want to distribute the exported .reg Registry file along with your OnDemand client software, see Distributing user-defined files. You can also provide the exported .reg Registry file directly to your users, and then import it on their workstations after they have installed the OnDemand client.

Both the OnDemand client and the OnDemand Administrator client use the same Registry key to populate the server list. The 32-bit and 64-bit versions of the clients also use the same Registry key.

This tip adapted from a recent update to the Content Manager OnDemand documentation.

64-bit OnDemand client now supports OLE

Beginning with version 10.5.0.1 of the OnDemand client, the 64-bit version of the client now includes OLE support.

Previously OLE support was only available when using the 32-bit client.

LDAP Sync enhanced

Beginning with server version 10.5.0.1, the maximum number of entries on the ignore users (ARS_LDAP_IGN_USERIDS) and ignore groups (ARS_LDAP_IGN_GROUPS) parameters is increased from 10 to 100.

For more information, see the Specifying the ARS.CFG file for the instance topic in the Content Manager OnDemand documentation.

Missing fields information enhanced

Beginning with server version 10.5.0.2, the message issued by the ARSLOAD program when fields are missing is enhanced to include the row number and the names of the missing fields. For example:

ARS1130E 5 fields submitted by the indexer, 8 expected. Row 1, missing fields: ADDRESS, SEQUENCE, CODE

New -e parameter for ARSLOAD

Beginning with server version 10.5.0.2, the ARSLOAD program supports a new –e parameter.

Specify the –e parameter to allow the ARSLOAD program to process loads that contain empty document files. If you specify the –n parameter with the –e parameter, the empty file is retained after processing, however no data is loaded into Content Manager OnDemand. If you are running ARSLOAD as a daemon with the –e parameter, the empty file will not cause an error and the ARSLOAD daemon will not exit.

Full text search enhanced

Collection location

Beginning with Content Manager OnDemand version 10.5.0.2, the location for the data (indexes) of a new collection can now be specified by using the OnDemand Administrator client or by using the ARSXML batch administration program.

In the OnDemand Administrator client, as part of the FTS server definition in the application group definition, a location can now be specified after the port number. The format looks like this:

```
<fts server name>,<port number>,<location>
```

The <location> specifies the name of a directory on the Content Manager OnDemand FTS server and must be writable by the Content Manager OnDemand FTS server. If you are specifying this as part of a new application group definition, the location value will be used immediately because no Content Manager OnDemand tables, or FTS collections have been created yet. If you update an existing application group that has already had data full text indexed, the location value will not be used until the current application group data table is closed and a new one is created. That is, a new collection will not be created until a new data table exists in Content Manager OnDemand for the application group. Only when the current table gets closed will this change in location take effect.

Note that the total length of the FTS server name with port and location cannot exceed 254 characters, the FTS server must have write access to this location, and the location you enter is not validated by the OnDemand Administrator client.

With the ARSXML batch administration program, as part of the FTS server definition in the application group definition, a location can now be specified after the port number. The format looks like this:

```
serverFTI="odftsobj.od.company.com,8191,/myindexes"
```

Multiple server support

Multiple full text servers are now supported. In your ARS.CFG file you can now add the parameter ARS_FULL_TEXT_SRVR_CNT and then specify multiple servers, as shown in the example below.

```
ARS_SUPPORT_FULL_TEXT_INDEX=1
ARS_FULL_TEXT_SRVR_CNT=2
ARS_FULL_TEXT_SRVR_1=odftsobj.od.company.com,8191,K5QAnms=
ARS_FULL_TEXT_SRVR_2=odftsobj2.od.company.com,8192,zJYLwQ==
```

Tips – Multiplatform

Amazon S3 certificate requirements

SSL communications with Amazon S3 require the installation of the "Baltimore CyberTrust Root" certificate and the "Digicert Global Root CA" certificate in the GSKit .kdb file that is being used by the Content Manager OnDemand server.

Download the certificates from:

https://www.digicert.com/CACerts/BaltimoreCyberTrustRoot.crt

https://www.digicert.com/digicert-root-certificates.htm

Add the "Baltimore CyberTrust Root" certificate to the key database.

The following example adds the "Baltimore CyberTrust Root" certificate to the key database named ondemand.kdb:

```
gsk8capicmd_64 -cert -add -db "ondemand.kdb" -pw
    "myKeyDBpasswd" -label "Baltimore Cybertrust Root" -file
    "BaltimoreCyberTrustRoot.crt" -format binary -fips
```

Add the "Digicert Global Root CA" certificate to the key database.

The following example adds the "Digicert Global Root CA" certificate to the key database named ondemand.kdb:

```
gsk8capicmd_64 -cert -add -db "ondemand.kdb" -pw
    "myKeyDBpasswd" -label "DigiCert Global Root CA" -file
    "DigiCertGlobalRootCA.crt" -format binary -fips
```

Verify that the two new certificates were stored in the key database by using GSKCapiCmd.

The following example lists the certificates stored in ondemand.kdb:

```
gsk8capicmd_64 -cert -list all -db "ondemand.kdb" -pw
    "myKeyDBpasswd"
```

GSKCapiCmd displays the following result:

```
Certificates found
* default, - personal, ! trusted, # secret key
!       "Entrust.net Secure Server Certification Authority"
!       "Entrust.net Certification Authority (2048)"
!       "Entrust.net Client Certification Authority"
!       "Entrust.net Global Client Certification Authority"
!       "Entrust.net Global Secure Server Certification Authority"
!       "VeriSign Class 1 Public Primary Certification Authority"
!       "VeriSign Class 2 Public Primary Certification Authority"
!       "VeriSign Class 3 Public Primary Certification Authority"
!       "VeriSign Class 1 Public Primary Certification Authority - G2"
!       "VeriSign Class 2 Public Primary Certification Authority - G2"
!       "VeriSign Class 3 Public Primary Certification Authority - G2"
!       "VeriSign Class 4 Public Primary Certification Authority - G2"
!       "VeriSign Class 1 Public Primary Certification Authority - G3"
!       "VeriSign Class 2 Public Primary Certification Authority - G3"
!       "VeriSign Class 3 Public Primary Certification Authority - G3"
!       "VeriSign Class 3 Public Primary Certification Authority - G5"
!       "VeriSign Class 4 Public Primary Certification Authority - G3"
!       "Thawte Primary Root CA"
!       "Thawte Primary Root CA - G2 ECC"
!       "Thawte Server CA"
!       "Thawte Premium Server CA"
!       "Thawte Personal Basic CA"
!       "Thawte Personal Freemail CA"
!       "Thawte Personal Premium CA"
!       "Baltimore Cybertrust Root"        (Added this certificate)
!       "DigiCert Global Root CA"          (Added this certificate)
*-      "IBM Content Manager OnDemand"
```

Microsoft Azure certificate requirements

SSL communications with Microsoft Azure require the installation of the "Baltimore CyberTrust Root" certificate in the GSKit .kdb file that is being used by the Content Manager OnDemand server.

See the previous tip on Amazon S3 certificate requirements for details.

Linux - How to debug when ARSSOCKD fails to start and no messages are produced

This problem is usually caused by either ARSSOCKD ending before it can write to the System Log or the console is not set up correctly.

Before doing anything else, ensure that Db2 is running.

If that does not resolve the problem, capture the Linux system trace information by using a command similar to this:

```
strace -s 256 -f /<full path to>/arssockd -I MyInstance -S 2>
    strace.out
```

Review the strace.out file and search for "arslog".

Often, "arslog" will be followed by a Content Manager OnDemand message with the error.

Here is an example from a recent problem record:

```
[pid  1927] execve("/opt/ibm/ondemand/V10.1/bin/arslog",
    ["/opt/ibm/ondemand/V10.1/bin/arslog", "ARCHIVE", "2021-
    06-08 19:41:32.980988", "0", "ARSSOCKD", "", "4", "213",
    "ARS0213I Unable to load the OnDemand DB2 dynamic load
    library (arsdb2).  Check to make sure DB2 is installed
    and that the db2ln command has been run", ""], [/* 74
    vars */] <unfinished ...>
```

Note the ARS0213I message which in this case also gives the problem resolution:

```
ARS0213I Unable to load the OnDemand DB2 dynamic load library
    (arsdb2). Check to make sure DB2 is installed and that
    the db2ln command has been run
```

If that does not resolve the issue, you can use the "ldd" command to check if there are other dependency issues with ARSSOCKD.

For example, as the userid that would start ARSSOCKD, run

```
ldd /opt/ibm/ondemand/V10.1/bin/arssockd
```

If there are still issues, then open up a case with IBM Software Support.

Tips – z/OS

Change in OAM at z/OS V2.3

As of z/OS V2.3, OAM no longer creates or references collections stored in the catalog. It only creates or references the collections stored in the Db2 Collection table.

What this means is that the LISTCAT step in OAM IVP will not find any newly created collections in the catalog. The old collections will still be there, just not any new ones.

If you run the OAM IVP, be sure to update it to the latest level in SAMPLIB(CBRSAMIV).

Tips – IBM i

New commands available

Three new commands are now available for Content Manager OnDemand for i at V7.3 and V7.4. A brief description of each is provided below. Help text is available online in support item 6446689.

The required PTFs are:

Release	PTF s	
V7.4	SI76121	SI76122
V7.3	SI76123	SI76124

Display Resource List (DSPRSCLOND)

The Display Resource List (DSPRSCLOND) command lists the AFP resources used in a spooled file. This includes fonts, overlays, form definitions, etc. The list includes the location of the resource and if the resource is available, as shown in the example below.

The Display Resource List command requires server version 10.1 or later.

```
                    Content Manager OnDemand for i
5770-RD1  V7R3M0     LIST RESOURCES FOR AFP SPOOLED FILE  ODIX73X    4/29/21
JOB . . . . . . . . . :  TSTAFP        FILE . . . . . . . . . :  UX11PRTF
  USER . . . . . . . . :  DBRYANT        NUMBER . . . . . . . :    000003
  NUMBER . . . . . . . :  021303       CREATION DATE  . . . . :  11/13/20
JOB SYSTEM NAME  . . . :  ODIX73X      CREATION TIME  . . . . :  11:51:40

RESOURCE NAME    LIBRARY/PATH          TYPE                     AVAILABLE
---------------- --------------------  ------------------------ --------
1bit.tif         /AFPresources/        OTHER OBJECT DATA        YES
tryit.tif        *UNKNOWN              OTHER OBJECT DATA        NO
F1DFLT           *INLINE               *FORMDF                  YES
O1UB9203         ONDAFP                *OVL                     YES
Arial            *INLINE               TRUETYPE/OPENTYPE FONT   YES
Arial Bold       *INLINE               TRUETYPE/OPENTYPE FONT   YES
X0GT10           QFNTCPL               *FNTRSC                  YES
X0H4106C         QFNT16                *FNTRSC                  YES
X0GT24           QFNTCPL               *FNTRSC                  YES
S1MED3AA         ONDAFP                *PAGSEG                  YES
S9MED3AA         AFPRSC                *PAGSEG                  NO
```

Add Document (ADDDOCOND)

The Add Document (ADDDOCOND) command adds a single document to Content Manager OnDemand with the provided index value(s). The Add Document command provides an easy-to-use front end to the most frequently used options of the ARSDOC ADD program function. The document to be added must be located in a directory in the Integrated File System (IFS).

The Add Document command requires server version 10.5.0.2 or later.

Update Document (UPDDOCOND)

The Update Document (UPDDOCOND) command updates the specified Content Manager OnDemand document's index field(s) with the provided value(s). The Update Document command provides an easy-to-use front end to the most frequently used options of the ARSDOC UPDATE program function.

The documents to be updated are selected by using one of three methods:

SQL Query String (SQLQRY): Specifies a valid SQL query that includes the name of one or more application group database fields, index values, and operators.

Public Named Query (PUBNAMQRY): Specifies the name of a public named query for the folder named with the FOLDER parameter. A named query is a set of search criteria previously saved on the server that can be recalled by name to search a folder.

Report ID (RPTID): Specifies the report ID of the documents to be updated. The report ID is also known as the Load ID.

The Update Document command requires server version 10.5.0.2 or later.

Create Instance command enhanced

The Create Instance (CRTINSTOND) command is enhanced at V7.3 and V7.4 to support the configuration of SSL during the creation of an instance. A brief description of the new parameters is provided below. Help text is available online in support item 6446689.

The new parameters are:

Use SSL (USESSL): Specify if this instance uses SSL. When *YES is specified, five additional parameters must be specified.

SSL port number (SSLPORT): Specify the TCP/IP port on which the instance server listens to receive requests from a Content Manager OnDemand SSL-enabled client.

SSL key file (SSLKEYF): Specifies the path and stream file name for the SSL key file that contains all the requisite certificates and keys.

SSL key file password (SSLKEYPWD): Specifies the password for the SSL key file.

SSL key file label (SSLKEYLBL): Specifies the label of the SSL Certificate used to identify the Content Manager OnDemand server.

Client use SSL (CLNTUSESSL): Specifies whether the server-side clients must communicate using the SSL protocol. Server-side clients include commands such as ADDDOCOND, ADDRPTOND, STRMONOND, and STRDSMOND and APIs such as ARSDOC and ARSLOAD.

Note that you must create your key file, specified by using the SSLKEYF parameter, prior to using the new parameters or your new instance will not start.

The enhanced Create Instance command requires server version 10.5.0.2 or later.

The required PTFs are:

Release	PTF s
V7.4	SI76259
	SI76260
V7.3	SI76261

Add Report command enhanced

The Add Report (ADDRPTOND) command is enhanced at V7.3 and V7.4 to support the automatic generation of the trace file name.

The trace stream file (TRCSTMF) parameter now supports the value *GEN. When you use the value of *GEN, the trace file name is generated automatically based on the input data type and file name. The file extension is '.trc'. The trace file is placed in the temporary directory of the instance as specified in the ARS.CFG file. The default temporary directory is named TMP and located in the instance directory.

The enhanced Add Report command requires server version 10.1 or later.

A trace impacts server performance and should only be enabled when requested by IBM Software Support.

The required PTFs are:

Release	PTF s
V7.4	SI76303
V7.3	SI76304

Start Monitor command enhanced

The Start Monitor (STRMONOND) command is enhanced at V7.3 and V7.4 to support ending the monitor if an error limit is reached.

The new parameters are:

Limit monitor errors (LMTERR): Specifies whether or not to limit the number of errors that can occur before the monitor ends. The monitor job ends as soon as the maximum number of consecutive or total errors occur. Errors might include application group name or application name not found, or indexing failures such as trigger, field, or index not found, for example.

Monitor error limit (LMTTYPE): Specifies the type of limit and the number of errors that can occur before the monitor ends. If you start more than one monitor for the same output queue, the error limit applies to each monitor individually.

Limit type:

    *CONSECUTIVE - The limit is based on the number of consecutive errors or failures. Each successful load resets the count of errors.

    *TOTAL - The limit is based on the total number of errors since the monitor job was started.

Number of errors:

    Specify the number of errors before the monitor is forced to end.

If the monitor job ends due to the error limit being exceeded, the monitor job log will contain message OND0705: "The monitor is ended. The maximum error count of n *CONSECUTIVE / *TOTAL errors has been exceeded." where n is the number specified on the Number of errors sub-value.

The enhanced Start Monitor command requires server version 10.5.0.2 or later.

The required PTFs are:

Release	PTF s
V7.4	SI76386
V7.3	SI76387

How to expire data if Segment or Document expiration is used

If you use Document or Segment for the Expiration Type in any of your application groups, you might need to take action to ensure that data stored in the application group expires as expected. Content Manager OnDemand does not explicitly delete data stored using Document or Segment as the Expiration Type from Archived Storage Manager (ASM).

Note that the default for new application groups is an Expiration Type of Load. This tip does not apply if you are using Load expiration. With an Expiration Type of Load, Content Manager OnDemand expires data at the appropriate time regardless of where it is located.

The System Log application group uses Segment expiration. For more information on managing the System Log, see Configuring the System Log application group.

The following storage set possibilities exist:

- If the storage set uses only cache storage, for example the Cache Only – Library Server storage set:
  - o Disk Storage Manager (DSM) expires both indexes and data when the Life of Data and Indexes is reached.
- If the storage set uses ASM as the storage manager (which is the most common type of storage set for Content Manager OnDemand for i customers):

- o DSM expires only the indexes when the Life of Data and Indexes is reached.
- o You must ensure that the sum of the duration of your migration policy levels is equal to or greater than the Life of Data and Indexes in the application group.
- o You must have an expire level in your migration policy.
- o You must run ASM on a regular basis to expire the data.
- o Note that when using ASM, a storage set also references a migration policy created in IBM Navigator for i.

To check if you have any application groups with an Expiration Type of Document or Segment, run the following SQL statement. Change QUSROND to the name of your instance.

```
SELECT SUBSTR(ARSAG.NAME,1,25) AS APPLICATION_GROUP,
SUBSTR(ARSSET.NAME,1,25) AS STORAGE_SET,
CASE EXPIR00001 WHEN X'53' THEN 'SEGMENT'
WHEN X'41' THEN 'DOCUMENT' END AS EXPIRATION_TYPE
FROM QUSROND/ARSAG, QUSROND/ARSSET
WHERE EXPIR00001 <> x'4C' AND ARSAG.SID=ARSSET.SID
ORDER BY ARSSET.NAME, ARSAG.NAME
```

Your results will be similar to the following. You can use these results to determine what actions, if any, you need to take to configure your Content Manager OnDemand system properly.

```
APPLICATION_GROUP   STORAGE_SET                EXPIRATION_TYPE
CDOC037-test        Cache Only – Library Server  SEGMENT
CLOAD005-test       Cache Only - Library Server  SEGMENT
LABOR               DISK                         SEGMENT
UserDefinedData     DISK                         DOCUMENT
System Log          SYSTEM_LOG                   SEGMENT
```

Empty all output queues in QRDARS library before upgrading

Before upgrading to a new version of Content Manager OnDemand (such as V7.3 to V7.4), confirm that the output queues in the QRDARS library do not contain any spooled files. If spooled files exist in any of the output queues, move the spooled files to the corresponding output queues in the QUSRRDARS library or to other output queues of your choice, or delete the spooled files if they are no longer needed. The output queues in QRDARS are named QRDARS400, ONDPROC, and ONDERR. If any of the output queues in QRDARS contain spooled files, the upgrade of Content Manager OnDemand (licensed program product number 5770-RD1) might fail.

Note that this requirement for empty output queues in QRDARS does not apply to Content Manager OnDemand server version upgrades (such as V10.5.0.1 to V10.5.0.2).

Additional Information

Documentation

Content Manager OnDemand for Multiplatforms Documentation

Content Manager OnDemand for z/OS Documentation

Content Manager OnDemand for i Documentation

Publication Libraries - PDF versions of the documentation

Multiplatforms	Version 10.1	Version 10.5
z/OS	Version 10.1	Version 10.5
IBM i	Version 7.3	Version 7.4

Product System Requirements

Multiplatforms	Version 10.1	Version 10.5
z/OS	Version 10.1	Version 10.5
IBM i	Version 7.3	Version 7.4

More Enterprise Content Management web sites

IBM Content Manager OnDemand Product Overview

Compatibility Matrix for the Content Manager OnDemand clients and servers

IBM Content Navigator Product Overview

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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