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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 7024130. 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 Acrobat (Ctrl+L) for best results.

Server version 10.1.0.5 available

Multiplatforms

The V10.1.0.5 fix pack installation files are available from IBM Fix Central. This includes the OnDemand Administrator and OnDemand end-user clients.

z/OS

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

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 PTF group when upgrading your system to V10.1.0.5.

Release	PTF Group	PTF Lists	Read This First
V7.4	SF99652	0731827	885943
V7.3	SF99252	0737891	7046944
V7.2	SF99251	0737893	7041959

Content Manager OnDemand education for V9.5 and V10.1

You can easily create a Content Manager OnDemand application definition – but do you understand what you're doing? Take Content Manager OnDemand courses when you first install the product or when new employees join your organization to have a strong understanding of the fundamentals of the system, how to administer it, and its purpose.

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 class is available for 2019:

• November 18 - 22, 2019

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 course are available:

IBM Content Manager OnDemand Administration

This is the foundational course for individuals interested in learning about the major functions of the 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, 390 Indexer, and 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 <u>enChoice</u> <u>Education</u> page or contact your TechData/Exit Certified, or LearnQuest training coordinator.
- Custom or private remote or onsite classes are also available – simply contact <u>ODU@enchoice.com</u> for more information.

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Tips – Cross Platform – V10.1.0.5 OnDemand Administrator client

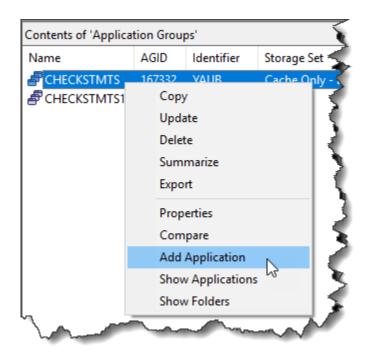
All of the enhancements described in this section are applicable to both server version 9.5 and server version 10.1 when using the OnDemand Administrator client version 10.1.0.5.

New Add Application menu item

Starting in version 10.1.0.5 of the OnDemand Administrator client, a new menu item called "Add Application" appears in the pop-up menu for application groups. When you select the option, the view is changed to the application list for the application and the Add an Application dialog is displayed with the application group already selected. The "Select ..." button is disabled since the application group is already selected.

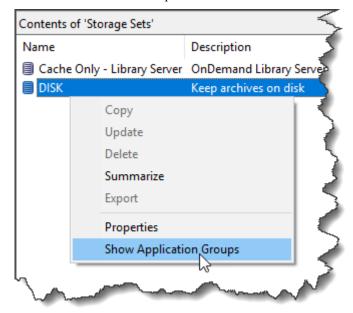
The "Add Application" option is grayed out if you can't add an application to the application group because there isn't an available application identifier or there's already an application in the application group that can only have one application. The "Add Application" option is omitted from the pop-up menu when "System Data Distribution (CFM), System Data Distribution (F/G)", System Data Distribution (L), "System Log", or System Load" is selected.

The new menu item is disabled if more than one object is selected.



New Show Application Group menu item

Starting in version 10.1.0.5 of the OnDemand Administrator client, a new menu item called "Show Application Groups" appears in the pop-up menu for storage sets. When you select the option, the view is changed to the application group list and the application groups that use the selected storage set are included in the list. The example below shows the pop-up menu with the new option. This change satisfies a request from the OnDemand Users Group.



Find dialog enhanced

Currently, when the OK button is pressed on a Find dialog, the dialog is removed and the list is updated with the search results. If the search criteria doesn't produce a match, a message is displayed. With this change, the dialog will not be removed if there isn't a match, which enables the user to enter different search criteria. Specifically, when the OK button on the message dialog is pressed, the user can then enter different search criteria. This change applies to all of the Content Manager OnDemand object types. This change satisfies a request from the OnDemand Users Group.

Selected objects count

The number of selected objects is now displayed in lower right corner of the Content Manager OnDemand Administrator client when more than one object is selected.

Tips – Cross Platform – V10.1.0.5

ODWEK API dependency

At version 10.1.0.5, the ODApi.jar file has a dependency on xstream. The OnDemand Web Enablement Kit install now ships the xstream-1.4.11.1.jar file in the jars directory. This jar file must be copied to the same directory as the ODApi.jar file.

ARSXML changes

The following changes have been made to ARSXML at version 10.1.0.5:

- Command actions (add, delete, update, export and validate) are no longer required to be entered in lowercase.
- To avoid ambiguity, when adding or updating application group permission attributes, the following three attributes must all be specified in the input XML file or an error message will be issued:
 - o adminAuthority
 - o lvAuthority
 - accessAuthority

ODWEK Java API users need to update CLASSPATH

Beginning with server version 10.1.0.5, customer applications that are using the Content Manager OnDemand Web Enablement Kit (ODWEK) Java APIs will need to include the Gson jar file, with path, in the CLASSPATH for the application. The file name for Gson version 2.8.1 is gson-2.8.1.jar and can be found in the <CMOD install directory>/jars directory, where CMOD install directory is your Content Manager OnDemand installation directory.

For example, the file name for Gson version 2.8.1 is gson-2.8.1.jar. If this is the name of your most current Gson file, the CLASSPATH statement must be updated to include:

AIX:

CLASSPATH=/opt/IBM/ondemand/V10.1/jars/gson-2.8.1.jar
Linux:

CLASSPATH=/opt/ibm/ondemand/V10.1/jars/gson-2.8.1.jar Windows:

CLASSPATH=C:\Program Files\IBM\OnDemand\V10.1\jars\gson2.8.1.jar

IBM i

CLASSPATH=/QIBM/ProdData/OnDemand/jars/gson-2.8.1.jar.

Tips – Cross Platform

Db2 Client SSL setup for use with Content Manager OnDemand

The following steps were extracted from the Db2 documentation. These steps can be used to setup the Db2 Server to use SSL. This setup was performed on Db2 V10.5 and is applicable to both Content Manager OnDemand V9.5 and V10.1

Setup the Db2 Server to use SSL

```
db2 update dbm cfg using SSL_SVR_KEYDB /home/archive/db2_ss1/db2_ss1.kdb db2 update dbm cfg using SSL_SVR_STASH /home/archive/db2_ss1/db2_ss1.sth db2 update dbm cfg using SSL_SVR_LABEL CMODLabel db2set DB2COMM=SSL
```

And on the Db2 Clients

```
db2 update dbm cfg using SSL_CLNT_KEYDB /home/archive/db2_ss1/db2_ss1.kdb db2 update dbm cfg using SSL_CLNT_STASH /home/archive/db2_ss1/db2_ss1.sth db2 update dbm cfg using SSL_SVCENAME 50001
```

Verify the resulting configuration is shown below

```
db2 get dbm cfg | grep SSL
   SSL server keydb file
                                  (SSL_SVR_KEYDB) = /home/archive/db2_ssl/db2_ssl.kdb
   SSL server stash file
                                  (SSL_SVR_STASH) = /home/archive/db2_ssl/db2_ssl.sth
   SSL server certificate label
                                  (SSL\_SVR\_LABEL) = CMODLabel
   SSL service name
                                  (SSL\ SVCENAME) = 50001
   SSL cipher specs
                                  (SSL CIPHERSPECS) =
   SSL versions
                                  (SSL VERSIONS) =
   SSL client keydb file
                                  (SSL CLNT KEYDB) = /home/archive/db2 ssl/db2 ssl.kdb
   SSL client stash file
                                  (SSL_CLNT_STASH) = /home/archive/db2_ssl/db2_ssl.sth
```

Stop and restart Db2 to pick up the changes

db2stop db2start

Extract the certificate from the key database for the db2cli client

```
gsk8capicmd_64 -cert -extract -db db2_ssl.kdb -label CMODLabel -stashed -target
   /home/archive/db2_ssl/db2_ssl.crt
```

Create the db2cli client information

Create the information in home/archive/sqllib/cfg/db2dsdriver.cfg.

```
db2cli writecfg add -database ARCHIVE -host odsrvr.mydomain.mycompany.com -port 50001
db2cli writecfg add -database ARCHIVE -host odsrvr.mydomain.mycompany.com -port 50001
    -parameter "SecurityTransportMode=SSL"

db2cli writecfg add -database ARCHIVE -host odsrvr.mydomain.mycompany.com -port 50001
    -parameter "SSLServerCertificate=/home/archive/db2_ssl/db2_ssl.crt"

db2cli writecfg add -dsn ARCHIVE -database ARCHIVE -host odsrvr.mydomain.mycompany.com
    -port 50001
```

The resulting configuration is shown below

Manually edit the db2cli.ini file

```
cat /home/archive/sqllib/cfg/db2cli.ini
   [ARCHIVE]
   Database=ARCHIVE
   Protocol=tcpip
   Hostname=odsrvr.mydomain.mycompany.com
   Servicename=50001
   Security=ssl
   SSLClientKeystoredb=/home/archive/db2 ssl/db2 ssl.kdb
   SSLClientKeystash=/home/archive/db2 ssl/db2 ssl.sth
   [ODBC]
   DRIVER=IBM DB2 ODBC DRIVER - ARCHIVE
   UID=root
   AUTHENTICATION=SERVER
   PORT=50001
   HOSTNAME=odsrvr.mydomain.mycompany.com
   PROTOCOL=TCPIP
   DATABASE=ARCHIVE
   SECURITY=SSL
   SSLClientKeystoredb=/home/archive/db2_ssl/db2_ssl.kdb
   SSLClientKeystash=/home/archive/db2_ssl/db2_ssl.sth
```

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Validate the connection

```
db2cli validate -dsn ARCHIVE -connect -user root -passwd passwd
 ______
 Client information for the current copy:
 ______
                : IBM DB2 Enterprise Server Edition
 Client Package Type
 Client Version (level/bit): DB2 v10.5.0.3 (s140203/64-bit)
 Client Platform
                : Linux/X8664
 Install/Instance Path
                : /opt/ibm/db2/V10.5
 DB2DSDRIVER CFG PATH value: <not-set>
 db2dsdriver.cfg Path
                : /home/archive/sqllib/cfg/db2dsdriver.cfg
 DB2CLIINIPATH value
                : <not-set>
 db2cli.ini Path
                : /home/archive/sqllib/cfg/db2cli.ini
                : /home/archive/sqllib/db2dump/db2diag.log
 db2diag.log Path
 ______
 db2dsdriver.cfg schema validation for the entire file:
 ______
 Success: The schema validation completed successfully without any errors.
 ______
 db2cli.ini validation for data source name "ARCHIVE":
 ______
 [ Keywords used for the connection ]
 Keyword
                Value
 ______
 DATABASE
                ARCHIVE
                TCPIP
 PROTOCOL
 HOSTNAME
                odsrvr.mydomain.mycompany.com
 SERVICENAME
                50001
                SSL
 SECURITY
 SSLCLIENTKEYSTOREDB
                /home/archive/db2_ss1.kdb
 SSLCLIENTKEYSTASH
                /home/archive/db2 ssl/db2 ssl.sth
 ______
 db2dsdriver.cfg validation for data source name "ARCHIVE":
 ______
 [ Parameters used for the connection ]
                Valid For
 Keywords
                        Value
 ______
 SECURITYTRANSPORTMODE
                CLI, .NET
                        SSL
                **UNKNOWN**
 SSLServerCertificate
 ______
 Connection attempt for data source name "ARCHIVE":
 ______
 [SUCCESS]
 ______
 The validation is completed.
 ______
```

Update the stash file

Add the Db2 userid and password to the ars.stash file defined in the ARS.INI file:

```
arsstash -a 8 -c -s /opt/ibm/ondemand/V9.5/config/ars.stash -u root
```

You should now be able to connect Content Manager OnDemand to Db2 via an SSL connection without setting the LD_LIBRARY_PATH environment variable.

Configuring ODWEK to use SSL

The Content Manager OnDemand server can be configured to listen on either a non-SSL port or an SSL port, or it can listen on both types of ports. The ODWEK Java APIs must also be configured for SSL in order to logon to an SSL port on the Content Manager OnDemand server. Once ODWEK has the information it needs, all communication between it and the Content Manager OnDemand server is done using SSL.*

There are three SSL-specific values that must be passed to ODWEK. This can be accomplished using a java.util.Properties object which is passed to the ODConfig constructor. The SSL values can be specified as follows:

```
Properties cfgProps = new Properties();
cfgProps.setProperty(ODConfig.USE_SSL_DEFAULT, "TRUE");
cfgProps.setProperty(ODConfig.SSL_KEYRINGFILE, "/opt/ssl/ondemand.kdb");
cfgProps.setProperty(ODConfig.SSL_KEYRINGSTASH, "/opt/ssl/ondemand.sth");
```

The Properties object is then passed to the ODConfig constructor for those values to be picked up as follows:

cfgProps); //Additional properties

Provided the SSL .kdb and .sth files are valid and the server has been configured to listen on an SSL port, the only other important value to be set is to make sure the proper port is specified before logon.

```
odServer.setPort(14450); // this is the SSL port the server has been configured to use odServer.logon( "odserver.mycompany.com", "admin", "secret");
```

For instructions on how to configure the Content Manager OnDemand server to listen on an SSL port, refer to the Content Manager OnDemand Knowledge Center.

*NOTE - The support of SSL and ODWEK refers specifically to the transfer of data between ODWEK and the Content Manager OnDemand server(s) and does not imply a level of support from the browser to ODWEK. Using SSL from the browser to ODWEK has always been allowed and does not require any support from ODWEK; it is the application/web developer's responsibility to enable such support.

Tips - z/OS

z/OS Quick Hits

Why is there a slash in the PARM line?

The slash is for the parser for that line. Everything to the left is either an ENVAR or an LE parameter, everything to the right is a Content Manager OnDemand parameter.

For example:

```
//ARSSOCKD EXEC PGM=ARSSOCKD,REGION=0M,TIME=NOLIMIT,
// PARM='/-S -I CMODSP03 -v'

//ARSSOCKD EXEC PGM=ARSSOCKD,REGION=0M,TIME=NOLIMIT,
// PARM='ENVAR(GSK_PROTOCOL_TLSV1_2=ON,GSK_PROTOCOL_TLSV1=0)
// /-S -I CMODSP03 -v'

//ARSSOCKD EXEC PGM=ARSSOCKD,REGION=0M,TIME=NOLIMIT,
// PARM='RPTOPTS(ON)/-S -I CMODSP03 -v'
```

LE parameter override

Support is still seeing occurrences where the LE parameters have been overridden to values less than the default.

It should be no surprise that newer releases of Content Manager OnDemand require more virtual storage as we continue moving into the 64-bit z/OS world.

This technote explains how to easily tell where and how your LE parameter values are set:

<u>Content Manager OnDemand for z/OS - Initial Recommended LE</u> Settings

Running multiple levels of ODF

Because ODF makes use of structures in (E)CSA, you cannot run more than one level of ODF on a single LPAR at a time.

The only exception to this is if you don't use jobnames for distributions.

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Tips – IBM i – V7.2 & V7.3

Many of the enhancements made to Content Manager OnDemand for i at version 7.4 have now been ported back to versions 7.2 and 7.3. More details are included in the tips below.

Cloud storage option for archive media

Cloud storage is now supported as an archive media for Content Manager OnDemand for i. Cloud support requires the IBM CloudTM Storage Solutions for i (5733-ICC) licensed program product.

Cloud Storage Solutions for i V1.2.0 with the latest PTFs includes a modern, interactive GUI interface. You can see all of your storage locations and view the contents of the storage.

Cloud Storage Solutions for i V1.2.0 supports the following providers and protocols:

- Amazon AWS S3
- IBM Cloud Object Storage
- IBM Cloud (formerly called IBM Bluemix, Cleversafe, and IBM Softlayer (S3 Protocol))
- Softlayer "Legacy" (Swift Protocol)
- FTP

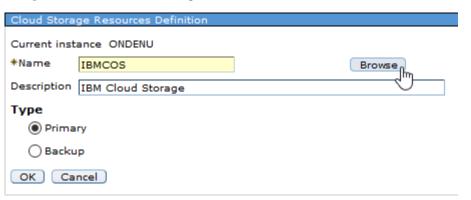
Notes:

- 1. When archived data is retrieved from cloud storage, the entire object is retrieved. Contrast this with retrieval from a disk pool where a partial object containing just the data requested is retrieved. (You can optionally choose to stage the data back to disk for a specified number of days, so that retrieved data is kept on disk for the number of days and then deleted the next time Archived Storage Manager (ASM) is run.)
- 2. The Use compression parameter (CMPRSDTA) on the Cloud Storage Solutions for i commands should be set to *NO. Archived data has already been compressed by Content Manager OnDemand. Compressing it twice might result in larger files and will use CPU unnecessarily.
- 3. The Use encryption parameter (ENCRYPTDTA) on the Cloud Storage Solutions for i commands can be set to *YES if you want the archived data encrypted on the cloud and if it is not already encrypted by Content Manager OnDemand. If the archive data has already been encrypted by Content Manager OnDemand, this parameter should be set to *NO. Configuring Content Manager OnDemand to encrypt your archived data will ensure that it is encrypted regardless of the media used now or in the future.

Content Manager OnDemand component of IBM Navigator for i enhanced

A new option has been added to create and manage cloud storage resources. The design of the Content Manager OnDemand component of IBM Navigator for i has also been updated to reflect a format similar to the operating system components.

You must specify a cloud storage resource name which corresponds to an existing cloud storage resource on your IBM i system that you created by using the IBM Cloud Storage Solutions for i licensed program product. The type of data (primary or backup) that will be stored to the defined cloud storage resource must also be specified.



When you choose cloud storage for your archive storage media type, you can optionally choose to stage the data back to disk for a number of days after the data has been retrieved from the cloud. If the Stage to disk when retrieved from tape or cloud checkbox is selected, (see the example below) retrieved data is kept on disk for the specified number of days after retrieval. The Stage to disk option can increase retrieval performance significantly if you expect that the archived data, once retrieved from cloud storage, might be retrieved again within the specified time period. After the specified number of days passes, the data remains on disk until the first time the Archived Storage Management (ASM) process is run.

Note that Tivoli Storage Manager (TSM) support has been removed from the Content Manager OnDemand component of IBM Navigator for i. The TSM APIs have been out of support since April, 2015.

igration Policy Storage Level Definiitor Add a migration policy storage level definition Current instance ONDENU Policy name DISK *Level identifier LVL2 Description Cloud level Disabled *Primary media type Cloud Storage Resource 🗸 *Primary storage group IBMCOS V BRMS media pool Duration at this level No maximum Days at this level 1825 1 - 999,998 Days Backup copy Create backup copy Backup media type [Empty] v Backup storage group [Empty] V BRMS media pool Stage to disk Stage to disk when retrieved from tape or cloud Duration on disk in days 7 1 - 1,000 Cancel

New parameter for the STRASMOND command

The Start Archived Storage Management (STRASMOND) command has a new Trace (TRACE) parameter to facilitate tracing when requested by software support.

Specifying TRACE(*YES) will impact how long STRASMOND runs. A spooled file will be created that contains the trace output. The file name will be QSYSPRT with user data of ASM_TRACE.

New parameter for the STRDSMOND command

The Start Disk Storage Management (STRDSMOND) command has a new Force ASM to end (ENDASM) parameter to enable you to end the Archived Storage Management (ASM) process (which, by default, runs after DSM completes) at a specified time or after a specified number of hours.

Prior to this update, the ENDASM parameter was only available on the Start Archived Storage Management (STRASMOND) command.

Note: If ASM completes the movement of all eligible data before the specified ending time, it will end before the specified end time or number of hours occurs.

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The possible values for the ENDASM parameter are:

*NO

Do not force the ASM process to end. ASM will end when it finishes processing all data that is eligible to move from one migration policy level to the next.

*NBRHRS

The ASM process is forced to end after it runs for the number of hours specified by the NBRHRS parameter. ASM completes the movement of the data that is currently being processed before it ends.

*ENDTIME

The ASM process is forced to end at the time specified by the ENDTIME parameter. ASM completes the movement of the data that is currently being processed before it ends.

New parameter for the PRTRPTOND, PRTDOCOND, QRYDOCOND, and RTVDOCOND commands

The Print Report (PRTRPTOND), Print document (PRTDOCOND), Query document (QRYDOCOND), and Retrieve document (RTVDOCOND) commands have a new Retrieve in load order (RTVLODORD) parameter to control which documents are included and in what order the documents are included.

*NO

The pages of the report will be printed, queried, or retrieved, but the original load order is not guaranteed. Pages will be included even if index values have been updated. Only documents to which the user is authorized will be included.

*YES

The pages of the report will be printed, queried, or retrieved in the order in which they were loaded. Only documents to which the user is authorized are included. **WARNING:** When using this option, Content Manager OnDemand cannot retrieve any documents that have index values that have been updated. Do not specify *YES unless you are certain that no indexes have been changed. If you have updated any indexes, use *NO instead.

Note that the default value for the Retrieve in load order parameter is *YES for V7.2 and V7.3 so that these commands function identically to the way they did before installing the PTFs. At V7.4, the default value for the Retrieve in load order parameter is *NO, to ensure that all documents in the original load are retrieved.

Additional Information

Knowledge Centers

Content Manager OnDemand for Multiplatforms Knowledge Centers

Content Manager OnDemand for i Knowledge Centers

Content Manager OnDemand for z/OS Knowledge Centers

Publication Libraries - PDF versions of the documentation

Multiplatform	Version 9.5	Version 10.1	_
z/OS	Version 9.5	Version 10.1	_
IBM i	Version 7.2	Version 7.3	Version 7.4

Product System Requirements

Multiplatform	Version 9.5	Version 10.1	-
z/OS	Version 9.5	Version 10.1	_
IBM i	Version 7.2	Version 7.3	Version 7.4

More Enterprise Content Management web sites

IBM Content Manager OnDemand Product Overview

<u>Compatibility Matrix</u> for the Content Manager OnDemand clients and servers

IBM Content Navigator Product Overview

IBM Software <u>Support Lifecycle</u> Policies (search for Content Manager OnDemand)

Social Media

Follow <u>@IBM_ECM</u> on twitter for almost real-time news & updates on Content Manager OnDemand. For more information and links to all social media sites, see support item 1673183.

OnDemand User Group

The primary objective of the <u>OnDemand User Group</u> (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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