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.
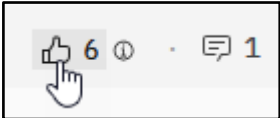
Previous editions of this newsletter can be found in support item 628001.

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.

Submitting enhancement requests to IBM

If you want to request an enhancement to Content Manager OnDemand, you can do so using the IBM Ideas portal. Prior to creating a new idea, it is a good practice to review existing ideas to determine if another person has already requested the same enhancement. You can upvote and comment on existing ideas by clicking the icons under the idea title.

Simply visit https://ideas.ibm.com. Log in. Click the 'Add new idea' button. In the 'Find your product' field, select Content Manager OnDemand (CMOD). Enter a summary sentence, a description of the idea, the business justification for the idea, and any other details that are relevant to your request.

IBM and the Content Manager OnDemand development team review the ideas for possible inclusion in a future release or fix pack.

Additional information on the IBM Ideas process is available in support item 6438917.

Notes:

- The portal requires an IBM ID and password, which you can create on your first visit.
- **Submitting your idea is not a guarantee that it will be implemented in the product.**

Global Content Manager OnDemand education

Hiring new Content Manager OnDemand administrators or needing a Content Manager OnDemand refresh?

Maybe you were not trained and are simply creating Content Manager OnDemand definitions by copying old ones? Whatever your level of skill, 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.

OnDemand University (ODU) has moved from enChoice, Inc. to CMODSkills, LLC, an IBM-authorized Content Manager OnDemand education provider.

CMODSkills is the foremost training provider with the most comprehensive Content Manager OnDemand education options for new and existing Content Manager OnDemand users.

All Content Manager OnDemand education is available for remote learning, providing 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 Instructor Led Online (ILO) courses equip Content Manager OnDemand users with the in-depth knowledge and techniques necessary for getting the maximum benefit from their Content Manager OnDemand systems and prepare students for the IBM Content Manager OnDemand System Administrator badge/certification exam.

The ILO classes include live, interactive presentations and hands-on labs.

The class details, including the class curriculum, can be found at cmodskills.com.

NEW in 2025: A Public training class will be held the week of **March 31st to April 4th, 2025.** This is a great opportunity for those organizations wanting to train one or two students in a classroom setting. This Public (versus Private) session will include students from several companies. There are several openings available for this session and this session is guaranteed to be held.

The cost per student for this training session is $3,200 USD. (An additional discount of 15% can be applied for referencing the Newsletter.) To register or for additional information, contact CMODSkills@outlook.com.

Custom or private remote or onsite classes are also available – simply contact either your IBM Technology Expert Labs team or CMODSkills@outlook.com for more information.

Tips — Cross Platform

How to extract and reload Content Manager OnDemand data by using ARSDOC GET

Question

Can the output from the Content Manager OnDemand ARSDOC GET function produce output files that can be used to reload documents into another Content Manager OnDemand instance?

Answer

Yes. The ARSDOC GET function outputs exactly what the other Content Manager OnDemand indexers output. You get a Generic indexer index file (*.ind), an output file that contains the documents concatenated together (*.out), and a resource file (*.res) that contains the resource(s) used by the documents in the output file, if the data is PDF or AFP. These files can then be used to reload the data to another Content Manager OnDemand instance by using the ARSLOAD program with the -X G parameter to cause ARSLOAD to use the Generic indexer.

The following example uses PDF data, but the process is similar for AFP or Line data. For AFP data, the .res file contains AFP resources (instead of PDF resources). There is no .res file for Line data.

PDF example

In this example, the ARSDOC GET function outputs exactly what the Content Manager OnDemand PDF Indexer outputs. You get a Generic indexer index file (*.ind), an output file that contains the PDF documents concatenated together (*.out), and a PDF resource file (*.res) that contains the PDF resource(s) used by the documents in the output file. The ARSDOC GET function does not output a standard PDF data stream. You cannot use Adobe products to validate the output file. But, these three files can be used to reload the data to another Content Manager OnDemand instance by using the ARSLOAD program with the -X G parameter to cause ARSLOAD to use the Generic indexer.

The PDF documents in the output file have already been indexed and the values for each document, including the offsets and lengths, are included in the generated Generic indexer index file. Since these PDF documents are already indexed, the ARSLOAD program needs to override the indexer defined in the Content Manager OnDemand application definition by using the -X G parameter to tell ARSLOAD to use the Generic indexer index file.

Example details

Retrieve the PDF data with ARSDOC GET -acgN as shown in the following command. This can be done on any platform since Content Manager OnDemand is not trying to reconstruct the PDF documents.

```
arsdoc get -h CMODzLinux -u cmoduser -p cmodpass -f MyPDFDocs
    -x 21282-1-0-1FAA-202410110000000-20241011000000-21283 -v
    -acgN -d ./ -o MyPDFDocs -S
    '10/11/2024,10/11/2024,%m/%d/%Y'
```

See the Content Manager OnDemand [ARSDOC GET documentation](#) for an explanation of each parameter.

ARSDOC GET generates three output files:

```
MyPDFDocs.2.MyPDFDocsAG.MyPDFDocsApp.ind
MyPDFDocs.2.MyPDFDocsAG.MyPDFDocsApp.out
MyPDFDocs.2.MyPDFDocsAG.MyPDFDocsApp.res
```

- The MyPDFDocs.2.MyPDFDocsAG.MyPDFDocsApp.ind file contains all the index values, offsets, and lengths for each PDF document written to the MyPDFDocs.2.MyPDFDocsAG.MyPDFDocsApp.out file.

- The MyPDFDocs.2.MyPDFDocsAG.MyPDFDocsApp.res contains the PDF resource used by all the PDF documents in the MyPDFDocs.2.MyPDFDocsAG.MyPDFDocsApp.out file.

- The MyPDFDocs.2.MyPDFDocsAG.MyPDFDocsApp.out file contains the PDF documents concatenated together.

To reload this PDF data to another Content Manager OnDemand instance, use the ARSLOAD program with the -X G parameter. Be sure to specify the remote Content Manager OnDemand server instance name or hostname with the -I or -h parameter. Use the output file name without the file extension. ARSLOAD can be run on any platform since the PDF data is already indexed and Content Manager OnDemand is not trying to reconstruct the PDF.

```
arsload -vn -X G -I REMOTECMOD -u arsloaduser -p arsloadpass
    -g MyPDFDocsAG MyPDFDocs.2.MyPDFDocsAG.MyPDFDocsApp
```

See the Content Manager OnDemand [ARSLOAD documentation](#) for an explanation of each parameter.

IBM i native command alternative

There are Content Manager OnDemand for i commands that can be used instead of ARSDOC GET and ARSLOAD.

Instead of ARSDOC GET, you can use the Retrieve Document (RTVDOCOND) command. For example:

```
RTVDOCOND FOLDER('MyPDFDocs') RPTID('21282-1-0-1FAA-
    202410110000000-20241011000000-21283') STMF('MyPDFDocs')
    DIR('/Migrate') SEGDATE('10/11/2024' '10/11/2024')
    DATFMT(*MDY) CONCAT(*YES) RSCGRP(*YES) CRTIDXF(*YES)
    ADDNAM(*YES) INSTANCE(QUSROND)
```

Instead of ARSLOAD, you can use the Add Report (ADDRPTOND) command. For example:

```
ADDRPTOND APPGRP('MyPDFDocsAG') INPUT(*STMF)
    STMF('/Migrate/MyPDFDocs.2.MyPDFDocsAG.MyPDFDocsApp')
    INSTANCE(REMOTECMOD)
    STASHFILE('/QIBM/UserData/OnDemand/CONFIG/ondemand.sth')
```

If you have multiple files to load, you can use the Start Monitor (STRMONOND) command. For example:

```
STRMONOND TYPE(*DIR) DIR('/Migrate') APPGRPSRC(*THIRD)
    CHKITV(10) INSTANCE(REMOTECMOD)
    STASHFILE('/QIBM/UserData/OnDemand/CONFIG/ondemand.sth')
```

For more information, see the Content Manager OnDemand for i [command documentation](#).

This tip adapted from [support item 7175240](#).

Deploying the line data HTML5 viewer

Question

What steps are required to deploy the line data HTML5 viewer with Content Manager OnDemand?

Answer

The line data HTML5 viewer is provided for viewing line data documents from a web browser when using the Content Manager OnDemand Web Enablement Kit (ODWEK). To use the viewer, you must make some code changes to your servlet environment, and then deploy the viewer.

Launching

The line data HTML5 viewer is launched by redirecting the servlet request to open a document. When your servlet receives a request to open a line data document, it must forward this request to the Viewer.html file, passing some parameters along with the request. There are four parameters that must be passed and are as follows:

action - This parameter should be set to a callback servlet. In this servlet you will process the viewerPassthru() call. See ODWEK API documentation for more information.

docid - This is the encrypted docid for the line data document you are wanting to view. Make sure the value here is encoded. (See URLEncoder class.)

folder - The name of the folder. Special characters in Content Manager OnDemand folder names require that the folder name be URL encoded. (See URLEncoder class.)

language - This is the language of the browser for this request. This can be obtained by reading the Accept-Language header of the request object.

The sample code below shows how your redirect might look:

```
response.sendRedirect (request.getContextPath() +
    "LineDataViewer/Viewer.html" +

        "?action=" + request.getRequestURI() +

        "&docid=" + URLEncoder.encode(docId, "UTF-8") +

        "&folder=" + URLEncoder.encode
            (odFolder.getName(), "UTF-8") +
```

```
      "&language=" + request.getHeader("Accept-
              Language"));
```

This will redirect the browser to Viewer.html which, once downloaded, will start the process of retrieving and viewing the specified line data document. Viewer.html will make application calls to the servlet that you specified in the action parameter.

Deployment

The viewer code itself ships with Content Manager OnDemand and is entirely contained in a zip file named LineDataHTML5Viewer.zip. As you can see in the code sample, this zip file was extracted to a directory called 'LineDataViewer' at the root level of the web application. Your web paths may vary.

Notes:

- The line data HTML5 viewer will work with ODWEK version 10.1.0.3 or later, however enhancements were made at version 10.1.0.5, which is the recommended minimum.
- The line data HTML5 viewer is supported on Apple Safari, Google Chrome, Microsoft Edge, and Mozilla Firefox browsers. It is not supported on Microsoft Internet Explorer.
- It is important that your web server be configured to return json files as application/json. If your web server is not configured to return json as application/json, the viewer will not run. A look at your browser debugger console (see your browser documentation) might show the following error(s):

```
Font: ']' not found

Object doesn't support property or method 'splice'.
```

You can also examine the response headers in the browser (see your browser documentation) to verify the proper mime type is being returned.

This tip adapted from support item 296863.

Tips – Multiplatforms

Should I use ARSDB to perform backups of Content Manager OnDemand?

It is recommended that you use database-specific utilities, instead of using the ARSDB program, to manage your database backup and recovery. The database utilities provided with Db2, Oracle, and SQL Server offer a more robust set of backup and recovery solutions that cannot be provided within the ARSDB program itself.

Installing fix pack 10.5.0.8 on Windows

When installing fix pack 10.5.0.8 on Microsoft Windows, you might receive the error message: "The JVM used for this installer seems to have been installed in a unsecured location (non-admin user folder). Installer would now exit. Please reach out to your vendor for more details."

You have Java 1.8 installed and that JVM worked for the fix pack 10.5.0.4 installation.

The reasons for this error message are:

1. Prior to 10.5.0.8, the Content Manager OnDemand fix pack installer supported Java 1.8. Any existing JVM 1.8 or higher installed on the target system is used by the fix pack installer from 10.5.0.2 to 10.5.0.7.
2. Starting 10.5.0.8, the Content Manager OnDemand fix pack installer dropped support for JVM 1.8. The fix pack is bundled with the latest Java OpenJDK 21 and the installer will also work with JVM 11 and 17.
3. The latest version of Java 21 bundled with fix pack 10.5.0.8 imposes restrictions on Windows that require the installer be run by a user who is in the local Administrators group. The Content Manager OnDemand fix pack installer does not impose this restriction.

To determine if the user is in the local Administrators group, run the following commands.

1. Open a Windows Administrator Command Prompt, which is labeled as "Command Prompt (Admin).
2. Type "whoami" to find out the current logged in user ID.
3. Type "net localgroup administrators" to determine if the currently logged in user ID is listed.

If the logged in user ID is not listed in the local Administrators group, that would be the reason for the error message.

Solutions

Any one of the following solutions will work:

1. Add the user ID used to install Content Manager OnDemand fix pack 10.5.0.8 to the local Administrators group on the local host, and run the install again.
2. Log in to the Windows server with a user ID that is in the local Administrators group, and use that user ID to install the Content Manager OnDemand fix pack.
3. Install a version of Java 11, 17, or 21 on the Windows system and add the path to java.exe to the PATH environment variable at the system level. After that, they should be able to open a Windows command prompt and type "java -version" to verify that Java 11, 17, or 21 is available.

   By installing a version of Java 11, 17, or 21, the Content Manager OnDemand 10.5.0.8 fix pack installer will be able to use it instead of unpacking the bundled version of Java 21 to a unsecured location (non-admin user folder) during the install when running from a user ID who is not in the local Administrators group.

4. Create a temporary directory, such as c:\temp.

   Unpack Java 11, 17, or 21 to C:\temp, such as C:\temp\jre11.

   Start a Windows Command Prompt and type: odwin.exe LAX_VM <java_path>, where <java_path> is the path to java.exe, such as C:\temp\jre11\bin\java.exe.

Tips – z/OS

Quick Hits

OS/390 Indexer – How many pages are reported?

Before it stores the document (after the anyexit, input exit, and indexer exits) the 390 Indexer looks through all of the lines and counts the '1' characters in column one. Depending on how the user wants pagination reported, for example 10 pages, there must be 10 lines with '1's in column one of the document.

Installing PTFs for Content Manager OnDemand for z/OS

Unlike Content Manager OnDemand for Multiplatforms, fix pack PTFs on z/OS are not necessarily cumulative. It is quite possible that a previously released PTF will not be part of a fix pack. Content Manager OnDemand development highly recommends installing all service-to-date when installing a fix pack because that is the level that all testing is performed against.

The list of all APARs and PTFs for Content Manager OnDemand for z/OS can be found in support item 7040762.

In what sequence should I end the Content Manager OnDemand server and related tasks?

You should ensure that the ARSLOAD started tasks, ARSYSPIN, mid-server, and ODF are all brought down before ARSSOCKD.
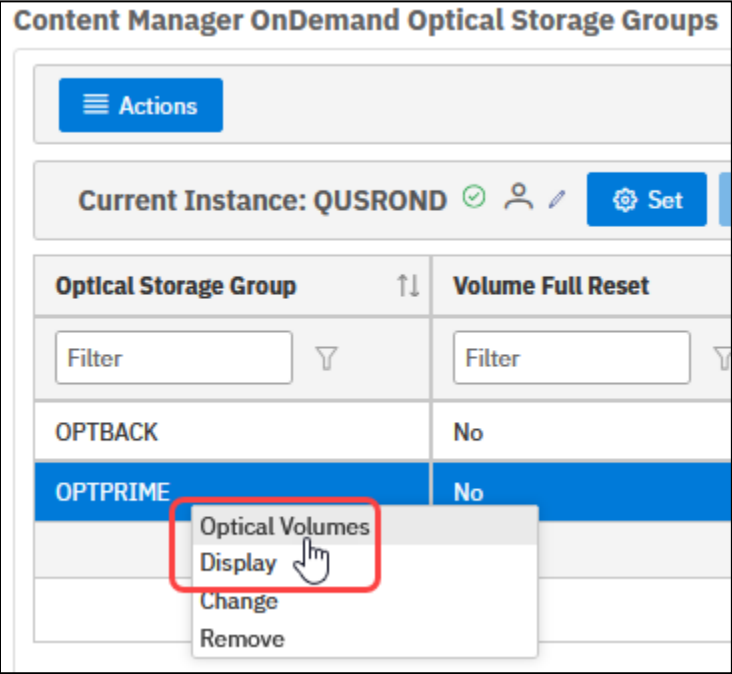
You should then ensure that ARSSOCKD has completely ended before shutting down Db2 and OAM.
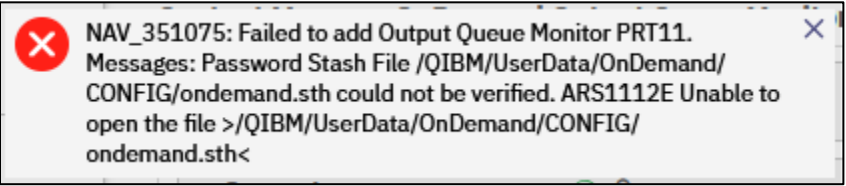
Tips – IBM i

IBM Navigator for i enhancements

The Content Manager OnDemand for i component of IBM Navigator for i contains the following enhancements in the fourth quarter update.

An option is added to allow listing the Optical Volumes for a particular Optical Storage Group directly from the Optical Storage Groups list or the Display Optical Storage Group interface.
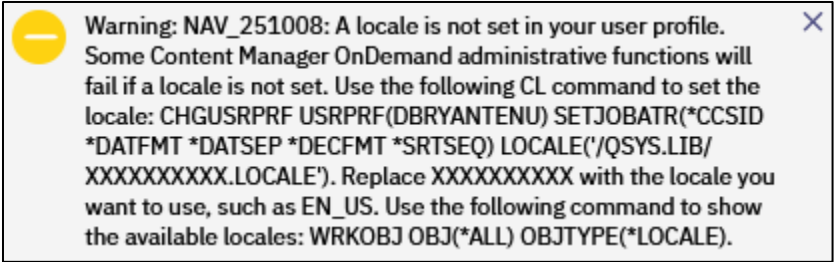

If a Password Stash File is specified during an Add, Change, or Start action for Directory Monitors or Output Queue Monitors, a check is made to ensure that the file is a valid stash file. If the file specified is not a valid stash file, a message similar to the following will be displayed:
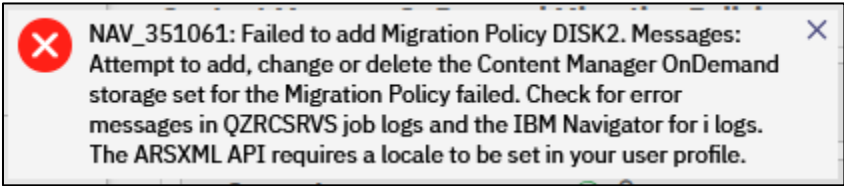

A warning is displayed if your user profile does not specify a locale because some administration functions fail if a locale is not set.

When you first use any Content Manager OnDemand function in IBM Navigator for i you will see the following message:

If you attempt to work with migration policies, you will see this message:

Listed in the table below are the required PTFs and minimum server levels for the fourth quarter Navigator update. You can also order the Content Manager OnDemand PTF Group, which will install all available Content Manger PTFs. This includes server version 10.5.0.8, if not already installed.

Version	Content Manager OnDemand PTF	IBM i PTF	Content Manager OnDemand PTF Group Level	Minimum Server Version
V7.5	SJ03019	SJ02361	10	10.5.0.4
V7.4	SJ03020	SJ02360	20	10.5.0.6

See support item 6486565 for more information on IBM Navigator for i.

It is recommended that you order and apply the latest Content Manager OnDemand for i PTF group to install this enhancement.

Controlling the run priority of Content Manager OnDemand for i instance server jobs

How do I control the run priority of Content Manager OnDemand for i instance server jobs?

The run priority of instance server jobs is set by default by the *ANY routing entry in the QSYSWRK subsystem description. Typically, this setting defaults to run priority 50. However, the run priority setting depends on the class that is specified for the *ANY routing entry in subsystem QSYSWRK. To change this for all instance server jobs, you can add a routing entry to the QSYSWRK subsystem description by using the Add Routing Entry (ADDRTGE) command as follows:

```
ADDRTGE SBSD(QSYS/QSYSWRK) SEQNBR(nnnn) CMPVAL('QRLMSERVER')
    PGM(QSYS/QCMD) CLS(class)
```

where

nnnn is an unused routing sequence number in the QSYSWRK subsystem that is lower than the *ANY routing entry sequence number.

class is the name of an IBM i class object (OBJTYPE(*CLS)) that contains the attributes you want to use.

An example of the command is:

```
ADDRTGE SBSD(QSYS/QSYSWRK) SEQNBR(1000) CMPVAL('QRLMSERVER')
    PGM(QSYS/QCMD) CLS(QSYS/QSYSCLS35)
```

The system ships with the following classes that you might consider using:

```
QSYS/QSYSCLS25 (Run priority of 25)
QSYS/QSYSCLS35 (Run priority of 35)
```

To specify a different run priority, for example 45, you need to create your own class. An example command is:

```
CRTCLS CLS(QGPL/ONDSVR45) RUNPTY(45) TIMESLICE(2000)
    PURGE(*YES) DFTWAIT(30) CPUTIME(*NOMAX) MAXTMPSTG(*NOMAX)
    MAXTHD(*NOMAX) TEXT('Content Manager OnDemand run
    priority 45 class')
```

After creating the class, specify it as the class name in the routing entry for QRLMSERVER in subsystem QSYSWRK.

This tip adapted from support item 335241.

How to end jobs on Content Manager OnDemand for i servers

When you need to end Content Manager OnDemand for i jobs, you should never use ENDJOB OPTION(*IMMED). Ending a job immediately might result in database files being left in an invalid state, in lost data during storage management, or in the incorrect cleanup of temporary files.

When you need to end a Content Manager OnDemand server job, you should use the End TCP Server (ENDTCPSVR) command. You can end all instances or end just one instance by specifying the INSTANCE parameter, such as ENDTCPSVR *ONDMD INSTANCE(QUSROND).

When you need to end an output queue or directory monitor, you should use the End Monitor (ENDMONOND) command. If you plan to end the monitors at a specific time, you can specify the Time to end parameter (ENDTIME keyword) when you start the monitor. For example, if you need the monitor to end at 10PM you should start the monitor with ENDTIME(220000).

If you need to end an Archived Storage Manager (ASM) job before file processing has completed, you must end the job controlled with a delay of 600 seconds or more. The delay allows ASM to complete the current task before ending. If you need to end ASM at a specific time, you should specify the Time to end parameter (ENDTIME keyword) when you start ASM. For example, if you want the ASM job to end at 6AM you should start ASM with ENDTIME(060000). The Time to end parameter is also

available if ASM is run by using the STRASMOND(*YES) parameter on the Start Disk Storage Management (STRDSMOND) command.

If you need to end a Disk Storage Management (DSM) job, you must end the job controlled with a delay 600 seconds or more. The delay allows DSM to complete the current task before ending.

Disk Storage Management enhanced

An enhancement to Disk Storage Management (STRDSMOND command) prevents multiple DSM jobs from running at the same time for the same application group. In addition, if DSM is started for all application groups (APPGRP(*ALL)), another DSM job cannot be started until the first job has completed. You can enable this enhancement by installing the PTF listed in the table below. Or you can install the PTF group at or above the minimum group level listed in the table below.

Release	PTF	PTF Group	Minimum Group Level	Current Group Level
V7.5	SI83610	SF99669	6	10
V7.4	SI83611	SF99652	15	20

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 7.4](#)	[Version 7.5](#)

More Enterprise Content Management 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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