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 widescreen devices. Use the full screen viewing option in Adobe Reader or Acrobat (Ctrl+L) for best results.

Server version 10.5.0.2 available

Multiplatforms

The V10.5.0.2 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 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 V10.5.0.2.

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

End of Support for Content Manager OnDemand for i V7.2

Content Manager OnDemand for i version 7.2 will reach End of Support on **April 30, 2021**. For more information, visit the IBM software support lifecycle site. Search for Content Manager OnDemand.

Customers using Content Manager OnDemand for i V7.2 should upgrade to Content Manager OnDemand for i V7.3 or V7.4 prior to the V7.2 end of support date.

See announcement letter 920-045 for more details.

IBM Content Manager OnDemand virtual workshops

Content Manager OnDemand Workshop 101

The IBM Content Manager OnDemand team has designed an entry-level workshop. This is an introduction to IBM Content Manager OnDemand, perfect for an organization looking to understand use cases and its value proposition or for a new team member, just getting up to speed on its capabilities.

This virtual workshop has already been held; the replay is available here.

Content Manager OnDemand Workshop 201 Series

Designed for technical attendees and knowledgeable business analysts, each virtual workshop will cover a different topic.

May 12, 2021 @ 11 AM ET/8 AM PT REST Services

June23, 2021 @ 11 AM ET/8 AM PT Remote Systems including Hybrid deployment and Storage updates

August4, 2021 @ 11 AM ET/8 AM PT The evolution of ePresentment

Sept. 15, 2021 @ 11 AM ET/8 AM PT Useful tips and tricks

October20,2021 @ 11 AM ET/8 AM PT Robotic Process Automation with CMOD

More detail and links for enrollment can be found online.

IBM Documentation replaces IBM Knowledge Center

On April 1, IBM released the newest version of the IBM Knowledge Center with a new user experience and a new name ~ IBM Documentation. According to the developers, the new site was a collaborative effort across many teams, guided by IBM strategy, analysis of metrics, and extensive user research. The new IBM Documentation repository is designed to make it easier than ever to find IBM product information.

IBM Documentation (short name IBM Docs) is cloud-based. The main landing page is ibm.com/docs/. Previous Knowledge Center links have permanent redirects in place so that bookmarks for Knowledge Center topics will continue to work.

See the new links under the Documentation heading on the last page of this newsletter.

IBM Content Manager OnDemand education

Still working from home? Now is a great time to get educated on several of the newer features in Content Manager OnDemand V10.5. Make sure your Content Manager OnDemand team has a strong understanding of the fundamentals of the system, its purpose, and how to administer it. 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 class is scheduled for the following weeks in 2021:

- May 10-14, 2021
- June 14-18, 2021
- August 23-27, 2021
- October 18-22, 2021

News (continued)

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

Customizing the OnDemand Windows client toolbar

As you use the OnDemand client, you might find there are certain menu options you use more frequently than others, and some you might not use at all. You can customize your OnDemand client toolbar to give you quicker access to the options you use most frequently, and remove options you only use infrequently. When you select Customize Toolbar on the Options menu, as shown in the figure below, the OnDemand client displays the Customize Toolbar window.
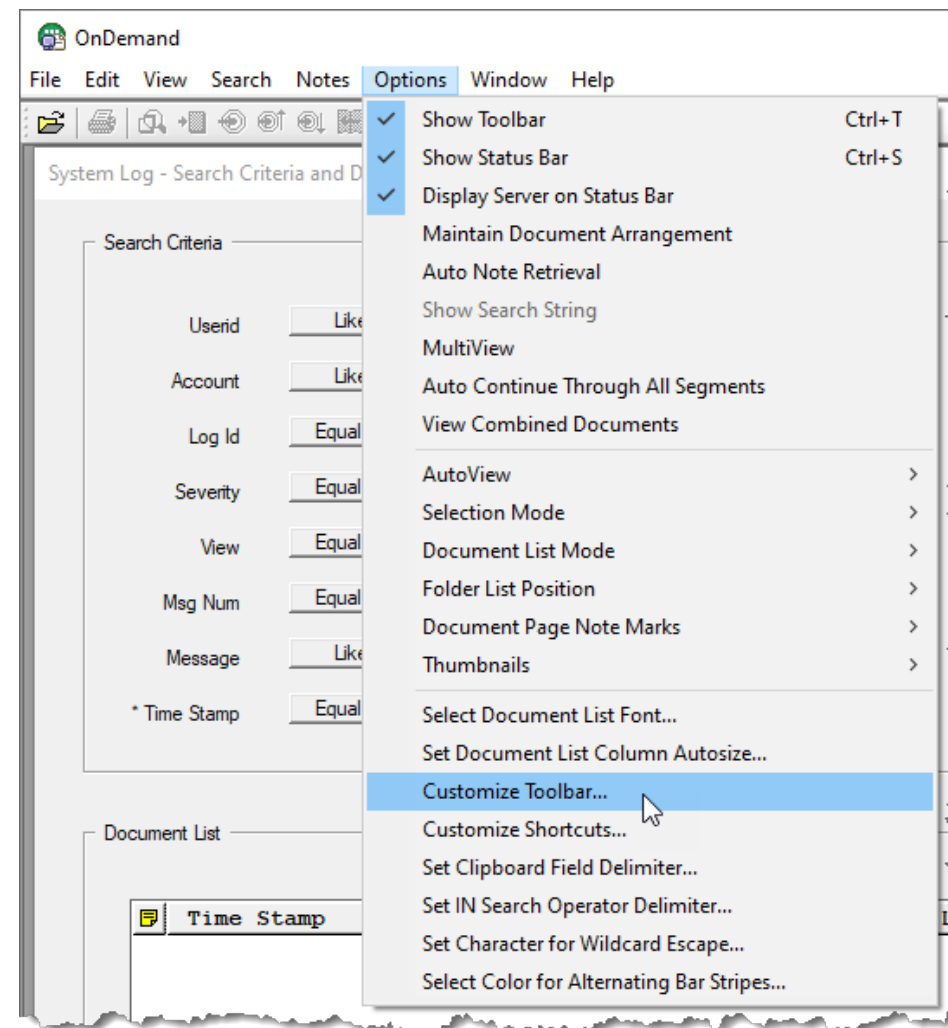

The Customize Toolbar window is shown in the next figure. You use this window to change your OnDemand client toolbar by rearranging, adding, or removing the available toolbar buttons.
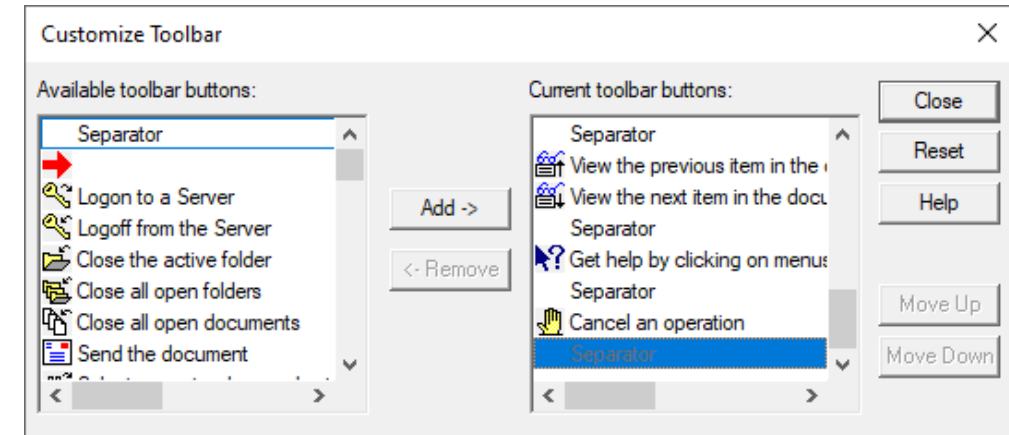
Many users like to have logon and logoff buttons on the client toolbar.

First, click *Open a folder* in the right side as shown below, then click the *Logon to a Server* icon at the left side and click the *Add* button. This adds the *Logon to a Server* icon before the *Open a folder* icon.
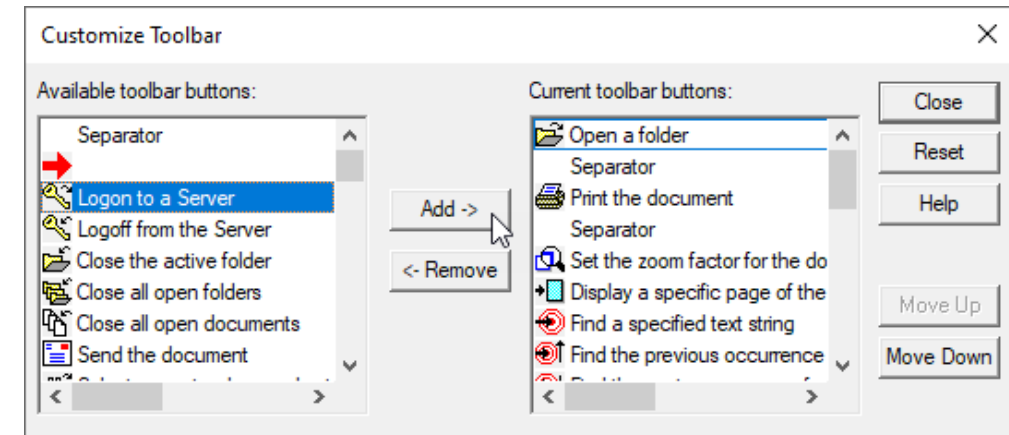
Then add the *Logoff from the Server* icon.
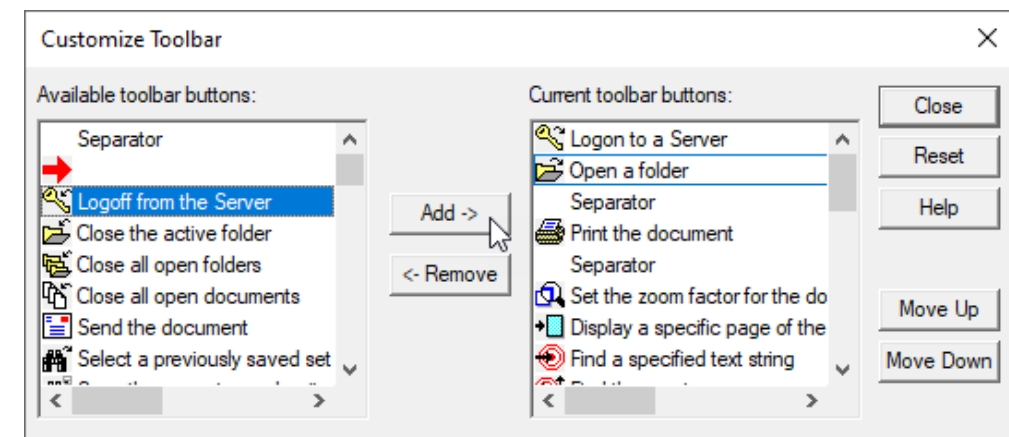
Next, add a *Separator* between the *Logoff from the Server* icon and the *Open a folder* icon.

When finished customizing the client toolbar, click on the Close button to save the changes.

The figure below shows the end result of the customization of the OnDemand client toolbar.

Errors when using Microsoft Print to PDF

Windows update KB5000808 can cause errors when printing from the OnDemand Windows client.

Symptoms you might observe when using the OnDemand client with the 'Microsoft Print to PDF' option include creating PDF files with zero length or with graphics but no text. The client might also crash occasionally.

A fix is available from Microsoft in update KB5001648.

HTML5 viewer support for full report browse

The HTML5 Line Data Viewer now supports full report browse at server version 10.5.0.1. IBM Content Navigator 3.0.9 Interim Fix 1, which is now available, is also required to use the full report browse function.

Tips – Multiplatforms

Server version 10.5.0.2 now supports hardware compression on Power9 and z15 Processors

Content Manager OnDemand for Multiplatforms version 10.5.0.2 enables hardware compression on AIX running on POWER9 hardware and zLinux running on z15 hardware.

Every z15 and POWER9 processor chip contains the novel compression accelerator (NXU) required for hardware compression.
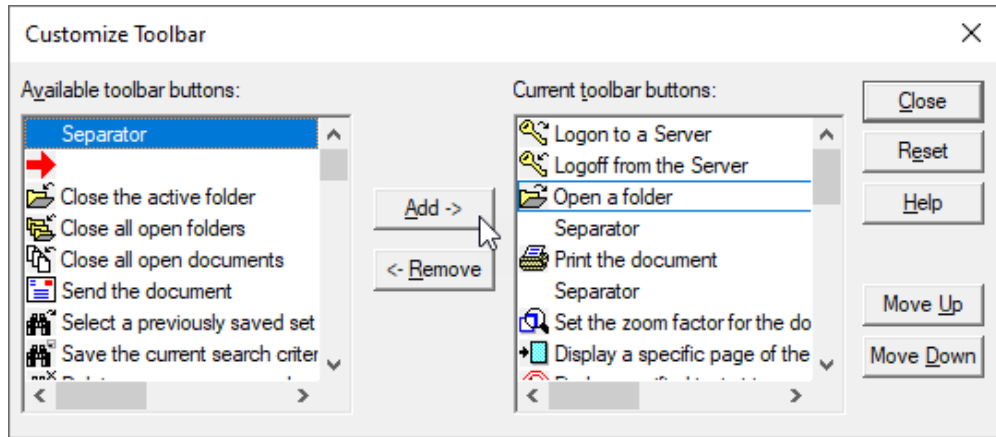
AIX customers must be at AIX 7.2 TL4 or later. If TL4 is not installed, customers will receive errors such as:

```
exec(): 0509-036 Cannot load program arsadmin because of the
    following errors:
rtld: 0712-001 Symbol nx_window_open was referenced from
    module arsadmin(), but a runtime definition of the symbol
    was not found.
rtld: 0712-001 Symbol _nx_crb_send was referenced from module
    arsadmin(), but a runtime definition of the symbol was
    not found.
rtld: 0712-002 fatal error: exiting.
```
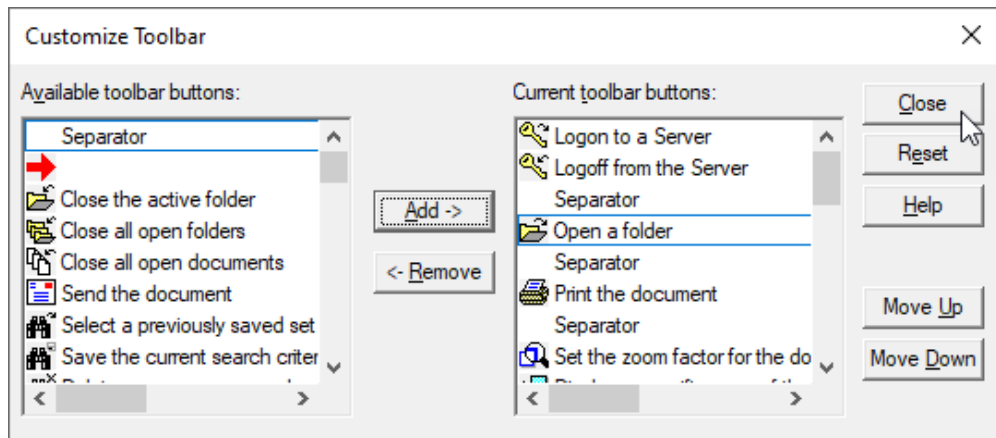
In order to leverage hardware-based compression, you must define the document and resource compression types as OD77HW or OD77LiteHW in your Content Manager OnDemand application definition. If hardware-based compression is not available, then OD77HW will default to OD77 (software-based) and OD77LiteHW will default to OD77Lite (software-based).

For decompression, if hardware-based is available, Content Manager OnDemand will always try to use it (even if the data was stored without OD77HW or OD77LiteHW). Note that OD77HW and OD77LiteHW use the exact same compression when able to use hardware compression. The difference between them is only when hardware compression is not available, in which case it defaults to the respective software-based compression algorithm.
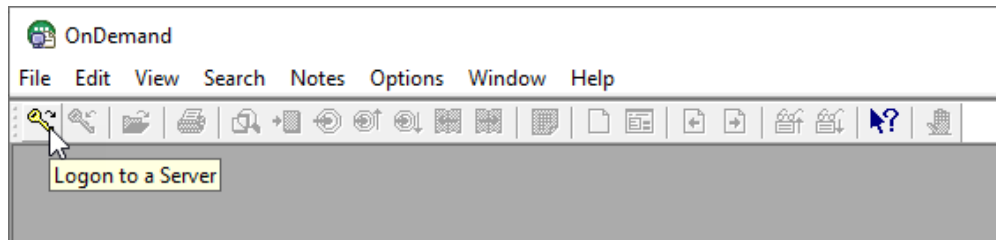
Detailed information on the implementation of hardware data compression in POWER9 and z15 systems can be found in this ACM/IEEE International Symposium on Computer Architecture paper.

Content Manager OnDemand REST Services log analytics

Content Manager OnDemand REST Services can be configured to output log files which can be ingested by analytics platforms (such as Splunk, Elastic, etc.) that support NDJSON formatted log files. These tools can monitor directories for new files and ingest them according to preconfigured patterns.

Examples from Splunk

Figure 1 below is a screen capture from the Splunk Search App. It shows the various fields available for visualization after the log file is imported. Refer to the Content Manager OnDemand REST Services Implementation Guide at the link provided below for more information on these fields.
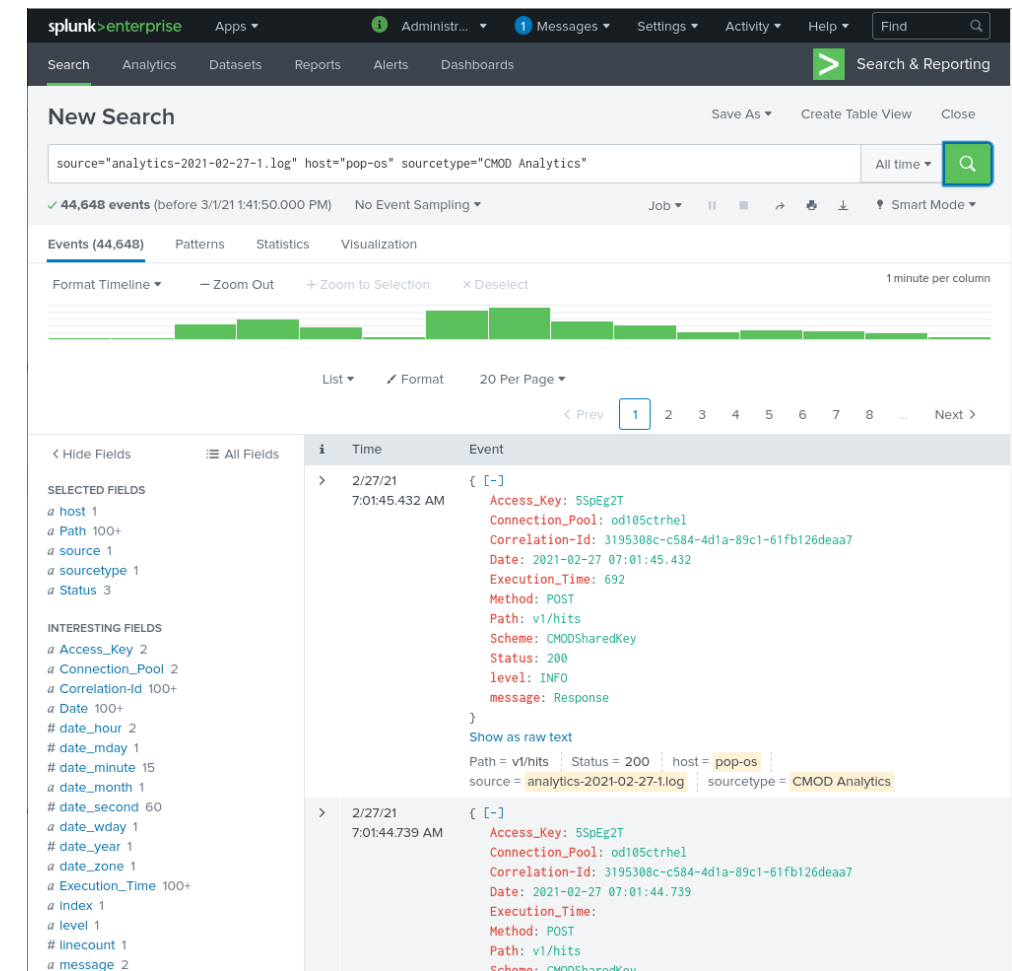

Figure 1 – Splunk Search

Once the log files have been added, the fields can be searched or combined to create visualizations. These visualizations can then be used to display a variety of information regarding your Content Manager OnDemand REST Services application. The Splunk dashboard below

shows total requests over time, how each connection pool is performing, and which Content Manager OnDemand folders are being search most frequently.
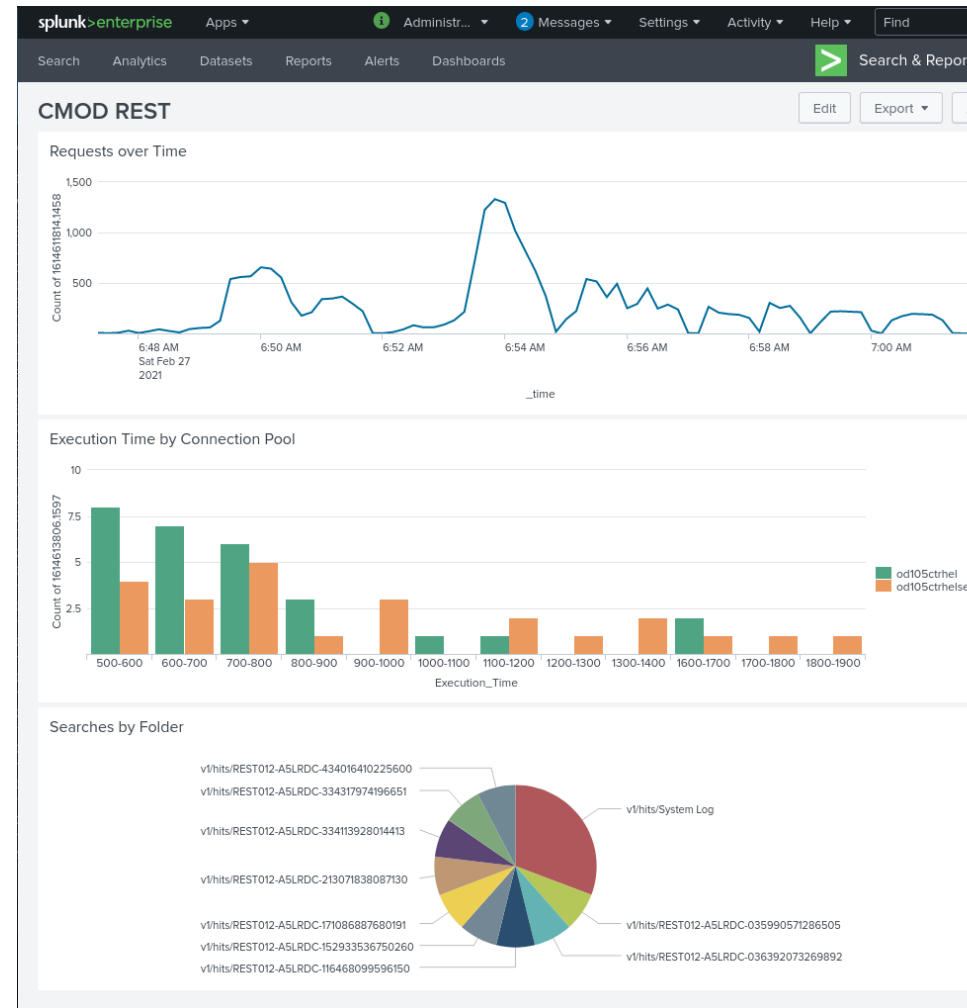

Figure 2 – Splunk Dashboard

The Splunk platform was used to create the above examples. However, the log files created by the Content Manager OnDemand REST Services are platform agnostic. If your analytics tool supports NDJSON, and most do, you will be able to utilize this new feature.

Note: By default, this logger is not enabled. Follow the instructions in the Implementation Guide in order to begin creating analytics log files.

The REST Services Implementation Guide can be found at support item 1078959.

Tips – z/OS

For users who have 31-bit COBOL exits

This tip is only for users who have 31-bit COBOL exits.

The ACTION HOLD for PH29322, available in March 2021, contains the following:

- New DD definition to be added: ARSSYSOU
- Changed DD definition: SYSOUT as used by CMOD

This fix changes the LE runtime options for 31-bit exits.

Previously, any 31-bit exit COBOL DISPLAYs appeared in SYSOUT.

With this change, 31-bit exit COBOL DISPLAYs will now appear in the ARSSYSOU DD definition.

This change fixes a problem with a 64-bit LE enclave interfering with 31-bit LE enclave usage.

It does this by separating 31-bit enclave usage of the MSGFILE with the default of SYSOUT from the 64-bit LE enclave usage of the MSGFILE with the default of SYSOUT.

This change will cause any 31-bit exit COBOL DISPLAYs to now appear on a DD of ARSSYSOU instead of a DD of SYSOUT. If customers are relying on the output from the exits appearing on the SYSOUT DD, the ARSSYSOU DD needs to be used instead.

Upgrading z/OS to Version 2.4

Are you upgrading z/OS to Version 2.4?

The most frequently encountered issue is that you may need to rebind SDSNSAMP(DSNTIJCL).

Also check the OAM binds required per the z/OS migration materials.

If rebinding, make sure you are using the JCL provided with z/OS 2.4, not JCL stored in a private library that is from a previous release.

Tips – IBM i

Considerations for High Availability

This tip applies to Content Manager OnDemand for i version 7.2 and later.

High Availability (HA) system requirements

Both the source and target IBM i systems should be at the same version and release of the operating system, and the same major server version of Content Manager OnDemand for i. For example, your operating system and Content Manager OnDemand for i might be at V7.4, and your Content Manager OnDemand major server version might be at V10.5 on both the source and the target systems.

Running Content Manager OnDemand for i after replicating from a system at a different version or release of IBM i or different major server version of Content Manager OnDemand for i might cause errors or unpredictable results due to database table changes. As you plan for the next operating system release or major server version of Content Manager OnDemand, you should contact IBM Software Support for information on database changes before proceeding with the source or target system upgrade.

To determine your server version, you can run this command:

QSH CMD(arsdoc)

The files in the instance libraries are journaled to the journal named QSQJRN in the respective instance libraries. Because this journaling is required for Content Manager OnDemand commitment control, these settings must not be changed.

What to replicate

In a High Availability environment on IBM i, it is recommended that you replicate:

- All instance libraries.
- Everything in the /QIBM/UserData/OnDemand path with the exceptions noted below.
- All data areas in QUSRRDARS library and the file named QRLWUSRINF in QUSRRDARS library. If you are using IASPs with Content Manager OnDemand, you should also replicate file QARLCASP in QUSRRDARS library.
- Any exit programs you are using with Content Manager OnDemand. For example, if you are using a System Log exit, or if you have specified a Post-processor exit specified in any Content Manager OnDemand application definitions, you should replicate those programs and their source files.

- If you have migrated to Common Server from Spool File Archive and you still have data in the /QIBM/UserData/RDARS/SpoolFile directory, that directory should be replicated.

  Note that in a future release, support for retrieving Spool File Archive data located in directory /QIBM/UserData/RDARS/SpoolFile will be deprecated. Data located in this directory should be migrated to Archived Storage Manager (ASM) by using the Migrate Media (MGRMEDRDAR) command.

What not to replicate

It is recommended that you NOT replicate the following:

- Do not replicate the QRDARS library. Library QRDARS should only be updated by installing PTFs and new releases.
- Do not replicate any work directories. High Availability software will lock the stream files during replication. This can result in failed loads, or orphan files left in the Integrated File System (IFS) on your IBM i system. See the following sections for details regarding various work directories used by Content Manager OnDemand.

Loading data temporary files

When you are loading data by using the Add Report (ADDRPTOND), Start Monitor (STRMONOND), or ARSLOAD commands, temporary work files are written to the home directory of the IBM i user profile that is running the command. If the directory that contains these temporary files is being replicated by the HA software, the files might be locked when Content Manager OnDemand tries to delete them, causing them to remain on the system. Because these are temporary files, they should not be locked during the load process and are not expected to be there after the data is loaded successfully. This can lead to unexpected and intermittent errors when you try to archive other files in the future.

If the user's home directory, as specified in the HOMEDIR parameter of the user's IBM i user profile, does not exist, you should create it. If the user's home directory does not exist, the root directory (/) is used.

If you need to replicate the user's home directory for other reasons, you should ensure the files in that directory with names beginning with DB_ and SP_ are not replicated.

Do not replicate any directories that are being monitored by the Start Monitor (STRMONOND) command.

Server printing temporary files

Server printing is performed by using the Server Print function of the OnDemand client or by using the Print Report (PRTRPTOND),

Print Document (PRTDOCOND), or ARSDOC PRINT commands. Server printing creates temporary files in the directory specified by the ARS_PRINT_PATH parameter in the ARS.CFG configuration file for the instance.

For example:

```
/QIBM/UserData/OnDemand/QUSROND/PRTTMP
```

The instance temporary directory

When loading data, some temporary files are created in the instance temporary directory. In addition, some log files are written to the instance temporary directory. The instance temporary directory is specified by the ARS_TMP parameter in the ARS.CFG configuration file for the instance.

For example:

```
/QIBM/UserData/OnDemand/QUSROND/TMP
```

ODWEK CGI cache directories (server version 9.5 and earlier only)

Any files that exist in these directories will be cached again, as needed, on the backup system. For this reason, they should not be replicated.

For example:

```
/QIBM/UserData/OnDemand/www/1141/CACHE
```

The system temporary directory

Some work files are written to the system temporary directory.

For example:

```
/TMP
```

The Content Manager OnDemand licensed program product directories

The licensed program directory and its subdirectories should be updated only by installing PTFs and new releases. For this reason, it should not be replicated.

```
/QIBM/ProdData/OnDemand
```

Considerations for using mounted file systems

In a High Availability setup, you will have a source system and a target system. On the source system, each time the instance is started, Archived Storage Manager (ASM) will mount the file systems the first time that data is migrated to or retrieved from a User Defined File System (UDFS) disk pool. On the target system, the instance will not be active, so you must mount the file system. This can be done manually or by your High Availability software.

An example of the MOUNT command for the primary disk pool in ASP01 is given below:

```
MOUNT TYPE(*UDFS)
    MFS('/dev/qasp01/ondemand_qusrond_primary_01.udfs')
    MNTOVRDIR('/qibm/userdata/ondemand/QUSROND/ASMASP01/PRIMARY')
```

You must ensure that the disk pools are always mounted on both the source and target systems when replication is running.

Note that if you are using a disk pool located in an Independent Auxiliary Storage Pool (IASP), there is no User Defined File System (UDFS) to mount.

This tip is adapted from support item 88151.

Using the QDFTINST data area

Question

I noticed that the Instance parameter (keyword INSTANCE) has a default value of *DFT. What does that mean?

Answer

The *DFT value specifies to use the default value for the instance name. The default value is determined in the following way:

- The default instance name is specified in the QDFTINST data area. The data area can exist in multiple libraries.
- The search for the data area is performed using the library list.
  - ➢ The first data area found is used.
- If the data area is not found using the library list, the QUSRRDARS library is searched for the data area.
  - ➢ If the data area exists in the QUSRRDARS library, it is used.
- If the data area is not found, instance QUSROND is used.

The Instance parameter is used by these commands:

- Add Report (ADDRPTOND)
- Change Policy Level Date (CHGPLDOND)
- Merge Spooled Files (MRGSPLFOND)
- Print Document (PRTDOCOND)
- Print Report (PRTRPTOND)
- Query Document (QRYDOCOND)
- Remove Report (RMVRPTOND)
- Retrieve Document (RTVDOCOND)
- Start Archived Storage Management (STRASMOND)
- Start Disk Storage Management (STRDSMOND)
- Start Import (STRIMPOND)
- Start Monitor (STRMONOND)

Suggestions regarding the use of the QDFTINST data area:

- For customers using QUSROND as their only instance:
  - No changes suggested.
- For customers with only one instance that is not named QUSROND:
  - Create data area QDFTINST in library QUSRRDARS and specify the instance name in the data area.
- For customers with multiple instances:
  - Create data area QDFTINST in each instance library and specify the instance name in the data area.
  - Add the instance library to the library list before running Content Manager OnDemand commands for that instance.
  - Remove the instance library from the library list after running Content Manager OnDemand commands for that instance.

ARSPRT400 data area used by server printing

The data area named ARSPRT400 controls the value that is placed in the user data attribute (keyword USRDTA) of the spooled file that is created by server print from the OnDemand client and from the Print Document (PRTDOCOND), Print Report (PRTRPTOND), and ARSDOC PRINT commands. Possible values are *APPL, *APPLGRP, *USERID, and *USERDATA. To create the data area, use the following command:

```
CRTDTAARA DTAARA(QUSRRDARS/ARSPRT400) TYPE(*CHAR) LEN(10)
```

- The value *APPL uses the application name as the user data. Values longer than 10 characters are truncated to 10 characters.
- The value *APPLGRP uses the application group name as the user data. Values longer than 10 characters are truncated to 10 characters.
- The value *USERID uses the user profile that printed the report as the user data. This is also the default value if the data area does not exist.
- The value *USERDATA uses the user data setting of the printer file named in the application as the user data.

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 7.2	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 7.2	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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