

In This Issue

News 1

 About this newsletter..... 1

 End of support for IBM i V7.1 1

 Business partner workshop announced 1

 IBM workshops announced 1

Tips – Cross Platform 2

 Tokenized query string support..... 2

 Customized date formats..... 2

Tips – IBM i..... 3

 Verifying the correct TCP/IP configuration on your system 3

 Do I need to run DSM and ASM? 3

Tips – z/OS 4

 z/OS Quick Hits..... 4

Additional Information 4

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 dbryant1@us.ibm.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.

End of support for IBM i V7.1

Support for IBM i Version 7 Release 1, including Content Manager OnDemand for i V7.1, will end on April 30, 2018. See announcement letters [917-080](#) and [917-116](#) for more information.

Customers using V7.1 should upgrade to V7.2 or V7.3 as soon as possible.

Business partner workshop announced

IBM business partner 10m GmbH is hosting a workshop at their office in Koblenz, Germany from June 6 through June 8.

The workshop is designed in close cooperation with the IBM Content Manager OnDemand team. The goal of the workshop is to offer a good mix of labs, tips and tricks, and provide insight on upcoming releases - directly from the Content Manager OnDemand lab. You can also benefit from networking between Content Manager OnDemand customers, IBM specialists, 10m, and 10m partners.

The workshop will be held in German and English. A Content Manager OnDemand for i developer will be there to bring the latest news from the lab. For more information, see the [workshop website](#).

IBM workshops announced

If you want to gain actionable insight on how to drive optimal business value from using Content Manager OnDemand, you should attend one of the upcoming IBM Content Manager OnDemand workshops. You will have the opportunity to network with peers and colleagues who face similar challenges and meet industry experts.

Attend these workshops to learn how to satisfy customers through self-service access to bills and statements, govern the content for compliance, and perform advanced analytics on the stored content to gain better insights.

Hear from top ECM Business Leaders and Subject Matter Experts to learn the latest solutions and best practices for enhancing service levels and customer satisfaction, improving operational efficiency, and reducing costs.

Whether new to Content Manager OnDemand or an experienced professional, join us for these two-day workshops.

Registration will be opening soon on the [workshop website](#).

Date	City
May 1-2, 2018	Chicago
May 8 - 9, 2018	Boston
May 30 - 31, 2018	Tampa
June 18, 2018	London
June 20 - 21, 2018	Copenhagen
June 26 - 27, 2018	Paris
Oct 16 - 17, 2018	Phoenix

Tips – Cross Platform

Tokenized query string support

The ARSDOC command can be used with an SQL query string that is in a format known as 'tokenized query'. For example, to search for documents that have a statement date of 'March 3, 2018' and an account number of '000-000-000', a tokenized query string can be used. In this example, the tokenized query string uses two database fields and values. The first database field (crd_date) has a data type of 'Date'. Because it is a date type field, the name must be preceded by "ODDAT_". The second database field (account) has a data type of 'String'.

```
arsdoc query -u oduser -h odserver -f "Credit Card
Statements" -i "2;ODDAT_crd_date,account;'2018-03-
03','000-000-000';where ODDAT_crd_date = ? and account =
?" -S "2017-01-01,2018-04-30,%Y-%m-%d"
```

A tokenized query string has four sections where each section is separated by a semicolon. The first section contains the number of database fields. The second section contains the names of the database fields in a comma separated list. The third section contains the database values in a comma separated list where each value is enclosed in single quotes. (The database values are enclosed in single quotes regardless of the data type.) The last section contains the SQL query string. Question marks are always used in the SQL query string in place of the actual database field values.

When using an SQL query string, regardless of its format, there are several things to keep in mind:

- 1. The SQL query string is passed directly to the server without validation. If there are any syntax errors in the SQL query string, the error messages will appear in the System Log.
- 2. If there are multiple application groups in the folder, the names of the database fields must exist in all of the application groups. The same SQL query string is used to query each application group in the folder. If a database field does not exist in an application group the query will fail. While some database queries may complete successfully (as seen by System Log messages), the overall result will fail without any documents being returned.
- 3. If there are multiple application groups in the folder, an application group name can be provided in addition to the name of the folder. This will limit the query to only one application group.

Customized date formats

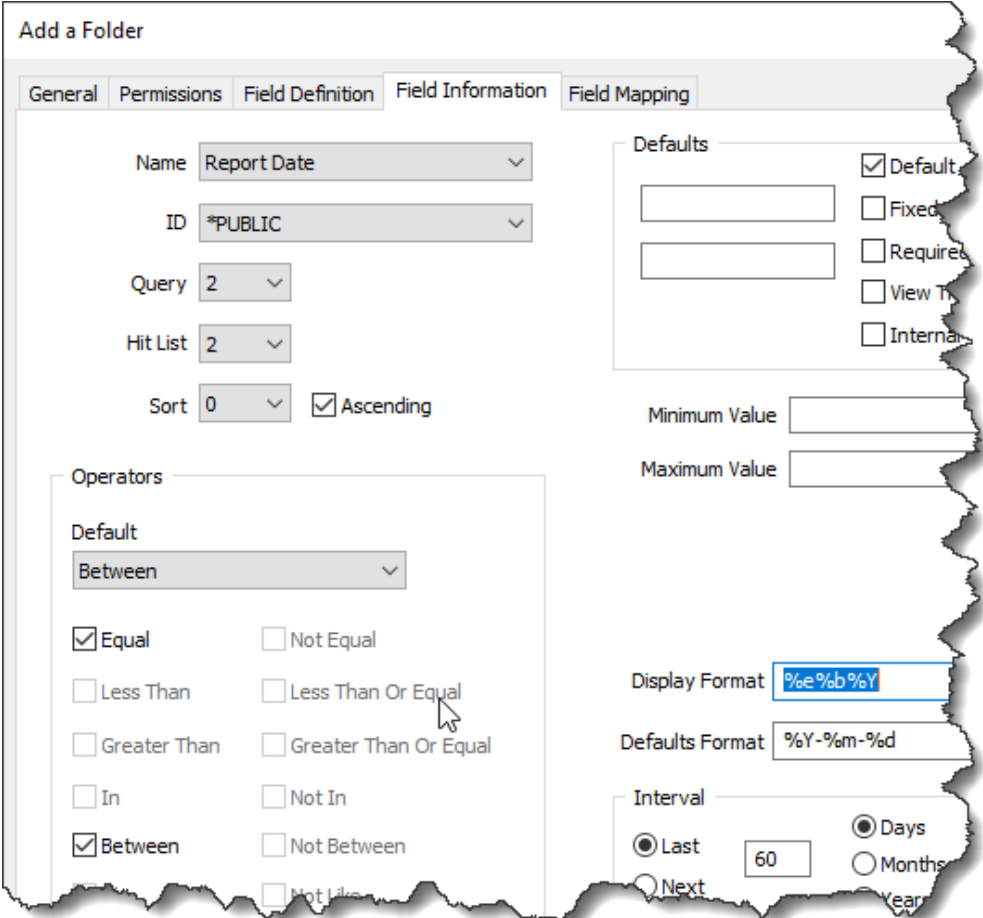
You can create your own customized date format in the text portion of the Display Format field of the Folder > Field Information tab if the format of the date or date/time that you require is not one of the standard formats that are listed. Known as a format specifier, this customized date format is used to describe the format of a unique date or time that you require. A format specifier consists of a set of values, such as %m, and separators, such as the / character. Specify the order in which the day, month, year, hour, minutes, and seconds appear. Exclude the day, month, year, hour, minutes, or seconds, if that part of the date or time does not appear in the format. Add value separators where required. For example, %d %B %Y represents dates that appear in the format of 21 February 2018. As another example, %b %e %Y represents dates that appear in the format of Feb 5 2018. Date strings are not case sensitive. For example, you can specify %B for dates that contain strings like February, FEBRUARY, or FEBruary.

When creating a customized format specifier, there must be one or more separator characters between numbers in a date. For example, %b %e, %Y represents a date such as Feb 5, 2018. The separator characters between the day of the month (5) and the year (2018) are a comma and a space. Specifying %b%e%Y for a date such as Feb52018 is not valid. However, the name of the month or the three character abbreviation for the name of the month can be used as the separator between the day of the month and year. For example, %e%b%Y represents dates that appear in the format of 5Feb2018.

The %e and %d can be used for one or two digit days. When a format specifier contains %e, single digit days are displayed as a single digit. When using %d, single digit days are displayed with a leading zero. For example, %b %e, %Y will display the date Feb 5, 2018 with a single digit for the day of the month. The format specifier %b %d, %Y will display the date Feb 05, 2018 with a leading zero for the day of the month.

The %f and %m can be used for one or two digit months. When a format specifier contains %f, single digit months are displayed as a single digit. When using %m, single digit months are displayed with a leading zero. For example, %f %e %Y will display the date 2 5 2018 with a single digit for the month. The format specifier %m %d %Y will display the date 02 05 2018 with a leading zero for the month.

The screen capture below shows a customized date format "%e%b%Y" in the Display Format field.



Tips – IBM i

Verifying the correct TCP/IP configuration on your system

The correct configuration of TCP/IP is critical to the functioning of Content Manager OnDemand on your system. Problems caused by incorrect configuration of TCP/IP might include:

- 1. Inability to start the Content Manager OnDemand servers
- 2. Inability to archive documents
- 3. Poor performance when logging on from the client
- 4. Inability to open system log messages

Interface

Every IBM i system using TCP/IP has a *LOOPBACK interface for TCP/IP. If you use the Work with TCP status (WRKTCPSTS *IFC) command, you should see an address of 127.0.0.1 with a line description of *LOOPBACK. This interface must exist and be active so that Content Manager OnDemand for i operates properly. If you have deleted the *LOOPBACK interface, you must recreate it using the following command:

```
ADDTCPIFC INTNETADR('127.0.0.1') LIND(*LOOPBACK)
SUBNETMASK('127.0.0.0')
```

Interface status

Sample output from WRKTCPSTS *IFC:

Internet Address	Network Address	Line Description	Interface Status
10.33.176.221	10.33.176.0	ETHLINE	Active
127.0.0.1	127.0.0.0	*LOOPBACK	Active

If the *LOOPBACK interface is inactive, you must start it using option 9 on the Work with TCP/IP Interface Status screen or by using the command:

```
STRTCPIFC INTNETADR('127.0.0.1')
```

Host table

Do not delete the host table entry for the LOOPBACK and LOCALHOST host names. If the host table entries are deleted, you can add them by using the Configure TCP/IP (CFGTCP) command, and then selecting option 10, or by using the Add TCP/IP Host Table Entry (ADDTCPHTE) command.

Work with TCP/IP Host Table Entries	
Internet Address	Host Name
127.0.0.1	LOOPBACK
	LOCALHOST

Domain name

Enter the host name and domain name for your system. You can do this by using the Configure TCP/IP (CFGTCP) command, and then selecting option 12. The host name and domain name entered by using option 12 must match the host table entries, which can be viewed using the Configure TCP/IP (CFGTCP) command, and then selecting option 10. For example, if the host name is SYSTEM1 and the domain name is COMPANY.COM, the host table entries should be:

Work with TCP/IP Host Table Entries

Internet Address	Host Name
10.33.176.221	SYSTEM1
	SYSTEM1.COMPANY.COM

IPv6

If you are using IPv6, the requirements are the same, however, configuration is performed by using IBM Navigator for i.

Do I need to run DSM and ASM?

Yes, in most circumstances you must run Disk Storage Management (DSM) and Archived Storage Management (ASM).

DSM

DSM performs the following functions:

- Controls the expiration of indexes and data from Content Manager OnDemand (if you do not use storage manager-based expiration)
- Migrates data from cache to the storage manager (if the Migrate Data from Cache option is not set to When loaded)
- Expires data from cache (if Cache Data is set to Yes)

If you do not run DSM, your disk storage requirements for Content Manager OnDemand are probably higher than expected. The number of objects stored in the Integrated File System (IFS) is also higher than necessary, which results in longer save and restore times.

Note that if you have never run DSM, the first execution of the Start Disk Storage Management (STRDSMOND) command might last for an extended period of time.

If you want to configure Content Manager OnDemand so that DSM is not required in the future, see [support item 1417320](#) titled “Reducing the need to run Disk Storage Manager (DSM).”

ASM

ASM performs the following functions:

- Controls the expiration of indexes and data from Content Manager OnDemand (if you use storage manager based expiration)
- Aggregates data before migrating it to archive media (if you select the Aggregation option in the migration policy)
- Migrates data between levels of the migration policy

If you do not run ASM, your disk storage requirements for Content Manager OnDemand are probably higher than expected. The number of objects stored in the Integrated File System (IFS) is also higher than necessary, which results in longer save and restore times.

Note that if you have never run ASM, the first execution of the Start Archived Storage Management (STRASMOND) command or the STRDSMOND command with STRASMOND(*YES) might last for an extended period of time.

If you cannot let ASM run to completion, at V7.2 and V7.3, the Start Archived Storage Management (STRASMOND) command has a new parameter named Force ASM to end (ENDASM). The Force ASM to end parameter specifies whether you want to force the ASM process to end, and if so, when it should end. You can force ASM to end after a specified number of hours or at a specified time. If ASM completes the movement of all eligible data before the specified ending time, it will end before the specified number of hours or end time occurs. This parameter is optional.

Start Archived Storage Mgmt (STRASMOND)		
Policy	*ALL	
Process to run	*ALL	
FORCE ASM TO END	*NO	*NO, *NBRHRS, *ENDTIME
Number of hours to run . .	8	1-999
Time to end	230000	Time

For example, you might use the Force ASM to end parameter to ensure that ASM ends before your nightly backup begins.

For more information about expiring data using ASM, see [support item 1317082](#) titled “Expiration processing in Archive Storage Manager (ASM)”.

Tips – z/OS

z/OS Quick Hits

Deciphering the "Modify ARSSOCKD, display OAM" command

A typical response to the F ARSSOCKD,D,OAM command is:

```
ARS0375I 18.04.37 DISPLAY OAM.
DB2      DB2      PLAN CBRIDBS  GENERAL    30 SLOW    5
TCB@     STATUS COLLECTION/OBJECT
00ACE430 IGQU    RDARS.XXXXXX.VAREPT.ZORP07.M004D07Y
                    IYC.L4183.FAAA
                    START=13.04.37.244 STOP=13.04.37.253
00AC53E8 BSFE    RDARS.XXXXXX.CAEAP05S.ZORP05.M004D07Y
                    TSE.L287947.FAAA
                    START=13.04.36.304
```

The STATUS flags mean:

- I/B = IDLE or BUSY
- G/S = General/fast or Slow
- QU/FE = OSREQ QUery or OSREQ RETRIEVE (FEtch) or DE for OSREQ DELETE or ST for OSREQ STORE

Troubleshooting “Out of Storage” abends

One of the most common outage scenarios that IBM Software Support sees for Content Manager OnDemand for z/OS is when the server started task suffers some type of 'out of storage' abend such as S878, S40D, S90D, S92A, etc.

In most cases these are not sudden abends but rather a scenario where external influences cause work requested of the server to not get processed in a timely manner. This scenario results in a buildup of TCBs within the ARSSOCKD address space, and eventually exhausts private area storage. (Most commonly, Subpool 2 Key 8 will be the most used subpool, for LE HEAP storage.)

In diagnosing these types of abends, it is helpful to be able to detect approximately when the trouble began. In most cases, that is extremely difficult or impossible to do.

To aid in that cause, we recommend adding some recurring display commands via your automation that can help provide that information. It might not only help diagnose a problem after the fact, but if monitored on a regular basis, could help to detect a problem in its early stages, which might lead to a resolution before the server task ever abends.

The two recommended displays are:

```
F ARSSOCKD,D,OAM
F ARSSOCKD,D,STATUS
```

The first provides information about how retrieval requests are being handled by OAM and the second provides thread information.

Having these commands issued on a regular basis, where they can be viewed after a problem occurs via SYSLOG, can provide very valuable information in problem diagnosis and again, if monitored on a regular basis, might lead to preventing an outage before it happens.

Additional Information

Knowledge Centers

- Content Manager OnDemand for Multiplatforms [Knowledge Centers](#)
- Content Manager OnDemand for z/OS [Knowledge Centers](#)
- Content Manager OnDemand for i [Knowledge Centers](#)

Publication Libraries - PDF versions of the documentation

Multiplatform	Version 9.5	Version 10.1 - Use the Knowledge Center
z/OS	Version 9.5	Version 10.1 - Use the Knowledge Center
IBM i	Version 7.2	Version 7.3 - Use the Knowledge Center

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

More Enterprise Content Management web sites

- Content Manager OnDemand [Product Overview](#)
- [Compatibility Matrix](#) for the CMOD clients and servers
- Content Navigator [Product Overview](#)
- IBM Software [Support Lifecycle](#) Policies (search for Content Manager OnDemand)

Social Media

Follow [@IBM_ECM](#) 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 [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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