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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.

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.

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](mailto:darrell.bryant@unicomsi.com).

### 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 meet industry experts and network with peers and colleagues who face similar challenges.

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 business leaders and subject matter experts to learn the latest solutions and best practices for enhancing service levels, improving operational efficiency, and reducing costs.

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

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

Date	City
April 16, 2019	Cape Town, South Africa
April 18, 2019	Johannesburg, South Africa
June 4-5, 2019	Vancouver, Canada
September 17-18, 2019	Austin, Texas, USA
October 23-24, 2019	Bethesda, Maryland, USA

### 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 classes are available for 2019:

- April 29, 2019
- June 17, 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 indexing components such as the PDF indexer, 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 LearnQuest training coordinator.
- Custom or private remote or onsite classes are also available – simply contact [ODU@enchoice.com](mailto:ODU@enchoice.com) for more information.

## Tips – Cross Platform

### What is ARSRPT and how can I use it?

The Content Manager OnDemand enhanced reporting command (ARSRPT) produces a report that covers three sets of operations of the system: logins, loads, and queries/retrieves for a selectable 24-hour period. The report is output in two optional files. The first file is the raw data extracted from the Content Manager OnDemand System Log and formatted as XML. The second file is a summary derived from the raw data. The summary data is designed to help you plan system activities, illuminate peak usage, and watch for usage irregularities.

Each operational set is broken down further. Login Activity is broken down into Logins by user, Logins by hostname, Logins by client, and Hourly activity distribution.

You might use the summary report of Logins by client to determine if any out-of-date clients, which should be upgraded, are being used. In the example below, you can see that some users are still using the version 9.0.0.x clients, which are no longer supported. You can now investigate further using the System Log to determine which users are affected.

Logins by client - 10 clients

Client	Version	Operating System	Logins	SSL Logins	Failed Logins	SSL Failed
ADMIN GUI	10.1.0.4	Windows 64	2	0	0	0
ARSADMIN	10.1.0.4	IBM i	14	0	0	0
ARSDOC	10.1.0.4	IBM i	385	0	0	0
ARSLoad	10.1.0.4	IBM i	86	0	0	0
ARSLoad	10.1.0.3	AIX	23	0	0	0
ARSXML	10.1.0.4	IBM i	149	0	0	0
CLIENT GUI	10.1.0.4	Windows 64	71	0	4	0
CLIENT GUI	9.5.0.8	Windows	81	0	1	0
CLIENT GUI	9.0.0.3	Windows	34	0	0	0
CLIENT GUI	9.0.0.1	Windows	11	0	3	0

Load Activity is broken down into Loads by user, Loads by application group/application, and Hourly activity distribution.

Query/Retrieval Activity is broken down into Query/Retrievals by user, Query/Retrievals by application group, and Hourly activity distribution.

For more information on the ARSRPT command, see support items [7027027](#), [7019740](#), and the Content Manager OnDemand Knowledge Centers. Links to the Knowledge Centers can be found in the Additional Information topic at the end of this document.

### New ARSDOC functions at 10.1.0.4

Two new functions were added to the ARSDOC command at server version 10.1.0.4. Those functions are BULK\_DELETE and BULK\_UPDATE.

The **BULK\_DELETE** function is used to delete a large number of documents from the system. To identify the documents that you want to delete, you can use the following parameters to query the database:

- SQL query (-i)
- text search string (-T)

If you use an SQL query, it must contain clauses, database field names, index values, and operators. Without the -L parameter, the BULK\_DELETE function deletes all of the documents that match the query. You can optionally use the -L parameter to specify a maximum number of rows to be deleted, regardless of the number of items that match the query. This method allows for the deletions to be done in smaller batches, in a more controlled manner, by running the same ARSDOC command multiple times.

The **BULK\_UPDATE** function is used to update the index values for a large number of documents. You must name the application group to update and specify one or more application group fields and their values. To identify the documents that you want to update, you can use the following parameters to query the database:

- SQL query (-i)
- hold name (-l)
- text search string (-T)
- load ID (-x)

If you use an SQL query, it must contain clauses, database field names, index values, and operators. Without the -L parameter, the BULK\_UPDATE function updates all of the rows that match the query. You can optionally use the -L parameter to specify a maximum number of rows to be updated, regardless of the number of items that match the query. This method allows for the updates to be done in smaller batches, in a more controlled manner, by running the same ARSDOC command multiple times.

The BULK\_UPDATE function does not change the actual document data.

More information on the BULK\_DELETE and BULK\_UPDATE functions can be found in the Content Manager OnDemand Knowledge Centers. Links to the Knowledge Centers can be found in the Additional Information topic at the end of this document.

### Specifying special characters in XML

#### Problem:

I am using ARSXML to update a user. My XML file contains in part:

```
...
<user
  name="DBRYANT"
  acctInfo="Engraving & Printing"
...
```

Execution of the ARSXML add command returns the error:

```
ARS7732E A parsing error occurred in file
  adduser1.xml, Line 6, Column 30:
  expected entity name for reference
```

#### Solution:

When specifying special characters in XML you must specify them by using an escape sequence. For example:

Character	Escape sequence
&	&amp;
'	&apos;
"	&quot;
<	&lt;
>	&gt;

Your input file should look like this:

```
...
<user
  name="DBRYANT"
  acctInfo="Engraving &amp; Printing"
...
```

## Specifying Unicode characters in XML

### Problem:

I want to use accented characters in Content Manager OnDemand object names or descriptions. Some of these accented characters are not available on my keyboard.

### Solution:

Accented characters that are not available on the keyboard can be inserted into Content Manager OnDemand object names by using their Unicode character equivalents.

If your keyboard does not permit you to enter accented characters into a Content Manager OnDemand XML input file, you can insert such characters by using a Unicode character equivalent. For example, if you want to enter a capital O with an umlaut in the name attribute of a Content Manager OnDemand application group, you can refer to the character by its equivalent Unicode decimal representation (214). Here is an example:

```
<applicationGroup name="#214;TEST"
  description="App group name containing O with
  umlaut" ...
```

The character equivalent begins with "&#", is followed by the decimal representation of the character's code point in Unicode, and concludes with a semicolon. Here are some other examples:

```
<applicationGroup name="#193;TEST"
  description="Name containing A with acute" ...
<applicationGroup name="#195;TEST"
  description="Name containing A with tilde" ...
<applicationGroup name="#202;TEST"
  description="Name containing E with circumflex" ...
<applicationGroup name="#217;TEST"
  description="Name containing U with grave" ...
```

Viewing the input file with a web browser shows how the value of the name attribute will appear in the Content Manager OnDemand system. Note that the figure below does not include the complete XML required to create an application group.

```
<?xml version="1.0" encoding="ISO-8859-1"?>
- <onDemand
  xsi:noNamespaceSchemaLocation="/QIBM/ProdData/OnDemand/bin/xml/ondemand.xsd"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <applicationGroup description="Name containing O with umlaut" name="ÖTEST"/>
  <applicationGroup description="Name containing A with acute" name="ÅTEST"/>
  <applicationGroup description="Name containing A with tilde" name="ÃTEST"/>
  <applicationGroup description="Name containing E with circumflex" name="ÊTEST"/>
  <applicationGroup description="Name containing U with grave" name="ÛTEST"/>
</onDemand>
```

Running the input file through ARSXML results in adding the application groups. Note that only some of the messages are shown below:

```
arsxml add -h ARCHIVE -d /home/dbryant/xml -i
  addappgrps1.xml -v -e a
```

```
03/15/2019 10:41:42: Adding applicationGroup, ÅTEST
03/15/2019 10:41:42: Add of applicationGroup, ÅTEST was
  successful.
03/15/2019 10:41:42: Adding applicationGroup, ÃTEST
03/15/2019 10:41:43: Add of applicationGroup, ÃTEST was
  successful.
03/15/2019 10:41:43: Adding applicationGroup, ÊTEST
03/15/2019 10:41:43: Add of applicationGroup, ÊTEST was
  successful.
03/15/2019 10:41:43: Adding applicationGroup, ÖTEST
03/15/2019 10:41:43: Add of applicationGroup, ÖTEST was
  successful.
03/15/2019 10:41:43: Adding applicationGroup, ÛTEST
03/15/2019 10:41:44: Add of applicationGroup, ÛTEST was
  successful.
```

Note: When exporting an object that contains a special character, ARSXML places the actual special character into the XML output file. The special character can be viewed by using an editor or a browser that supports UTF-8 encoding.

XML attributes (such as name, description, and so forth) cannot contain the characters apostrophe ('), quote ("), less than (<), greater than (>) or ampersand (&). See the previous tip in this newsletter for how to specify those characters in your XML.

Information on Unicode character equivalents can be found at:

<http://www.unicode.org/charts/>

The information published at unicode.org lists the character representations in hex. A hex to decimal converter is available at:

<http://www.easycalculation.com/hex-converter.php>

## Changing application group names using ARSXML

### Problem:

I need to change the application group name in Content Manager OnDemand using the ARSXML command.

### Solution:

You can use the newName attribute to rename the application group in Content Manager OnDemand. The following example shows how to rename the application group from "name1" to "name2":

```
...
<applicationGroup
  name="name1"
  newName="name2">
</applicationGroup>
...
```

You can include the example code in an input XML file and rename the application group using the ARSXML update command. For example:

```
arsxml update -i rename_ag.xml -h ARCHIVE -v
```

## Where can I download the Content Manager OnDemand clients?

### Question

How do I obtain the latest client software for Content Manager OnDemand?

### Answer

It is recommended that you install the latest version of the OnDemand client software that is compatible with your Content Manager OnDemand environment on all workstations that will use Content Manager OnDemand clients and servers to determine which versions of the OnDemand clients are compatible with your server version.

You can download the latest OnDemand Administrator and end-user clients from Fix Central, which is a repository of IBM software. Fix Central requires an account (available with a free, one-time registration) and an active support subscription in order to download entitled products.

Instructions for downloading the latest fix pack, and hyperlinks to Fix Central, can be found in [support item 1450570](#).

## Tips – Multiplatforms

### Content Manager OnDemand and Docker

With the rise in popularity of containerization, many companies are now looking at how they can benefit from leveraging this relatively new technology to increase portability and scalability of applications and minimize usage of system resources.

One of the Content Manager OnDemand developers has written a document that:

- Provides information that can simplify the process of creating a Content Manager OnDemand Docker image in a Linux environment.
- Addresses functionality that is available in Content Manager OnDemand Version 10.1 and later, implemented on a supported Docker platform.

See [support item 0869710](#) to download the PDF document.



## Tips – z/OS

### z/OS Quick Hits

#### Message ARS0141E - Explanation

Software Support is seeing an increase in the occurrences of message ARS0141E.

```
ARS0141E Ran out of load-id naming conventions.
      Increase the size of the Application Group Object
      Size.
```

This message is received when the Content Manager OnDemand architectural limit of 702 output files per load is exceeded. Let's look at an example of how a load might exceed that number.

Suppose we have an input file that is 249255956599 bytes (249,255,956,599) or almost 250 gigabytes in size.

By increasing the size of the object, we will use fewer load IDs. The maximum object size that we can define is 99999K. This is set via the OnDemand Administrator client on the Application Group > Storage Management > Advanced dialog.

The input file divided by the object size must be less than or equal to 702.

$$249255956599 / 99999 = 2492584.49$$

$$2492584.49 / 1000 \text{ (because 99999 is in K)} = 2492.58$$

$$2,492 > 702, \text{ the maximum limit for load IDs}$$

So the input file is just too big and must be split into smaller chunks to be ingested. Other factors can come into play as well, but this is an example of a common problem we see.

## Tips – IBM i

### Do I still need to run RMC?

#### Question

Do I still have to run the Report Management Cycle (RMC) by using the Start Report Management Cycle (STRRMCRDAR) command after I migrate from Spool File Archive to Content Manager OnDemand Common Server?

#### Answer

It depends.

After you have migrated from Spool File Archive to Common Server, RMC is still required to be run to manage the Spool File Archive data that remains under the control of the Spool File Archive Report Management Cycle. Note that running RMC will expire data stored in Spool File Archive. If all of the data stored in Spool File Archive has been expired, you no longer need to run RMC. You can check the contents of file QARLRSRT in library QUSRRDARS to determine if you have any data still under the control of the Report Management Cycle. Each row in file QARLRSRT represents one load into Spool File Archive that is still managed by RMC.

If you migrated from Spool File Archive to Common Server by either:

- Re-spooling your data and archiving it directly into Common Server

OR

- Using the Migrate Media (MGRMEDRDAR) command to migrate your Spool File Archive data such that it is now under the control of the Common Server Archive Storage Manager (ASM)

then the requirement regarding the continued use of RMC does not apply. In either of those cases, you no longer need to run the STRRMCRDAR command.

#### Future direction

In a future version of Content Manager OnDemand for i, all RMC functionality will be removed. At that time, data that has not been migrated to ASM will no longer be retrievable. Prior to that time, you should either expire all of your Spool File Archive data by running RMC or migrate all of your Spool File Archive data to ASM by using the Migrate Media (MGRMEDRDAR) command.

### IBM i Access Client Solutions & the Windows Application Package

#### Question

What is IBM i Access Client Solutions?

IBM i Access Client Solutions (ACS) provides a Java-based, platform-independent interface that runs on most operating systems that support Java, including Linux, Mac, and Windows™. IBM i Access Client Solutions consolidates the most commonly used tasks for managing your IBM i into one simplified location.

ACS is the replacement for IBM i Access for Windows.

The following features are included in ACS:

- 5250 display and printer emulation (license required)
- Multiple language support for concurrent 5250 emulation sessions on the same client
- Data Transfer with support for OpenDocument spreadsheet (\*.ods), Excel Workbook (\*.xlsx), and other file formats (license required)
- Simplified SSL Configuration
- Download and viewing of spool files
- Integrated File System tasks to browse and work with stream files
- Database tasks to access and analyze your Db2 for i databases

The latest version of IBM i Access Client Solutions is available to customers with an IBM i software maintenance contract.

#### What is the Windows Application Package?

The Windows Application Package (WAP) provides the ODBC driver, OLEDB provider, ADO.Net provider, ActiveX COM components and most of the API support that was in the IBM i Access for Windows product.

**Note that the WAP is required if you plan to download sample spooled file data from your IBM i system for use in the OnDemand Administrator client graphical indexer.**

There is also a Linux application package that provides an ODBC driver for Linux.

#### More information,

More information, including download links, is available at:

<http://www.ibm.com/support/docview.wss?uid=isg3T1026805>

## 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	<a href="#">Version 9.5</a>	<a href="#">Version 10.1</a>
z/OS	<a href="#">Version 9.5</a>	<a href="#">Version 10.1</a>
IBM i	<a href="#">Version 7.2</a>	<a href="#">Version 7.3</a>

### Product System Requirements

Multiplatform	<a href="#">Version 9.5</a>	<a href="#">Version 10.1</a>
z/OS	<a href="#">Version 9.5</a>	<a href="#">Version 10.1</a>
IBM i	<a href="#">Version 7.2</a>	<a href="#">Version 7.3</a>

### 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)

### 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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