

## In This Issue

<b>News</b> .....	<b>1</b>
About this newsletter .....	1
Server version 10.1.0.4 available .....	1
End of Support for Content Manager OnDemand V9.5 .....	1
IBM Content Manager OnDemand Education V9.5 and V10.1 Updates.....	1
<b>Tips – Cross Platform – 10.1.0.4.....</b>	<b>2</b>
ARSDOC: Allow -x loadID to be specified without any additional search parameters.....	2
ARSDOC: Allow -x loadID to be specified with the ARSDOC PRINT command .....	2
<b>Tips – Cross Platform .....</b>	<b>2</b>
Unload from the System Load folder .....	2
Using PDF internal indexes and the Page-Piece Dictionary.....	3
Multiple Page-Piece Dictionary rows .....	3
<b>Tips – Multiplatforms – 10.1.0.4 .....</b>	<b>4</b>
New cloud storage supported – Hitachi Content Platform .....	4
<b>Tips – z/OS .....</b>	<b>4</b>
z/OS Quick Hits .....	4
<b>Tips – IBM i – 10.1.0.4 .....</b>	<b>4</b>
Faster sample data download .....	4
Select File dialog column sorting.....	5
Support for user *ALL.....	5
<b>Additional Information .....</b>	<b>5</b>

## 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](mailto: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 10.1.0.4 available

#### Multiplatforms

The V10.1.0.4 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 1260192](#).

#### IBM i

See the Information APAR 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 V10.1.0.4.

Release	PTF Group	Info APAR	Read This First
V7.3	SF99252	<a href="#">II14799</a>	<a href="#">7046944</a>
V7.2	SF99251	<a href="#">II14723</a>	<a href="#">7041959</a>

### End of Support for Content Manager OnDemand V9.5

Content Manager OnDemand for Multiplatforms version 9.5 will reach End of Support on April 30, 2020. For more information about this product, visit the [IBM software support lifecycle](#) site.

Content Manager OnDemand for z/OS version 9.5 will reach End of Support on April 30, 2020. For more information about this product, visit the [IBM software support lifecycle](#) site.

Customers using Content Manager OnDemand for Multiplatforms or z/OS version 9.5 should upgrade to Content Manager OnDemand Multiplatforms or z/OS version 10.1 prior to the 9.5 support end date.

### IBM Content Manager OnDemand Education V9.5 and V10.1 Updates

You can simply create a CMOD Application – but do you understand what you're doing? Take CMOD Education when you first install OnDemand or when you have new employees 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.

We are pleased to offer the following Public instructor-led online classes for the following weeks in 2018 & a preview for 2019:

- November 12-16, 2018
- February 25, 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 CMOD instructors.

Two self-paced course are available:

#### IBM Content Manager OnDemand Administration

This is the foundation course for individuals interested in learning about the major functions of the IBM CMOD system. The course starts with a basic overview of the system, and then teaches students how to:

- Create and maintain CMOD objects such as applications, application groups, and folders
- Index, load, and retrieve various types of documents and report files in a CMOD system

#### IBM Content Manager OnDemand Advanced System Administration

- This self-paced course builds on the foundational course by providing system administration concepts for the CMOD solution. It provides students with a thorough understanding of CMOD architecture and system object concepts as well as storage administration, document storage and indexing components such as the PDF Indexer, OS/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 – 10.1.0.4

### ARSDOC: Allow -x loadID to be specified without any additional search parameters

The -X loadID option of the ARSDOC program can be used to identify all documents in a load. The -X loadID option uses the index file that was created when the data is loaded rather than performing a search. If any index values have been updated since the data was loaded, they won't match what is in the index file and so the corresponding documents will not be included in the list of documents returned by ARSDOC.

The -x loadID option also identifies all documents in a load, but previously required at least one other search parameter that identifies a subset of the documents in a load. The -x loadID option performs a search and will include all documents, regardless of whether or not their index values have been updated.

At server version 10.1.0.4, a change was made to allow the -x loadID to be specified without any other search parameters. This change allows the user to find all documents in a load, even those documents with updated index values.

Below are the options that can be used together.

- x loadID - with zero or more of the following:
- i sql\_string
- l hold\_name
- t search\_string
- T search\_string

This change is available in V10.1.0.4.

### ARSDOC: Allow -x loadID to be specified with the ARSDOC PRINT command

The ARSDOC PRINT program previously allowed the -X loadID option but did not allow the -x loadID option. At server version 10.1.0.4, a change was made to allow the -x loadID option to be used with ARSDOC PRINT. See the previous tip for information about the differences between the -X and -x options.

Below are the options that can be used together on the ARSDOC PRINT program.

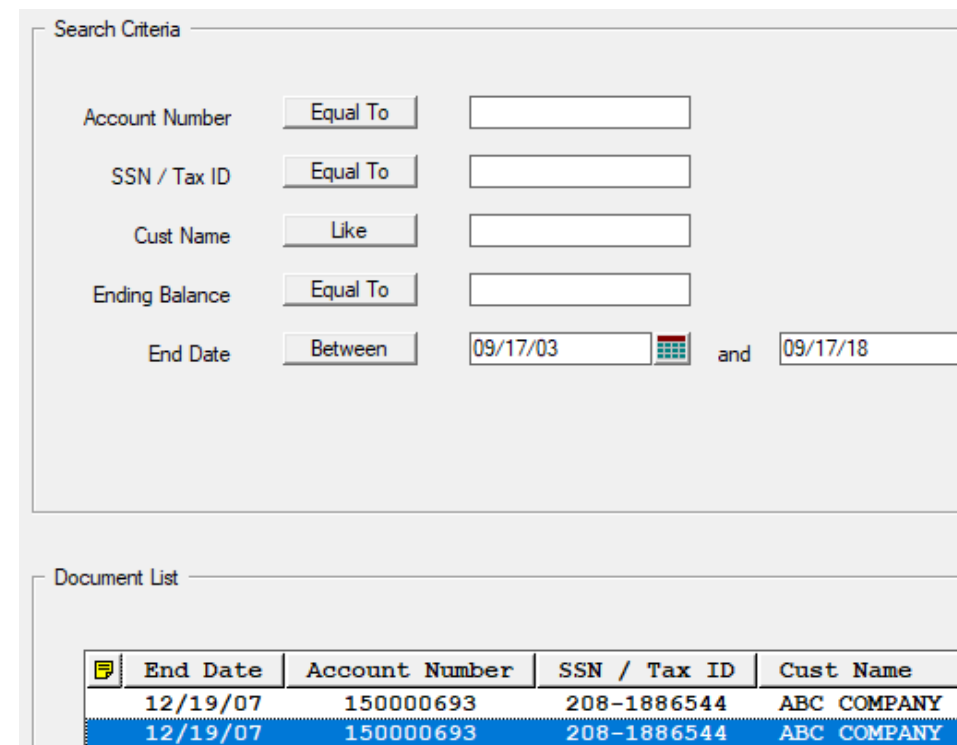
- x loadID - with zero or more of the following:
- i sql\_string
- l hold\_name
- t search\_string
- T search\_string

## Tips – Cross Platform

### Unload from the System Load folder

Content Manager OnDemand provides the System Load folder, which contains one row for each successful load. You can search for and filter information in the System Load folder by criteria such as load date, load ID, application group name, and application name.

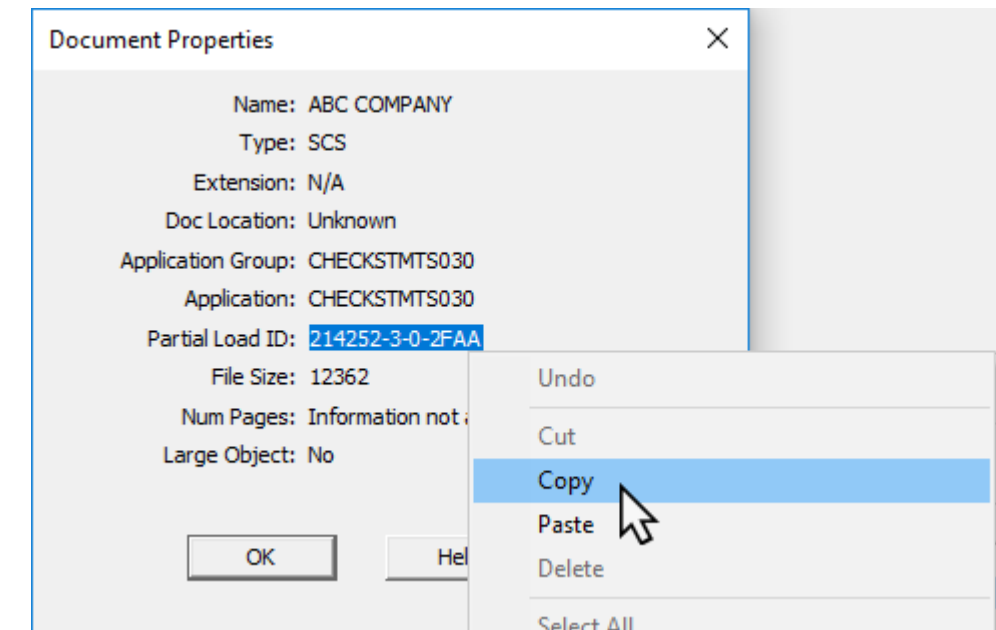
You also have the capability to unload data from the System Load folder, provided that your user ID has the proper permissions. For example, if you realize that data was accidentally loaded twice, you can unload the duplicate data by using the System Load folder. If you are searching for or viewing the data in the OnDemand end-user client, right click on the row in the Document List or from within the document.



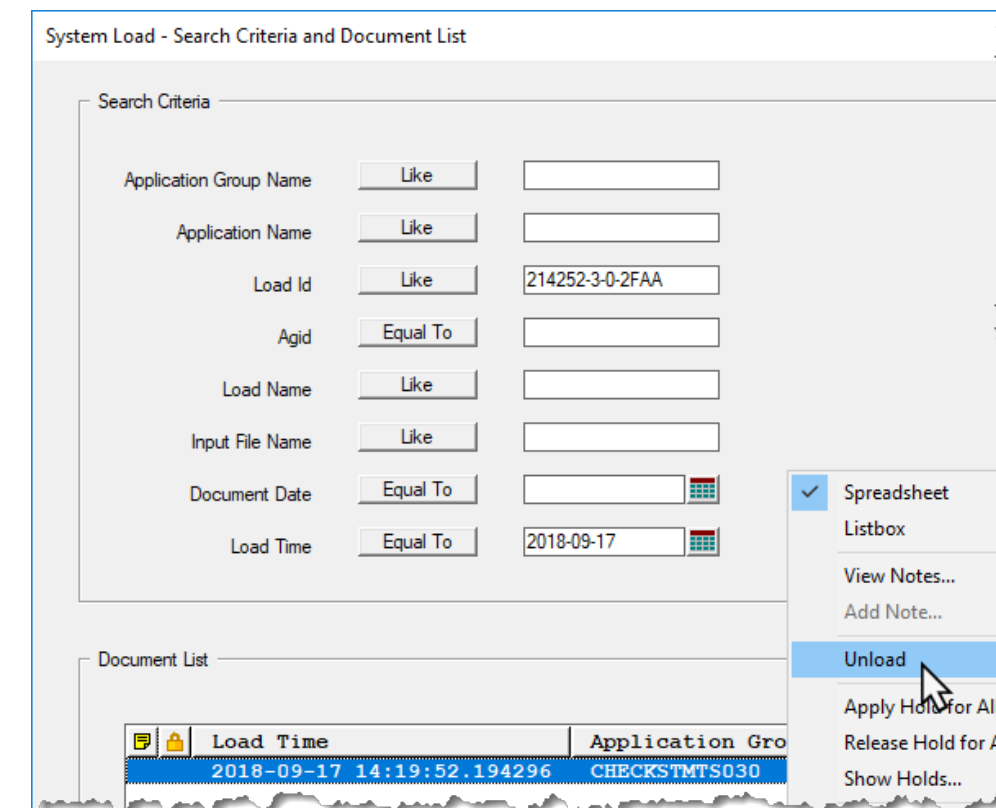
Select Properties.



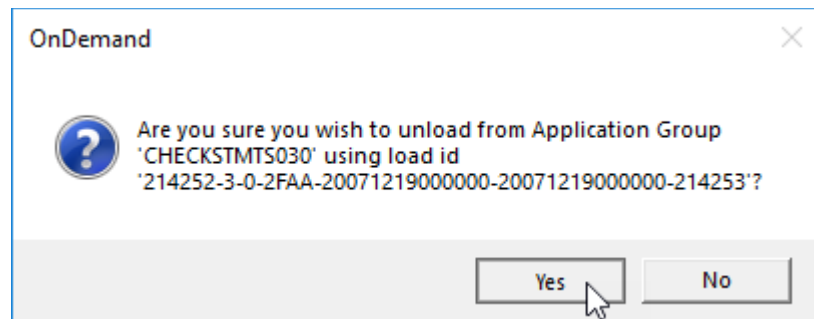
The Document Properties dialog includes the Partial Load ID, which you can copy to the clipboard.



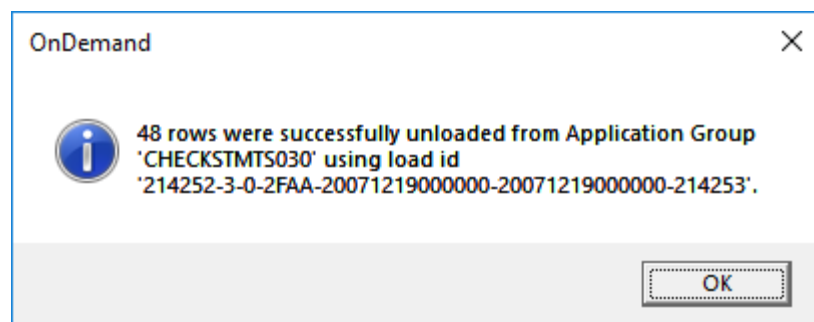
Next, open the System Load folder, paste the partial Load ID, and perform a search. You might have to specify a date range for the search, if you are not sure of the date that the duplicate data was loaded. Right click on the row in the Document List, and select Unload.



A confirmation message is displayed.



Click on Yes. The data is unloaded and a completion message is displayed.



## Using PDF internal indexes and the Page-Piece Dictionary

PDF internal indexes are indexes which are contained inside the PDF document, similar to the way that Tagged Logical Elements (TLEs) are contained inside an AFP document. These indexes are not part of the viewable page, but they can be extracted by the PDF indexer and placed into the index file.

Extracting the internal indexes can give better performance during loading than searching for and extracting the indexes from the pages of a PDF document.

PDF internal indexes must be created by the PDF provider when the document is created, in the same way that TLEs must be created in an AFP document at creation time.

The internal indexes are contained within the Page-Piece Dictionary, which is an optional structure of PDF document architecture. See the PDF Reference for a technical description of the Page-Piece Dictionary. Each page of a PDF document may contain a Page-Piece Dictionary.

In order for the PDF indexer to be able to extract the indexes, the Page-Piece Dictionary must be named IBM-ODIndexes. This name is case-sensitive.

The first group begins with the page which contains the first Page-Piece Dictionary. Pages previous to the first occurrence are discarded.

When any of the index values in the Page-Piece Dictionary changes, a new group is started.

It is not necessary for every page to contain a Page-Piece Dictionary. If a page does not contain one, that page is associated with the previous group.

There are PDF generators with which you can easily create a Page-Piece Dictionary using a graphical interface.

If you were to look inside a PDF document, here is an example of how a Page-Piece Dictionary would appear. The first index has an index name of "DocId" and the value is "AAA".

The Last Modified date is required by the PDF architecture.

```

/PieceInfo <</IBM-ODIndexes <</Private
                <</DocId(AAA)
                /BankNumber(0000000001)
                /AcctNumber(000000000011111111)
                /NoticeType(W)
                /StmtDate(20120507)
            >>
        >>
    >>

```

The values must be encoded in code page 1208. To specify a value in hexadecimal, enclose the value in angle brackets. For example, the previous "DocId" value specified in hexadecimal would appear as the following:

```

/DocId<414141>

```

Use the following indexing parameters to extract internal indexes. No other parameters are needed.

```

INDEXSTARTBY=1
RESTYPE=all
INDEXMODE=INTERNAL

```

The INDEXSTARTBY parameter determines the page number by which the PDF indexer must locate the internal indexes for the first group (document) within the input file. The PDF indexer stops processing if it does not locate the internal indexes for the first group by the specified page number.

The default number of indexes supported is 32. For more indexes, specify INDEXMODE=INTERNAL,n where n is the number of indexes. To conserve memory, use the minimum number required. For example, for the Page-Piece Dictionary shown in the preceding example, use:

```

INDEXMODE=INTERNAL,5

```

The PDF indexer can extract indexes using TRIGGER, FIELD and INDEX parameters, or it can extract indexes from the Page-Piece Dictionary with the INDEXMODE=INTERNAL parameter, but it cannot use both methods with the same input file.

The PDF indexer supports up to 128 internal indexes.

This tip adapted from [support item 1664089](#).

## Multiple Page-Piece Dictionary rows

The typical use for a Page-Piece Dictionary is to create one row of indexing information per group. However, starting with version 9.5.0.8, it is possible to create multiple index rows per group using a Page-Piece Dictionary. The following explains the Page-Piece Dictionary format that the PDF indexer requires in order to process multiple index rows for a group.

Use keys IBM-ODIndexes, IBM-ODIndexes1, IBM-ODIndexes2, ...IBM-ODIndexesn to designate each set of indexes on a page. A page can contain one, many, or no Page-Piece Dictionaries.

For example:

```

/PieceInfo <</IBM-ODIndexes <</LastModified(D:19700101000000Z)
                <</Private<<
                /AdvType(DIVIDEND WITH REINVEST OPTION)
                /CIFNo(5419-1)
                /ExDate(03 AUG 2004)
            <</IBM-ODIndexes1 <</LastModified(D:19700101000000Z)
                <</Private<<
                /AdvType(DIVIDEND WITH REINVEST OPTION)
                /CIFNo(5419-2)
                /ExDate(03 AUG 2004)
            <</IBM-ODIndexes2 <</LastModified(D:19700101000000Z)
                <</Private<<
                /AdvType(DIVIDEND WITH REINVEST OPTION)
                /CIFNo(5419-3)
                /ExDate(03 AUG 2004)
            >>
        >>
    >>

```

The example will create three rows pointing to the same document:

```

DIVIDEND WITH REINVEST OPTION 5419-1 03 AUG 2004
DIVIDEND WITH REINVEST OPTION 5419-2 03 AUG 2004
DIVIDEND WITH REINVEST OPTION 5419-3 03 AUG 2004

```

Rules for multiple Page-Piece Dictionaries:

1. A page with no Page-Piece Dictionaries is part of the current group.
2. A page with multiple Page-Piece Dictionaries starts a new group.
3. If the current group contains multiple Page-Piece Dictionaries and a page is encountered that contains only one Page-Piece Dictionary, it starts a new group.
4. If the current group contains one Page-Piece Dictionaries and a page is encountered that also contains one Page-Piece Dictionary, the index values are compared and if any value changes, a new group is started. This is the default behavior.
5. Each IBM-ODIndexes entry must contain the same number of indexes.
6. A page can contain up to 10,000 Page-Piece Dictionaries.

This tip adapted from [support item 1664089](#).

## Tips – Multiplatforms – 10.1.0.4

### New cloud storage supported - Hitachi Content Platform

Support for Hitachi Content Platform cloud storage has been added in version 10.1.0.4.

In the OnDemand Administrator client, a new storage node access method radio button has been added, labeled "Hitachi Content Platform". The radio button is only active on the storage node dialog if the server version is 10.1.0.4 or higher. When Hitachi Content Platform is selected, the Configuration File Name field becomes active. This allows a configuration file name to be used. The configuration file name is optional and can be added, updated, or deleted when adding or updating a storage node. When Hitachi Content Platform is selected, the title of the name field changes from "Storage Node" to "Namespace". A Logon value and Password must be specified. Description and Reload Hold Data parameters are optional. The access method cannot be changed once the storage node has been added.

The ARSXML batch administration program also supports Hitachi Content Platform beginning at server version 10.1.0.4. A new "HITACHI" value has been added for the accessMethod attribute, and other relevant attributes such as configFile are also supported when accessMethod is HITACHI.

The new access method is available on all platforms in the OnDemand Administrator client even though the storage manager support may not be available on the server. Hitachi Content Platform is currently available only on Content Manager OnDemand for Multiplatforms at server version 10.1.0.4 or higher.

More information on Hitachi Content Platform can be found on the web at <https://www.hitachivantara.com/en-us/products/cloud-object-platform/content-platform.html>.

## Tips – z/OS

### z/OS Quick Hits

#### OAM BIND requirement

IF you are migrating to z/OS V2.3

and

IF you are retrieving V2 migrated documents

THEN you will need to add CBRIDBSV.\* to the ARSZDOCG plan.

See [support item 2008017](#) for more information.

#### Using Direct Mode with Content Manager OnDemand on z/OS

Direct Mode improves performance for z/OS customers by bypassing ARSSOCKD and communicating directly with DB2.

Direct Mode processing is easy to set up and highly recommended.

To run ARSLOAD in Direct Mode you must have the following setup:

- ARSLOAD must be running with the same RACF user and group ID as the server.
- ARSLOAD and ARSSOCKD are running on the same system.
- The -h parameter specifies the instance name (such as ARCHIVE, for example) of the server in the ARS.INI file and not a host name.
- DSNAOINI DD is present.

If ARSLOAD is running in Direct Mode, you will see the following message in the output:

```
ARS4333I ARSLOAD is running in direct mode.
(ARSMVS_ARSADMIN_USETCPIP=0)
```

To run ARSODF in Direct Mode, you must have the following setup:

- ARSODF must be running with the same RACF user and group ID as the server.
- ARSODF and ARSSOCKD are running on the same system.
- The -h parameter specifies the instance name (such as ARCHIVE, for example) of the server in the ARS.INI file and not a host name.
- DSNAOINI DD is present.

If ARSODF is running in Direct Mode, you will see the following message at start up time:

```
ARS7946I ARSODF is running in direct mode.
(ARSODF_USETCPIP=0)
```

## Tips – IBM i – 10.1.0.4

### Faster sample data download

#### Background

As part of the OnDemand Administrator graphical indexer, the user has the ability to query for a list of spooled files on an IBM i server and transfer one of the spooled files in the list to the workstation as sample data. The file transfer was originally implemented using APIs that are part of the IBM i Access Client Solutions product. Transferring files this way is much slower than using a file transfer method. As a result, a change was made in server version 10.1.0.4 to use a Content Manager OnDemand file transfer API. Both the V10.1.0.4 OnDemand Administrator client and the V10.1.0.4 server are required for this change to be implemented.

#### Faster download

The new file transfer method is used both to download the list of spooled files and to download the contents of the selected spooled file.

The V10.1.0.4 OnDemand Administrator client is compatible with both the old and new methods of downloading spooled file lists and sample data.

If the server supports the new file transfer method, the following is true about the Pages to Display:

- 1) If you select All Pages, all of the pages in the file will be transferred to the workstation. The request may not work for extremely large spooled files. If the entire spooled file cannot be transferred within five minutes, an error will be displayed. In our testing, we have been able to download over 40,000 pages in one spooled file. Your results will vary based on your system and network.
- 2) If you select Starting Page, the Maximum Pages parameter is limited to 10000.

If the server does not support the new file transfer method, the following is true about the Pages to Display:

- 1) If you select All Pages, a maximum of 150 pages will be transferred to the workstation. If a spooled file containing more than 150 pages is selected, an error message is displayed.
- 2) If you select Starting Page, the Maximum Pages parameter is limited to 150.

## 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.

### Copyright and trademark information

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both. Microsoft, Windows, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

A current list of IBM trademarks is available on the Web at "[Copyright and trademark information](#)".

## Select File dialog column sorting

The Select File dialog of the OnDemand Administrator client contains a spooled file list that has seven columns of information. Depending on the search method (i.e Search by User, Search by Output Queue), the fifth column will contain either the Library/Queue information or the User name. The following is the list of columns:

### Search by User

File User Data Form Type Job Library/Queue File Type Pages

### Search by Output Queue

File User Data Form Type Job User File Type Pages

Because a list of spooled files can now be retrieved faster and can be much larger in size, searching for a specific spooled file in the list may take more time due to the number of files in the list and the random order they appear in the list. To improve the search, a change was made to allow the list to be sorted. When a column title is clicked, the list is sorted in ascending order based on the contents of the column. If the same column is clicked again (before clicking on another column), the column will be sorted in descending order. If another column is clicked, the list will be sorted in ascending order based on the contents of the column being clicked.

This enhancement:

- Is only available in the English language version of the OnDemand Administrator client until the next translation.
- Works with both 9.5.0.x and 10.1.0.x servers.

## Support for user \*ALL

Another addition to the V10.1.0.4 OnDemand Administrator client is a check to ensure that at least one "Also Search By" value is provided when searching by user if you have specified the user name as \*ALL. If User Data, Form Type, Job Type, or File isn't also specified, an error message will be issued and the search will not be performed. The message will be displayed in English only regardless of the language being used until the next translation.

The error message is:

User Data, Form Type, Job, or File must be provided when \*ALL is provided as the User name.

This enhancement requires server level 10.1.0.4.