IBM Content Manager OnDemand Newsletter

3rd Quarter 2023

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.

Server and client version 10.5.0.7 available

Multiplatforms

The V10.5.0.7 fix pack installation files are available from IBM Fix Central. The fix pack includes the Content Manager OnDemand for Multiplatforms server as well as 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 V10.5.0.7. This is the final fix pack for V7.3.

Release	PTF Group	PTF Lists	Read This First
V7.5	SF99669	335651	82189
V7.4	SF99652	335651	82189
V7.3	SF99252	335651	82189

End of Support for Content Manager OnDemand for i V7.3

Content Manager OnDemand for i version 7.3 reached End of Support on **September 30, 2023**. For more information, visit the IBM software support lifecycle site. Search for Content Manager OnDemand.

Customers using Content Manager OnDemand for i V7.3 should upgrade to Content Manager OnDemand for i V7.4 or V7.5 as soon as possible.

IBM Content Manager OnDemand education

Still working from home? 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. 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.

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 courses, visit the enChoice Education page or 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

64-bit clients fully support PDF

Effective with version 10.5.0.6, the 64-bit OnDemand Administrator client supports graphical indexer markup of PDF documents. Previously, the 32-bit OnDemand Administrator client was required.

Effective with version 10.5.0.6, the 64-bit OnDemand Client for end-users supports seamless viewing of PDF documents in the client window. Previously, the 32-bit OnDemand Client was required.

Cache recommendations for Content Manager OnDemand servers and application groups

When is cache recommended for a Content Manager OnDemand application group?

Content Manager OnDemand commands and APIs that perform ad hoc document storage should use cache storage for better performance. The application group can be set up to migrate to Tivoli Storage Manager (TSM), Object Access Method (OAM), or the Archived Storage Manager (ASM). Loading directly to these archive solutions is supported, but not recommended when using these commands and APIs.

Content Manager OnDemand application groups that are defined to support ad hoc document storage work best when cache storage is defined. They should also use an Expiration Type of Segment.

The Content Manager OnDemand server works best when using cache storage for ad hoc document storage requests. The Content Manager OnDemand server uses the cache to append the new documents being stored to the current storage object in the cache. The server performs this append until the maximum storage object size is reached. That larger storage object can be migrated to an archive solution, such as TSM, at a later date, if desired. This lowers the overhead and improves performance of the archive solution, by storing fewer objects that are larger in size.

Recommended: The Content Manager OnDemand System Log application group should have cache storage defined and the following commands and APIs should use an application group with cache storage defined:

- ARSDOC ADD command
- Add Document (ADDDOCOND) command (IBM i only)
- Content Manager OnDemand OLE control method StoreDoc
- Java API method ODFolder.storeDocument

This also includes the use of IBM Content Collector or CommonStore against Content Manager OnDemand because these solutions do ad hoc storage of documents into Content Manager OnDemand.

This tip is adapted from support item 469245.

New ARSDOC parameter introduced at server version 10.5.0.7

Server version 10.5.0.7 introduces the -z parameter for the ARSDOC QUERY and ARSDOC PRINT commands. The -z parameter causes the sort order specified in the folder to be ignored, which might improve performance.

What to do if index values from the PDF indexer are backwards

If the index values extracted by the PDF indexer are backwards or the words are mixed up, try adding the Disable Character Reordering parameter to the PDF indexer parameters.

```
DISABLECHARREORDERING=0
```

The character reordering affects how text is extracted from PDF documents. By default, the character reordering is disabled. However, if the PDF page contains heavily overlapped characters, enabling the character reordering by setting DISABLECHARREORDERING=0 might produce more consistent text extraction.

The value of the parameter can be:

0 Character reordering is not disabled. Character reordering might occur during the processing of the PDF input file.

1 Character reordering is disabled and will not occur. This is the default.

More information on the PDF indexer is available at this link in the Content Manager OnDemand documentation.

How do I know what APARs are included in each fix pack?

The Content Manager OnDemand for Multiplatforms readme file lists all of the APARs included in each fix pack. You can find all of the version 10.5 readme files in support item 1170988.

Click the link for the fix pack you are installing. Then click the link for the server and ODWEK.

Inside the server readme file, under each component, there is a section labeled “APARs” which lists all of the cross-platform APARs included in each fix pack level.

Additional APARs specific to Content Manager OnDemand for z/OS are listed in support item 7040762.

Content Manager OnDemand for i might include additional platform specific APARs in its fix packs.

Tips – z/OS

Quick Hits

Is it possible to run two ARSYSPINs processing the same spool output to either balance the load between the two or to provide a high availability solution?

Technically, the answer is yes, but the problem is that the system might process the same spooled file twice.

The issue is with the SYSOUT Application Program Interface (SAPI) interface, not with Content Manager OnDemand. When ARSYSPIN – via the SAPI interface – begins processing the spool output, SAPI puts an enqueue on the spooled file as expected. However, SAPI does not maintain an enqueue all the way to spooled file deletion. Rather, once processed, the spooled file enqueue is released and then SAPI marks the spooled file for deletion. Unfortunately, there is a narrow window between enqueue release and actual deletion where another process (the second ARSYSPIN) can grab the spooled file.

Tips – IBM i

Server version 10.5.0.7 improvements to SSL support

Previous implementations of SSL with Content Manager OnDemand for i required the SSL password to be in the clear in the ARS.INI configuration file. Content Manager OnDemand for i now has the capability to implement SSL by using an application defined to Digital Certificate Manager (DCM).

Your existing SSL implementation can be reconfigured so that you are no longer required to have your SSL password in the clear in the ARS.INI file. This reconfiguration is done entirely at the server. Your Content Manager OnDemand Client and OnDemand Administrator client installations do not require any changes.

Server version 10.5.0.7 is required. Also required are the 2Q2023 HTTP and Java PTF groups. The minimum PTF group levels are listed in the table.

Version	Content Manager OnDemand Group	Java Group	HTTP Group
V7.5	SF99669 - 6	SF99955 - 5	SF99952 - 9
V7.4	SF99652 - 15	SF99665 - 18	SF99662 - 30
V7.3	SF99252 - 25	SF99725 - 28	SF99722 - 47

See support item 595101 for more information.

IBM Navigator for i enhancements

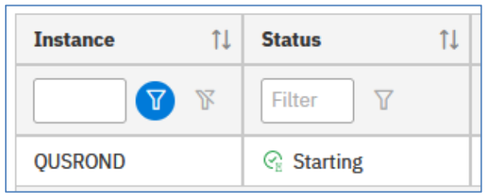
The Content Manager OnDemand for i component of IBM Navigator for i contains the following enhancements in the 3rd quarter update:

- The instance list now contains more columns of data. In addition to the existing columns of Instance, Status, Disk Pool, and Authority, the instance list now includes Port, SSL Port, Version, Locale, Language, and Database CCSID.

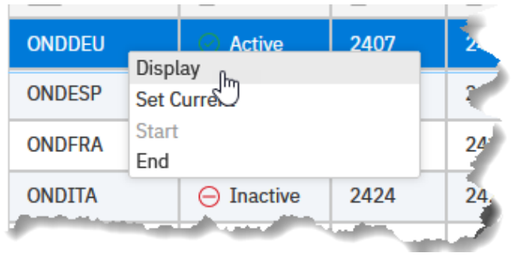
Instance	Status	Port	SSL Port	Version	Disk Pool
ONDDEU	Active	2407	2408	10.5.0.7	1
ONDESP	Inactive	2412	2413	10.5.0.6	1
ONDFRA	Active	2414	2415	10.5.0.7	1
ONDITA	Inactive	2424	2425	10.5.0.4	1
ONDJPN	Inactive	2422	2423	10.5.0.6	1
ONDUTF8FRA	Inactive	2624	2625	10.5.0.6	1
ONDUTF8JPN	Inactive	2622	2623	10.5.0.6	1
ONDVADER	Inactive	2470	2471	10.5.0.4	34 (DARTHVADER)
QUSROND	Active	1450	1451	10.5.0.7	1

Instance	Authority	Locale	Language	Database CCSID
ONDDEU	System Administrator	/QSYS.LIB/DE_DE.LOCALE	German	1141
ONDESP	System Administrator	/QSYS.LIB/ES_ES.LOCALE	Spanish	1145
ONDFRA	System Administrator (Read-Only)	/QSYS.LIB/FR_FR.LOCALE	French	1147
ONDITA	System Administrator	/QSYS.LIB/IT_IT.LOCALE	Italian	1144
ONDJPN	System Administrator	/QSYS.LIB/JA_5035.LOCALE	Japanese Katakana	5035
ONDUTF8FRA	System Administrator	/QSYS.LIB/FR_FR.LOCALE	French	*UTF8
ONDUTF8JPN	System Administrator	/QSYS.LIB/JA_5035.LOCALE	Japanese Katakana	*UTF8
ONDVADER	System Administrator	/QSYS.LIB/EN_US.LOCALE	US English	*UTF8
QUSROND	System Administrator	/QSYS.LIB/EN_US.LOCALE	US English	37

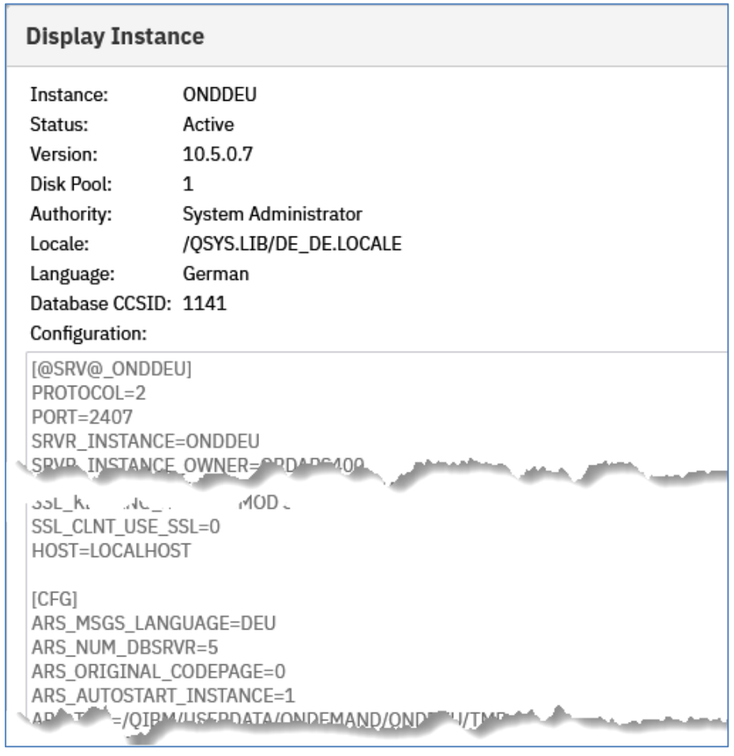
- After an instance is started, the status will change to Starting. If you refresh the list after the instance has completely started, typically 20 to 30 seconds, the status will change to Active.



- There is an option to display the configuration of the instance. From the instance list, right click the instance name and select Display.



The pop-up window displays the instance configuration.



The required PTFs for the 3rd quarter Navigator update are:

Version	Content Manager OnDemand PTF	IBM i PTF
V7.5	SI83565	SI83094
V7.4	SI83566	SI83095
V7.3	SI83567	SI83096

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

Considerations for high availability documentation updated

Considerations for High Availability when using Content Manager OnDemand for i documentation has been updated.

The lists of items that should be replicated and that should not be replicated have been updated.

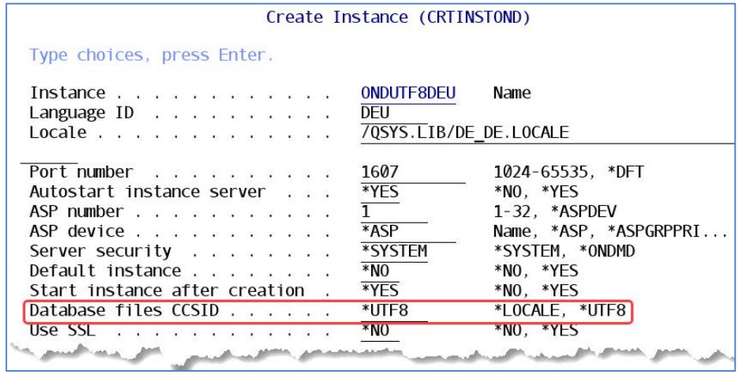
For more details, see support item 88151.

UTF-8 (Unicode) support explained

Content Manager OnDemand for i supports UTF-8 encoding, also known as Unicode, for all database files that belong to a Content Manager OnDemand instance. UTF-8 support is valid only for new instances; you cannot change an existing instance from a non-UTF-8 CCSID to UTF-8.

When creating an instance by using the Create Instance (CRTINSTOND) command, a Database files CCSID (DBFCCSID) parameter is available. If the DBFCCSID parameter value is specified as *UTF8 when you run the CRTINSTOND command, a parameter entry of ARS_IBMI_UTF8_TABLES=1 is added to the ARS.CFG configuration file for the instance. This parameter setting causes all character fields in all database files in the instance to be created with a CCSID setting of 1208. This allows for loading of data with different CCSIDs into a single instance, and eliminates the possibility of character conversion errors.

In a future release, the default value for the Database files CCSID parameter will be changed to *UTF8.



The ARS_IBMI_UTF8_TABLES parameter value must not be changed after the instance is created. The ARS_IBMI_UTF8_TABLES parameter must not be added manually to the ARS.CFG configuration file for any new or existing instances.

The instance is still created with specific Language ID (LANGID) and Locale (LOCALE) parameter settings. The instance server job will run in the specified language and locale.

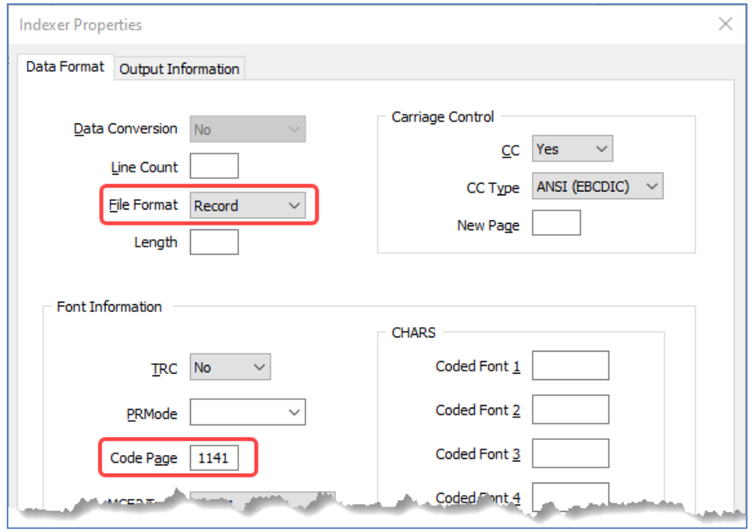
Jobs loading data into a UTF-8 instance must not have a CCSID value of 65535. If the job that is loading data has a CCSID value of 65535, the load will fail with message OND2049 - Application group not found. To resolve the problem, you can change the job to have a different CCSID value, change the CCSID setting of the user profile that is running the job, or change the Coded character set identifier (QCCSID) system value.

When storing indexes in a UTF-8 instance, it is important to note that some characters will use more than one byte when stored in a UTF-8 field. All ASCII characters use one byte. This includes basic Latin lowercase [a-z] and uppercase [A-Z] characters, Arabic numerals [0-9], and commonly used symbols such as those found on the ANSI keyboard. Most other non-Chinese/Japanese/Korean (CJK) characters require two bytes. Most CJK characters require three bytes. Some uncommon characters require four bytes.

When index values are stored, they are converted from the Code Page specified in the OnDemand Administrator client on the Indexer Properties dialog of the application definition to UTF-8 (CCSID 1208). String conversion between code pages might result in an increase in the length of the string when data is loaded into Content Manager OnDemand. For example, the OnDemand Administrator client might require two bytes to display a double-byte character, yet the server might require three bytes to store the character in the database.

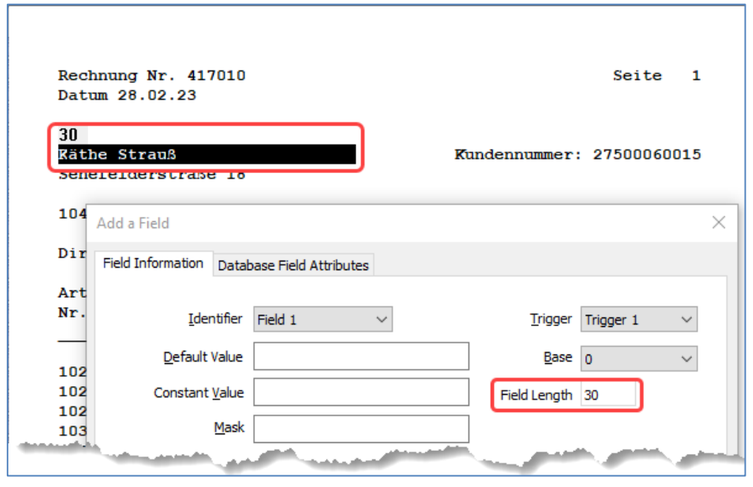
When storing data for languages such as Greek, Russian, Hebrew, and Arabic, it is recommended that you create application group string fields that are double the length you would use if the instance did not support UTF-8. For other languages, if your index values contain accented characters, you will need to make the fields somewhat longer, but likely do not need to double the length. The OnDemand Administrator client makes it easier to handle these increased field lengths, as described in the following example.

The graphical indexer of the OnDemand Administrator client can be invoked either by using the Report Wizard, or by manually creating a Content Manager OnDemand application definition. When using the graphical indexer with a UTF-8 instance, the Indexer Properties dialog will be presented before your sample data is displayed. The File Format field must be set to Record. You must set the Code Page field to the value that matches the data being indexed. In the example, the Code Page field is set to 1141, which is German with Euro support.

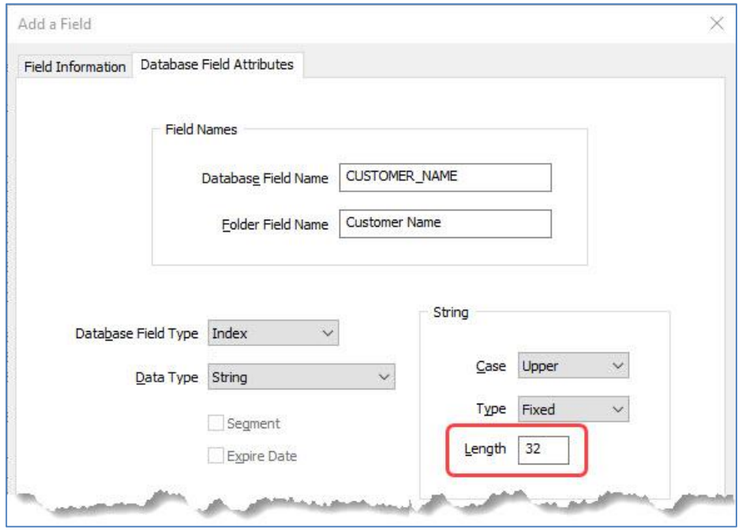


When selecting a string to use as an index field, the graphical indexer will set the Field Length field to the length that is selected in the sample data.

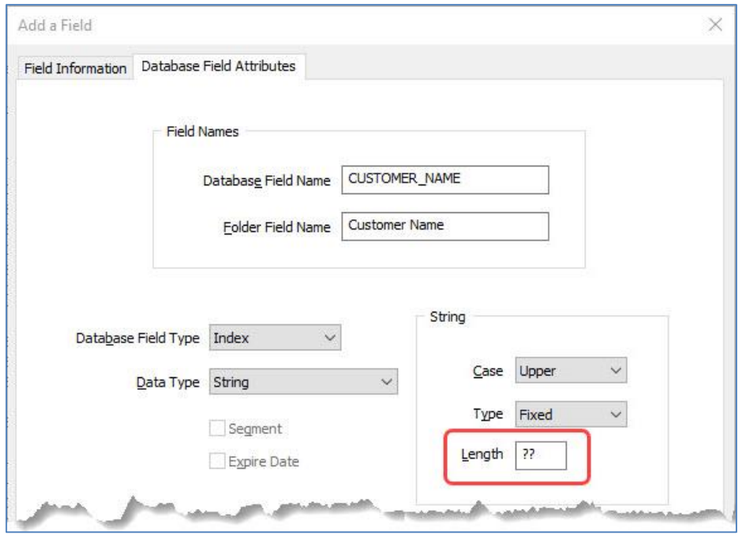
On the Field Information tab, the Field Length is shown before it has been converted to UTF-8.



On the Database Field Attributes tab, the graphical indexer automatically increases the String Length to a size that is sufficient to hold the data that you have selected after conversion to UTF-8. If you expect that other possible values for the field might require more space than Content Manager OnDemand calculated, you can override the length by typing a different number in the space provided. In the example, the calculated length is 32.



What is the correct length if only some characters require two bytes? You should adjust the String Length to accommodate the maximum number of accented characters that might occur in the data being indexed.



This tip is adapted from support item 7017512.

Correct method for starting the Content Manager OnDemand server

Supported method

The only supported method for starting the Content Manager OnDemand server is to the use Start TCP/IP Server (STRTCPSVR) command. For example, to start the server for instance QUSROND, the command to use is

```
STRTCPSVR *ONDMD INSTANCE(QUSROND)
```

or

```
STRTCPSVR SERVER(*ONDMD) INSTANCE(QUSROND)
```

The INSTANCE parameter permits the special values *DFT, *ALL, and *AUTOSTART as well as the specification of the name of an instance. The default value for the INSTANCE parameter is *DFT.

There is also the option of creating a data area to further control the behavior of the STRTCPSVR and ENDTCPSVR commands.

Without the STRTCPSVR data area

Without the data area, the values of *DFT and *AUTOSTART work identically. All instances that are set to autostart are started. Use of the special value *ALL will start all instances configured on the system.

With the STRTCPSVR data area

With the data area, the value of *DFT will start only the instance named in the data area. The data area must be named STRTCPSVR and located in library QUSRRDARS. The data area must be type character with a length of 10. To create the data area, use the command:

```
CRTDTAARA DTAARA(QUSRRDARS/STRTCPSVR) TYPE(*CHAR) LEN(10)
   VALUE(ONDPROD) TEXT('Autostart instance for OnDemand')
```

where ONDPROD is the name of the instance to start.

The special values *ALL and *AUTOSTART work the same with the data area as without the data area.

The following table summarizes the behavior of STRTCPSVR.

STRTCPSVR	*DFT	*ALL	*AUTOSTART	Named instance
Without the data area	All instances set to auto-start are started	All instances configured on the system are started	All instances set to autostart are started	The named instance is started
With the data area	Only the instance named in the data area is started	All instances configured on the system are started	All instances set to autostart are started	The named instance is started

The following table summarizes the behavior of ENDTCPSVR.

ENDTCPSVR	*DFT	*ALL	Named instance
Without the data area	All active instances are ended	All active instances are ended	The named instance is ended
With the data area	Only the instance named in the data area is ended	All active instances are ended	The named instance is ended

Which instances autostart?

How can you tell the instances that are started when STRTCPSVR SERVER(*ONDMD) INSTANCE(*AUTOSTART) is run? You know that if ARS_AUTOSTART_INSTANCE=1, the instance will automatically start. But you do not want to view the ARS.CFG file for every instance.

You can use the grep command in qsh to search the contents of all the ARS.CFG files for the string ARS_AUTOSTART_INSTANCE=1.

```
$
grep -n ARS_AUTOSTART_INSTANCE=1 /qibm/userdata/ondemand/*/ars.cfg
/qibm/userdata/ondemand/ONDDEMO/ars.cfg:53:ARS_AUTOSTART_INSTANCE=1
/qibm/userdata/ondemand/ONDDEU/ars.cfg:53:ARS_AUTOSTART_INSTANCE=1
/qibm/userdata/ondemand/ONDENU/ars.cfg:53:ARS_AUTOSTART_INSTANCE=1
/qibm/userdata/ondemand/QUSROND/ars.cfg:53:ARS_AUTOSTART_INSTANCE=1
$
```

You know from the output of this command that instances ONDDEMO, ONDDEU, ONDENU, and QUSROND will be started when STRTCPSVR SERVER(*ONDMD) INSTANCE(*AUTOSTART) is run.

You can specify multiple path names so that the ASPs and IASPs can be checked at the same time. Use a space to separate the paths. If you do not want the line numbers shown in the first example, remove the -n parameter as shown in this example.

```
$
grep ARS_AUTOSTART_INSTANCE=1 /qibm/userdata/ondemand/*/ars.cfg
    /IASP1/qibm/userdata/ondemand/*/ars.cfg
/qibm/userdata/ondemand/ONDDEMO/ars.cfg:ARS_AUTOSTART_INSTANCE=1
/qibm/userdata/ondemand/ONDDEU/ars.cfg:ARS_AUTOSTART_INSTANCE=1
/qibm/userdata/ondemand/ONDENU/ars.cfg:ARS_AUTOSTART_INSTANCE=1
/qibm/userdata/ondemand/QUSROND/ars.cfg:ARS_AUTOSTART_INSTANCE=1
/IASP1/qibm/userdata/ondemand/ONDTEST/ars.cfg:ARS_AUTOSTART_INSTANCE=1
$
```

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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