Adding additional IDOL content engines to Content Manager

Content Manager: 9.x

September 2018

Ref: KM02602196

MICRO FOCUS®

Introduction

Out of the box Content Manager (CM) installs one IDOL (OEM) Content Engine, allowing indexing and searching the content of up to 10 Million documents (licenced limit per content engine). For smaller sites this may be adequate for their CM Production usage for the foreseeable future. For larger sites, an analysis of their needs may indicate a need for additional content engines (this may be driven by performance and/or capacity requirements).

The CM IDOL OEM licence allows for creation of more than one IDOL content engine as needs dictate. This guide explains the method of adding additional IDOL content engines to an existing installation.

Assumptions

For simplicity and brevity's sake, this article assumes:

a. A single server is hosting all CM and IDOL components (although in a typical Production implementation this will not be the case).

b. A 64-bit CM Workgroup Server installation is already functioning correctly on the server.

c. The CM IDOL Service and one (1) CM IDOL content engine were originally installed and are properly functioning (with default settings) on the same workgroup server.

d. The organisation has already determined server and storage requirements for their CM IDOL (OEM) implementation, and has made an informed decision regarding their requirements for more than one CM IDOL content engine. This article does not discuss server sizing or requirements analysis.

e. This article demonstrates the addition of one (1) additional CM IDOL (OEM) content engine to the existing environment. Procedures detailed herein can be applied to the creation of any number of additional content engines.

Terminology

•   The term "**Content *Engine***" refers to the sum of all components comprising a working CM IDOL (OEM) index, i.e.:

    a. A Windows service
    b. Application and configuration files
    c. Index files & directories
    d. Log files

•   The term "**Content *Service***" refers to only the Windows service component of a CM IDOL (OEM) content engine.

•   The term "**IDOL database instance**" refers to a logical segregation of data within an IDOL content engine's index. One IDOL content index may contain many database instances. In a CM IDOL (OEM) installation, the IDOL index will typically contain a database instance for each CM dataset for which content indexing is enabled. It is necessary to create CM-specific database instances in an IDOL index, as content queries sent from CM include the database identifier to ensure results are only returned for the correct dataset.

Target Audiences

- Customer IT Support
- Content Manager implementation specialists
- Micro Focus Support engineers

Prerequisite Knowledge

- Experience in creating and managing datasets in CM Enterprise Studio (CMES)
- Experience installing and configuring IDOL (OEM) as provided with CM
- The following knowledge base articles should be read and understood:
  - KM02602195 - CM IDOL - Initial Setup Overview
  - KM03211832 - IDOL and Document Content Indexing Installation and Configuration

Solution

Note: The process below describes the addition of a single CM IDOL (OEM) content engine. These steps can be repeated to create as many additional engines as required.

Copy and Rename an Existing Content Engine's Application Files

1. Stop all running IDOL services (using action=stop commands from a browser).

2. Copy the entire program folder from an existing IDOL content engine, e.g. "C:\Program Files\Micro Focus\Content Manager\IDOL\TRIM Content Service" (including subfolders & contents).

3. Place this copy of the folder and its contents in the desired location on your chosen IDOL content server.

   > Note: For simplicity's sake the following instructions assume the content service application folder is being copied to the same parent folder on the same server as the source engine, i.e. "C:\Program Files\Micro Focus\Content Manager\IDOL\").

4. Rename the copied folder to "C:\Program Files\Micro Focus\Content Manager\IDOL\TRIM Content Service **2**".

5. Rename the corresponding files within the folder to:

   a. TRIM Content Service **2**.cfg

   b. TRIM Content Service **2**.exe

   c. TRIM Content Service **2**.log (or simply delete TRIM Content Service.log, as a new log file will be created upon next service start)

d. (If present, TRIM Content Service.lck can either be deleted or re-named to TRIM Content Service 2.lck)

Configure the New Content Engine

6. Open TRIM Content Service 2.cfg using a text editor (e.g. Notepad).

7. Modify the following entries:

a. **Ports** – If necessary, to avoid conflict with other CM IDOL content services running on the same server, change:

    i.   ServicePort=9102 to **ServicePort=9202** (or any other available port of your choice)

    ii. Port=9100 to **Port=9200** (or any other available port of your choice)

    iii. IndexPort=9101 to **IndexPort=9201** (or any other available port of your choice)

b. **Paths** – All paths in the [Paths] and [Logging] sections of this new content engine's configuration **must** now be modified to point to the required location for this new engine's index and log files.

> Note: If these paths are left pointing to the same location as the original content engine's index and log files, errors will result and corruption of the original engine's index is highly likely.

c. **Databases** – Database instance information is already present because it was copied from another working engine. This database information will be used by the new engine, and hence should be left in the configuration file. E.g.:

```
[Databases]
NumDBs=1

[Database0]
Name=CM_nn
DatabaseReadOnly=FALSE
Internal=FALSE
InvertedAgent=FALSE
```

(where 'nn' is your CM dataset ID)

Create and Configure a Windows Service for the New Content Engine

8. Open a command prompt using "Run as Administrator", and execute the following command:

"C:\Program Files\Micro Focus\Content Manager\IDOL\TRIM Content Service 2\TRIM Content Service 2.exe" -install

> Note: This command may not run if copied and pasted directly from this document to a command prompt window. It may be necessary to type the command (in particular the quotation marks) manually.

This will install the new content service with the name "TRIM Content Service 2", with a description such as "Autonomy IDOL Server Version 12.0.0 Build 1686550"):

Time Broker	Coordinates execution of background work for WinRT ...	Running	Manual (Trigg
Touch Keyboard and Handwriting ...	Enables Touch Keyboard and Handwriting Panel pen a...		Manual (Trigg
TRIM Content Service 2	Autonomy IDOL Server Version 12.0.0 Build 1686550		Automatic
Update Orchestrator Service for Wi...	UsoSvc		Manual
UPnP Device Host	Allows UPnP devices to be hosted on this computer. If ...		Disabled

9. To maintain consistency with other CM content services, it is desirable (though not mandatory) to change the way the new content service's Name and Description appear in the Windows services console. To achieve this:

   a. If the new content service is running, stop it.
   (Although normally this should be done using an action=stop command from a browser, in this instance it's OK to stop the service using the Windows Services console because the new content engine will not be performing any indexing tasks yet)

   b. Open a command prompt using "Run as Administrator"

   c. To change the **Display Name**, issue the following command:

   sc config "TRIM Content Service 2" DisplayName= "Content Manager IDOL Content Service 2"

Content Manager IDOL Content Service	Content Manager IDOL Content Service		Automatic
Content Manager IDOL Content Service 2	Autonomy IDOL Server Version 12.0.0 Build 1686550		Automatic
Content Manager IDOL Service	Content Manager IDOL Service	Running	Automatic

   d. To change the **Description**, issue the following command:

   sc description "TRIM Content Service 2" "Content Manager IDOL Content Service 2"

Content Manager IDOL Content Service	Content Manager IDOL Content Service		Automatic
Content Manager IDOL Content Service 2	Content Manager IDOL Content Service 2		Automatic
Content Manager IDOL Service	Content Manager IDOL Service	Running	Automatic

> Note: These commands may not run if copied and pasted directly from this document to a command prompt window. It may be necessary to type the commands (in particular the quotation marks) manually.

10. In the Windows services console, right click on the service "Content Manager IDOL Content Service 2", select Properties, and then configure the following:

   a. General tab - Startup type = Automatic (if not already)

   b. Log On tab – for "This account", enter the user name and password for the account you wish to run the service (usually the same account as the CM Workgroup and other CM IDOL services)

Add New Content Engine to CM IDOL Service

11. The following changes will add the new content engine to the CM IDOL Service's configuration file (C:\Program Files\Micro Focus\Content Manager\IDOL\TRIM IDOL Service\TRIM IDOL Service.cfg):

   Example additions/changes in **bold**:

```
[DAHEngines]
Number=2

[DAHEngine0]
Host=ContentServer1
Port=9100

[DAHEngine1]
Host=ContentServer1
Port=9200

[DIHEngines]
Number=2

[DIHEngine0]
Host=ContentServer1
Port=9100

[DIHEngine1]
Host=ContentServer1
Port=9200
```

> Note: The port numbers in this section must match the value specified in the content engine's 'Port' parameter. It's OK to use the same port number for more than one content engine if they're running on different 'host' content servers.

Start Services and verify correct operation

12. In the Windows services console, start the Content Manager IDOL service.

13. Start all Content Manager IDOL content services. Check application.log for the new content service for any unexpected errors.

> Note: It's normal at this stage to see the message "…00-Always: No Database found" in the application.log for the new content engine. This will be rectified automatically when the first index job is sent to this engine.

14. In CMES, right-click on the dataset and select Content Index – Properties – IDOL Configuration.

15. Verify that the new content engine is now listed under "IDOL Content Engines" and its status is 'Online'.

16. Click OK.

17. An additional CM IDOL (OEM) content engine has now been added to the environment. CM is now ready to resume normal content indexing operations.

> Note: It is **not** normal practice to point the index paths for multiple content engines to the same physical disk. It was shown this way in this article for simplicity's sake.

Micro Focus Trademark Information

MICRO FOCUS and the Micro Focus logo, among others, are trademarks or registered trademarks of Micro Focus (IP) Limited or its subsidiaries in the United Kingdom, United States and other countries. All other marks are the property of their respective owners.

Company Details

Company name: Micro Focus International plc
Place of registration: England and Wales
Registered number: 5134647
Registered address: The Lawn, 22-30 Old Bath Road, Berkshire, RG14 1Q