Fuse Management Central

User Guide

Version 1.3.1

Contents

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Disclaimer

1. Introduction

This user guide provides information about features and functionality of Fuse Management Central 1.3.1.

2. Document Revision History

Revision Number	Modification Date	Section Modified	Modifications
1.0	2021-03-02	All	Initial version

3. Supported Systems and Compatibility

Please refer to the **Release Notes** document for a complete listing of supported systems and compatibility.

3.1. Supported Screen Resolution

Fuse Management Central web application requires you to have your screen resolution set at a minimum of **1280x720**.

(Windows Only) To verify your screen resolution settings, please do the following:

1. Go to **Start**.
2. Select **Settings**.
3. Select **System**.
4. Click **Advanced Display Settings**.
5. Check your **Resolution**.
6. If your screen resolution is below the recommended settings, click the arrow to toggle the drop down, and **select a higher resolution**.
7. Click **Apply**.

4. Get Started

4.1. What is Fuse Management Central?

Fuse Management Central is an application management platform that simplifies OpenText ™ Content Server® management and accelerates its administration learning curve. The Fuse Management Central web administration console enables centralized management of Content Suite instances as well as its component monitoring.

Fuse Management Central also separates system administration from content administration, introducing a new layer of security on top of the traditional OpenText ™ Content Server® administration tools.

4.2. Install Fuse Management Client

1. Extract Fuse Management Client ZIP file (`Clients/Fuse Management Client 1.3.1/fuse-management-client-1.3.1.zip`)* outside of the OpenText ™ Content Server® installation folder*.
2. Copy all the extracted `fuse-management-client-1.3.1` folder contents to the `<Content Server home>` directory, overriding the `staging` folder.

> ! If you are installing Fuse Management Client on a UNIX/Linux system, make sure that you are performing the setup actions with the user who installed OpenText ™ Content Server® and runs the Content Server service.

3. Open **Content Server Administration** page in a Web browser.
4. If prompted, enter the Administrator password, and then click **Log-in**.
5. Install or upgrade Fuse Management Client:
    a. If you already have a previous version of Fuse Management Client:
        i. Select:
            - *(OpenText ™ Content Server 16.2.5 and below)* **Module Administration > Upgrade Modules**
            - *(OpenText ™ Content Server 16.2.6 and above)* **Core System > Module Configuration > Upgrade Modules**
    b. For new installations:
        i. Select:
            - *(OpenText ™ Content Server 16.2.5 and below)* **Module Administration > Install Modules**
            - *(OpenText ™ Content Server 16.2.6 and above)* **Core System > Module Configuration > Install Modules**
6. From the **Installable Modules** list, install/upgrade **Fuse Management Client** module.
7. After the installation of **Fuse Management Client** module is completed, restart **Content**

Server.

For some Content Server versions, specially earlier ones, we found out that the standard soft-restart is not enough to reload all the loaders required for Fuse Management Client, so we suggest you do a second hard-restart to make sure everything was updated. Please check the troubleshooting section.

4.2.1. (Optional) Install using Opentext System Center Manager

Alternatively If OpenText System Center Manager (OTSCM) is installed in all your systems it can be used to install the Fuse Management Client 1.3.1 module:

1. Upload Fuse Management Client ZIP file :
    a. Open OTSCM, navigate to **Settings** and on the left menu choose **External Vendor Files**.
    b. On the top right there is a button named **Select external vendor files** that allows to upload a new file.
    c. Upload Fuse Management Client ZIP file (`Clients/Fuse Management Client 1.3.1/fuse-management-client-1.3.1.zip`).
2. Create an installation plan for Fuse Management Client:
    a. Navigate to the **Plans** tab and use the button **Add plan** to create a new plan for installing Fuse Management Client.
    b. Add each configured system where fuse-management-client-1.3.1 is to be installed, and for each one of them configure the required attributes:

Field	Description
Module Vendor	Third Party
Thirt party Module	Previously uploaded Fuse Client ZIP (e.g. *"fuse-management-client-1.3.1.zip"*)
Instance path	Path to OpenText Content Server installation
Admin username	OpenText Content Server Admin user
Host name	OpenText Content Server hostname
Site name	OpenText Content Server site name (configured in mappings.tbl)

    c. Save the plan.
3. Execute plan:
    a. The plan can be executed by pressing the play button under actions.

4.3. Add New System

This section will guide you through the process of adding a new system (OpenText ™ Content Server® instance) to Fuse Management Central.

Before starting, ensure that:

✅ You have the Fuse Management Client module installed on your system (OpenText ™ Content Server instance)

✅ Fuse Management Central can access your system (e.g. `http(s)://otcs.company.com/otcs/cs.exe`)

✅ Your system can access Fuse Management Central (e.g. `http://fuse.company.com:2100`)

The first time a system is added to Fuse Management Central, it cannot be running under **Eclipse (CSIDE)**. Is mandatory to wait until Fuse Management Central scans all of your system's component.

4.3.1. Activation Request

1. Access Fuse Management Central:

```
http://<fuse-management-central-host>:2100
```

2. **Login** with your authentication credentials:
   - **Username**: `fuseadmin` *(default)*
   - **Password**: `fuseadmin` *(default)*
3. Click **Systems** on the navigation menu
4. Click **Add System**
5. Fill the following fields, following all wizard steps:

Field	Description
Environment	Environment name (e.g. *"DEVELOPMENT"*) **Please note that only systems belonging to the same cluster can be added to the same environment. Mixing systems from different clusters on the same Fuse Management Central enviroment will cause system deactivation**!
System Name	System name or alias (e.g. *"LV181"*)
System Type	Default: *OpenText Content Server*

Field	Description
System URL	System CGI path (e.g. `http://otcs.company/otcs/cs.exe`)
Username	User account with system login privileges (e.g. *"otadmin@otds.admin"*)
Password	User account password
Advanced Options	
(Optional) **Description**	System description to help system identification (e.g. *"Partner sandbox"*)
(Optional) **Owners**	System owner(s) email(s) (e.g. *"john.doe@company.com"*), for event email notifications
(Optional) **Tags**	System tags (e.g. *"front-end"*)

System tags can be very useful when logically grouping systems, allowing you to filter them when, e.g. applying configurations, performing bulk actions, …

6. Click **Test Connection** to validate that your system fulfills all requirements

If connection test is not successful, please **review all system parameters** (System URL, credentials, …) and try again.

7. Click **Finish**
8. Next, copy **System ID** and send it to your system administrator to authorize Fuse Management Central activation request

4.3.2. Authorize Activation

1. Open the **Content Server Administration** page in a Web browser.
2. If prompted, enter the Administrator password, and then click **Log-in**.
3. Select **Fuse System Administration > Fuse System Activation**.
4. Insert the provided **System ID** and click **Activate**
5. Your system is now **activated** and Fuse Management Central can start manage and monitoring it

If the authorize activation process fails, please check if all requirements are fulfilled and review the procedure.

5. How to Use Fuse Management Central

Fuse Management Central is organized into 6 different areas, each one covering an operational role and suited to provide different perspectives over your OpenText CSP infrastructure.

Each area is designed to offer an optimized user experience in systems management, while maintaining close control and monitoring features.

5.1. Errors & Alerts

Fuse Management Central provides resourceful alerts as UI indicators and email notifications so you can have a bigger control on what it's going on with the systems.

The alerts are divided into 4 categories:

- **Errors** → Indicates a problem ocurring.
- **Warnings** → Warns about possible problems about to occur.
- **Resolved** → Represents a previous alert that has been resolved.
- **Dismissed** → Represents an alert that was dismissed while active.

Alerts are triggered when they reach a defined threshold.

Admin users can redefine some of the thresholds for the alerts. You can read more about this in the [bookmark-administration-alerts] chapter.

5.1.1. UI Indicators

Fuse Management Central allows you to quickly identify problems in the OpenText ™ Content Servers® components and processes using visual indicators.

These visual indicators are easy to identify and are spread all over the application trough dashboards and widgets.

Errors and alerts counters can be expanded in some dashboards, usually the more detailed ones (for instance, a System Dashboard). When expanded it will show the list of all related alerts with more detail. It is possible to highlight the widget related with the alert, to do that just hover the mouse over the alert on the alerts list.

Some indicators can also be hovered and a tooltip will be shown showing more details about the alert.

5.1.2. Email Notifications

Fuse Management Central can send email notifications for every alert that is triggered. Those emails are sent to all owners of the corresponding systems and / or environments, and will include useful information regarding the type of alert, its severity and observed value.

Alerts notifications can include more than one alert, if they have the exact same type, system and / or environments, date and severity. That means that if two agents that belong to a specific system trigger the exact same alert at the same time, only an email is sent that aggregates those two alerts.

Define system / environment owners

To get email notifications from a specific system, or environment, one must belong to the owners distribution list.

To configure the owner for a specific system, you must:

- Edit the system to get notifications from
- Expand **Show Advanced Options**
- Add your, or any other email address(es), to **Owners**
- Save the system

To get email notifications from an environment, you must:

- Edit the environment to get notifications from
- Expand **Show Advanced Options**
- Add your, or any other email address(es), to **Owners**
- Save the environment

If you want to receive notifications for all systems in an environment, you just need to configure notifications in that environment, as all of the systems will inheritate it.

Inhibited alerts

There are two situations that inhibit alert notifications, meaning that you won't get those notifications even if the alert is actually active:

- when system is offline, all other alerts regarding that system are inhibited
- when there is an error alert and a warning alert with the same type for the exact same component, system or environent, the warning event is also inhibited (e.g. if CPU above 80% triggers a warning event, and CPU above 90% triggers a warning event then only the error alert notification will be sent when CPU is above 90%)

Email content

In the email subject, we include the following information:

- Whether the alert was triggered (`[ALERT]`) or was resolved (`[RESOLVED]`)
- If the notification aggregates more than one alert, it displays `[ALERT DIGEST]` instead of `[ALERT]`
- If alert was triggered, it also includes its severity (either `WARNING |` or `ERROR |`)

- finally, the alert title, specifing which system or environment was affected, is included

An example of the email subject is:

```
[ALERT DIGEST] WARNING | System OTCS-01 agent scheduled next run failed
```

For the email body, the following information is included:

Field	Description
Severity	Alert severity (Warning, Error, or Resolved)
Title	A simple title specifing which system or environment was affected
Summary	A more detailed description of the problem, which can include the component name that triggered that alert
Start Time	When the alert was triggered
Affected	Includes a reference to the environment and system where the alert was triggered
Metric	The internal alert name
Threshold	The threshold value that was configured at the time the alert was triggered
Observed	The actual value that was observed when the alert was triggered

For aggregated alert email notifications, a list with the description and the observed value for each individual alert is also included.

There is a "View Details" button available to navigate directly to the Alert Details page, from where it is possible to check all the information available from the alert, as well as perform related actions.

5.1.3. Alert Details

Clicking in any Alert entry in an Alerts list, existent in Dashboard, System Details, Environment Details or in the Events side ribbon, will open an Alert Details page which offers a wide view over a specific Alert.

This page contains everything there is to know about the Alert: the alert cause, start and end time, current status, systems and/or environments affected, components affected, or any other detailed information available in the Alert.

It will also show if any user was notified of the Alert and which channel was used for that notification.

On the right side, there is a list of all currently active alerts. It is possible to navigate that list and easily switch between alerts. There are filters available to facilitate the search on that list, for example: filter by environment, system or component, filter by alert severity. It is also possible to search with text by name or description.

All the information available in this page is time-machinable, which means that it is possible to navigate in time and check the alert status in any specific point in time. It is also possible to check information about past alerts that are already resolved.

Actions

There are multiple actions that can be executed directly form the Alert details page, divided in 2 major categories: Alert actions and Component actions.

Alert Actions

Alert actions are common to all alerts.

Directly from the Alert details page, it is possible to:

- open the alert threshold configuration
- dismiss alert, for the specific system and/or environment
- open time machine, in the exact point when the alert started

Component Actions

Component actions differ from alert to alert, according to the component(s) affected by the alert.

These actions are performed on top of the Component that is affected, so they are the same actions available for that Component in other Fuse pages.

For example, for systems it is possible to execute system actions such as Restart or Generate System Report; for SOV processes it is possible to Start, Stop or Restart the process.

The available Component actions highly depend on the Component affected and which actions are available for that Component in Fuse. There could be components that do not have actions available.

5.1.4. Alert Dismissal

Fuse Management Central allows to dismiss alerts that the user may think are not worth for a specific system and/or environment.

In alerts lists there is a context menu that allows to dismiss an alert. There are 2 options available:

- Dismiss for system
- Dismiss for environment

Using any of these dismiss actions means that that specific alert will be ignored for that specific component in that system/environment (contextual to the current alert entry).

Some points to have in consideration:

- when an alert is dismissed, it will be ignored for a specific component inside a specific system/environment, for **all users**.
- only System Administrators or Environment Owners can disable an alert.
- alert dismissals are audited and will be listed in the events side ribbon.
- a notification will be sent to the System Administrator/Environment Owner saying that the alert was dismissed.
- current active alerts will be put in state dismissed.

All dismissals will be listed in Fuse Administration Alert Manager page, inside each alert, from where they can be removed in order to get the alert working again. Only Fuse Administrators can access this page. For more information please refer to Fuse Management Central Administration Guide.

Dismissing an alert is different from disabling it in Fuse Administration Alert Manager page. Disabling an alert will completely shutdown the alert for all systems/environments and users. Dismissing an alert will only ignore the alert for a specific system/environment and component.

5.2. Events

Certain operations in Fuse Management Central trigger events, which are registered in the system and are then available for consultation.

These events are divided into two types: Audit events and Alert events.

5.2.1. Audit Events

Currently, an audit event is created every time a user created, updates or deletes the following entities:

- Systems
- Environments
- Configuration Policies
- Fuse configurations
- Scheduling jobs

These events can be used to determine who, when and what changed in Fuse Management Central for auditing purposes.

5.2.2. Alert Events

Alert events are triggered by alerts from Alert Manager, and they basically store when the alert was triggered and its status (either it has been resolved or not).

Alert events are grouped by alert type, system / environment and time, which means that if more than one component triggers the same alert type for the same system / environment, they will be stored in the same event.

Some alert types are by environment only, they are not associated with a specific system (e.g. alerts related with System Object Volumes).

5.2.3. Severity

The following table describes event severity types:

Severity	Description
Error	events triggered by error alerts
Warning	events triggered by warning alerts
Info	audit events or on events triggered by resolved alerts

Error and Warning severity directly corresponds to the actual event severity when that event is not resolved yet.

5.2.4. Events List

To list all events:

- Login in to Fuse Management Central
- Click on the rightmost icon in the top navigation bar
- All events will be displayed, ordered by descending date

It's then possible to apply filters and scroll down results to keep getting previous events.

Relevant information regarding each event is displayed:

- title
- description
- date of the event
- a red, yellow or green color, indicating an error, warning or info event, correspondingly
- the event type

- the event performer, on Audit events
- in case of a resolved alert event, a **RESOLVED** badge is shown

Filters

When listing events, the user can apply filtering criteria. For that, the user must expand the **Filters** section at the top of the events list, and all filter options will be available there.

The following table describes each filtering criteria available:

Filter	Description
Full-Text Search	Filter operations by typing a combination any of the search parameter(s): Name, Summary, and/or Performer
System	Filter by system that triggered the event
Environment	Filter by environment where event was triggered
Severity	Filter by event severity (Info, Warning or Error)
Event Type	Filter by combining operation type (Audit or Alert)
Date Interval	Filter by range of execution dates

5.2.5. Retention policy

Events retention policy is 15 days. Events before that period are permanently deleted from Fuse Management Central.

5.3. Systems

Systems are the key element to Fuse Management Central, as all metrics and operations are retrieved and applied to them, allowing a central management and monitoring approach.

Before adding a system to Fuse Management Central, you must first install Fuse Management Client module on OpenText ™ Content Server. Please refer to [bookmark-install-client] section for more details.

System components status begins automatically as soon as a system is activated in Fuse and starts autonomously sending metrics.

To access Systems area, click **Systems** on the navigation menu.

You will be presented with a systems dashboard which allow you to see individual and aggregated system status metric, such as:

- Performance and Availability
- Averages of Threads Usage, Queue Time, Queue Depth, CPU Usage and Memory Usage
- Errors and Warnings

Administrators, can also add **Environments** and **Systems** clicking on the respective buttons at the top right corner of the page.

The table presents all the systems added to the Fuse Management Central. Each row represents an individual system where you can visualize its state, individual metrics and perform actions if the user as administration privileges. To perform an action just hover the mouse over the button under the **Actions** column to be presented with following options:

- **Activation Request**: available only when the system is deactivated. This will send a request to the OpenText ™ Content Server® instance to active the system. (For more details check: **here**)
- **Deactivate**: this allows you to deactivate the system.
- **Edit**: you can edit the system.
- **Restart**: restart the system or scheduled the restart.
- **Generate System Report**: generate a system report or schedule one.

It's possible to apply an action to multiple systems at once. To do that, just select the systems you desired to perform the action at the table, move the mouse hover the **Actions** button (that will be enabled when systems are selected), and choose the desired operation to apply to them (some actions could be disabled based on the system status).

Check more info on operations at **Operations Chapter**

Clicking on each **System** name or its **Environment** name will lead you to the **System Details** or to the **Environment Details** page.

5.3.1. System Details

Once you enter a **System** you'll be presented with a system dashboard where you can visualize more detailed system information, individual metrics and system related actions.

Some of the information, regarding the system status (**offline** and **CSIDE Mode**), will have visual indicators so the user can easily identify the system status.

The widgets presented will be more detailed in the following topics.

5.3.2. Threads

Threads are parts of OpenText ™ Content Server process that allow it to perform multiple functions concurrently, serving several requests at the same time.

When a thread is spawned, it loads all of installed modules and patches, persisting their own OScript objects in memory.

Fuse Management Central allows to monitor in real time all system threads, allowing a constant and thorough analysis of all dimensions of thread metric data, effectively allowing you to profile your system.

Clicking on the double arrow to the top right of the widget will take you to the thread details page, increasing the level of detail of this component.

The Threads widget also allows you to quickly apply settings, by clicking the wrench icon on the top right of the widget.

Threads Details

This page provides more in depth information about each thread and all its metrics (queue, requests, …), while allowing to combine and compare multiple environments using the following filters:

- Environment
- Systems
- Tags

If a thread is generating a log file, it's possible to quickly open the log by clicking the button under the **Log File** column. It will open a new tab displaying the log file with the [bookmark-system-log-viewer].

5.3.3. Processes

Processes widget shows multiple processes within Content Server. This allows to have a quick view on top of the existent processes in a system, as well as observing their status or any existing active alerts.

This widget includes:

- Loader Components
- Agents
- Distributed Agents
- Distributed Agent Workers
- System Object Volume Processes

Different interactions are available for each type of processes. While some processes can be opened, redirecting the user to its details page to check its details, including changing their status, other processes can be clicked in order to navigate to other details pages.

There are also quick actions, such as Start/Stop/Restart, and/or others, available as contextual process actions which can even change its Status. Changes can be made immediately or can be scheduled for later.

Any of the available interactions depend on the process type and of the actions available in Fuse Management Central.

5.3.4. Configurations

The Configurations widget allows the user to view how many configurations are applied to the system as well Configuration Polices and their compliance state.
To access a configuration policy just expand the Configuration Polices and click the policy desired.

To view the configurations with more detail click on the double arrow to the top right of the widget.

Configurations Details

You can see all the configuration settings for a given Content Server and have the ability to change them from this interface.
From here, administrators are able to change most aspects of the Content Server administration or reuse these configurations in a Configuration Policy.

Fuse Management Central recognize which configurations require a system restart, if so, a confirmation message will appear to alert the user.

To apply any configuration just expand the configuration desired change the value/toggle you want, the **Apply Changes** button will be enabled and you can click it to apply the changes.

To add configurations to a **Configuration Policy** or other **Systems**, select the desired configurations by clicking on the box on the left of the configuration (the box will show a check mark when selected). At this point, the **Add Configuration Policy** and **Add to More Systems** will be enabled and you can click the button to perform the desired action. After click the button, you will be allowed to choose the **Configurations Policies** or the **Systems** you want to apply, after choosing it just click the **Add to Configuration Policy** or **Apply Configurations**, according to the action selected.

Changes cannot be applied and added to a Configuration Policy or other System at the same time. If you want to add any configuration change you need to apply it first.

5.3.5. Storage Providers

Content Server storage providers are listed here and clicking on each provider will expand its details, displaying its read and write throughput and also providing an graphical representation over time of its performance.

5.3.6. Logs

Although Fuse Management Central does not require any logging enabled, it allows one to manage and view your system log files if desired.
The logs widget gives you an overview of your system logs, allowing you to see the number of log files being generated and if there are any trace files (exceptions) being generated.

Clicking the wrench icon will allow you to quickly change your different system log levels.

You can access the Log viewer by clicking the double arrow icon to the top right of the widget.

If a trace file exists, you can open it quickly just by expanding the trace files and clicking at the trace file. When clicked, a new tab will be opened with the trace file displayed on the [bookmark-system-log-viewer].

Logs Viewer

The Log Viewer allows you to browse and visualize any of your system logs, as well as searching for a specific word(s) inside the log opened in the viewer.

You can access the Log viewer by clicking a log file on any Fuse Management Central component area.

Log files are shown at the tree view structure where users can navigate and click the log file to visualise it's content and select files or folders to download or perform actions. You can sort the tree by name, size or last modification date. You can also search the tree for log names.

When visualizing a log file some reserved words will highlight its line position, helping one to quickly identify any occurred issues:

- **WARN** → Yellow
- **ERROR** → Red

The footer shows the number of lines as well as counters for warning and errors in the loaded lines. Next to it it's a button to maximize or minimize the viewer. If the number of lines displayed is less than the total lines, more lines will be loaded as you scroll up the log file. When the log file is updated, a button will be shown informing the user the new number of lines that he can loaded clicking the button (there's also a blue circle indicator showing next to the tab file name). The user can activate the "Auto Refresh" toggle in order to automatically load new lines. New lines will be loaded and marked as new with a separator in the viewer.

Users can search for content inside the opened log file using the search bar in the header of the log viewer.

Fuse Management Central log viewer also allows you to have different log files opened at the same time and navigate through them by a tab system. To close a tab, just click the X button next to the file name.

For trace files, the user has the possibility to view the file with a trace view layout or plain text. A toggle button to switch the view type will be shown on the bottom left corner of the viewer.

Either in the Log browser or viewer, whenever a log file is updated on your system a blue circle will be displayed near its filename.

System administrators can download/delete one, multiple or an entire log folder, by selecting the log(s) and/or folder(s) and clicking the **Download** button or **Delete** under the actions button.
The selected log(s)/folder(s) package will be downloaded in a compressed ZIP file, maintaining

its original folder structure.

5.3.7. Actions

Actions can be performed in two ways, **Immediate Actions** or **Scheduled Actions**.

Each action is an operation performed directly on a system, having a direct consequence to it (e.g. Restart), meaning that all actions should be planned and performed carefully.
These actions where described in detail in the previous chapters for each widget or page.

Please refer to the Operations section for more details on Scheduled Actions.

5.3.8. Alerts

Any issues Fuse has detected with your Content Server will be shown as described here [bookmark-errors-and-alerts].

Besides that, errors and warnings can be expanded to view the details by clicking on top of the Errors and Warnings widget.

5.4. Environments

Environments are logical groups of systems that can be used to make system management easier. An environment can have any number of systems, but all systems in the same environment must have the same cluster ID.

In Fuse you can create environments and associate systems with them in order to have a more logic organization and overview of an Environment

5.4.1. Environments page

The Environments page is where you can view the list of environments and manage them. This page can be accessed by clicking on **Environments** on the left bar.

On the top, this page shows the averages of some metrics gathered from the systems, including performance, availability, memory and cpu usage, requests, queue time, queue depth and threads usage. Also includes information about the number of errors and warnings in the systems.

Below, there's a **table listing all the environments**. The results in this table can be filtered using the search bar above the table or the dropdown next to the search bar. The search bar allows to filter the results in the table by doing a full text search over the name and tags of the systems. The dropdown next to the search bar allows to filter the environments by tag.

You can click on the names of the environments in the table to view more information about a particular environment.

It's also possible to **sort the systems by name** by clicking on the arrows after the **Name** header. On the bottom of the table you can navigate between the result pages and change the number of environments shown per page.

5.4.2. Creating a new Environment

To create a new environment:

1. Click on **Environments** on the left bar to access the environments page
2. Click on **Add environment** on the top of the page.
3. Fill the details of the new environment:

Field	Description
Name	Environment name (e.g. *"DEV"*)
(Optional) **Description**	Environment description to help environment identification (e.g. *"Partner environment"*)
Advanced Options	
(Optional) **Owners**	Environment owner(s) email(s) (e.g. *"john.doe@company.com"*), for event email notifications
(Optional) **Tags**	Environment tags (e.g. *"partner", "dev"*)

5.4.3. Deleting an Environment

To delete an environment:

1. Click on **Environments** on the left bar to access the environments page
2. **Find the environment** to delete in table listing

If you are looking for a specific environment, you can use the search bar above the table to filter the results.

3. On the row of the environment to delete, mouse over the button in the **Actions** column of the table. A few options should appear - choose **Delete**.
4. A pop-up will appear asking for confirmation. Choose **Yes** to delete the system

5.4.4. Editing an Environment

To edit an environment:

1. Click on **Environments** on the left bar to access the environments page.
2. **Find the environment** to delete in table listing.

If you are looking for a specific environment, you can use the search bar above the table to filter the results.

3. On the row of the environment to delete, mouse over the button in the **Actions** column of the table. A few options should appear - choose **Edit**.
4. A pop-up will appear with the environment information. Update the desired fields and click **Finish** to save the changes.

Refer to [creating-a-new-environment] for a more detailed description of the each of the fields.

5.5. Environment Detail

This page shows you details about an environment.

On the left to the page there's a summary of the performance and availability of the systems in this environment. There's also an error and warnings counter of all the systems. You can click on the errors and warnings section to view more info, namely what those warnings and errors are and when they happened. Below the errors and warnings you can see information about the cluster, namely what application is running, which database it is using, the CPU and the total memory. Each one of these informations can be clicked to get access to more info.

To the right of the page there are 3 tabs where you can see more information about this environment:

- The **Systems** tabs shows a graph with the performance, availability, errors and warnings in this environment over time. Below the graph there is a table with a list of systems in this environemnt. You can use the controls at the top of the table to filter the systems in this list by tag, name and status. Each system in the list can be selected by clicking in the checkbox next to its name. Selecting one or more systems will enable the **Actions** button which allows to **Restart** the selected systems, or **Generate a systems report**, which will generate a system report for each of the systems selected.
- The **Components** tab shows information about the different components of the systems in the environment.
- The **Operations** tab shows the operations that were recently run on the systems of this environment as well as the ones scheduled.

5.6. Service Report

The Service Report feature, available in Environments List and in Environment details pages, allows users to generate an automatically created report describing the customer's OpenText application status, availability and performance for one or multiple environments, covering periods up to the last 15 days.

This report provides information regarding status, health, detected alerts and the efficiency of the OpenText Content Suite infrastructure.

To generate a Service Report, initiate the Service Report generation modal by clicking in the

Service Report button, available on the header of Environments list or Environment details page.

After the modal is open, fill the required fields:

1. Select one or multiple **Environments** to include in the report.
2. Choose the **report period**.
3. Optionally, you can **send the report by email**.
    - Environemnt owners will be automatically added to the **recipient emails** list.
    - You can add more recipient emails as you like.
4. Click on **Generate Report**. This action may take some minutes to complete.
5. After complete, you can **Download** the report.
    - If you selected the option to send the report by email, an email will be sent to each on of the recipients with the report attached

5.7. System Object Volume

A detailed view of the System Object Volume in an Environment.

This page provides a detailed overview of the System Object Volume inside an Environment, with enhanced management capabilities while leveraging the Time-Machine and Scheduled Operations features, including:

- Admin Servers list with management capabilities
- Admin Server processes list and management capabilities
- Data Sources (All): Enhanced Data Flow with management capabilities
- Data Sources (All): Enhanced Partition Map with management capabilities
- Search stats and performance chart

5.7.1. How to access System Object Volume

System Object Volume page is available through an **Environment**'s details page. Inside the **Processes** tab, the System Object Volume widget contains a link to System Object Volume details page.

System Object Volume details page presents an overview on System Object Volume organized in 2 major sections:

- **Admin Servers**
- **Data Sources**

5.7.2. Admin Servers

The Admin Servers section inside System Object Volume details page displays a list of all the Admin Servers and Processes existent in the Environment.

In this page the user will find several indicators that will help to understand the **status** of the Admin Servers and Processes. Any **alerts** will also be pinpointed in the specific Admin Server or Process that may be failing.

Hovering the mouse on top of a **status** or **alert** will display details about it, when relevant.

The user can easily **Suspend**, **Reset** or **Resynchronize** Admin Servers, using the **Actions** menu for each Admin Server, or by selecting multiple Admin Servers in the list and using the global **Actions** button in the top of the Admin Servers list.

Each Admin Server can be **expanded** in order to view a complete list of all the **Processes** existent in that Admin Server.

The user can execute multiple actions on top of one or multiple Processes:

- Start, Stop and Restart Processes
- Resynchronize Processes
- Summarize Index Log File
- Validate Index
- Start, Stop and Restart All Index Processes
- Start, Stop and Restart All Search Processes

These actions can be executed for one or multiple Processes, using the **Actions** menu of each Process or using the global **Actions** button in the top of the Processes list.

Currently only 3 processes can be selected to run bulk actions, in order to avoid performance issues on Content Server.

The available actions will depend on the type of Processes selected by the user.

5.7.3. Data Sources

The Data Sources section inside System Object Volume details page displays all the Data Sources existent in the Environment.

Each **Data Source** will be presented in a different tab. Inside each Data Source tab the user can find a visual representation of the **Data Flow** and **Partition Map** components.

The **Data Flow** section shows a list of **Ipools** between **Processes**. There are multiple **status** and **alert** indicators that will help understand the status of the Data Flow and its Processes and Ipools.

Multiple actions can be executed for each process, such as **Start**, **Stop**, **Restart** and **Resynchronize**, using the menu available in each Process component.

The **Partition Map** section displays a visual representation of the Partitions, Update Distributors and Search Federators of the Data Source, listing all Index and Search Engines, as well as showing the existent connections between the multiple Processes of the Partition Map.

Multiple **status** and **alert** indicators will help understand the status of the Partition Map and its Processes. Multiple **actions** can be executed for each Process, such as:

- Update Distributors:
  - Start, Stop and Resynchronize
  - Start, Stop and Resynchronize All Index Processes
- Index Engines:
  - Start, Stop and Restart
  - Resynchronize
  - Summarize Index Log File
  - Validate Index
- Partitions:
  - Resynchronize
  - Change Partition Mode
- Search Federators:
  - Start, Stop and Resynchronize
  - Start, Stop and Restart All Search Processes
- Search Engines:
  - Start, Stop and Restart
  - Resynchronize

These actions can be executed using the menu available in each Process component.

5.8. Configuration Policies

It is possible to create pre-defined configuration sets that you can apply to one or more systems, allowing a controlled and consistent way to push and ensure its consistency across your managed systems.
With this configuration management you are able to store, apply and switch configurations across your systems without needing to do it manually.

5.8.1. Create Policy

Policies are created based on existing system configurations (used as template), which you can always customize later. This allows you to clone and distribute configurations across your system landscape.

To create a Configuration Policy:

1. Click **Configuration Policies** on the navigation menu.
2. Click the **Add Configuration Policy** (top right button).
3. Enter an explicit **Policy Name**.

4. Select **a configuration baseline system** and optionally select and/or adjust the settings you want to add to your policy:
    - Date Settings
    - Performance Settings
    - Security Parameters
5. Optionally, select one or more systems to which this policy will apply.
6. Click **Finish**.

After that, the policy will be displayed in the left panel list. For each list element, you can:

- See the policy overview (name, number of systems, compliancy status).
- See a list of systems configured for that policy (by clicking).
- Edit a policy (Edit Policy).
- Activate and deactivate policy monitoring (Monitoring Policy).
- Delete policy (Delete Policy).
- Apply Policy (Apply Policy).
- Check non-compliant system configurations (Non-Compliance Mode)

5.8.2. Add configuration to Policy

Add configurations to a policy already created it's also possible. For that you just need to:

1. Go to the system configuration page from where you want to copy configurations.
2. Select all configurations desired.
3. Click on **Add Configuration Policy** button.
4. Select the policy where you want to add those selected configurations.

If you selected configurations that already exists in the policy, those policy configurations will be overridden by the value of the new ones.

5.8.3. Remove configurations from Policy

If you want to remove one or multiple configurations from a policy, follow these steps:

1. Click **Configuration Policies** on the navigation menu.
2. Search the policy in the **left panel list**.
3. Select the **edit** policy action in the context menu of the policy.
4. The policy edition wizard will come up.
5. In **step 2 of the wizard**, you have the current list of configurations of the policy.
6. All configurations will be selected by default, **unselect** the ones you want to remove.
7. **Save** the policy by finishing the wizard.

5.8.4. Delete Policy

To delete a Configuration Policy:

1. Click **Configuration Policies** on the navigation menu.
2. Search the policy in the left panel list.
3. Select the **delete** policy action.

After that, the policy will be deleted.

5.8.5. Edit Policy

When editing you can opt by 2 different things:

- Edit the policy baseline attributes: name, systems and baseline configurations (like Create Policy)
- Edit only the existing policy configurations values (keep the other policy attributes as they are)

Edit Policy baseline attributes

To edit the baseline attributes:

1. Click **Configuration Policies** on the navigation menu.
2. Search the policy in the left panel list.
3. Select the **edit** policy action.

After that, you will see the same wizard as Create Policy. Make the changes you want and them click on **finish** to save those changes

When editing a policy, the second wizard step give a new alternative **Select a configuration baseline system**. If selected, the actual policy configuration will be overridden by a new one that you can select here.

If policy monitoring is activated, once a Configuration Policy is saved, you will be asked to apply the changes to its systems, where you can opt to apply immediately or schedule to apply it later.

Edit Policy Configurations values

To edit the Policy Configurations values:

1. Click **Configuration Policies** on the navigation menu.
2. Search the policy in the left panel list and click on it.
3. On the right panel you can see the policy configurations and respective values. Make the desired changes.

The configurations viewer allows you to filter for any items in the configuration, highlighting all results matching your search filter.

1. Click on **Save Configuration Policy** button.

If policy monitoring is activated, once a Configuration Policy is saved, you will be asked to apply the changes to its systems, where you can opt to apply immediately or schedule to apply it later.

5.8.6. Apply Policy

As described previously, policies are created with a configuration based on specific system. If wanted you can easily apply those policy configurations to all the policy systems. To apply the policy configurations to the policy systems:

1. Click **Configuration Policies** on the navigation menu.
2. Search the policy in the left panel list and click on it.
3. On the right panel click on **Apply Policy** button.

If any of the policy configurations required a system restart, you will be asked if you want to apply immediately or schedule to apply it later.

5.8.7. Monitoring Policies

To activate or deactivate policy monitoring:

1. Click **Configuration Policies** on the navigation menu.
2. Search the policy in the left panel list.
3. Toggle the button: **ON** means the monitoring is activated and **OFF** means the monitoring is deactivated.

After activated, the monitoring process will display, after a few moments the policy compliancy status. The possible status are the following:

- **Validating**: monitoring is in progress.
- **Non-compliant**: one or more systems have one or more configuration non-compliant with the policy configuration. If desired you can check the list of non-compliant configurations for a specific system by clicking on **View Details**.
- **Complaint**: all systems configurations are compliant with the policy configuration.

When policy monitoring is activated, events, alerts and notifications are created with the respective policy compliancy status.

5.8.8. Non-Compliance Mode

On Non-Compliance mode you can see system configurations that are non-compliant with the policy selected.

This mode will be only accessible if policy compliance status is **Non-compliant** and when this condition is happening, the option **View Details** will be shown for each system non-compliant. By clicking there, you will enter the non-compliance mode and you would be able to check (side by side) policy configurations against system configurations.

Then on the right panel you'll have the option to **Apply** the policy only to the specific system that you are checking.

5.9. Operations

In Fuse Management Central an operation refers to any action (restart, changed configuration, …) executed on systems.
This allow administrators to have a close control over every operation, performed or scheduled, on their system landscape by managing them on this area and optionally following up their status through email notifications.

Administrators can create operations directly from any system component actions, as described along this guide.

To access Operations area, click "Operations" on the navigation menu

> **!** Only users beloging to **Fuse Admin** or **System Admin** roles can execute and/or manage operations.
> For more details on Fuse Management Central roles, please refer to the **Installation and Administration Guide**.

The Operations page is divided in 3 main areas:

- Operations Overview
- Operations List
- Scheduled Operations

5.9.1. Operation Status

For the point of view of Fuse operations are a set of actions executed on just one system or to multiple systems at the same time.
Each operation has a global status that depends on the individually result of each system job that belong to the operation. Based on that, operations can have one of the next status:

- **Finished**
  All system's jobs that belong to the operation were completed with success.
- **Error**
  If any of the system's jobs requests that belong to the operation return an error.

- **Canceled**
  If any of the system's jobs that belong to the operation returned canceled status or if the operation timeout was reached.
- **Failed**
  If any of the system's jobs that belong to the operation return failed status.
- **Skipped**
  If all systems that belong to the operation were deactivated.
- **Not started**
  None of the system's jobs that belong to the operation started.
- **Executing**
  At least one of system's jobs that belong to the operation is in progress.

5.9.2. Operation Types

In Fuse Management Central scheduled operations are divided in 2 types:

- **Single Execution**
  The operation will be executed only once on the defined date and time.
- **Recurring Execution**
  The operation will be executed on a recurring schedule.

Optionally, Administrators can switch to "Advanced Mode", to better fine tune the recurrent schedule. The minimum granularity allowed is minutes, and will allways be executed on the first second

With those two types, Administrators can easily schedule simple operations (like execute next friday) or more complex ones (like execute every day at midnight) .

5.9.3. Notifications

In Fuse Management Central Administrators can opt to receive operations status notifications. Depending of the configuration selected, notifications will be send or not to a list of users.

When scheduling an operation, Administrators can choose one of the following notification options:

- **Don't notify** *(Default)*
  Don't send any status notification.
- **Notify only if failed**
  Send a status notification only if a job fails its execution.
- **Always notify**
  Send a status notification whenever the operation is executed or edited.

By default, when an Administrator opts to receive a status notifications system owners are automatically added to the mailing list. However, the notification recipients list can be customized.

5.9.4. Operations Overview

The Overview chart provides an at-a-glance view of the status of all operations.

All operations are included and grouped by state. User can easily see how many operations has in each state.

5.9.5. Operations List

All operations in execution or already executed are listed here and can be filtered by:

Filter	Description
Full-Text Search	*Filter operations by typing a combination any of the search parameter(s): Status, Job ID, Job Type and/or Owner*
Date Interval	*Filter by range of execution dates*
Status	*Filter by operation status (Finished, Canceled, …)*
Job Type	*Filter by combining operation type (Apply configuration, Restart, …)*
System	*Filter by combining systems where the operation has been executed*
Owner	*Filter by combining operation owners (who has executed the operation)*

Operation Actions

For each operation displayed in the table (Operations List) Administrators can do the following actions:

- See Operation Details
- Delete Operation

Operation Details

To obtain more more detailed information:

- Click on the operation's **Job Id** field.
- Select the **View Job Status** operation action.

All system jobs included in the operation will be displayed as well as the respective start-time, end-time and status. Each job can also be expanded (by clicking) and a job execution log can

be seen.

Delete Operation

To delete operations:

- Select the "Delete" operation action.
- Select one or more operations and selecting the "Delete" bulk operation action.

Only completed operations can be deleted.

5.9.6. Scheduled Operations

All scheduled operations are listed here and can be filtered by:

Filter	Description
Full-Text Search	*Filter operations by typing a combination any of the search parameter(s): Status, Job Type, Schedule Type, System and/or Owner*
Date Interval	*Filter by range of execution dates*
Status	*Filter by operation status (Finished, Canceled, …)*
Schedule Type	*Filter by schedule type (Single or Recurring)*
Job Type	*Filter by combining operation type (Apply configuration, Restart, …)*
System	*Filter by combining systems where the operation has been executed*
Owner	*Filter by combining operation owners (who has executed the operation)*

Scheduled Operation Actions

For each scheduled operation displayed in the table (**scheduled operations**) Administrators can do the following actions:

- **Edit**
- **Disable**
- **Enable**

- Delete
- Run Now

Edit - Scheduled Operation

To edit a scheduled operation:

- Click on the operation's **Operation Id** field.
- Select the **Edit** scheduled action.

Administrators can see or edit the operation type (Operation Types) and the notification configuration (Notifications)

To save changes:

- click on the **Schedule** button

Disable - Scheduled Operation

To disable a scheduled operation:

- Select the "Disable" scheduled operation action.
- Select one or more scheduled operation and selecting the "Disable" bulk scheduled operation action.

Only **enabled** scheduled operation can be disabled.

Enable - Scheduled Operation

To enable a scheduled operation:

- Select the "Enable" scheduled operation action.
- Select one or more scheduled operations and then select the "Enable" action.

Only **disabled** scheduled operations can be enabled.

Delete - Scheduled Operation

To delete a scheduled operation:

- Select the "Delete" scheduled operation action.
- Select one or more scheduled operation and then select the "Delete" action.

Run Now - Scheduled Operation

To run a scheduled operation immediately:

- Select the "Run Now" scheduled operation action.
- Select one or more scheduled operation and then selecti the "Run Now" action.

If executed in a scheduled operation configured as a single operation the respective scheduled operation will be deleted. The same doesn't happen with recurring operations.

5.10. Dashboard

Fuse Management Central provides a comprehensive Dashboard Interface which gives you a visual representation of all the Content Servers on your estate.
The dashboard provides you with an overview of your system's status, it also informs you of running or scheduled operations but most importantly, it consolidates all active alerts that may require your attention. As an OpenText ™ Content Server administrator you will be able to see e.g. how busy the system is or was at what times and real-time statistics of your systems in any environment.

5.10.1. Overview section

At a glance, you will see overall performance, availability and broad system statistics all from a single place. On the overview section you can see the following widget:

- **Performance** chart
- **Availability** chart
- Number of **Systems** with respective counters of errors and warnings
- Number of **Configuration policies** respective with counters of errors and warnings
- **CPU** chart
- **Memory** chart
- Heatmap for **Threads usage**
- Bar chart with **Active sessions**
- **Content overview** chart
- Overview of the **System object volume**
- Overview of the **Distributed agents**
- Overview of the **Queue tables**

5.10.2. Active alerts sections

On the right side you will have a list of **active alerts** grouped by System or Environment in some cases. For instance, if a system has alerts, you will have a panel with the system name and a collapsible block with all the alerts of that system.

5.10.3. Operations section

You will have a list of the running Operations and the latest Operations finished. You will also have a list of the next scheduled Operations.

To access the Dashboard, click **Dashboard** on the navigation menu.

You can filter all Dashboard data by Environment, one ore more environments can be selected simultaneously .
For added convenience, the applied filter will remain selected even when navigating outside the Dashboard.

5.11. Time Machine

By default Fuse Management Central is displaying real-time metric data but one can opt to visualize past data.
The Time Machine feature provides all system data, frozen at a specific point in time, meaning that when you enable this feature all system status information is displayed relative the selected point in time.

Please note that some components are still not Time Machine enabled, such as System Logs and Operations.

You can activate the Time Machine by:

1. Clicking on Fuse Management Central top header **LIVE** button.
2. Clicking or zooming in (area selection) on any System or Environment component line chart data (*e.g. Threads Usage, System Disks, Memory, …*).

To navigate to a specific point in, for which you want to view information using the Time Machine:

- Click on the select box "You are here" component and select a date and time.
- Click on a specific Time Machine chart moment.

To disable the Time Machine, click on the top bar **Time Machine** button.

By default, Time Machine long-term metric data are stored for a maximum of 15 days.
To extend this period please contact us.

5.11.1. Timeline

When users open the Time Machine mode, they will see a timeline at the top of the page with a range of 2 days. The range is represented by 2 date fields displayed in the time machine header.

On this timeline, users will have an overview of errors (*red bars*) and warnings (*yellow bars*)

over the selected range of time.

Users can change the timeline range by clicking on the dates in the time machine header. Users can select some predefined ranges such as *Last Day, Last Week, Last 2 weeks*. Or choose a custom range by selecting a date range on the calendar. When a range is applied, the timeline will adjust to show only that chosen period of time and it's on this timeline that users can select a specific point in time.

When on Time Machine Mode, user will always be at the specific point in time represented by a marker **"You are here"**. Users can change the current point by simply clicking in any other point in the timeline.

All data displayed will be related to the point selected and some interval before that point. This interval is configurable, users can select values such as *Last 5 minutes, Last 1 hour, Last 24 hours*. For instance, if a user selects the point **30 Mars 20 03:00** and select an interval of "*Last 2 hours*", the information presented on the page will show data between **30 Mars 20 01:00** and **30 Mars 20 03:00**.

As a typical use case, if someone reports an error during the previous night, with the Time Machine mode, you are able to go back (with a few clicks) to the precise moment where the error happened, and check the state of your system at that moment.

5.11.2. Zoom and Pan

You can **zoom** via area selection with the mouse in the Time Machine chart. You can also **Pan** (option allows you to move the Time Machine date range in any direction within 15 days) by clicking and dragging the mouse. You can switch between zooming and panning using the buttons available on the top right corner of Time Machine.

After a Zoom in you will have available the **Reset Zoom** option to reset the Time Machine to its initial zoom state.

5.12. Storage Providers Details

This page provides an overview of all storage providers available and the respective content saved in each one.

The page is divided in 3 sections:

- Content Overview
- Read and Write Throughput
- Storage Providers Table

This page has also a filter always available to help users, allowing them to combine and compare multiple storage providers. Users can filter by:

- Environments
- Environment Tags
- Systems

- Storage Provider Type
- Storage Provider Status

Here users can also **Add Storage Provider**, **Edit Storage Provider** and **Delete Storage Provider**

5.12.1. Content Overview

In this section users can quickly see how much data is saved in each storage provider. It provides a global overview of all storage providers and their size.

Data displayed depends on the filters selected.

5.12.2. Read and Write Throughput

Here users can compare different storage providers throughput. 2 charts are available, one for read throughput and other for write throughput.

Each graphic displays the throughput for each storage provider, allowing to compare speeds between the existent storage providers.

Data displayed depends on the filters selected.

5.12.3. Storage Providers Table

In this section users can see storage providers information in a table format. For example, users can see storage providers name, average read/write throughput, used disk, path and alerts (with mouse over the storage provider icon)

Data displayed depends on the filters selected.

5.12.4. Add Storage Provider

To add a storage provider users only need to click on the button **Add Storage Provider** and follow the wizard steps:

- On the first wizard step fill the following fields:

Field	Description
Environment	Environment name (e.g. *"DEVELOPMENT"*)
Storage Provider Type	Types available: *Archive Center* and *External Document Storage*

- On the second wizard step fill the following fields:

◦ If the type select is *External Document Storage* fill the following fields

Field	Description
Storage Provider Name	Storage provider name or alias
Storage Provider Path	Storage provider path **Path should be available on all systems belonging to the environment selected in the previous step**!

- Click on **Validation Storage Provider** button to validate the information added.
- If none errors happen, click on **Add Storage Provider** to finish the action

◦ If the type select is *Archive Center* fill the following fields

Field	Description
Storage Provider Name	Storage provider name or alias
Logical Archive	Local archive
Storage Tier	Storage tier
Delete Documents from Archive	If selected, deleting content from storage provider will be possible
Allow content Move Operation	If selected, moving content from storage provider will be possible

To add a storage provider type **Archive Center**, first the user needs to manually configure the archive storage provider on CS.

- Click on **Validate Storage Provider** button to validate the information added.
- If none errors happen, click on **Add Storage Provider** to finish the action

! To make the changes effective, it is necessary to restart all systems belonging to the selected environment. The user can decide if wants to do it manually later, now or scheduled it.

5.12.5. Edit Storage Provider

To edit a storage provider users only need to click on **Edit** button that can be found on the storage providers table. The same wizard displayed on Add Storage Provider will be displayed but now it will be filled with the storage provider selected.

To make the changes effective, it is necessary to restart all systems belonging to the selected environment. The user can decide if wants to do it manually later, now or scheduled it.

5.12.6. Delete Storage Provider

To delete a storage provider users only need to click on **Delete** button that can be found on the storage providers table.

Users can delete multiple storage providers in a single action. To do that, users only need to select one or more storage providers displayed on storage providers table and then click the **Delete** bulk action button.

To make the changes effective, it is necessary to restart all systems belonging to the selected environment. The user can decide if wants to do it manually later, now or scheduled it.