fuse
Management Central

Fuse Management Central

User Guide

Version 1.6.1

VILT

Contents

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Disclaimer

1. Introduction

This user guide provides information about features and functionality of Fuse Management Central 1.6.1.

2. Document Revision History

Revision Number	Modification Date	Section Modified	Modifications
1.0	2024-04-23	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 **1366x768**.

(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 a centralized web administration console for OpenText ™ solutions, providing to Self-Managed Customers or Managed Service Providers a Unified Management Experience. With Fuse Management Central intuitive user interface simplified deployment, OpenText ™ system administrators can now interact directly from a system component, maintaining the context and understanding of it, with the option to schedule any action.

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

4.2. First Steps

This guide will give you a wide knowledge about how to use Fuse Management Central.

At this point Fuse Management Central should be correctly installed, and all the managed systems should be already added and activated.

For instructions about how to install Fuse Management Client on managed systems or add new systems to Fuse Management Central, please refer to the the Installation and Administration Guide, or contact your system administrator.

5. How to Use Fuse Management Central

The following sections will guide you through the several components that compose Fuse Management Central.

Each topic will provide you basic information about what that component represents and what's possible to do with it.
Some components are global, other are specific to each system type: OpenText Content Server or OpenText Archive Center.

5.1. Using Fuse Management Central

The following sections describe Fuse Management Central components and their usability, that are commonly available across multiple Fuse Management Central pages, independently of the System type.

Further in this guide you'll find specific System type components, both for OpenText Content Server and OpenText Archive Center.

5.1.1. 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. Please refer to **Installation and Administration Guide** for more details about installing Fuse Management Client.

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 an hybrid 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
- Others…

Systems are grouped by **Environments**. Environments are logical groups of systems that can be used to make system management easier. An environment can have any number of systems. For OpenText ™ Content Server systems, all systems in the same environment must have the same cluster ID.

Administrators can create new **Environments** and **Systems** clicking on the respective buttons in the top right corner of the page.

The table presents all the systems added to the Fuse Management Central, grouped by Environment. 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**: Only available when the system is deactivated. This will send a request to the Fuse Management Client installed in the system to activate the system.
- **Deactivate**: Allowing you to deactivate the system, disable all management functionalities.
- **Edit**: Edit system properties, such as tags, …
- **Restart**: *(Only available in specific system types)* Restart the system or schedule a restart operation.
- **Generate System Report**: *(Only available to OpenText Content Server systems)* Generate a system report or schedule it, as an operation.

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.

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.

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.

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

Alerts

Any issues Fuse has detected with your system will be shown as described in **Alerts**.

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

Environment Details

Clicking in an Environment name in the Systems list will open the Environment Details page. This page shows you details about an environment.

The Environment page is divided into 3 main sections:

- **Systems** list - list of all systems inside that Environment and widgets common to both Content Server and Archive Center scopes (e.g. Operations…)
- **OpenText Content Server** section - containing widgets exclusive to Content Server scope
- **OpenText Archive Center** section - containing widgets exclusive to Archive Center scope

Systems list

- The **Systems** section shows a resume of your Systems stats, with more details available using the **Show more details** expandable section. These details include a graph with the performance, availability, errors and warnings in this environment over time.

Below the summary section, there is a table with a list of systems in this environment. 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 system report**, which will generate a system report for each of the systems selected.

- The **Operations** tab shows the operations that were recently run on the systems of this environment as well as the ones scheduled.

OpenText Content Server

The **OpenText Content Server** section displays information exclusive to your Content Server systems. Information about all the Content Server systems inside the Environment is compiled and grouped in these widgets to give you a wider view of the Content Server scope inside your Environment.

You can find 4 main tabs inside the Content Server scope:

- **Overview** will show an overview of your Environment's Content Server scope, including basic information, average performance and availability, and database performance stats.
- **Components** contains data about Content Server components such as Threads, Queues, Configurations, Logs and Workflows.
- **Processes** displays information about processes inside Content Server, such as your System Object Volume processes, Distributed Agents, Loaders and Agents.

- **Storage Providers** presents a compiled list of all the Storage Providers inside the Environment.

Please note that the widgets in the Environment page are a compiled and grouped view of all the data from all the Systems inside the Environment.

OpenText Archive Center

The **OpenText Archive Center** section displays information exclusive to your Archive Center systems. Information about all the Archive Center systems inside the Environment is compiled and grouped in these widgets to give you a wider view of the Archive Center scope inside your Environment.

An Overview of your Archive Center scope in this Environment is available, including Archives listing and Data Volume statistics.

Please note that the widgets in the Environment page are a compiled and grouped view of all the data from all the Systems inside the Environment.

Alerts

On the right section of the page, there is an expandable **Alerts** section.

This section is a list of all the active alerts inside your Environment. This includes alerts coming from specific systems and components, or alerts related to the Environment itself.

Alerts in this list are grouped by System or Environment. Clicking in an alert entry will redirect you to the Alert Details page.

This list can be filtered and searched to find alerts easier.

Actions

In the top right corner of the Environment Details page, you'll find available **Actions** to be performed in your Environment.

Among the usual **Edit** and **Delete** actions, you can:

- **Restart Systems** - Restart all **OpenText Content Server** systems in this Environment. [1: Actions only available for **OpenText Content Server** systems.]
- **Generate System Report** - Generate a system report for each **OpenText Content Server** system in this Environment. [1: Actions only available for **OpenText Content Server** systems.]
- **Service Report** - Generate a service report including all **OpenText Content Server** and **OpenText Archive Center** system metrics in the Environment. Please check Service Report to know more about this report.

5.1.2. Dashboard

Fuse Management Central provides a comprehensive Dashboard page which gives you a visual overview of your entire infrastructure.

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

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 a systems 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.

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.

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** with respective counters of errors and warnings
- **CPU** chart
- **Memory** chart
- Heatmap for Content Server **Threads Usage**
- Bar chart with Content Server **Active Sessions**
- Content Server **Content Overview** chart
- Overview of the Content Server **System Object Volume**
- Overview of the Content Server **Distributed Agents**
- Overview of the Content Server **Queue Tables**
- Overview of Archive Center **Archives**
- Archive Center **Data Volume** statistics

Active alerts sections

On the right side you will have a list of **active alerts** grouped by System or Environment. 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.

Clicking in an alert entry will redirect you to the Alert Details page.

This list can be filtered and searched to find alerts easier.

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.

5.1.3. 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 occurring.
- **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. For more information about this, pelase refer to **Installation and Administration Guide**.

UI Indicators

Fuse Management Central allows you to quickly identify problems in the OpenText ™ system 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.

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 at 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 from 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.

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 configuration, 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 the **Installation and 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.

5.1.4. 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 the systems will inherit 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 environment, 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, specifying 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)

Field	Description
Title	A simple title specifying 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. For more info, please check Alert Details.

5.1.5. Events

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

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

Audit Events

Currently, an audit event is created every time a user creates, 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.

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 alerts are related to environment only, they are not associated with a specific system (e.g. alerts related to System Object Volume).

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 events triggered by resolved alerts

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

Events List

To list all events:

- **Login in** to Fuse Management Central
- Click on the **Events** icon in the top-right corner of the page header
- A side ribbon will open, listing all events, 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

Retention policy

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

5.1.6. Operations

In Fuse Management Central an operation refers to any action (restart, changed configuration, …) executed on systems.
This allows administrators to have a close control over every operation, performed or scheduled, on their system landscape by managing them in 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 belonging 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

Operation Status

From 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 individual result of each system job that belongs 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 the system's jobs that belong to the operation is in progress.

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 always 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) .

Notifications

In Fuse Management Central Administrators can opt to receive operations status notifications. Depending on the configuration selected, notifications will be sent 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.

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. The user can easily see how many operations there are in each state.

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, Operation ID, Operation Type and/or Owner*
Date Interval	*Filter by range of execution dates*
Status	*Filter by operation status (Finished, Canceled, …)*
Operation Type	*Filter by combining operation type (Apply configuration, Restart, …)*

Filter	Description
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 **Operation 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 select the "Delete" bulk operation action.

Only completed operations can be deleted.

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, Operation Type, Schedule Type, System and/or Owner*

Filter	Description
Date Interval	*Filter by range of execution dates*
Status	*Filter by operation status (Finished, Canceled, …)*
Schedule Type	*Filter by schedule type (Single or Recurring)*
Operation 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 select 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 select 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.

5.1.7. 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 to 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.

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.

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 in 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.

5.1.8. Stale Metrics

During Fuse Management Central usage, you may encounter references to **Stale Metrics**.

Stale Metrics are metrics for which Fuse Management Central cannot guarantee that they are really accurate with current real values.

This can happen in a lot of scenarios, but generally it represents a deviation from the last values collected and the frequency at which those metrics should be collected. For example, if certain group of metrics should be collected every 5 seconds, but the latest values Fuse could collect were collected more than 5 seconds ago, Fuse marks those metrics as Stale Metrics, because it cannot be sure that those are really the most up-to-date metrics.

Any kind of delay on metrics collection can cause the metrics to be marked as Stale Metrics. Several reasons can cause delays on metrics collection, all of them being out of Fuse Management Central control. Some examples of things that may cause delays are:

- Client system having low performance
- Any other external factors that may delay or stop metrics collection

Alerts from Stale Metrics

When there are Stale Metrics, some alerts can be fired from those metrics, especially alerts that depend on a certain duration.

For example, let's say that the CPU usage alert is configured to be fired once the CPU usage is above `90%` for more than `30 seconds`, and this metric is collected every `5 seconds`. If Fuse collects a metric of `95%` at point `00:00`, it should be able to collect new metrics at `00:05`, `00:10`, `00:15`, etc… If the collections start to fail or delaying, after `30 seconds` the last value known to Fuse will still be `95%`, so at `00:30` the alert will be fired.

However, Fuse will have a notification on the alert saying that it was generated from a Stale Metric. This happens because Fuse Management Central cannot be sure if that alert is really accurate, since it is based on "delayed" information, so the System Administrator should verify the authenticity of the alert.

5.1.9. 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 Logs Viewer.

Logs Viewer

The Logs 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 visualize 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.

For OpenText Archive Center systems, the logs paths should be configured in the Fuse Management Client for OpenText Archive Center page, in order to display the required logs. For more information please refer to Fuse Management Central Installation Guide. For OpenText Content Server systems, the logs are automatically detected.

Due to performance reasons, only the latest 350 log files from each folder are showed in Logs Viewer.

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

- **WARN**, **WRN** → Yellow
- **ERROR**, **ERR** → Red

The footer shows the number of lines as well as counters for warnings and errors in the loaded lines. Clicking in warnings or errors counters allows you to filter the log file to display only warnings and/or error lines.

There'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 be loaded by 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 in the bottom left corner of the viewer.

Due to performance reasons, opening trace files in Trace view mode is limited to files up to 3MB. Files above that size can only be viewed in plain text (raw) mode.

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.

5.1.10. ServiceNow Integration

Fuse Management Central allows you to connect with ServiceNow in order to keep track of issues affecting your Content Suite environment.

For instructions on how to integrate Fuse Management Central with ServiceNow, please refer to the **Install and Administration Guide**.

Once the integration with ServiceNow is enabled, Fuse Management Central will automatically manage ServiceNow tickets accordingly with the Alerts raised.

Once an Alert is raised, a new ticket is created in ServiceNow, with all the details from the Alert being added in the ticket description. Other ticket fields such as **status** and **severity** will be managed accordingly with the configuration set on the ServiceNow Integration.

All updates to the Alert will be added as new comments in the ServiceNow ticket, as well as updates to the **status** and **severity**. If the Alert is resolved, the ticket status will be updated accordingly to the configuration set on the ServiceNow Integration.

For more details about this configuration, please contact your System Administrator or refer to the **Install and Administration Guide**.

Each ServiceNow ticket will be connected to Fuse Management Central by a unique link to the Alert details page. This link will be part of the description of the ticket and also will be sent in a comment each time there's an update. This allows you to seemingly navigate between the ServiceNow ticket and the Alert in Fuse Management Central.

5.1.11. Maintenance Windows

Fuse Management Central allows you to setup Maintenance Windows for your environments and/or systems. Maintenance Windows are periods of time in which the selected environment and/or systems won't be subject to Alerts.

This means that Alerts for the selected environments and/or systems won't be raised during the time period set on the Maintenance Window.

This could be especially useful for exceptional situations when you know that it is normal to have some alerts but you don't want to be bothered by them, for example, when dealing with server maintenance, upgrades, patches and other kind of interventions.

All system metrics will keep being collected as possible, it's only Alerts that will be snoozed during this time.

Maintenance Windows can be managed by System Administrators. In order to manage Maintenance Windows, please navigate to **Fuse Administration > Maintenance Windows** in the main menu.

System Administrators can also check **Maintenance Windows Executions** in the specific section for that. This includes past and currently running Maintenance Windows.

Configuring a new Maintenance Window

In the Maintenance Windows page, click the button **Add Maintenance Window** to create a new Maintenance Window.

A Maintenance Window has the following configurations:

- **Name** - a name identifying the Maintenance Window
- **Description** *(optional)* - some text describing the Maintenance Window
- **Schedule** - the Maintenance Window schedule. It can be a **One-Time** event or a **Recurring** Maintenance Window
    - **Date and Time** - for **One-Time** Maintenance Windows. It sets a specific start date and time for the Maintenance Window.
    - **Recurrence** - for **Recurring** Maintenance Windows. It sets the Recurrence of the Maintenance Window.
- **Duration** - once the Maintenance Window starts, for how long does it last
- **Scope** - select the environments and/or systems affected by the Maintenance Window.

Selecting an environment means that all alerts coming from systems belonging to that environment or from the environment itself won't be raised.

- **Notification Settings** - select if you want to get notified by email when the Maintenance Window starts and ends.

Forcing a Maintenance Window to Run Now

If you have a scheduled Maintenance Window but you want to run it instantly, you can go to the **Actions** column of the Maintenance Windows table and click **Run Now**.

This will start a new execution of that Maintenance Window during the time set in its definition.

Stopping a Maintenance Window

If for some reason you want to stop an execution of a Maintenance Window earlier than the scheduled end time, you can go to **Maintenance Windows Executions**, and in the **Actions**

column of the running Maintenance Window click **Stop Execution**.

This will terminate the running Maintenance Window immediately.

Cloning a Maintenance Window execution

Maintenance Windows Executions can be cloned using the **Actions** column in the Maintenance Windows Executions table, clicking the option **Clone**.

The Maintenance Window creation setup modal will pop-up with the fields pre-populated with the values of the current Maintenance Window Execution.

5.2. OpenText Content Server Administration

This section describes the Fuse Management Central components related to OpenText Content Server.

These components can be found across multiple Fuse Management Central pages, mainly System, Environment and Dashboard pages.

Each component should have its own widget, which can be found in System details page, and can also have replications on Environment and Dashboard pages. In those cases, the information will be compiled and grouped including all systems inside that Environment or even all systems in your infrastructure, for the case of Dashboard widgets.

5.2.1. Performance and Availability

Fuse Management Central uses a complex formula to monitor your Content Server performance. The goal is to have a unique indicator of the global performance of Content Server. Performance appraisal is always subject to context and interpretation, so it's important to be clear about what exactly is Fuse Management Central having into account, allowing you to take better decisions, knowing exactly how this performance calculation applies to your infrastructure.

> **!** Please be aware that all data presented in Fuse Management Central comes directly from the data that Fuse Management Client is capable of intercepting. This means that indicators such as performance are calculated based in a sample of data (the data that Fuse Management Client was able to capture) and not the full data of your Content Server infrastructure.

The performance formula takes into account the following indicators, with these respective weights:

Total Requests Executed **below** 1 second	30%
Total Requests Executed **below** 5 seconds and **above** 1 second	27.5%
Avg. Execution Time	22.5%

Avg. Queue Depth	20%

The final value is the sum of all these indicators, resulting in a percentage between 0 and 100.

Next you can find more details about each indicator.

Total Requests Executed below 1 second

Fuse Management Central computes the number of current request times available for 1 minute range and, from those requests, does a ratio for the ones that took less than 1 second.

- Ratio 0 → 0%
- Ratio 0.93 → 100%

Total Requests Executed below 5 seconds and above 1 second

Same as above but the ratio is for the number of requests taking less than 5 seconds.

- Ratio 0 → 0%
- Ratio 0.35 → 100%

Avg. Execution Time

Fuse Management Central uses the rate of a metric called `otcs_thread_execution_time_total` to compute the average time of requests for 1 minute range.

- Avg. execution time ≤ 0.6 → 100%
- Avg. execution time ≥ 5 → 0%

Avg. Queue Depth

We compute the average queue depth in for 1 minute range.

- Avg. queue depth in 0 → 100%
- Avg. queue depth in 2 → 0%

Availability

Availability is a much more simple formula, just having into account the **status** of Content Server in a certain period and rate.

For example, if you are checking the availability of Content Server for 1 hour with a rate of 1 minute, and if Content Server was offline for 20 minutes, then you'll have an availability of 67% (40 / 60).

5.2.2. 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 Logs Viewer.

5.2.3. 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 process. 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.

5.2.4. Configurations

The Configurations widget allows the user to view how many configurations are applied to the system as well as 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.

5.2.5. Configuration Policies

It is possible to create predefined 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.

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, compliance 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)

Add configuration to Policy

Adding configurations to a policy already created is 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 select configurations that already exist in the policy, those policy configurations will be overridden by the value of the new ones.

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.

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.

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.

Apply Policy

As described previously, policies are created with a configuration based on a 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.

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 compliance 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 compliance status.

Non-Compliance Mode

In 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.

5.2.6. 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 Content Server application status, availability and performance for an environment, covering periods up to the last 31 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 an **Environment** to include in the report.
2. Choose the **report period**.
3. Optionally, you can **send the report by email**.
    - Environment 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

5.2.7. 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

How to access System Object Volume

System Object Volume page is available through any System Object Volume widget, existent in **System** or **Environment** details pages. 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**

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.

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.

5.2.8. Storage Providers Details

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

How to access Storage Providers Details page

Storage Providers page is available through any Storage Providers widget, existent in **System** or **Environment** details pages. The Storage Providers widget contains a link to Storage Providers details page.

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**, **Delete Storage Provider** and **Update Monitoring List**.

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.

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.

Read and Write Throughput is only calculated if the storage provider is added to the monitoring list of at least one system.

Storage Providers Table

In this section users can see storage providers information in a table format. For example, users can see storage providers name, systems that are monitoring or not the storage provider, average read/write throughput, used disk, path and alerts (with mouse over the storage provider icon)

Data displayed depends on the filters selected.

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

Field	Description
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 he wants to do it manually later, now or scheduled it.

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.

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.

Update Monitoring List

By default, Fuse is not calculating Read and Write Throughput metrics. To calculate these metrics the storage provider must be added to the systems' monitoring list where the user wants to monitor it.

To update the monitoring list, users only need to click on **Update Monitoring List** button and fill the wizard fields:

Field	Description
Environment	Select the environment
Systems	Select the systems (from the selected environment) that will update their monitoring list
Monitored Storage Providers	Select the storage providers to monitor on the selected systems or leave it empty to not monitor any storage provider

Finally, the user can click **Update** or schedule the update by clicking **Schedule Update**.

This action can also be found on System Details and Environment pages in the Storage Providers Widget.

Editing the Monitoring List directly on the System Details page will pre-fill the storage providers currently monitored for the system.

5.2.9. Extended ECM

Fuse Management Central collects and displays information about your Extended ECM (xECM) components.

This information includes:

- **Business Applications**
- **Scheduled Processing**
- **Licensing**

There are 2 widgets where this information can be found:

- in the OpenText Content Server **System Details** page, the Extended ECM widget will show **Business Applications** from that system.
- in the OpenText Content Server **Environment**, located under the **OpenText Content Server > Components** tabs, the Extended ECM widget will show **Licensing** information and **Scheduled Processing** data from that Environment.

Business Applications

A complete list of the Business Applications in your system and their status, as well as possible alerts that may be affecting your system.

Hovering the mouse over a Business Application will display a tooltip with more detailed information.

Scheduled Processing

The Scheduled Processing section is only available in the **Environment** details page, under the **OpenText Content Server > Components** tabs.

It displays a complete list of Jobs in your environment and their status, as well as possible alerts that may be affecting your schedules.

Hovering the mouse over a Job will display a tooltip with more detailed information.

Licensing

The Licensing section is only available in the **Environment** details page, under the **OpenText Content Server > Components** tabs.

Licensing provides a list of **Ecosystems**, **Licenses** and **Users** existent in your environment, as well as their status and possible issues affecting your Environment.

Due to performance improvement, **Users** section displays how many users exist, but only lists the users with licensing issues.

More details can be found hovering each list entry.

5.3. OpenText Archive Center Administration

This section describes the Fuse Management Central components related to OpenText Archive Center.

These components can be found across multiple Fuse Management Central pages, mainly

System, Environment and Dashboard pages.

Each component should have its own widget, which can be found in System details page, and can also have replications on Environment and Dashboard pages. In those cases, the information will be compiled and grouped including all systems inside that Environment or even all systems in your infrastructure, for the case of Dashboard widgets.

5.3.1. Statistics

The Statistics widget can be found on the OpenText Archive Center system details page. This widget presents a graphical representation of:

- **Data Volume** - The volume of data processed (read/write operations) over time.
- **Performance** - The read/write performance (in MB/s) over time.
- **Components** - The number of documents/components processed (read/write operations) over time.

The time interval for these charts can be adjusted using the time period dropdown, located in the top-right corner of the Fuse Management Central header.

The Archive Center statistic metrics are enabled by default. If this is not the case for your system, the following properties must be set in the OpenText Administration Client:

- `<AS.DS.STATISTIC>` = on
- `<AS.DS.USE_ACCOUNTING>` = on

The data displayed on these charts is being delivered directly from OpenText Archive Center, as a consequence Fuse Management Central has no intervention on how and when this data is collected and calculated. Due to this fact, the data presented in these charts may differ from other statistical data being collected, processed and computed directly by Fuse Management Central.

5.3.2. Logical Archives

The Archives widget lists and displays information on all the Logical Archives configured in your OpenText Archive Center systems. Currently, Fuse Management Central is capable of listing and displaying information on the following types of Archives:

- **Original Archives** - Logical Archives which are created on the actual administered (local) server.
- **Replicated Archives** - Logical archives of known servers. These archives are located on known servers and can be reached for retrieval.
- **External Archives** - Replicated logical archives from the primary Archive Server to a Remote Standby Server, configured as a Known Server.

This widget is available on both OpenText Archive Center system details and environment pages. On the system details page, you will find all Logical Archives configured in that specific system, while on the environment page, you will see all Logical Archives configured among all

the OpenText Archive Center systems belonging to that environment.

Adding Logical Archives

On the Archives widget top-right corner, there's a context menu that allows you to **Add Original Archive**.

Give the new Archive a **name** and you're ready to add it. As usual, this action can be performed right away or scheduled for later.

Logical Archive Details

When you click on a Logical Archive, a modal window will open providing more details about it, including:

- All **Pools** added to the Logical Archive
- All **Certificates** installed in the Logical Archive
- The **Server Priorities** for the Logical Archive

For each **Pool** listed in the Logical Archive you can see a list of all **Disk Volumes** attached to it, and make changes to their **Status**, either **Locked** or **Write Locked**.

You can also **Detach Volume** from the **Pool**, using the context menu in the Disk Volume entry.

On the **Certificates** list, it is possible to **Enable** or **Disable** each certificate, as well as to **Change Certificates Privileges**.

For **External Archives**, it is only possible to set the list of server priorities, as there is no information about Pools or Certificates for this Logical Archive type.

5.3.3. Infrastructure

The Infrastructure widget is available at OpenText Archive Center System details page, and lists the following components of your OpenText Archive Center System infrastructure:

- **Buffers** - Also known as "Disk Buffers", an area on hard disk where archived documents are temporarily stored until they are written to the final storage media.
- **Disk Volumes** - A memory area of a storage media that contains documents.
- **Storage Devices** - A physical storage unit that contains storage media, but can also contain additional software or hardware to manage the storage media.
- **Caches** - A memory area which stores frequently accessed documents, to increase document performance.

Please note that only Storage Devices of Container File type are currently compatible to be listed in Fuse Management Central.

Add Disk Volume

From the Infrastructure widget, you can create new Disk Volumes, using the actions context menu in the top-right corner of the widget.

The following properties will be asked to create the Volume:

- **Volume Name** (Unique name of the volume)
- **Mount Path** (Mount path of the volume in the file system)
- **Volume Class** (The storage medium or storage system to ensure correct handling of documents and their retention)

After filling those fields you're ready to create the new Volume. This action can be performed immediately or scheduled for later.

Buffer Details

Clicking in a Buffer will open a modal window with more details about the Buffer.

Among other details, you'll see a list of **Volumes** attached to this Buffer, as well as a list of **Pools** and **Archives** where the Buffer is being used.

On the **Volumes** list, you can change the Volume status (Locked and Write Locked), as well as **Detach Volume**, using the context menu in the Volume entry.

Buffer Actions

In the top-right corner of the Buffer details modal window, there is an **Actions** dropdown that allows you to:

- **Attach Volume** to the Buffer
- **Edit** the buffer

Attach Volume allows to easily select a Volume to be attached to this Buffer.

Edit Buffer allows you to change the Buffer properties, such as the **Buffer Name** and other configuration properties.

Disk Volume Details

Clicking in a Volume will open a modal window with more details about the Disk Volume.

Rename Disk Volume

In the top-right corner of the Volume details modal window, there is an **Actions** dropdown that allows you to **Rename Disk Volume**. It will ask you for the new name for the Volume, it is a simple and easy way of renaming the Volume.

Storage Device Details

Clicking in a Storage Device will open a modal window with more details about the Device.

Among other details, you'll see a list of **Volumes** created in the Storage Device. In this list you can check for important information, such as the used space, media type and the file system.

Storage Device Actions

In the top-right corner of the Storage Device details modal window, there is an **Actions** dropdown that allows you to **Attach** or **Detach** the Storage Device. As usual, this action can be performed immediately or scheduled for later.

Cache Details

Clicking in a Cache will open a modal window with more details about the Cache.

5.3.4. Services

The Services widget is located on the OpenText Archive Center system details page. It provides a quick overview of the key services deployed by the platform, so you can easily identify any services that may be down or encountering errors. By hovering over a service, you can view additional information including its description, status, and detailed status information.

> **!** In order for Fuse Management Central to be able to monitor OpenText Archive Center services, the **Monitor Server** service (IxmonSvc) must be installed and running.

5.3.5. Jobs

The Jobs widget is available on OpenText Archive Center system details page and lists the following areas:

- **Job Scheduler** - Show Job Scheduler status and enable starting or stopping it.
- **Jobs** - Recurring tasks that are automatically triggered based on a set schedule or when specific conditions are met.

Starting and Stopping the Job Scheduler

You can start and stop the scheduler depending by clicking on its context menu.

Creating Jobs

From the Jobs widget, you can add a new job, using the actions context menu, located on the widget top-right corner.

The following properties will be prompt to create the Job:

- **Job Name** - Unique name of the job that describes its function)
- **Command** - Select the job command to be executed)
- **Command Arguments** - Job optional arguments, for additional job configurations.
- **Job Start Mode**
    - Scheduled (Can define the start time of the job)
    - After previous job finished (Can specify to start the job when another job is finished)
- Depending on the start mode, set the scheduling settings or the previous job

Clear All Job Protocol List

From the jobs' widget, you can clear all job protocol list, using the actions context menu in the top-right corner of the widget. This will **clear all** the protocols for **all jobs**.

Job Details

Clicking in a Job will open a modal window with more details about the Job.

Among the job properties, and if the job is executing, you will see a tab with the message from the last job execution (e.g. last protocol) and a tab with a list of protocols for the job.

Protocols are job executions. Protocol entries with a red status are protocols finished with an error and the ones with green status identify jobs that have run successfully.

Job Actions

In the top-right corner of the job details modal window, there is an Actions dropdown that allows you to:

- Start Job
- Stop All Jobs (Jobs can have more than one instance running)
- Edit Job
- Enable Job
- Disable Job
- Delete Job

5.3.6. Document Pipelines

The Document Pipelines widget is only available in the environments page, located under the **OpenText Archive Center > Document Pipelines** tab. It lists and displays information on all the Document Pipeline servers configured on each Fuse Management Client for OpenText Archive Center configured for the environment.

Currently, Fuse Management Central is capable of displaying information on the following Document Pipeline components:

- **Document Pipeline Servers**
  - **Pipelines**
    - **DocTools**
      - **Input and Error Documents**

The ability to search and filter Document Pipelines by name and status, as well as Documents by name, makes it easier for users to quickly locate and prioritize the information they need. This feature enhances the overall efficiency and effectiveness of managing Document Pipelines.

Document Pipeline Servers

Each Document Pipeline server entry is followed by a status icon that indicates any currently active alert(s). Hovering over the icon will display a tooltip with more detailed information about each alert. Additionally, an informative icon is provided, that when hovered displays the hostname of the Document Pipeline server. Each Document Pipeline server entry also includes a summary of the total pipelines, input documents, and error documents.

Pipelines

By clicking on a Document Pipeline server, users can expand it to view a comprehensive list of all the configured and deployed pipelines, each Pipeline entry is followed by a status icon that indicates any currently active alert(s) and total input and error documents chart. Hovering over the icon will display a tooltip with more detailed information about each alert.

DocTools

By expanding a Pipeline, users can view all assigned DocTools as well as their status. Each DocTool entry includes an icon representing its current status, and if there are any alerts, hovering over the icon will reveal more details. Each DocTool entry also displays the total count of input and error documents, along with a contextual button that provides access to a list of available actions:

- **Enable/Disable** - Enable or disable the DocTool, when disabled to DocTool will stop processing Input Documents.
- **Show Input/Error Documents** - Displays a table listing all the input/error documents.
- **Remove Input/Error Documents** - Remove all the input/error documents from the DocTool Input or Error queues.
- **Requeue Error Documents** - Allows for the re-addition of all error documents to the input queue.

Input and Error Documents

By selecting the **Show Input/Error Documents** action, a table displaying all input/error documents in alphabetical order will be displayed. This table allows for easy searching by document name and navigation through pages using pagination. When hovering over a document, its full path will be displayed in a tooltip, and a contextual button provides access to the following actions:

- **Show Protocol** - Displays the document protocol and a log of events related to the processing of the document by the DocTool.
- **Copy path to clipboard** - Copy the complete file path of the document to the clipboard.
- **Remove Document** - Remove the document from the DocTool Input or Error queues.
- **Requeue Error Document** - Allows for the re-addition of the error documents to the Input queue.

Document Protocol

When clicking the document's **Show Protocol** action, a modal containing the document's protocol will be shown. It will also show the document path, the document pipeline hostname and a button with the following actions:

When you select the **Show Protocol** action for a document, a modal will appear displaying the document's protocol, its path, and the hostname of the Document Pipeline server. This modal will have two buttons for the following actions:

- **Download** - Download the document's protocol, as a text file.
- **Refresh** - Refreshes the document's protocol content.

To maintain optimal performance and prevent performance issues, the ability to display input/error documents is limited to a maximum of 20,000 documents. If this limit is surpassed, the option to display these documents will become inactive.