

# Hitachi Content Intelligence

v2.2.1

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## Release Notes

This release of Hitachi Content Intelligence (HCI) applies a Common Vulnerabilities and Exposures (CVE) fix for a critical vulnerability.

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# Hitachi Content Intelligence v2.2.1 Release Notes

## About this document

This document provides information about the Hitachi Content Intelligence (HCI) software, including new features, important enhancements, as well as fixed and known issues.

## Intended audience

This document is intended for system administrators, Hitachi Vantara representatives, and authorized service providers who configure and operate the HCI software.

## Getting help

The [Hitachi Vantara Support Website](https://support.hitachivantara.com/en_us/contact-us.html) is the destination for technical support of products and solutions sold by Hitachi Vantara. To contact technical support, log on to the Hitachi Vantara Support Website for contact information: [https://support.hitachivantara.com/en\\_us/contact-us.html](https://support.hitachivantara.com/en_us/contact-us.html).

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## About this release

This release of HCI applies a critical CVE fix around Apache Commons Text for CVE-2022-42889.

## Major features

## General updates

### Password policy enhancements

This release of HCI addresses a critical CVE regarding Apache Commons Text v1.6 for [CVE-2022-42889](#). The vulnerability has been fixed by upgrading Apache Commons Text to v1.10 in our product.

For more information, see [Resolved CVEs \(on page 8\)](#).

## Resolved issues

Issue	Area affected	Description	Outcome
HCI-8378	Security	The Apache Commons Text v1.6 JAR file used in HCI is associated with critical <a href="#">CVE-2022-42889</a> .	The vulnerability was addressed by upgrading Apache Commons Text v1.6 to Apache Commons Text v1.10.  For more information, see <a href="#">Resolved CVEs (on page 8)</a> .

## Known issues

Issue	Area affected	Description	Outcome/Workaround
HCI-286	Workflow Designer App	Using <b>Retry Failed Documents</b> manually in a workflow that has failures doesn't add to the output metrics after it has successfully indexed those files.	The results of the <b>Retry Failed Documents</b> setting do not affect output metrics and the files are still indexed successfully.
HCI-353	Job Driver	When attempting to migrate data to a namespace that has already hit its hard quota, 413 errors are received without any failure notifications in the workflow. The failures are instead reported in the advanced historic metrics.	N/A
HCI-1047	Content Monitor App	Replication links with forward slashes (/) do not appear in the Replication metrics.	Replace the forward slashes in the Replication link name with any other ASCII character (space, %, etc.).

Issue	Area affected	Description	Outcome/Workaround
HCI-1737	Workflow Designer	Enabling <b>Process all documents</b> ignores the HCP and Sharepoint connector's directories when a workflow is resumed.	N/A
HCI-1918	Metrics	Metrics service cannot be scaled to twice the current number of instances.	<ul style="list-style-type: none"> <li>▪ Scale the instances back down to the original instances.</li> <li>▪ Wait for the scale action to complete.</li> <li>▪ Scale the instances back up to the desired number of instances.</li> </ul>
HCI-6103	Workflow Designer App	On a multi-node cluster, if one of the nodes goes down, the workflow halts with a task error. The task error states that the driver heap limit is too low for the workflow, but raising this value in the workflow settings does not restart the workflow.	The workflow-agent job type is configured to run on all nodes in a cluster by default. Scaling the workflow-agent off of the bad node will allow workflows to resume.
HCI-6109	Admin App	HCI enters a bad state after rebooting 2 of the 3 master nodes available on a 4-node cluster.	Reboot all HCI master nodes at the same time and the clusters will return normally.
HCI-6128	Metrics	Metrics from historical logs are ignored after an update and present an OOM message.	If you notice your imported logs missing after update, reimport them and the metrics will display correctly.
HCI-6304	Workflow Designer App	Testing a data connection accessible by proxy shows a blank certificate and cancelling it makes the system seem unresponsive.	<p>If your data connection can only be accessed by proxy and requires a certificate, download the certificate from the other system and manually add it to the Admin App</p> <p>To do this, navigate to <b>Configuration &gt; Certificates &gt; Client</b> and click <b>UPLOAD CLIENT CERTIFICATE</b>.</p>
HCI-6540	Solr	During an update, Solr shards appear in the <b>Gone</b> state if Marathon references the old port number and node name pairing when starting the Solr service.	<p>Delete the <b>Gone</b> shards:</p> <ol style="list-style-type: none"> <li>1. Navigate to the Solr UI.</li> <li>2. Click <b>Collections</b>.</li> <li>3. For each affected index: <ol style="list-style-type: none"> <li>a. Click the index name.</li> </ol> </li> </ol>

Issue	Area affected	Description	Outcome/Workaround
			<ul style="list-style-type: none"> <li>b. Click the affected shards.</li> <li>c. Click <b>X</b>.</li> <li>d. Confirm the deletion.</li> </ul>
HCI-6857	Search App	Search App exclusive users with bulk action permissions are able to see Workflow Designer as an option in their SSO menu. Clicking it presents a message telling the user the page cannot be displayed.	N/A
HCI-7020	Admin App	When updating from HCI 1.6.x to 1.10.1, the <i>doc</i> folder is owned by <i>root</i> on several nodes in the cluster, causing an update failure.	Changing the user from <i>root</i> to <i>hci</i> and retrying the failure resolves the issue.
HCI-7341	Solr	When attempting to recreate a delete Solr collection with a different initial schema, the old schema is still present in the UI. This is an internal HCI ticket to track the progress of SOLR-15674, which was filed directly with Apache.	N/A
HCI-7366	Search App	The autocomplete functionality of the search bar in Search App does not work for file names in Chinese after reindexing text field changes.	N/A
HCI-7368	Solr	If an index is created without using a SolrCloud connection URL, attempts to create bulk actions using the index will fail.	N/A
HCI-7369	Solr	When attempting to remove a copy field from an index, the delete fails with a "Collection not found" error and the index is unable to be written to.	N/A
HCI-7370	Solr	Solr can only use comparatives with small numbers and returns 0 results (in error) when using larger ones.	N/A
HCI-8242	Import	Importing a Solr alias bundle containing an index associated with HCP for Cloud Scale Bucket Indexing results in an error.	<ul style="list-style-type: none"> <li>1. Import the HCP for Cloud Scale Bucket Indexing bundle.</li> <li>2. Reload the imported bundle.</li> </ul>

Issue	Area affected	Description	Outcome/Workaround
			3. Import the Solr alias bundle.
HCI-8243	Import	After importing specific components from a bundle, an error message is received when attempting to add additional components.	Import the bundle in its entirety. If the error persists, contact your Hitachi Vantara representative.

## Resolved CVEs

This table lists the high and critical CVEs that no longer affect HCI as of v2.2.1. For more information, refer to <https://nvd.nist.gov>.

Issue	Area affected	Description
CVE-2022-42889	Apache Commons Text	<p><b>Apache Commons Text vulnerability</b></p> <p>Apache Commons Text performs variable interpolation, allowing properties to be dynamically evaluated and expanded. Starting with version 1.5 and continuing through 1.9, the set of default Lookup instances included interpolators that could result in arbitrary code execution or contact with remote servers. Applications using the interpolation defaults in the affected versions may be vulnerable to remote code execution or unintentional contact with remote servers if untrusted configuration values are used. Users are recommended to upgrade to Apache Commons Text 1.10.0, which disables the problematic interpolators by default.</p> <p>For more information on this CVE, see <a href="https://nvd.nist.gov/vuln/detail/CVE-2022-42889">https://nvd.nist.gov/vuln/detail/CVE-2022-42889</a>.</p> <p><b>Resolution</b></p> <p>HCI has upgraded Apache Commons Text v1.6 to Apache Commons Text v1.10, which fixed the issue.</p>

## System requirements

This section lists the hardware, networking, and operating system requirements for running an HCI system with one or more instances.

## Hardware requirements

This table shows the minimum and recommended hardware requirements for each instance in an HCI running Hitachi Content Search.

Resource	Minimum	Recommended
RAM	16 GB	32 GB
CPU	4-core	8-core
Available disk space	50 GB	500 GB

## Software requirements

The following table shows the minimum requirements and best-practice software configurations for each instance in an HCI system.

Resource	Minimum	Best
IP addresses	(1) static	(2) static
Firewall Port Access	Port 443 for SSL traffic Port 8000 for System Management App GUI Port 8888 for Content Search App GUI	Same
Network Time	IP address of time service (NTP)	Same

## Operating system and Docker minimum requirements

Each server or virtual machine you provide must have the following:

- A 64-bit Linux distribution
- Docker version 1.13.1 or later installed
- IP and DNS addresses configured

Additionally, you should install all relevant patches on the operating system and perform appropriate security hardening tasks.

**Important:**

- Install the current Docker version suggested by your operating system, unless that version is earlier than 1.13.1. The system cannot run with Docker versions prior to 1.13.1.
- HCI will not function on an operating system that uses cgroups v2. If your system currently utilizes it, you must downgrade to cgroups v1 prior to installation.

## Operating system and Docker qualified versions

This table shows the operating systems, as well as the Docker and SELinux configurations, on which this HCI release was qualified. It acts as a point of reference for our customers to better share how we operate within our internal environment and does not represent any requirements that need to be followed within your own.

Operating system	Docker version	Docker storage configuration	SELinux setting
CentOS 7.6	Docker 18.03.1-ce	device-mapper	Enforcing
CentOS 8.1	Docker 19.03.13	overlay2	Enforcing
Red Hat Enterprise Linux 8.1	Docker 20.10.14	overlay2	Enforcing
Ubuntu 18.04.4 LTS	Docker 18.03.1-ce	overlay2	Not Installed

## Docker considerations

The Docker installation folder on each instance must have at least 20 GB available for storing the HCI Docker images.

Make sure that the Docker storage driver is configured correctly on each instance before installing HCI. To view the current Docker storage driver on an instance, run `docker info`.



**Note:** After installing, changing the Docker storage driver requires a reinstallation of HCI.

If you are using the Docker `devicemapper` storage driver:

- Make sure that there's at least 40 GB of Docker metadata storage space available on each instance. HCI needs 20 GB to install successfully and an additional 20 GB to successfully update to a later version. To view Docker metadata storage usage on an instance, run `docker info`.
- On a production system, do not run `devicemapper` in `loop-lvm` mode. This can cause slow performance or, on certain Linux distributions, HCI might not have enough space to run.

## SELinux considerations

You should decide whether you want to run SELinux on system instances and enable or disable it before installing HCI. To enable or disable SELinux on an instance, you must restart the instance. To view whether SELinux is enabled on an instance, run: `sestatus`

To enable SELinux on the system instances, use a Docker storage driver that supports it. The storage drivers that SELinux supports differ depending on the Linux distribution you're using. For more information, see the Docker documentation.

## Time source requirements

If you are installing a multi-instance system, each instance should run NTP (network time protocol) and use the same external time source. For information, see [support.ntp.org](http://support.ntp.org).

## Supported browsers

The following browsers are qualified for use with HCI software. Other browsers or versions might also work.

- Google Chrome (latest version as of the date of this publication)
- Microsoft Edge (latest version as of the date of this publication)
- Mozilla Firefox (latest version as of the date of this publication)

## Documentation set

Along with your release notes, the following guides and documentation comprise the full set of HCI reference documentation:

- *Hitachi Content Intelligence Installing Hitachi Content Intelligence*
- *Hitachi Content Intelligence Deploying the HCI Example OVF*
- *Hitachi Content Intelligence (HCI) Getting Started Guide*
- *Hitachi Content Intelligence Workflow Designer Help*
- *Hitachi Content Intelligence Search Help*
- *Hitachi Content Intelligence Content Monitor Help*
- *Hitachi Content Intelligence Administrator Help*

To learn more, visit the [HCI Knowledge page](#).

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