

IBM Content Collector
4.0.1.15 Interim Fix 6

Readme

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IBM Content Collector 4.0.1.15 Interim Fix 6

Readme documentation for IBM® Content Collector 4.0.1.15 interim fix 6 including installation-related instructions, prerequisites and co-requisites, and information about fixes, changes, and limitations for IBM Content Collector for Email, IBM Content Collector for File Systems and IBM Content Collector for Microsoft SharePoint.

Readme file for:

IBM Content Collector

Product / Component release:

Version 4.0.1.15

Update Name:

Interim Fix 006

Fix ID:

4.0.1.15-IBM-ICC-IF006

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Download location

The following deliverables are available for download from the IBM Fix Central:

Download Collector 4.0.1.15 interim fix 6 fix files

<https://www.ibm.com/support/fixcentral/swg/selectFixes?parent=Enterprise%2BContent%2BManagement&product=ibm/Information+Management/Content+Collector&release=4.0.1.15&platform=ALL&function=fixId&fixids=4.0.1.15-IBM-ICC-IF006&includeRequisites=1&includeSuperse>

It includes steps to install the IBM Runtime Environment Java to 8.0.8.5 and Struts to 2.5.31, which are used by Content Collector.

Note: This interim fix is not applicable for Solaris platform because IBM Java 8 32-bit JRE is not available for Solaris.

Product / Component name	Platform	File name
IBM Content Collector 4.0.1.15 interim fix 6 readme https://www.ibm.com/support/pages/node/7030364	Not applicable	4.0.1.15-IBM-ICC-IF006.pdf
IBM Content Collector Server https://www.ibm.com/support/fixcentral	Windows	4.0.1.15-IBM-ICC-WIN-IF006.zip
Content Collector 4.0.1.15 interim fix 6 CM8 Text Search Support	AIX	4.0.1.15-IBM-ICC-AIX-IF006.gz
	Linux	4.0.1.15-IBM-ICC-Linux32-IF006.tgz
	Linux for zSeries	4.0.1.15-IBM-ICC-Linuxz-IF006.tgz

Prerequisites and corequisites

- The server package of this interim fix requires one of the following Content Collector versions installed on your operating system:

Content Collector 4.0.1
<ul style="list-style-type: none"> Content Collector 4.0.1.10 Content Collector 4.0.1.11 Content Collector 4.0.1.12 Content Collector 4.0.1.13 Content Collector 4.0.1.14 Content Collector 4.0.1.15

- This interim fix is completely independent of following interim fixes and can be deployed on top of the specified interim fixes:

Content Collector release version	Components	Release content
Content Collector 4.0.1.15 interim fix 1 https://www.ibm.com/support/pages/node/6823863	Server	Java PSIRT fixes CVE-2022-21496, CVE-2022-21434, CVE-2022-21443, CVE-2022-21299, CVE-2021-35561 <u>Solution:</u> Upgrade Java to 8.0.7.10
Content Collector 4.0.1.15 interim fix 2 https://www.ibm.com/support/pages/node/6846217	Server (Web Application)	Liberty PSIRT fixes CVE-2022-34165 <u>Solution:</u> Upgrade Liberty to 22.0.0.10
Content Collector 4.0.1.15 interim fix 3 https://www.ibm.com/support/pages/node/6954449	Server	Java PSIRT fixes CVE-2022-3676, CVE-2022-21624 <u>Solution:</u> Upgrade Java to 8.0.7.20

Content Collector release version	Components	Release content
Content Collector 4.0.1.15interim fix 4 https://www.ibm.com/support/pages/node/7006055	P8 Content Search service support	P8 Content Search service support plugin fix files: 1. Support for Semeru Java 11 for Content Platform Engine. 2. Support enablement for keystore type JCEKS and PKCS12 to establish SSL connection.
Content Collector 4.0.1.15interim fix 5 https://www.ibm.com/support/pages/node/7005863	Server CM8 Text Search Support	Java PSIRT fixes CVE-2022-21426 Solution: Upgrade Java to 8.0.8.0.

For information about hardware and software compatibility, see the detailed system requirements document at:

- **Latest updates:** IBM Software Product Compatibility Reports
<https://www.ibm.com/software/reports/compatibility/clarity/index.html>
- **Additional information:**
 - Prerequisites for IBM Content Collector 4.0 - <https://www.ibm.com/support/pages/node/612697>
 - Prerequisites for IBM Content Collector 4.0.1 - <https://www.ibm.com/support/pages/node/614445>

Known issues

No known issues.

Installation information

You can apply this fix directly on Content Collector 4.0.1 fix pack 15 (4.0.1.15).

Notes:

- When following the instructions, replace *<ICC_installation_directory>* with the name of your Content Collector installation directory.
- If the installation directory path contains space, you must use Windows short names while navigating. For example:

Directory path with spaces: *C:\Program Files (x86)\IBM\ContentCollector* should be written as

Desired path: *c:\progra~2\IBM\ContentCollector*.

You can find the short name for a directory by running this command: *dir /x*.

A. Installing IBM Runtime Environment Java Technology Edition

The following sections provide information on how to install IBM Java.

Prerequisite

1. Download and extract the fix files for your operating system from the IBM Fix Central to a temporary directory:

<https://www.ibm.com/support/fixcentral/swg/selectFixes?parent=Enterprise%2BContent%2BManagement&product=ibm/Information+Management/Content+Collector&release=4.0.1.15&platform=ALL&function=fixId&fixids=4.0.1.15-IBM-ICC-IF006&includeRequisites=1&includeSupers>

For example, for Windows operating system, you need to extract from following compressed folder:

4.0.1.15-IBM-ICC-WIN-IF006.zip

2. The Java fixes are available in the folder named **java**.

Installing

1. **Close** the Content Collector Configuration Manager and stop the following services:

- a. All the services on IBM Content Collector Server
- b. **For CM8 Text Search Support 4.0.1.9 to 4.0.1.12:**
DB2EXT Service on CM8 Server

Note: CM8 Text Search Support 4.0.1.8 and earlier use Java 6, and this Content Collector interim fix is applicable only for Java 8.

2. Take a backup of the respective Java directory present within the Content Collector product directory.

If you used the default location for installation, the paths are as follows:

Component	Platform	Default location
Server	Windows	<ICC_installation_directory>/java
CM8 Text Search Support	Windows	C:/Program Files (x86)/IBM/ICCIndexer/java
CM8 Text Search Support	Unix	/opt/IBM/ICCIndexer/java

3. Replace the contents of the Java directory in your installation folder (from Step 2) with the fix file for your operating system.
4. Start the services you stopped in Step 1.

B. Windows only: Upgrading Struts

The following sections provide information on how to upgrade Struts.

Prerequisite

1. Download and extract the fix files for your operating system from the IBM Fix Central to a temporary directory:

<https://www.ibm.com/support/fixcentral/swg/selectFixes?parent=Enterprise%2BContent%2BManagement&product=ibm/Information+Management/Content+Collector&release=4.0.1.15&platform=ALL&function=fixId&fixids=4.0.1.15-IBM-ICC-IF006&includeRequisites=1&includeSuperse>

For example, for Windows operating system, you need to extract from following compressed folder:

4.0.1.15-IBM-ICC-WIN-IF006.zip

2. The Struts fixes are available in the folder named **AFUWeb**.

Installing

1. Stop the IBM Content Collector Web Application service on the IBM Content Collector Server.
2. Run the following script from the administrator command prompt to remove the existing extracted EAR files:
afu_ewas_undeploy.bat
3. Take a backup and delete the following files:
 - a. AFUWeb\afu_web.ear
 - b. AFUWeb\DocViewer.ear
 - c. AFUWeb\DocViewer\DocViewer.ear
 - d. AFUWeb\DocViewer\win64\DocViewer.ear
4. Extract the contents of the folder that has the Struts fixes, **AFUWeb** folder ([Prerequisite Step 2](#)).
5. Copy the **afu_web.ear** file and paste it in the following directory:
 - a. AFUWeb
6. Copy the **DocViewer.ear** file and paste it in the following directories:
 - a. AFUWeb\
b. AFUWeb\DocViewer\
c. AFUWeb\DocViewer\win64\
7. Copy the **DocViewer_win64\DocViewer.ear** file and paste it in the following directories:
 - a. AFUWeb\DocViewer\win64\
b. AFUWeb\DocViewer\win64\DocViewer\
8. Run the following script from the administrator command prompt to deploy the existing as well as the newly replaced EAR files:
afu_ewas_deploy.bat
9. Reconfigure the Web Application Service.

Uninstalling this fix

The following sections provide information on how to uninstall IBM Java and rollback Struts.

A. Uninstalling IBM Runtime Environment Java Technology Edition

1. Close the Content Collector Configuration Manager and stop the following services:
 - a. All the services on IBM Content Collector Server
 - b. **For CM8 Text Search Support 4.0.1.9 to 4.0.1.12:**
DB2EXT Service on CM8 Server

Note: CM8 Text Search Support 4.0.1.8 and earlier use Java 6, and this Content Collector interim fix is applicable only for Java 8.

2. Navigate to the Java directory and replace the files with the backup taken in Step 2 of [installation](#).
3. Start the services you stopped in Step 1.

B. Uninstalling Struts upgrade

The following steps roll back the current version of Struts on your system to the version you backed up.

1. Stop the IBM Content Collector Web Application service on the IBM Content Collector Server.
2. Run the following script from the administrator command prompt to remove the extracted EAR files:
afu_ewas_undeploy.bat
3. Delete the following files:
 - a. AFUWeb\afu_web.ear
 - b. AFUWeb\DocViewer.ear
 - c. AFUWeb\DocViewer\DocViewer.ear
 - d. AFUWeb\DocViewer\win64\DocViewer.ear
4. Restore the **afu_web.ear** file that you backed up in Step 3 of [installation](#) and paste it in the following directory:
 - a. AFUWeb
5. Restore the **DocViewer.ear** file that you backed up in Step 3 of [installation](#) and paste it in the following directories:
 - a. AFUWeb\
b. AFUWeb\DocViewer\
c. AFUWeb\DocViewer\win64\
6. Restore the **DocViewer.ear** file that you backed up in Step 3 of installation and paste it in the following directories:
 - a. AFUWeb\DocViewer\win64\
b. AFUWeb\DocViewer\win64\
7. Run the following script from the administrator command prompt to reinstall the applications that you uninstalled in Step 2:
afu_ewas_deploy.bat
8. Reconfigure the Web Application Service.

Fixes and changes

This interim fix addresses the following security vulnerabilities in the IBM Runtime Environment Java Technology 8 used by Content Collector.

Security vulnerabilities

A. IBM Runtime Environment Java Technology Edition

1. A flaw in the TLSv1.3 implementation allows an attacker to inflict a denial of service attack. The fix corrects the flaw.

CVE-2023-21930 - <https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2023-21930>

2. A flaw in the CertPath component allows an attacker to inflict a denial of service by sending malformed certificate data. The fix ensures that such malformed certificates are handled gracefully.

CVE-2023-21967 - <https://cve.mitre.org/cgi-bin/cvekey.cgi?keyword=CVE-2023-21967>

3. A flaw in the implementation of java.lang.ProcessBuilder.start() may allow an attacker to execute arbitrary system commands if untrusted String data is added to the String that's passed java.lang.ProcessBuilder.start(). This will also affect use of the java.lang.Runtime.exec() API, which uses java.lang.ProcessBuilder under the covers. The fix ensures that malformed command strings are handled correctly.

CVE-2023-21938 - <https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2023-21938>

4. A flaw in OpenJ9 may allow untrusted code to disable the security manager and elevate its privilege. The fix corrects the flaw.

CVE-2023-2597 - <https://cve.mitre.org/cgi-bin/cvekey.cgi?keyword=CVE-2023-2597>

5. A remote attacker to execute arbitrary code on the system, caused by an unsafe deserialization flaw. By sending specially-crafted data, an attacker could exploit this vulnerability to execute arbitrary code on the system.

CVE-2022-40609 - <https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2022-40609>

B. Struts Upgrade

1. Apache Struts is vulnerable to a denial of service, caused by a flaw when processing Multipart request containing non-file normal form fields. By sending a specially crafted request, a remote attacker could exploit this vulnerability to cause a denial of service condition. The fix corrects the flaw.

CVE-2023-34396 - <https://cve.mitre.org/cgi-bin/cvekey.cgi?keyword=CVE-2023-34396>

2. Apache Struts is vulnerable to a denial of service, caused by a flaw with only handling setProperty() but not getProperty(). By sending a specially crafted request, a remote attacker could exploit this vulnerability to cause a denial of service condition. The fix corrects the flaw.

CVE-2023-34149 - <https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2023-34149>

Fixed defects

No defects

Documentation

- Download IBM Content Collector 4.0.1.15 interim fix 6 (Readme file)
<https://www.ibm.com/support/pages/node/7030364>
Note: For the latest version of the Readme file, use this link.
- IBM Content Collector Downloads
<https://www.ibm.com/support/pages/node/613127>

- IBM Software Product Compatibility Reports
<https://www.ibm.com/software/reports/compatibility/clarity/index.html>
- IBM Content Collector 4.0.1 documentation
<https://www.ibm.com/docs/en/content-collector/4.0.1>

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