IBM Content Collector 4.0.1.10 Interim Fix 14

# Readme

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## IBM Content Collector 4.0.1.10 Interim Fix 14

Readme documentation for IBM® Content Collector 4.0.1.10 Interim Fix 14 including installation-related instructions, prerequisites and corequisites, 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 4.0.1.10

**Update Name:** 

Interim Fix 014

Fix ID:

4.0.1.10-IBM-ICC-IF014

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# **Download location**

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

Download Collector 4.0.1.10 Interim Fix 14 fix files

 $\frac{https://www.ibm.com/support/fixcentral/swg/selectFixes?parent=Enterprise\%2BContent\%2BManagement\&product=ibm/Information+Management/Content+Collector\&release=4.0.1.10\&platform=ALL\&function=fixId&fixids=4.0.1.10-IBM-ICC-IF014\&includeRequisites=1&includeSuperse$ 

It includes steps to upgrade the IBM Runtime Environment Java to 8.0.6.15 and Struts to 2.5.22 of Content Collector.

Product / Component name	Platform	File name
IBM Content Collector 4.0.1.10 IF014 Readme https://www.ibm.com/support/pages/node/6353383	Not Applicable	4.0.1.10-IBM-ICC-IF014.pdf

Product / Component name	Platform	File name
IBM ContentCollector 4.0.1.10 IF014 Server <a href="https://www.ibm.com/support/fixcentral">https://www.ibm.com/support/fixcentral</a>	Windows	4.0.1.10-IBM-ICC-WIN-IF014.zip
IBM Content Collector 4.0.1.10 IF014 CM8 Text Search Support	AIX	4.0.1.10-IBM-ICC-AIX-IF014.gz
	Linux	4.0.1.10-IBM-ICC-Linux32-IF014.tgz
	Linux for zSeries	4.0.1.10-IBM-ICC-Linuxz-IF014.tgz

Note: This interimfix is not applicable for Solaris platform because IBM Java 832-bit JRE is not available for Solaris.

# Prerequisites and corequisites

The IBM Content Collector (ICC) 4.0.1.10 server package is required.

# A. Deployable as additional fix

This interim fix can coexist with the following interim fixes and can be deployed on top of it:

ICC Release Version	Components	Release Content
4.0.1.10 Interim Fix 001 https://www.ibm.com/support/pages/node/885440	Outlook Extension	APAR fix HE12884: IBM Content Collector Outlook Extension (32-bit and 64-bit)
4.0.1.10 Interim Fix 003  https://www.ibm.com/support/pages/node/887881	Server (P8 Config, Expiration Manager Tool)	APAR fix  HE12880: ICC Expiration manager tool command quits the processing returning SQL syntax error.  When running the Expiration Manager Tool command to delete all the emails archived in FileNet, a SQL Syntax Error is returned. This fix resolves the error by modifying the SQL query to be compatible with FileNet Content Engine Server.  Defect  Internal defect 69240: The defect was reported on ICC 4.0.1 FP10 P8 CPE 5.5.3. The initial configuration fails when retrieving the objects to res. During initial configuration ICC is using VerityIndexAreaImpl and CBRSearchType.VERITY references which is deprecated in CPE 5.5.2.  This fix removes the references of deprecated VERITY APIs and properties as CPE has stopped VERITY support for some time now. With this fix, VERITY will not be supported with ICC as VERITY users will have to use older versions of ICC.

ICC Release Version	Components	Release Content
4.0.1.10 Interim Fix 004 <a href="https://www.ibm.com/support/pages/node/1073800">https://www.ibm.com/support/pages/node/1073800</a> 4.0.1.10 Interim Fix 005 <a href="https://www.ibm.com/support/pages/node/1100253">https://www.ibm.com/support/pages/node/1100253</a>	Server (Web Application Liberty, IBM Content Collector P8 Connector), SharePoint Extension, OWA Extension Server (Web Application Liberty)	New features  Support of Microsoft Exchange OWA 2019 Support of Microsoft SharePoint Server 2019 Support for Business Automation Content Services on Cloud (BACSOC)  APAR fix HE12928: Archival to FileNet P8 5.5.2 fails when ICC tries to query distinguished name property for current CPE server user.  New features Liberty Phase 2 (External Liberty Server and API Support): Support for ICC Web
		Application deployment on External Web Application Server  • Support for ICC Web Application services application programming interfaces (APIs)  • Admin Center Control for IBM WebSphere Liberty Application Server  • Support for Doc Viewer: ICC plugin Doc Viewer can be used to view documents in IBM Content Navigator.  APAR fix HE12935: ICC CM and FileNet repository configuration tool fails to load.  Defect Internal defect 69271: ICC plugin Doc Viewer can be used to view documents in IBM Content Navigator.
4.0.1.10 Interim Fix 007 https://www.ibm.com/support/pages/node/1168090	Server (Web Application Liberty, Configuratio n Manager)	New features  • Upgraded WebSphere Liberty Profile (WLP) to 19.0.0.5.  • Migrated External WebSphere Application Server (eWAS) certificate stores to Liberty certificate stores.  APAR fix
		Internal defect 68765: Reconfiguration flow issue.  Internal defect 69414: Search does not display previously archived mails from a Migrated mailbox when the ExchangeOnlineMigratedUsers.csv file has double quotes ("").  Internal defect 69427: Web application on Secondary node does not work as expected in a Cluster environment.

ICC Release Version	Components	Release Content
4.0.1.10 Interim Fix 011 https://www.ibm.com/support/pages/node/6234926	Server	APAR fixes HE12952: ICC for EFS - When a security policy only
ittps://www.iom.com/support/pages/node/0254/20	Cluster	allows fully qualified server names, ICC becomes
	Management,	non-functional in scale out mode.
	Configuratio	
	n Store	<u>HE12973</u> : ICC 2.2 catalog copied to ICC 4.0.1.10
	services,	gives the following error: System.Xml.XmlException
	Configuratio	Root element missing.
	n Manager, File Systems	HE12976: When using the Always schedule with
	Connector,	cluster setup, errors are seen during post-processing,
	Email	because a file may have been collected twice for
	Connector,	processing.
	Web	
	Application	HE12991: Unable to establish a successful
	Liberty)	Connection to Active Directory with UnsupportedOperationException in MAPI logs.
		Chsupported Operation Exception in WATT logs.
		HE12993: ICC for Email - Unable to search on
		customattribute for folder in CM8 repository.
4.0.1.10 Interim Fix 013	Server (Email	New feature
https://www.ibm.com/support/pages/node/6258225	Connector,	ICC Support for OAuth (Exchange Online)
	Web	
	;	Security fix
Į	Liberty)	Denial-of-service (DoS) vulnerability

# B. Deployable as replaceable fix

This interim fix replaces the following interim fixes:

ICC Release Version	Components	Release Content
4.0.1.10 Interim Fix 002 https://www.ibm.com/support/pages/node/886311	Server	Java PSIRT fixes  CVE-2018-1890, CVE-2018-12547, CVE-2018- 12549, CVE-2019-2422, CVE-2019-2426, CVE- 2019-2602, CVE-2019-2684, CVE-2019-2697, CVE- 2019-2698, CVE-2019-10245 Solution: Upgrade Javato 8.0.5.35.
4.0.1.10 Interim Fix 006 https://www.ibm.com/support/pages/node/1100259	Server	Java PSIRT fixes  CVE-2019-2762, CVE-2019-2766, CVE-2019-2769,  CVE-2019-2786, CVE-2019-2816, CVE-2019-4473,  CVE-2019-11771, CVE-2019-11772, CVE-2019-  11775  Solution: Upgrade Javato 8.0.5.40.
4.0.1.10 Interim Fix 008 https://www.ibm.com/support/pages/node/1284202	Application	Liberty PSIRT fix CVE-2019-4441 Solution: Upgrade to WebSphere Liberty Profile (WLP) 19.0.0.11.
4.0.1.10 Interim Fix 009 https://www.ibm.com/support/pages/node/5695269	Server	<b>Java PSIRT fixes</b> CVE-2019-2962, CVE-2019-2964, CVE-2019-2989, CVE-2019-2992, CVE-2019-2999

ICC Release Version	Components	Release Content
		Solution: Upgrade to Java 8.0.6.0.
4.0.1.10 Interim Fix 010 <a href="https://www.ibm.com/support/pages/node/6201775">https://www.ibm.com/support/pages/node/6201775</a>	Server	Java PSIRT fixes CVE-2019-4732, CVE-2020-2654, CVE-2020-2593 Solution: Java upgrade to 8.0.6.7.  Note: ICC 4.0.1.10 IF010 replaces 4.0.1.10 IF002, IF006 and IF009.
4.0.1.10 Interim Fix 012 https://www.ibm.com/support/pages/node/6255980	Server	Java PSIRT fixes  CVE-2020-2805, CVE-2020-2803, CVE-2020-2781,  CVE-2020- 2800, CVE-2020-2757, CVE-2020-2756, CVE- 2019-2949  Solution: Upgrade Javato 8.0.6.10.
		Liberty PSIRT fixes CVE-2019-4720, CVE-2020-4329 Solution: Upgrade WebSphere Application Liberty to 20.0.0.6.
		<b>Note</b> : ICC 4.0.1.10 IF 12 replaces 4.0.1.10 IF 2, IF 6, IF 8, IF9 and IF 10.

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

Prerequisites for IBM Content Collector 4.0.1 - <a href="https://www.ibm.com/support/pages/node/614445">https://www.ibm.com/support/pages/node/614445</a>

# **Known issues**

No known is sues.

# Installation information

You can either apply this fix directly on Content Collector 4.0.1 Fix Pack 10 or on any of the 4.0.1.10 interim fixes, as per the prerequisites section of this document.

# Installing this fix

**Note:** 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.

You can find the short name for the directory by running the dir/x command in the command prompt.

For example: *c:\progra~2\IBM\ContentCollector* 

## A. Installing IBM Runtime Environment Java Technology Edition

## 1.1 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=4.0.1.10&platform=ALL&function=fixId&fixids=4.0.1.10-IBM-ICC-IF014&includeRequisites=1&includeSuperse

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

4.0.1.10-IBM-ICC-WIN-IF014.zip

2. The Java fixes are available in the following folder: jre.

### 1.2 Installing

- 1. **Close** the ICC Configuration Manager and stop the following services:
  - a. All the services on IBM Content Collector Server
  - b. DB2EXT Service on CM8 Server
- 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 directory="" installation="">/java</icc>
CM8 Text Search Support	Windows	C:/ProgramFiles (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. If you are using a Domino source, perform the following step:

Copy icu4j-58\_2.jar and icu4j-charset-58\_2.jar from:

<ICC Installation

<ICC Installation Directory>\java\jre\lib\ext

5. Start the services stopped in Step 1.

## B. Upgrading Struts (applicable for Windows)

#### 2.1 Prerequisite

1. Download and extract the fix files (4.0.1.10-IBM-ICC-WIN-IF014.zip) 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=4.0.1.10&platform=ALL&function=fixId&fixids=4.0.1.10-IBM-ICC-IF014&includeRequisites=1&includeSuperse

2. The Struts fixes are available in the following folder: AFUWeb.

## 2.2 Installing

- 1. Stop the following services on the IBM Content Collector Server.
  - a. IBM Content Collector Web Application
  - b. IBM Content Collector Documentation
- 2. Take a backup of the following directory and files:
  - a. AFUWeb\\*.bat files
  - b. AFUWeb\\*.xml files
  - c. AFUWeb\afu\_web.ear
  - d. AFUWeb\afu\_services.ear
  - e. AFUWeb\afu\_api.ear
  - f. AFUWeb\afu-dashboard.ear
  - g. AFUWeb\DocViewer.ear
  - h. AFUWeb\DocViewer\win64\DocViewer.ear
  - i. AFUWeb\jvm.options
  - j. AFUWeb\afu
  - k. AFUWeb\DocViewer
  - l. AFUWeb\wlp
  - m. AFUWeb\external

Note: Ignore if any of the files are not present in the directory.

- 3. Run the following scripts from the administrator command prompt to uninstall the mentioned applications:
  - a. Web application: Run afu\_ewas\_uninstall.bat
  - b. Help application: Run afu\_help\_uninstall.bat
- 4. Delete the following directories:
  - <ICC Installation Directory>\AFUWeb\wlp
  - <ICC Installation Directory>\AFUWeb\afu
  - <ICC Installation Directory>\AFUWeb\DocViewer\lib
  - <ICC Installation Directory>\AFUWeb\DocViewer\config
- 5. Extract the contents of the wlp folder from the temporary folder extracted in prerequisite step 2.1, 1 and place it in the following directory:

<ICC Installation Directory>\AFUWeb directory

- 6. Copy the following extracted files from step 2.1.1 to *<ICC Installation Directory*>\AFUWeb directory:
  - a. AFUWeb\\*.bat files
  - b. AFUWeb\\*.xml files

- c. AFUWeb\afu\_web.ear
- d. AFUWeb\afu services.ear
- e. AFUWeb\afu\_api.ear
- f. AFUWeb\afu-dashboard.ear
- g. AFUWeb\DocViewer.ear
- h. AFUWeb\DocViewer\win64\DocViewer.ear
- i. AFUWeb\jvm.options
- j. AFUWeb\\*.properties files
- k. AFUWeb\external
- 7. Run the following scripts from the administrator command prompt to install the mentioned applications:
  - a. Web application: Run afu\_ewas\_install.bat
  - b. Help application: Run afu\_help\_install.bat
- 8. Reconfigure the web application service.

## Uninstalling this fix

#### A. IBM Runtime Environment Java Technology Edition

- 1. Close the ICC Configuration Manager and stop the following services:
  - a. All the services on IBM Content Collector Server
  - b. DB2EXT Service on CM8 Server
- 2. Navigate to the Java directory and replace the files with the backup taken in A. Installing IBM Runtime Environment Java Technology Edition, installation step 1.2, 2.
- 3. Start the services stopped in step 1.

## **B. Struts Upgrade**

**Note**: The following uninstallation steps removes only the latest upgraded version of Struts.

- 1. Stop the following services on the IBM Content Collector Server:
  - a. IBM Content Collector Web Application
  - b. IBM Content Collector Documentation
- 2. Run the following scripts from the administrator command prompt to uninstall the mentioned applications:
  - a. Web application: Run afu\_ewas\_uninstall.bat
  - b. Help application: Run afu\_help\_uninstall.bat
- 3. Delete the following directories:
  - a. <ICC Installation Directory>\AFUWeb\wlp
  - b. <ICC Installation Directory>\AFUWeb\external
- 4. Restore the *<ICC Installation Directory*>\AFUWeb directory and files backed up in B. Upgrading Struts (applicable for Windows), installation step 2.2, 2.
- 5. Run the following scripts from the administrator command prompt to reinstall the mentioned applications:
  - a. Web application: Run afu\_ewas\_install.bat

- b. Help application: Run afu\_help\_install.bat
- 6. Reconfigure the web application service.

# Fixes and changes

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

#### **Fixed defects**

- 1. **Internal defect 69444**: Doc Viewer login page UI does not show correct labels.
  - With this release, the labels such as **User Name** and **Pass word** are now shown correctly on accessing the Doc Viewer login page.
- 2. **Internal defect 69445**: MIMEType exception after opening SMTP mails in HTML and PDF format in IBM Content Navigator CM8.6.
  - With this release, the exception no longer occurs when IBM Content Collector Viewer plugin in IBM Content Navigator is used to view SMTP mails in HTML or PDF format.
- 3. **Internal defect 69584**: Mail property labels like **To**, **From**, **Subject** are not displayed when an email is opened in IBM Content Navigator using ICC4.0.1.10.
  - With this release, the labels are now displayed when a mail is opened using the IBM Content Collector Viewer plugin IBM Content Navigator.
- 4. **Internal defect 69654**: IBM Content Navigator not able to open or view SharePoint / File Systems documents when the viewing format is PDF.
  - With this release, the IBM Content Collector Viewer plugin in IBM Content Navigator is fixed to open any SharePoint / File Systems documents when the viewing format in the Doc Viewer is PDF.
- 5. **Internal defect 69655**: IBM Content Navigator not able to open or view Share Point / File Systems documents when the viewing format is TIFF.
  - With this release, the IBM Content Collector Viewer plugin in IBM Content Navigator is fixed to open any SharePoint / File Systems documents when viewing format the in Doc Viewer is TIFF.

## Security vulnerabilities

#### A. IBM Runtime Environment Java Technology Edition

- 1. Eclipse OpenJ9 could allow a remote attacker to obtain sensitive information, caused by the premature return of the current method with an undefined return value.
  - CVE-2019-17639 https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2019-17639
- 2. An unspecified vulnerability in Java SE related to the Libraries component could allow an unauthenticated attacker to cause low confidentiality impact, low integrity impact, and no availability impact.
  - CVE-2020-14556 https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2020-14556
- 3. An unspecified vulnerability in Java SE related to the JSSE component could allow an unauthenticated attacker to obtain sensitive information resulting in a low confidentiality impact using unknown attack vectors.
  - CVE-2020-14577 https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2020-14577

4. An unspecified vulnerability in Java SE related to the Libraries component could allow an unauthenticated attacker to cause a denial of service (DoS) resulting in a low availability impact using unknown attack vectors.

CVE-2020-14578 - https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2020-14578

An unspecified vulnerability in Java SE related to the Libraries component could allow an unauthenticated
attacker to cause a denial of service (DoS) resulting in a low availability impact using unknown attack
vectors.

CVE-2020-14579 - https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2020-14579

6. An unspecified vulnerability in Java SE related to the JAXP component could a llow an unauthentic ated attacker to cause no confidentiality impact, low integrity impact, and no availability impact.

CVE-2020-14621 - https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2020-14621

#### **B. Struts**

1. Denial of service (DoS) vulnerability in Apache Struts

<u>Cause</u>: An override in access permission when uploading a file

<u>Impact</u>: By sending a specially crafted request, an attacker could exploit this vulnerability to cause subsequent upload actions to fail.

CVE-2019-0233 - https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2019-0233

2. Remote code execution (an arbitrary code) vulnerability in Apache Struts

<u>Cause</u>: A forced double Object Graph Navigational Language (OGNL) evaluation on raw user in put in tag attributes

<u>Impact</u>: By sending a specially crafted data, an attacker could exploit this vulnerability to execute an arbitrary code on the system.

CVE-2019-0230 - https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2019-0230

# **Documentation**

- Download Content Collector 4.0.1.10 Interim Fix 14 (Readme document) https://www.ibm.com/support/pages/node/6353383
- IBM Software Product Compatibility Reports https://www.ibm.com/software/reports/compatibility/clarity/index.html
- IBM Content Collector 4.0.1 Knowledge Center https://www.ibm.com/support/knowledgecenter/SSAE9L 4.0.1

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# **Document change history**

	Date	Description of change	
- 1		Original version published	