IBM Content Collector 4.0.1.10
Interim Fix 011

Readme

IBM Content Collector 4.0.1.10 Interim Fix 011

Readme documentation for IBM® Content Collector 4.0.1.10 Interim Fix 011 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

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Interim Fix 011

Fix ID:
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Contents

Download location

Download IBM Content Collector 4.0.1.10 Interim Fix 011, from the following location:

Product / Component name	Platform	File name
IBM Content Collector 4.0.1.10 IF011 Readme	Not Applicable	4.0.1.10-IBM-ICC-IF011.pdf
IBM Content Collector 4.0.1.10 IF011 Server	Windows	4.0.1.10-IBM-ICC-WIN-IF011.zip

Prerequisites and corequisites

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

This interim fix is partially or completely independent of following interim fixes and can be deployed on top of it. Refer to the following component details for more information.

ICC Release Version	Components	Release Content
4.0.1.10 Interim Fix 001	Outlook Extension	**APAR fix** HE12884: IBM Content Collector Outlook Extension (32-bit and 64-bit)
4.0.1.10 Interim Fix 002	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 Java to 8.0.5.35.
4.0.1.10 Interim Fix 003	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 objectstores. 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.
4.0.1.10 Interim Fix 004	Server (Web Application Liberty, IBM Content Collector P8 Connector), SharePoint Extension, OWA Extension	**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.

4.0.1.10 Interim Fix 005	Server (Web Application Liberty)	**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 006	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 Java to 8.0.5.40.
4.0.1.10 Interim Fix 007	Server (Web Application Liberty, Configuration 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.
4.0.1.10 Interim Fix 008	Server (Web Application Liberty)	**Liberty PSIRT fix** CVE-2019-4441 Solution: Upgrade to WebSphere Liberty Profile (WLP) 19.0.0.11.
4.0.1.10 Interim Fix 009	Server	**Java PSIRT fixes** CVE-2019-2962, CVE-2019-2964, CVE-2019-2989, CVE-2019-2992, CVE-2019-2999 Solution: Upgrade to Java 8.0.6.0.
4.0.1.10 Interim Fix 010	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.

For information about hardware and software compatibility, see the detailed system requirements document at https://www.ibm.com/support/pages/node/614445

Known issues

No known issues.

Installation information

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

Installing this fix

1. **Extract** the files from 4.0.1.10-IBM-ICC-Server-IF011.zip compressed folder to a temporary location.
2. **Run** the interim fix installer (4.0.1.10-IBM-ICC-Server-IF011.exe).
3. Ensure the following files are updated in this path after successful installation: *<ICC Installation Folder>*\ctms
   a. TaskRoutingService.exe
   b. Core.dll
   c. DataStore.dll
   d. IBM.Ctms.UI.dll
   e. Connector.dll
   f. afu-mailinterface-mapi.jar
   And in this path: *<ICC Installation Folder>*\AFUWeb
   g. afu_web.ear

Note: During installation, Windows firewall may block pop ups with program warning messages. You need to **Allow** those pop-ups to add them into the network access trust list.

Uninstalling this fix

1. Stop the IBM Content Collector Task Routing Engine and IBM Content Collector Web Application services.
2. Go to the installation directory and double click the rollback.cmd file to run the script for uninstalling this fix.
   For example: *<ICC Installation Folder>*\interimFixes\4.0.1.10-IF011_rollback
3. Start the services stopped in step 1.

Fixes and changes

This fix addresses the following APARs:

APAR HE12952

When a security policy only allows fully qualified server names, ICC becomes non-functional in scale out mode.

Component: Server (TaskRoute, Cluster Management, Configuration Store services)

Description
If an organization has a security policy that only allows fully qualified server names and blocks any short machine names, below issue is observed with IBM Content Collector Cluster environment:

- On Primary Machine: System Dashboard Scale out status for Secondary machine is not found - not accessible.
- On Secondary Machine: System Dashboard does not show anything.
- IBM Content Collector currently uses short machine name in cluster processing logic.

This fix allows you to use fully qualified server names.

Note: This fix is required only if the security policy of your organization only allows fully qualified server names, in ICC scale out mode, that is, two ICC nodes.

Perform the following steps only after installing this fix on the two ICC nodes:

Section 1

1. Stop the ICC services on the secondary node.
2. Stop the ICC services on the primary node.
3. Set the CTMS_USE_FQ_MACHINE_NAME as a system variable on both the nodes:
   a. Go to **Control Panel** > **All Control Panel Items** > **System** > **Advanced system settings** > **Environment Variables**.
   b. Click **New** under **System variables**. A window, **New System Variable** appears.
   c. Add the **Variable name** CTMS_USE_FQ_MACHINE_NAME and set the **Variable value** to 1.

   Refer to Section #1.1 below for more details.
   d. Click **OK** on all the windows to apply this System variable setting.

4. Start the services stopped in step 2.
5. Start the services stopped in step 1.
6. Open Dashboard and notice the 4 new columns. These columns appear only on the first use of the fix.
7. To remove the nodes with short names, now seen as expired, refer to Section 1.2 below.

Section 1.1

How to use the system variable CTMS_USE_FQ_MACHINE_NAME

1. If 1 is value set in Section 1 step 3a, ICC uses fully qualified machine names.
2. If the System variable CTMS_USE_FQ_MACHINE_NAME is not added, ICC continues to use short machine names.
3. If the value in Section 1 step 3a is set to any value other than 1, ICC continues to use short machine names.

Section 1.2

How to remove Expired Nodes from System Dashbaord UI

1. Go to the **File** menu on the System dashboard.
2. Select **Remove Expried Servers**.
3. Click **OK** when a pop-up appears with the list of to-be **Expired Nodes**.

Section 2

Disabling the APAR fix - HE12952

1. Stop the ICC services on the secondary node.
2. Stop the ICC services on the primary node.

Perform Section#1 steps 3 to 5 on both the nodes.

3. Set the CTMS_USE_FQ_MACHINE_NAME as a system variable on both the nodes:
   a. Go to **Control Panel** > **All Control Panel Items** > **System** > **Advanced system settings** > **Environment Variables**.

       b.   Go to **System variables** and select CTMS_USE_FQ_MACHINE_NAME.

       c.   Click **Delete** and then **OK**.

Refer Section 1.1 for more details.

    4.   Start the services stopped in step 2.

    5.   Start the services stopped in step 1.

APAR HE12973

ICC 2.2 catalog copied to ICC 4.0.1.10 gives the following error message:

System.Xml.XmlException Root element missing

Component: Server (Configuration Manager)

Description

After Copying ICC 2.2 catalog to 4.0.1.10, the configuration manager opens in read only mode gives the above-mentioned error. This is because in this scenario ICC cannot retrieve information from the empty or missing node from the copied catalog.

This fix updates ICC and it skips processing empty nodes and continues processing further without any error.

APAR HE12976

When using always schedule with cluster setup, errors seen during post processing as a file may be collected twice for processing.

Component: Server (File Systems Connector)

It is observed that when using **Always** schedule with file system archiving and a cluster setup, the same file may be collected twice for processing.

When the file is processed the first time (collection round 1), it goes through successfully and the file is removed from the source folder as designed in the task route. If the collector runs immediately after (collection round 2), there is a chance that the collector will collect the same file before the postprocessing of the same file from Collection Round 1-queue is completed.

When the processing of the file from Collection Round 2, reaches to its post-processing task, the file no longer exists in that folder. The same results into an error as the system cannot find the file specified. When accessing file on Primary node or Secondary node (if forwarded).

This fix implements a workaround through Connector binary wherein Collection delay can be specified in seconds via System variable CTMS_COLLECTION_DELAY. Valid values in seconds: 1 - 899.

Note:
- This fix is required in ICC scale out mode, that is, two ICC nodes for TaskRoutes using FileSystem as Source if either the Customer sees the issue mentioned in the APAR Error description, or
- The Customer needs to schedule a collection delay lower than 15 minutes.
- This fix works only for Taskroutes schedules set to **Always**.

Perform the following steps only after installing this fix on both the ICC nodes:

Section 1

1. Stop the ICC services on the secondary node.
2. Stop the ICC services on the primary node.
3. Set the CTMS_USE_FQ_MACHINE_NAME as a system variable on both the nodes:
    a. Go to **Control Panel** > **All Control Panel Items** > **System** > **Advanced system settings** > **Environment Variables**.
    b. Go to **System variables** and select CTMS_USE_FQ_MACHINE_NAME.
    c. Click **New** under **System variables**. A window, **New System Variable** appears.
    d. Add the **Variable name** CTMS_USE_FQ_MACHINE_NAME and set the **Variable value** to, for example, 30.

 Refer Section 1.1 for more details.
    e. Click **OK** on all the windows to apply this System variable setting.

4. Start the services stopped in step 2.
5. Start the services stopped in step 1.

Section 1.1

How to use the system variable CTMS_COLLECTION_DELAY

1. Valid numerical values in seconds range from 1 to 899, where 899 seconds is the maximum duration less than 15 minutes, that is [(14min x 60sec) + 59sec].
2. The following scenarios indicate that the delay is set to zero, same as the schedule **Always**.
    a. If the system variable is not added, no delay is observed.
    b. If a non-numerical value is set, no delay is observed.
    c. If the value set is 0 or less than 0 or greater than 899, no delay is observed.

Note: This system variable that is to be used with TaskRoute schedule is set to **Always**.

Section 2

Disabling the APAR Fix - HE12976

1. Stop the ICC services on the secondary node.
2. Stop the ICC services on the primary node.
3. Set the CTMS_USE_FQ_MACHINE_NAME as a system variable on both the nodes:
    a. Go to **Control Panel** > **All Control Panel Items** > **System** > **Advanced system settings** > **Environment Variables**.
    b. Go to **System variables** and select CTMS_COLLECTION_DELAY.
    c. Click **Delete** and then **OK**.
4. Start the services stopped in step 2.
5. Start the services stopped in step 1.

APAR HE12991

Unable to establish a successful Connection to Active Directory with UnsupportedOperationException in MAPI logs.

Component: Server (Email Connector)

On starting the Taskrouting service, ICC was unable to establish a connection to Active Directory due to java.lang.UnsupportedOperationException thrown from LdapContextFactory$PersistentTrustManager.getAcceptedIssuers method.

When ICC tries to establish trust with LDAP, if there is a certificate chain to be imported, the connection failed with the below error in MAPI logs:
com.ibm.afu.mailinterface.MailException: javax.naming.AuthenticationNotSupportedException: [LDAP: error code 8 - 00002028: LdapErr: DSID-0C09026E, comment: The server requires binds to turn on integrity checking if SSL\TLS are not already active on the connection, data 0, v2580]

The certificate chain added to the keystore returns to establish a successful connection with the LDAP.

APAR HE12993

ICC for Email: Unable to search on custom attribute for folder in CM8 repository.

Component: Server (Web Application Liberty)

Description

While trying to search on custom attribute for folder in CM8 repository, IBM Content Collector Web Application throws the below exception:
DOCUMENT_TYPE_FIELD_NOT_FOUND: In the Search mapping, the field FOLDER_RSRVD is not defined for collection ICCEmailInstance.

Per current analysis, the fix for APAR#HE12703 (Search for emails can take several minutes when one of the emails in the result set contains many instances.) seems to have broken this functionality.

This fix handles the search on custom attribute for a folder in CM8 repository.

Documentation

Not applicable.

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