

IBM Tealeaf CX
Version 8 Release 7
April 2014

IBM Tealeaf CX Release Notes



Note

Before using this information and the product it supports, read the information in “Notices” on page 27.

This edition applies to version 8, release 7, modification 0 of IBM TealeafCX and to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. 8.7 Release Notes

This section contains the general Release Notes® for Release 8.7 of the IBM Tealeaf CX platform.

- For more information about individual items that are resolved in each build available in this release, see Chapter 3, “Build notes,” on page 9.
- For more information about Release Notes for the IBM Tealeaf CX Passive Capture Application, see "Release Notes - PCA" in the *IBM Tealeaf Release Notes - Passive Capture Application*.
- For more information about Release Notes for UI Capture SDK, see "Release Notes - UI Capture" in the *IBM Tealeaf Release Notes - UI Capture*.

Note: IBM Tealeaf CX Release 8 introduces a redesigned event and reporting data model and a number of new or redesigned features to support it. The design of events and steps to create them and the report building tools were redesigned. Customers who are upgrading from a pre-Release 8.0 version are encouraged to review the Migration page first. See "Migration to CX Release 8" in the *IBM Tealeaf CX Upgrade Manual*.

Latest versions

Table 1. Latest Versions

Product	Version	As of Date
IBM® Tealeaf® CX and related products	Interim Fix 0002 (Build 8.7.0.8790)	July 2013
IBM Tealeaf Passive Capture Application	3610	12/14/2012
IBM Tealeaf UI Capture j2	2.1	May 2013
IBM Tealeaf Tealeaf Android Logging Framework	8.7.1.9	June 2013
IBM Tealeaf Tealeaf iOS Logging Framework	8.7.5.25	July 2013

Note: A Customer Support account is required for latest versions of IBM Tealeaf CX and IBM Tealeaf CX Passive Capture Application. For more information, please contact <http://support.tealeaf.com>.

Notes on IBM Tealeaf CX build numbers:

At the bottom of each Portal page, you can see the full build number for the installed Portal as a series of four numbers: A.B.C.DDDD.

- A - Major release number. For Release 8.7, this number is always 8.
- B - Minor release number. For Release 8.7, this number is always 7.
- C - Official build number of the release. This number indicates the number of official builds that have been published for the release (e.g. for Release 8.7).
- DDDD - The unique build number.

Note: When contacting Tealeaf Customer Support, please have the unique build number available.

Required PCA Build

Note: PCA Build 3600 or later is required for Release 8.7 or later.

See "Release Notes - PCA Build 36xx" in the *IBM Tealeaf Release Notes - Passive Capture Application*.

See "Passive Capture Application Manual" in the *IBM Tealeaf Passive Capture Application Manual*.

browscap and WURFL public standards

Note: 01/14/2013: Recently, the owner of the Browscap project has stopped supporting the project. This Advisory provides the location of the new owner and how to update your local system with the new version of Browscap. If you have not been able to update your instance of Browscap for some time, the latest released user agents may not be reflected in your user agent data. For more information on updating your version of Browscap, see Browscap project hosted in a new location

After installation or upgrade, Tealeaf recommends updating your local installation to the latest version of the following standards. These standards are used by Tealeaf for detecting user agent information in requests submitted to your applications.

Note: These public standards must be downloaded and installed in your Tealeaf solution. Tealeaf recommends updating your local versions of these standards on a periodic basis.

Table 2. browscap and WURFL public standards

Standard	Used for	Documentation Link
browscap	Detection of fixed desktop user agents	"Maintaining the CX System" in the <i>IBM Tealeaf CX Installation Manual</i>
WURFL	Detection of mobile user agents Note: WURFL applies to IBM Tealeaf CX Mobile license only.	"Maintaining the CX System" in the <i>IBM Tealeaf CX Installation Manual</i>

Note: A recent major upgrade has been published of the browscap public standard. Tealeaf recommends acquiring this new version of the public standard.

Supported browsers

For more information about the current browsers and versions supported for accessing the Tealeaf Portal, see "Logging in to the Tealeaf Portal" in the *IBM Tealeaf cxImpact User Manual*.

Tealeaf license keys

As of Release 8.7, license keys are no longer needed within IBM Tealeaf products. Licenses to Tealeaf these products are managed through the license that is issued by Tealeaf, an IBM Company to your enterprise.

- For more information about managing license keys for earlier versions of Tealeaf software, see Managing Your Tealeaf License Key

Removed features

The following features are no longer available in Tealeaf software as of Release 8.7. Below, you can access documentation for the Release 8.6 versions of these features.

Note: The following features are not available in Release 8.7 software.

Note: You might need to configure access to Release 8.6 documentation in your viaTealeaf account. See [Configuring Permissions in viaTealeaf](#).

Table 3. Removed Features

Product	Feature Description	Release 8.6 documentation
IBM Tealeaf CX	Tealeaf ISAPI Capture Filter	(Release 8.6) Tealeaf Capture Filter Installation Manual
IBM Tealeaf CX	CEP Session Agent	n/a
IBM Tealeaf CX	Tealeaf Cookie Injectors Note: These offerings are now delivered as sample code.	Tealeaf Cookie Injector Manual
IBM Tealeaf cxImpact	Event API for inserting events into the Canister	(Release 8.6) Tealeaf Event API Overview
RTV	Export LoadRunner Scripts	(Release 8.6) Exporting LoadRunner Scripts
RTV	Export WAS Scripts	(Release 8.6) Exporting WAS Scripts
IBM Tealeaf cxConnect for Data Analysis	Integration with Google Analytics Note: Deprecated Feature as of Release 8.0.	(Release 8.6) Integrating Tealeaf with Google Analytics
IBM Tealeaf cxConnect for Data Analysis	Export to Urchin log files	(Release 8.6) cxConnect Configuring Tasks

Tealeaf CX Platform

Tealeaf Release 8 represents a foundational improvement in how data is evaluated, stored, and reported in the IBM Tealeaf CX platform. Rearchitected from the ground up, the Tealeaf Event Engine, data model, and reporting deliver faster and more flexible capabilities for monitoring activities, errors, performance, and other key metrics affecting customers experience with your web application.

- See "Migration to CX Release 8" in the *IBM Tealeaf CX Upgrade Manual*.

Supported languages

The IBM Tealeaf CX platform now supports various languages and territories that use UTF-8 or ISO-8859-1 encoding with some limitations.

Limitations include:

- Monitored websites must use either ISO-8859-1 or UTF-8 character encoding and may not mix them.

- Some searching and filtering operations (such as privacy and filtering rules) may not correctly process non-ASCII data (characters outside of A-Z, a-z, 0-9 and common punctuation).
- Some user interface components do not respect cultural preferences for dates, times, calendars, and numbers.
- Conversion of hit attributes to numeric event values does not respect cultural preferences.
- Some components of Tealeaf CX (such as PCA and HBR) do not properly process user data that cannot be represented in the native character encoding of the operating system. For example, these components would not process Arabic data correctly on a French Windows system. Customers should match the native character encoding of their operating system with the encoding of the data being processed.
- Administrative components, installers, and RTV are not translated.
- User components are not translated for pre-built events and report templates.
- Translations are provided for French, German, Italian, Brazilian Portuguese, and Spanish
- Documentation is available in English only.

For more information about supported locales, see [Configuring Locale Settings](#).

cxlmpact

Data collector processing independence

Release 8.7 introduces a more robust data collection process, in which the individual data collection processes run in parallel. For example, collection, aggregation, and report generation processes all may occur simultaneously.

By separating Data Collector processes into separate threads, Release 8.7 enhances Data Collector performance and reduces the potential for bottlenecks, which may delay the processing of reporting data.

Replay server

In Release 8.6, Tealeaf introduced the Chrome-based renderer, which could render sessions for replay in BBR in HTML or bitmap format. For Release 8.7, the bitmap renderer option was removed, as replay of HTML-based sessions that are generated by the Chrome renderer was improved.

Mobile Session Replay

Replay of scroll and pinch

In Release 8.7, Tealeaf introduces new capabilities for rendering the Mobile DOM in Browser Based Replay. iOS and Android browser scroll and pinch in/out events that are detected recorded on the mobile device are now reflected in the replay of the session in BBR. For example, when the visitor scrolled their mobile device screen during the session, the scrolling action is displayed during replay in BBR.

There is some variation between replay of these events for iOS- and Android-based sessions. For Android, the events are rendered correctly, yet there is no representation of the corresponding UI events in the navigation column.

Scaling of display

BBR now uses device information to scale the height and width of the replayed screen in BBR to match the resolution of the device from which the session was captured.

Note: Display scaling is supported for Android and iOS mobile web sessions only.

Capture of Flex and Silverlight sessions

The capture of sessions that are based on Flex or Silverlight technologies is no longer supported. Replay is partially supported.

- See Preparing to Upgrade to Release 8.x.

cxOverstat

Goal-based dimensions

By default, Tealeaf publishes events and dimensions as soon as the event was evaluated. Publication of event data by the Canister enables other Tealeaf services, such as the Data Collector and indexing service, to use the data.

Beginning in Release 8.7, the publication of events and dimensions can be delayed until the end of the session. When an event or dimension is marked for publication at the end of session, the values are captured at the time of occurrence, but they are not stored in the session until the end of the session.

Note: In Goal Based Dimensions, the instances of the dimensions that occurred earlier in the session are populated with the last instance of the dimension value in the session.

In this manner, you can use events and dimensions to evaluate a current action against a session-level goal, as stored in a dimension.

- See "Goal Based Dimensions" in the *IBM Tealeaf Event Manager Manual*.

Mobile Sessions

IBM Tealeaf cxOverstat now supports the display of all overlays for mobile sessions.

- In Release 8.6, only the heat map feature was available for mobile sessions.

See "cxOverstat User Manual" in the *IBM Tealeaf cxOverstat User Manual*.

Zoom Tool and Minimap

For higher fidelity analysis of usability aspects of your web pages, you can use the Zoom Tool and Minimap available in the IBM Tealeaf cxOverstat overlays to zoom in on specific areas of the page and to reposition the viewport over a different part of the page. Using these tools, you can analyze down to the pixel to determine where usability issues may be interfering with the customer experience.

- See "cxOverstat Interface" in the *IBM Tealeaf cxOverstat User Manual*.

Errata

Installer for cxConnect for data analysis always installs software

Note: This issue affects Release 8.7 Limited Availability and is fixed in Release 8.7 General Availability.

The Installer for IBM Tealeaf cxConnect for Data Analysis always installs the product software and enables the product using a registry key.

If you are installing the IBM Tealeaf cxConnect for Data Analysis software on a server that is not the Portal Server, you must do the following:

1. Run the Installer on the Portal Server so that the Portal web application can enable the menu features of IBM Tealeaf cxConnect for Data Analysis.
2. Run the Installer on the IBM Tealeaf cxConnect for Data Analysis Server so that the software is available for use.

Note: After you installed the software on both servers, you must remove the software files that were installed on the Portal Server to prevent conflicts.

- The software that is installed on the IBM Tealeaf cxConnect for Data Analysis Server is used instead.
- For more information about how to remove the software on the Portal Server, see "cxConnect Installation" in the *IBM Tealeaf cxConnect for Data Analysis Administration Manual*.

Other notes

Build Notes

For more information about issues that are fixed or features added in the official builds of this release, see Chapter 3, "Build notes," on page 9.

- For more information about changes in official RTV builds, see "Build Notes - RTV" in the *IBM Tealeaf CX Release Notes*.

PCA Release Notes

For more information about release notes for published versions of IBM Tealeaf CX Passive Capture Application, see "Release Notes - PCA" in the *IBM Tealeaf Release Notes - Passive Capture Application*.

UI Capture for Ajax Release Notes

For more information about release notes for published versions of IBM Tealeaf CX UI Capture for AJAX, see "Release Notes - UI Capture" in the *IBM Tealeaf Release Notes - UI Capture*.

UI Capture for j2 Release Notes

For more information about release notes for published versions of IBM Tealeaf CX UI Capture j2, see "UI Capture j2 Release Notes" in the *IBM Tealeaf UI Capture j2 Release Notes*.

Chapter 2. Deprecated features

For more information on features that have been deprecated between Release 7.2 as of this release, see [Deprecated Features](#)..

Chapter 3. Build notes

This section contains release notes pertaining to the individual official builds available for this release. Included in these notes is a list of issues that are addressed in the build, as well as new features and any dependencies.

Note: Tealeaf recommends upgrading to the latest available build for any Release whenever possible.

Release 8.7 general availability

Note: This release is a limited availability release. Some features and documents are not available in this release. Review the general limitations below.

Tealeaf version: 8.7.0.8715

Release Date: 09-Nov-2012

Dependencies:

- Other fix dependencies: Customers can upgrade to 8.7.0.8715 from 7.X (before 7.2.12.7296) by upgrading to 7.2.12.7296 and then upgrade to 8.7.0.8715. Upgrade from older 7.X build needs a hop on 7.2.12.7296 before moving to 8.7.0.8715.
- Other component dependencies: None

Compatibility:

Customers can upgrade to 87xx from any 6.X, 7.X or 8.X build.

Note: Before you begin upgrading, verify that your system is properly sized for Release 8.x, as the system requirements changed. See *CX Pre-Installation Checklist*.

8.7 General Availability Build Issues

8.7 General Availability New Features:

See *8.7 Release Notes*.

Table 4. 8.7 General Availability Issues Addressed

Description of the Issue
Data Collector running in one time zone fails to synchronize gathered reporting data from Canisters in another time zone, causing gaps in reporting data.
RTV fails to decode spaces in windowHref attribute in UI event XML, which impacts replay of cached pages from CDNs.
Scheduled dashboard is emailed on non-configured days.
RTV POST form data is improperly scanned by RTV, causing failures to display some content during replay.
Meta refresh tag in no-script block causes RTV to misinterpret the page as a Status Code 302 redirect page.
RTV retrieval of images from the TLI cache always goes to the origin.

Table 4. 8.7 General Availability Issues Addressed (continued)

Description of the Issue
cxConnect fails with unexpected cxVerify error message about failure to retrieve Archiver status.
cxConnect W3C logs do not include events and local timestamps.
IIS instance hangs every few days with the error similar to the following: A worker process '6264' serving application pool 'Tealeaf' failed to stop a listener channel for protocol 'http' in the allotted time.
RTV reloads some framed pages until a Cancel possible recursive url load message is displayed.
In the Data Filters tab in cxConnect for Data Analysis, EventID icons are not displayed.
Replay breaks due to UI events on radio buttons with single-character identifiers.
RTV is inserting JSON posts into the image list, which is causing them to be treated as static content.
After creating a copy of an existing event, the hit attribute that is used to populate the value reverts to its original value even after changing it.
In RTV, the Insert Missing or Cached Pages command is not identifying redirect UI Capture pages correctly.
TMS Pipeline Status is causing a memory leak that can crash IIS.
Tealeaf status blackout period configuration does not prevent reports of errors that occurred during the blackout period.
Page Sequence report showing hits on the Tealeaf target page, which is used for capturing client framework hits only.
Portal search performance issues that are caused by delays in Search Server retrieving status information from Canisters.
In Client Performance - Render Times report, Avg Render Time is greater than Max Render Time in some cases.
Log files do not have a maximum permitted size.
Chrome renderer hangs on pages, where navigation is requested before UI event JavaScript is completed.
TLTMaint is not detecting some existing session data files in Canister.
Some JavaScript errors are occurring when the renderer is failing to clear the onLoad handler for an iFrame.
Select option is not properly triggering the corresponding UI event during replay.
UI Capture j2 does not have easily accessible value for computing render time.
Session segment analysis fails if browser type information is missing.
When creating dashboard schedules, the All Tabs selection is missing in the Tab drop-down.
In the Data Filters tab, cxConnect event filtering does not work. All events are exported.
A dashboard template that is exported from a system that was upgraded from Release 7.2 cannot be imported into another system.
Report access permissions cannot be saved.
Cannot send any active or completed session to Event Tester through the Portal.
During upgrade from 7296, custom charts are not being converted.

Other Customer Issues:

These items were initiated by customer inquiry with Tealeaf Customer Support.

- None

Table 5. Known Issues

Summary
When upgrading to Release 8 and changing the name of your email server, the Upgrader resets to empty values the user name and password of the email account to use. • Workaround: See <i>Reconfigure Email Server</i>.
cxVerify Server may be dropped from Portal Management page during upgrade to Release 8.7 • Workaround: See <i>cxVerify Installation</i>.
RTV displays non-ASCII data incorrectly for POST'ed form using URL-encoding in URL field pane.
RTV displays a very large skin size for mobile sessions captured using Motorola Droid Razr (Android version).
After installing Tealeaf CX and cxReveal, uninstalling cxReveal does not permit deleting the Search database through Tealeaf Database Manager. • Workaround: See Delete Search DB through SQL Server Studio.
In Tealeaf Database Manager, page selection under User Management does nothing.
BBR highlights the wrong HTML element during replay.
PCA parses multipart/form-data request incorrectly.
Request / Response tabs in BBR do not respect the Hide All UI Events option.
Highlight Only replay rule throws an exception when rendering the page.
Page Load Details does not reload cached URL data when switching pages.
Popup replay rules are not working in BBR.
On iPhones, the mobile browser is always recorded as the Safari browser.
For some versions of Android, session is displayed with incorrect skin size in Browser-Based Replay.

Deprecated Functionality:

- See *Deprecated Features*.

Release 8.7.0.8715

Note: This Release is a limited availability release. Some features and documents are not available in this release. Review the General Limitations below.

Tealeaf version: 8.7.0.8715

Release Date: 09-Nov-2012

Dependencies:

- Other fix dependencies: Customers can upgrade to 8.7.0.8715 from 7.X (before 7.2.12.7296) by upgrading to 7.2.12.7296 and then upgrade to 8.7.0.8715. Upgrade from older 7.X build needs a hop on 7.2.12.7296 before moving to 8.7.0.8715.
- Other component dependencies: None

Compatibility:

Customers can upgrade to 87xx from any 6.X, 7.X or 8.X build.

Note: Before you begin upgrading, verify that your system is properly sized for Release 8.x, as the system requirements changed. See "CX Pre-Installation Checklist" in the *IBM Tealeaf CX Installation Manual*.

8.7.0.8715 general limitations

Note: The following features are not available in this Release of the IBM Tealeaf CX platform.

- Language:

Note: This release supports the use of English in the Portal. French and German language options are not supported in this release.

- New version of UI Capture:

- The new version of UI Capture is not generally available with this release.

Note: The new version of UI Capture is required to support IBM Tealeaf cxOverstat, which is available for this Limited Availability release. If you licensed IBM Tealeaf cxOverstat, contact Tealeaf Professional Services to discuss and schedule an engagement to deploy the new version of IBM Tealeaf CX UI Capture j2.

- Legacy documentation:

- "Release Notes - UI Capture" in the *IBM Tealeaf Release Notes - UI Capture*
- "UI Capture for Ajax Guide" in the *IBM Tealeaf UI Capture for Ajax Guide*
- "UI Capture for Ajax Quick Start Guide" in the *IBM Tealeaf UI Capture for Ajax Quick Start Guide*
- "UI Capture for Flex Quick Start Guide" in the *IBM Tealeaf UI Capture for Flex Quick Start Guide*
- "UI Capture FAQ" in the *IBM Tealeaf UI Capture for Ajax FAQ*

- IBM Tealeaf CX Mobile Android Logging Framework:

Note: This logging framework is not available in this Limited Availability release.

- Legacy documentation:

- *IBM Tealeaf Android Logging Framework Reference Guide*

- Tealeaf IOS Logging Framework:

Note: This logging framework is not available in this Limited Availability release.

- Legacy documentation:

- *IBM Tealeaf iOS Logging Framework Reference Guide*

8.7.0.8715 build issues

8.7.0.8715 new features

See Chapter 1, "8.7 Release Notes," on page 1.

Table 6. 8.7.0.8715 Issues Addressed:

Description of the Issue
When an iOS native application crashes, crash information is submitted to the server using a different session identifier and is not stored in the session that crashed. This issue may be addressed in a later build.

Table 6. 8.7.0.8715 Issues Addressed: (continued)

Description of the Issue
Upgrade from 7296: Scorecard data is lost
Database Manager may fail to create database users if database name contains "-" dash. For more information about this issue, see 8.6 Release Notes.

Other Customer Issues:

These items were initiated by customer inquiry with Tealeaf Customer Support.

- None

Table 7. Known Issues:

Summary
IBM Tealeaf cxConnect for Data Analysis is not exporting events and local timestamps to log files destination.
Pages that are requested from BBR have ReplaySplice JS incorrectly inserted.
Data Collector stops collecting data when duplicate dimension keys are detected
Goal Based Dimension data not showing in reports
BBR Replay screens are cut off in Internet Explorer.
When performing a subsearch in RTV, the app crashes while the search results are loading.
IBM Tealeaf CX UI Capture j2 Configuration Wizard allows specifying empty ID fields in privacy masks.
The list of audit log events in the Tealeaf Status report is not filtered by the installed products.
Dimensions that are populated by a hit attribute should not be allowed to be evaluated at the end of session. See "Goal Based Dimensions" in the <i>IBM Tealeaf Event Manager Manual</i>.
Cannot create IBM Tealeaf cxConnect for Data Analysis configured task
Some tokens in IBM Tealeaf CX UI Capture j2 Configuration Wizard are not substituted with actual values.
Tealeaf services start/stop operations do not always complete in a timely manner.
Some Replay Server configuration settings are not available in TMS.
In Android sessions that are captured from the Android logging framework, native app hits are not captured.
Cannot import dashboard
Default language is always English, even if OS locale indicates otherwise.
IBM Tealeaf cxConnect for Data Analysis may install software twice. For details and a workaround, see Chapter 1, "8.7 Release Notes," on page 1.
Some highlighting not correctly displayed in Replay view of BBR
Cannot apply replay rules on pages when NavList is collapsed in BBR. Chrome browser only.
TL_STATISTICS database that is not removed even when you choose to delete databases during uninstall
BBR Sub-Search displays incorrect list of pages and UI event for entered search criteria
Data Collector logs an error when database name contains a dash
German OS: Hit attributes fail to match case-insensitive searches.

Table 7. Known Issues: (continued)

Summary
Event Dependency Firing Order does not take events that are used in dimensions into account.

Deprecated functionality

Release 8.7.0.8781

Tealeaf version: 8.7.0.8781
Release Date: May 15, 2013

Bug fixes

- Users experienced a login error that the Data collector reports failed to log in to the canister. This issue was resolved.
- Errors causing the DimensionExtractor to fail were fixed.
- Hourly performance data is now getting trimmed properly.
- Scorecard Processing was logging invalid warnings to the scorecard log and event log that the minimum date was too low and the maximum date was too high. This issue was resolved.
- The Fact Aggregator, Performance Aggregator, and Dimension Tracking no longer delete tm_table records to trim data.
- The procedure for calculating server disk space previously required users to reconfigure the procedure each time it was run. The server disk space procedure now only must be configured once.
- If the Fact Aggregator, Performance Aggregator, or Top Movers were disabled and then re-enabled, they did not resume without restarting data collector. This was fixed so that the Fact Aggregator, Performance Aggregator, or Top Movers restart on next data collector run without restarting data collector.
- Browser-based Replay render and display issues were resolved.
- Search queries that are failed and resulted in error messages on first search attempts. However, if the same search was attempted again, it succeeded with no errors. This issue was resolved so that search queries succeed on the first attempt.
- In the **Manage Servers** section in the Portal, if a user creates a cxReveal Search Server entry and does not select **Use External Server**, only one entry in TM_SERVICE_MAP is created. The database entry is missing. The missing database entry causes the server to be skipped over for cxReveal functionality. This issue was resolved so that a database entry is created even if **Use External Server** is not selected.
- Data encryption issues were resolved in Browser-based Replay.
- In Browser-based replay, HTTP response header display issues were resolved.
- Crashes occurring in the SessionAgentPrivacy were fixed.
- The Report definitions showed the date comparison incorrectly. This issues was fixed.
- In Replay, the content section of a page was not populating. This issue was resolved.

Release 8.7.0.8789 Fix Pack 1

IBM Tealeaf 8.7.0.8789 Fix Pack 1 includes all the patches previously released for 8.7.0.8781 and new patches.

The Fix Pack 1 can only be applied from the 8.7.0.8781 build version with or without patches. Therefore, customers with older versions must upgrade first to 8.7.0.8781 and then apply the Fix Pack 1. New customers are also required to install 8.7.0.8781 version before applying the Fix Pack 1.

Customers can apply the Fix Pack 1 with the installation program (setup.exe), similar to a major upgrade of Tealeaf. For installation of Tealeaf, refer to IBM Tealeaf CX Installation Manual.

Included in this note is a list of issues that are addressed in the build. There are also a number of issues that are addressed but not included in this list.

Bug fixes

- **Multiple Dimension** filter dropdown list was incorrect when creating a report with more than one segment. An include filter was created for one and an exclude for the other.
- Data collector reports failed to log in to canister - ctree logon error.
- PCA stats updates failed if they used Tealeaf self-signed cert.
- Customers were unable to search on `client_ip` in competed search for sessions before 8.x.
- The EventProcessor log files grew to a large size.
- Canister Status Reports showing N/A.
- Encrypted text in response did not decrypt during replay for users who hold the correct encryption key.
- Changes to alerts were not recorded in Portal change history.
- Drill down from Dashboards to Report did not retain the compare date.
- RTV did not render some pages.
- BBR rendering issue.
- Dwell times are summing as opposed to averaging.
- **Selective Archive Server** was not visible in the **Search Servers List** in cxVerify.
- Report definition showed the date comparison incorrectly.
- Performance reports were slow or do not return.
- HTML code was not rendered in the iFrames with RTV.
- RTV did not select check box correctly.
- Reports with **Rolling Average Same DOW** were not returning results.
- An exception was raised when the filegroup paths were modified globally with the Database Manager.
- Customers were unable to export reports.
- CSS was not rendering correctly in BBR.
- Tealeaf default event Session Length issues were resolved.
- Completed Session Search Results no longer showed the total number of sessions matched.
- Usage Metrics By User Dashboard was not populating correctly.
- The EventProcessor log files grew to a large size.

- Search Queries failed with error on the first attempt, but succeeded unchanged on the second attempt.
- RTV 8724 failed to render pages.
- In a replay, the content section of the page was not populating.
- Searching for visitors using In the listed sequence and any of the events with ≥ 2 (or more) resulted in an error.
- The Event Manager failed to update event definition.
- When using compare dates range, the label for the compare date gave no indication as to what date customers were comparing to.
- Several issues were identified when deploying cxReveal on a dedicated server. These issues included that the Tealeaf Database Manager fails to start on the cxReveal server, only the TeaLeafEventBus.cfg file is defined in the cxConnectDA_8781\Event Bus folder, customer received a **Product Registry Entry(s) Missing** error on the Tealeaf Database Manager, TMS starts as Master on the cxReveal server, and the Tealeaf Capture Socket utility is missing from the **Tealeaf Technology** start menu.
- Copying a dashboard tab to the same dashboard occasionally failed.
- Not all the Session Attributes are shown in the Session Attribute selector when added to a Search Template.
- Report Builder allows dimensions from excluded Report Group.
- When using **Add Function** to select any of the functions, the report cleared.
- From **Portal Management**, customers were unable to Select or Edit announcements.
- Editing a dashboard changed selected tab on that dashboard's schedule.
- Archive Indexed Sessions counts did not align with total session counts.
- An alert that was based on the ratio top mover event failed to fire.
- Users in Search Server configuration were not found by Search Server.
- Splunk id not getting data from Event Bus because a comma was inserted in event ID and TLFID numbers greater than 1,000.
- cxVerify was not outputting all appdata to the PDF page.
- RTV 8.7 does not displaying this information at the top, or banner, of the session.
- Saved Searches were not being shared to any other Portal users.
- Thousands of .exe files were being generated inside the RTV temp folder.
- Hits 94 and 3 did not render correctly in RTV 8725.
- Incorrect Start and Expiry time were configured when saving an announcement.
- There was no way to only allow requests from localhost to the RTV local web server.
- Customers were not able to effectively cut and paste into search fields. Customers also cannot enter text into the session index.
- Customers were returned to the Portal login after passing SSO credentials for authorized and authenticated users. Customers should be able to bypass the Portal login.
- Enhancements made for Portal login through URL arguments for VOC integration.
- URL fixups for Chrome were fixed.
- In the Report builder, customers who selected Session Length (sec) event and change data type to Minimum saw negative numbers in the reports.

- TLExtractor did not convert the extract time correctly when using the gmt option.
- Customers could not upgrade TL_EXTRACTOR and TL_SYSTEM databases from 7313 to 8765. The upgrade failed with errors.
- TLPrivacy did not always correctly put encryption entry in the request.
- In BBR, some pages are not displayed correctly during replay.
- The dimension extractor is throwing errors because of a missing TD_CAN_KEY table as seen in the TLDimensionExtract log.
- In BBR, maps were not getting displayed during replay.
- In the **Manage Servers** section on the Portal, if a user created a new cxReveal Search Server entry and does not specify Use External Server, only one entry in TM_SERVICE_MAP is created for the reveal server and the database entry is missing. This caused the server to be skipped over for cxReveal functionality.
- Hourly performance data was not getting trimmed.
- (WILL-1264) The SessionAgentPrivacy crashed under certain conditions where blocked and areas may overlap from different rules.
- The Scorecard Processing was writing invalid warning to log file and event log.
- Some systems were experiencing deadlocks on trims.
- The server disk space procedure is needed to be reconfigured on every run.
- When The Fact Aggregator, Performance Aggregator, or Top Movers were disabled, and then re-enabled, they did not resume.
- Encrypted data was shown decrypted to users without the key.
- App cache is now supported in HTML5 sites.
- In BBR, the raw response is pulled with header instead of replay response for display.
- In BBR, customers experienced an issue when replaying session there were captured with Fiddler 8.6 library.
- Customers experienced an error when sharing a dashboard with a report builder component.

Interim Fix 0002 (Build 8.7.0.8790)

Patch installation instructions for IF0002 (Build 8.7.0.8790)

Note:

IF0002 (Build 8.7.0.8790) requires Fix Pack 1 (Build 8.7.0.8789). Customers must update to Fix Pack 1 before applying IF0002. All patches should be applied together, unless otherwise required.

For each DLL and EXE file in the compressed file, you must make sure that the DLL or EXE is unblocked. To unblock the file, right click **Properties**. If there is an **Unblock** button at the bottom of the dialog, click **Unblock** to unlock the DLL or EXE.

If you want to save the existing DLL files, do not rename any existing DLL files, especially in the **Portal** folder. Instead, save the DLL files in another folder outside the Tealeaf directory. IIS attempts to load all DLL files in the Portal, WebApp, and bin folder, so the installation will attempt to load both the new and renamed DLL files.

8.7.0_TL_DataCollector_IF0002.zip

This fixes migration issues for Data Collector as well as database-related issues.

- There were Data Collector fixes to address the issue that the Data Collector was using up to 90% of available CPU (for example, a *spinning* issue), deadlock occurred in Data Collector when saving events due to contention in the TM_TABLE, Aggregation AGKEY was not collected, and Tealeaf Dashboards showed low session counts.
- Performance reports did not show empty days.
- With the cxReport Database Manager, a .NET 2.0 error occurred indicating there was an exception that is associated with DB Manager.
- Database Install using Tealeaf Authentication failed.
- Portal management could not add cxReveal Server to the Portal.

Installation instructions:

1. Apply to Data Collector and SQL servers.
2. Stop Tealeaf Services.
3. Extract the files into the root Tealeaf folder so that it overlays existing files.
4. Execute SQL\StoreProcedures_IF0002.sql on the cxImpact Database using MS SQL Server Management Studio.
5. Customers with one or more cxReveal Databases will also need to execute SQL\StoredProcedure_cxReveal_IF0002.sql on each of those instances using MS SQL Server Management Studio.
6. Start **Tealeaf Services**.

8.7.0_TL_Portal_IF0002.zip

This fixes the following issues in Portal.

- Incorrect Start and Expiry time was configured when saving an announcement.
- After changing a Portal user's password, the user could not perform a search for a period of time.
- Users were sent to the Portal login page after passing SSO credentials for authorized and authenticated users. Users should be bypassing the Portal login.
- Report Builder did not prompt users to **Save**.
- Export Event for all events failed. It never completed or never timed out.
- Double forward slashes, //, in URL caused an invalid character error.
- Enable and disable search text field for **Search Box for Online Help** option did not work.
- BBR js could not read property length of null.
- Event validation error occurred because the `firstValue()` function was missing from the JavaScript syntax.
- In the Event Manager, changing the And/Or/Dist/Seq for an Event broke if conditions were removed

Installation instructions:

1. Apply to Portal machines.
2. Stop Tealeaf Services.
3. Extract the files into the root Tealeaf folder so that it overlays existing files.
4. Start **Tealeaf Services**.

8.7.0_TL_Processor_IF0002.zip

This fixes the following issue.

- At times, the processing component incorrectly trimmed uncollected report data.

Installation instructions

1. Apply to all Processing machines.
2. Stop Tealeaf Services.
3. Extract the files into the root Tealeaf folder so that it overlays existing files.
4. Start **Tealeaf Services**.

8.7.0_TL_Transport_IF0002.zip

This fixes the following issue.

- Session Agent Session Router did not support Session Agent CEP.

Installation instructions

1. Apply to all Transport machines.
2. Stop Tealeaf Services.
3. Extract the files into the root Tealeaf folder so that it overlays existing files.
4. Start **Tealeaf Services**.

Interim Fix 0003 (Build 8.7.0.8792)

Patch installation instructions for IF0003 (Build 8.7.0.8792)

Note:

- Even though this patch only contains stand-alone RTV, upgrading to the latest version of IBM Tealeaf with Fix Pack 1 (Build 8.7.0.8789) and Interim Fix 0002 (Build 8.7.0.9790) is recommended before applying Interim Fix 0003.
- For each DLL and EXE file in the compressed file, you must make sure that the DLL or EXE is unblocked. To unblock the file, right click **Properties**. If there is an **Unblock** button at the bottom of the dialog, click **Unblock** to unlock the DLL or EXE.
- If you want to save the existing DLL files, do not rename any existing DLL files, especially in the Portal folder. Instead, save the DLL files in another folder outside the Tealeaf directory. Because IIS attempts to load all DLL files in the Portal, WebApp, and bin folder, the installation attempts to load both the new and renamed DLL files.

8.7.0_TL_RTV_IF0003.zip

This fixes the following RTV issues.

- Pages were shown blank when replaying sessions in RTV from Windows XP workstations with Internet Explorer 8.
- RTV failed to render the pages of two attached sessions at first, but worked after sessions were saved.
- HTTP DELETE method on replay could not be handled correctly.
- Completed form fields that are shown in RTV were blank when printed.

Installation instructions

Upgrade RTV by running the setup.exe twice. For detailed instructions refer to Installing RealTea Viewer and Upgrading RTV sections of IBM Tealeaf CX RealTea Viewer User Manual.

Release 8.7.0.8795 Fix Pack 2

IBM Tealeaf 8.7.0.8795 Fix Pack 2 includes all the patches previously released since 8.7.0.8781.

This fix pack is a full IBM Tealeaf system upgrade that can be used to upgrade any IBM Tealeaf system 7296 and later versions. Like with any other full IBM Tealeaf system upgrade, all machines in the IBM Tealeaf environment should be upgraded to the same version.

For installation of IBM Tealeaf, refer to IBM TealeafCX Installation Manual.

Included in the IBM Tealeaf CX Release Notes is a list of issues that are addressed in the build. There are also a number of issues that were addressed, but not included in this list.

Bug fixes

- The IBM Tealeaf Portal showed no canister or decouple statistics. All graphs in IBM Tealeaf System Statistics were empty due to error on StatsLogger.
- TLStatsLogger failed to convert parameter value from a String to a Int64
- cxReveal in database filegroup reports could not see RS_EXTRACTOR, TL_SEARCH, and visitor databases.
- Various methods to view counts of the same event or same period showed different counts. Event counts were overstated and did not match the report builder or event activity reports for the same event.
- There was no dimension log data to display for URL (Normalized) Dimension when logging was turned on.
- Slow **Portal** performance was traced to a high call per second of stored procedure pr_AggregateEventsByDay.
- When you drill down on an event count from the report builder, and then click **Cancel Search**, the Processing popup never closed.
- In **Portal Management, Manager Servers** could not add a cxReveal machine.
- **Process Scorecard** incorrectly displayed a red arrow for a decrease in the Failure Event count.
- In **Search Templates**, under **Configure**, edited Search Servers to use in the template were not saved.
- When applying the **Same Day of Week Average** function to an event in Report Builder, and selecting a date older than the past two days, the following message was raised; There were not enough days of data to perform the calculation as specified due to the data retention settings. Values below have been calculated using available data.
- When printing a complete form shown in CX RealTea Viewer Replay display, the form fields were printed as blank.
- CX RealTea Viewer did not correctly handle HTTP DELETE method on replay.
- CX RealTea Viewer crashed when viewing large sessions, typically sessions greater than 650 hits.
- A cxConnect job with long list of URLs to extract fails nearly silently.
- Privacy failed to block subsequent strings when it had a null string.

- CX RealiTea Viewer failed to render the pages only after pages were saved.
- In the Event Manager, changing the And/Or/Dist/Seq for an event broke if conditions were removed.
- Data migrator issues were addressed for version 7.2 to 8.x.
- A large number of report definitions caused Portal and Data Service performance issues.
- The Event Manager could not remove or export a corrupted event.
- When a recent version 7.2 upgrade hit the backup timer logic, the stress on SQL server introduced errors while trying to save the converted events.
- When replaying with CX RealiTea Viewer 8781, the UI hits are out of order due to FiddlerCSC incorrectly using ClientConnected.
- When creating a session segment based on a search for the IP address, the IP address in the search was displayed as null,null,null,null.
- **CEP Session Agent** threw an error and stopped writing to the file.
- When cxVerify is installed, the **Archive** and **Archive** manager service was not visible in the **TMS Worldview**.
- cxVerify daily pdf archive jobs with **Nth day ago** failed.
- Changing the host name for the **Report Search Server** in **Manage Servers** resulted in new records for TMS, Alert, DC, Data, RSE, Visitor, and Report, all on port 19000 in the TM_SERVER and TM_SERVICE_MAP tables. All machine names disappeared in manage servers and the services with the wrong port numbers stopped working.
- Android BBR resized the render improperly for some Android devices resulting in illegible replays.
- BBR did not correctly render some of their mobile sessions.

Release 8.7.1.8798 Fix Pack 3

IBM Tealeaf 8.7.1.8798 Fix Pack 3 includes all the patches previously released since 8.7.1.8795.

This fix pack is a full IBM Tealeaf system upgrade that can be used to upgrade any IBM Tealeaf system 7296 and later versions. Like with any other full IBM Tealeaf system upgrade, all machines in the IBM Tealeaf environment should be upgraded to the same version.

This fix pack is compatible with browscap.csv version 5026 and WURFL version <db.scientiamobile.com - 2013-08-18 00:50:13>.

For installation of IBM Tealeaf, refer to IBM TealeafCX Installation Manual.

Included in the IBM Tealeaf CX Release Notes is a list of new features and issues that are addressed in the build. There are also a number of issues that were addressed, but not included in this list.

New features

- **Edit Rules Profile** is a new feature in the Browser Based Replay **Options** menu. You can now use the Rules Profile Editor to make Replay Rules changes directly from Browser Based Replay. You can use the Rules Profile Editor to view your list of existing rules. You can add rules, delete rules, edit rules, rename rules, and view properties. You can also edit the raw XML for the rules and view the rules history.

- MobileMod Rule was added to Browser Based Replay Rules. MobileMod Rule corrects the dimensions of mobile devices that are based on user agent information during Replay.
- **DisableRendererImageLoading** is a new setting available in the Replay Server. When set to 1, **DisableRendererImageLoading** stops an image from loading during replay rendering to improve performance. If this setting is enabled, the **FakeImagesOnRender** setting is disabled. This setting can be configured through TMS.

Bug fixes

- This fix pack contains a Heartbleed security vulnerability fix for IBM Tealeaf products. For CX Passive Capture Application Heartbleed security vulnerability fix, refer to the CX Passive Capture Application Heartbleed patch.
- Admin users could not change the access permissions when they clicked **Save**.
- The drilldown option of a dashboard item was not functioning correctly. The icon remained visible and usable even when it was set to disabled.
- The aggregation process stalled or ran more than 30 hours behind schedule.
- Browser Based Replay could not load content or render the page correctly if there was a hash (#) in the URL.
- The daily roll-up did not keep up with the data collected.
- The TL_REPORTS.V_RS_DTS view fetched duplicate records when **Canister** and **Report Server** are on the same server.
- An error occurred when building a report in the Report builder because it threw an exception for reports where dimension filters had values with id = 0.
- CX UI Capture for AJAX load messages did not make calls to the correct URL. There was a case with a non-decoded string that caused CX RealTea Viewer to not properly split the query string elements from urlfields, which caused post data that matched to break.
- cxConnect tasks failed with an xml error. The loop that read the TLExtractor configuration file did not check the return value of the ReadFile() correctly, which caused subsequent reads to fail.
- A report generated an error when some or all of the reporting period is more than 21 days ago, and one of the three available **same day of week** functions is included on the report.
- Errors occurred during Event creation and save and Dimension creation. pr_CreateMissingTables needed to obtain the sys.tables information as TLADMIN and run the rest of stored procedures as TLUSER.
- The drilldown to the **Totals** value in the **Report Builder** hung the page with processing box opened on screen. The same problem did not occur for drilldown of hourly or other values.
- The drilldown from the Scorecard's **Process Step Dropoff** section threw an exception.
- Browser Based Replay performance was often slow, caused 401, 404, and 500 errors, and had security pop-ups. Multiple repeated access attempts to IBM Tealeaf images triggered authentication challenges, and if canceled, refused with 401 (Unauthorized) response codes.
- A valid Hit Attribute caused the event tester to fail with errors. Regular Expression in the Hit Attribute definition with \r failed to parse.
- When a session was replayed in Browser Based Replay, some of the items on the page did not render properly and were overlaid by others.

- Searches against the indexes failed to return results even when the actual index directories existed. Local to the canister **Search Server's Check and Fix** showed all zeros for the indexes.
- Event names were not populated in **Manage Segment** in the **Report Builder**.
- The order of data items in the **Report Builder** was not honored when the report was a combination of Ratio and Events. Once the chart was added to a dashboard, the columns were returned to their original order.
- The daily roll-up lagged because a missing LT agg table caused the Stored Procedure to go into an infinite loop.
- There was a Hit Count discrepancy in drilldown from Page Response Time report with the Application filter.
- There were Ajax and JSON post data match issues. The value of tid is numeric, and increments sequentially. Occasionally, due to the timing of multiple concurrent requests, the values of two adjacent requests were swapped.
- **Display Render Times** was not honored when you open a dashboard.
- The Chrome renderer had the ERROR RENDERING THIS PAGE: Replay Splice Script Not Loaded error and could not render the page.
- In the generated cxVerify PDF, the **Login**, **UserDef**, and **SesnAttr** fields were not populated.
- The Segment Analysis report page was blank. The report was empty when a segment to view the analysis results was selected.
- Alert service was unable to send an email to the SMTP server, which requires authentication credentials.
- Transport Service on the Event Bus collection server to restart.
- The CEP Session Agent threw an error and stopped writing to file where the Event Bus on canisters was set to write to a file.
- Top Mover alerts were not firing when Top Mover events had no data.
- There were rendering issues with some mobile sessions. Replay did not function without CX UI Capture j2 and the mobile skin height was incorrect.
- Ratio-Reports with **Same Day of Week Average** showed incorrect results with consistently decreasing Same Day of Week Average values.
- Yearly reports were not correctly sorted in the Report Builder when the focus date crossed years. For example, if you select the focus date from Aug-12 to Nov-13, adding Year filter did not sort the data on basis of year.
- CX RealTea Viewer did not accept an accented **e** in a URL. A UTF-8 conversion occurred in the http server that replaced an ANSI character with a question mark.
- There were CX RealTea Viewer errors on any custom UI highlighting rule for some controls when a custom UI highlight rule did not run for XPath elements where the XPath is incorrect or specified an element that does not exist.
- The default search segment name could not include the event name when you drill down from an event.
- Aggregate data was missing because the Event Manager did not save events successfully.
- Database Size reports failed when the registry of the **Portal** server contains the canonical name of the database server, but not FQDN.
- The list of available events disappeared when a dimension was first added to a report.
- Internet Explorer 7 failed to load any page that referred to searchreults.js. Users could not log in to the **Portal** with Internet Explorer 7.

- Browser Based Replay Sub-search returned data retrieval error. The issue occurred if the Search Server was unable to find the session hit attributes.
- Browser Based Replay did not highlight fields that contained user entered data.
- Dashboards with component sizes of minimum 2 x 2 were overlapping in Chrome version 32.0.1700.76 m and later.
- The correct mobile skin did not load on replay.
- Metadata was not populated in PDFs when users selected options of PDF page fields in cxVerify.
- In IE 10, hover and click states of selected item of the menu bar displayed in white.
- When creating a mobile mod rule in Replay, the check box to enable or disable did not work.
- Clicking menu items of in the report menu in the **Report Builder** did not fire the click event and the menu remained on screen. This addresses the issue where users were unable to create reports without decimal places when using IE 10.
- Directory contents on the Portal and Reporting server could be viewed using a browser.
- Functionality in the IBM Tealeaf Portal that should be hidden was visible to users.
- It was possible to download arbitrary files during the web application phase of testing.
- The alert service did not send email from the SMTP server, which requires authentication credentials.
- There was no highlighting visible when replaying sessions in Browser Based Reply without UISDK installed. Now highlighting is supported in the way it was in the 7.2 version, which is based on heuristics such as what URLs in current page lead to next page and formfields that were found in an http POST.
- Browser Based Replay did not render when mobile device was detected.

Appendix. Build notes - RTV

This information contains release notes about the individual official builds for the IBM Tealeaf CX RealTea Viewer available for this release. Included in these notes is a list of issues that are addressed in the build, and also new features and any dependencies.

Note: RTV is released on a schedule that is independent of IBM Tealeaf cxImpact.

Note: Tealeaf recommends upgrading to the latest available RTV build for any Release whenever possible.

The IBM Tealeaf CX RealTea Viewer is a stand-alone application that can be installed on your local desktop to enable searching for and replaying Tealeaf sessions. For more information about RTV, see "RealTea Viewer (RTV) User Manual" in the *IBM Tealeaf RealTea Viewer User Manual*.

Note: No RTV-only builds were issued for Release 8.7.

RTV Build 8452

RTV version: 8.4.1.8452

Release Date: 24-Apr-2012

Dependencies:

- Other fix dependencies: Customers can upgrade to RTV 8452 from any 6.x or 7.x build of RTV.

Note: In general, avoid installing builds of RTV that are for versions of IBM Tealeaf cxImpact released later than the version in use in your Tealeaf environment. If you are also installing the Event Editor with RTV, the major and minor version of the Event Editor must match the major and minor version of IBM Tealeaf cxImpact. If they do not match, the Event Editor cannot commit changes to the Event Master server.

- Other component dependencies: None

Compatibility:

Customers can upgrade to RTV 8452 from any 6.X or 7.X build.

Note: Before you begin upgrading, verify that your system is properly sized for RTV Release 7.x, as the system requirements changed. See "RealTea Viewer Overview" in the *IBM Tealeaf RealTea Viewer User Manual*.

Table 8. 8.4.1.8452 Issues Addressed:

Description of Issue
Status Code 404 errors that are caused by failing to remove question marks (?) display before anchor tags in response content during replay.

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