

IBM Tealeaf Customer Experience
Version 9 Release 0.1
December 4, 2014

*IBM Tealeaf Customer Experience
9.0.1 and 9.0.1A Enhanced
International Character Support (EICS)
Release Notes*



Note

Before using this information and the product it supports, read the information in "Notices" on page 15.

This edition applies to version 9, release 0, modification 1 of IBM Tealeaf Customer Experience and to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. 9.0.1 Release notes

These are the general Release Notes for IBM Tealeaf Customer Experience 9.0.1 and 9.0.1A Enhanced International Character Support (EICS).

For more information about Release Notes for the IBM Tealeaf CX Passive Capture Application, see *IBM Tealeaf Release Notes - CX Passive Capture Application*.

For more information about Release Notes for IBM Tealeaf CX UI Capture j2, see *IBM Tealeaf CX UI Capture j2 Release Notes*.

For more information about Release Notes for IBM Tealeaf CX Mobile Android Logging Framework, see *IBM Tealeaf CX Mobile Android Logging Framework Release Notes*.

For more information about Release Notes for IBM Tealeaf CX Mobile iOS Logging Framework, see *IBM Tealeaf CX Mobile iOS Logging Framework Release Notes*.

Differences between V9.0.1 and V9.0.1A - Enhanced International Character Support (EICS)

There are two versions of this release of IBM Tealeaf Customer Experience; V9.0.1 and V9.0.1A - Enhanced International Character Support (EICS).

In IBM Tealeaf Customer Experience V9.0.1A - Enhanced International Character Support (EICS), IBM Tealeaf provides the following enhancements, which are not available in IBM Tealeaf Customer Experience V9.0.1.

- Support for all common web page encodings, including those commonly used for Japanese, Chinese, and Korean.
- Improved encoding, searching, filtering, and collation operations on non-ASCII data (characters outside of A-Z, a-z, 0-9, and common punctuation).
- Support when the user data being processed is not the same as the native character encoding of the operating system. For example, IBM Tealeaf components can process Arabic data on a French Windows operating system.

Note: IBM Tealeaf CX RealiTea Viewer v9.0.1A does not have these additional features. It contains the same enhancements as V9.0.1.

Note: IBM Tealeaf Customer Experience V9.0.1A - Enhanced International Character Support (EICS) should only be used if you require the additional features that are provided by this version. If you do not require these additional features, install IBM Tealeaf Customer Experience V9.0.1.

Note: The following IBM Tealeaf products and components do not have a separate installer that is specific IBM Tealeaf Customer Experience V9.0.1A. You can use the V9.0 installation files to enable the following products in your IBM Tealeaf Customer Experience V9.0.1A environment:

- IBM Tealeaf CX Mobile
- IBM Tealeaf cxOverstat
- IBM Tealeaf cxImpact
- IBM Tealeaf cxView

- IBM Tealeaf cxConnect for Web Analytics
- IBM Tealeaf cxConnect for Voice of Customer

In V9.0.1, IBM Tealeaf provides the following enhancements. These features are also available in V9.0.1A - Enhanced International Character Support (EICS).

- Culturally correct user interface: Updated Portal user interface components to accept and present numbers, dates, times, and calendars to reflect the user's cultural preference.
- Additional user interface translations: Japanese, Chinese (Simplified), Chinese (Traditional), and Korean.
- Additional localized product documentation: The product documentation set is translated into all supported languages (German, French, Spanish, Italian, Brazilian Portuguese, Japanese, Chinese (Simplified), Chinese (Traditional), and Korean).

Latest versions

The following table lists the build numbers for the latest versions of the IBM Tealeaf products discussed in these release notes.

Table 1. Build numbers for latest versions of IBM Tealeaf products

Product	Build number	As of Date
IBM Tealeaf Customer Experience V9.0.1 and related products	9.0.1 1053	December 4, 2014
IBM Tealeaf Customer Experience V9.0.1A and related products	9.0.1 5046	December 4, 2014
IBM Tealeaf CX Passive Capture Application	3670 Note: The following information applies to IBM Tealeaf with EICS enablement. 3720 (for IBM Tealeaf version 9.0.1A with EICS)	December 4, 2014
IBM Tealeaf CX UI Capture j2	3.1.0	December 4, 2014
IBM Tealeaf CX Mobile Android Logging Framework	9.0.0.13	December 4, 2014
IBM Tealeaf CX Mobile iOS Logging Framework	9.0.0.23	December 4, 2014

Note: You must have an active customer support account for the latest versions of IBM Tealeaf Customer Experience and IBM Tealeaf CX Passive Capture Application. For more information, go to support.ibmcloud.com.

About IBM Tealeaf Customer Experience 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 version number.
- B - Minor release version number. Minor releases are incremental improvements to a major release.

- C - Modification release number. Modification releases are incremental improvements to a minor release.
- DDDD - The unique build number. This number indicates the number of official builds that have been published for the release.

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

Required PCA Build

A PCA Build 3670 is required for IBM Tealeaf Release 9.0.1.

A PCA Build 3720 is required for IBM Tealeaf Release 9.0.1A with EICS support.

For more information about the Passive Capture Application (PCA), see *IBM Tealeaf Passive Capture Application (PCA) Manual* and *IBM Tealeaf Passive Capture Application (PCA) Release Notes*.

Supported browsers

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

IBM Tealeaf CX

The following features are new to IBM Tealeaf CX.

New pre-aggregation process for the Data Collector

The pre-aggregation process improves overall performance of the Data Collector and SQL server. The amount of data that is processed by the Data Collector is reduced by the pre-aggregation process. The pre-aggregation process receives data from the canisters and aggregates any duplicated data while the data is still in memory. Aggregating the data while it is in memory reduces the amount of data that is written to disk and transferred over the network connection. The process also reduces the number of staging tables and reporting tables on the SQL server.

IBM® Digital Analytics integration

Performance improvements for the integration of Tealeaf® and Digital Analytics allows more customer session data to be exported to IBM Digital Analytics. An increase in the session limit number increases the number of customer sessions in the Tealeaf segments that can be exported to Digital Analytics.

IBM Tealeaf CX users who also have entitlement to Digital Analytics Explore can export Tealeaf search segments into Digital Analytics. In Explore, users can apply Tealeaf visitor and customer segments to the Digital Analytics data set and create a report analyses to improve their understanding of their customers' behavior.

Cloud deployment

IBM Tealeaf can be deployed within the IBM Softlayer® and Microsoft Azure cloud-based environments. Using the CX PCA and packet forwarder software, data can be captured within these environments for processing by your IBM Tealeaf CX software.

For more information about IBM Tealeaf CX, see:

- *IBM Tealeaf CX Installation Manual*
- *IBM Tealeaf CX Configuration Manual*
- *IBM Tealeaf CX Database Guide*
- *IBM Tealeaf CX Event Manager Manual*
- *IBM Tealeaf CX PCA Manual*

cxImpact

The following features are new to IBM Tealeaf cxImpact.

BBR support for DOM Capture and Replay

A feature for DOM Capture and Replay has been added to IBM Tealeaf Version 9.0.1.

DOM Capture and Replay offers an alternative method of capturing, replaying, and analyzing visitor sessions for scenarios where classic Capture and Replay are not supported.

DOM Capture relies on the Document Object Model (DOM), which provides a structured representation of the web page (document). The DOM Capture Service captures a "snapshot" of the rendered DOM. The "snapshot" is sent to the server as a Type 12 JSON message. The Replay server processes the DOM for Browser Based Replay (BBR).

For a list of the publications with information about DOM Capture and Replay , see Reference table for the DOM Capture and Replay documentation.

Table 2. Reference table for the DOM Capture and Replay documentation

For information about. . .	See the . . .
what DOM Capture and Replay provides	<i>IBM Tealeaf cxImpact User Manual</i>
configuring UI Capture to make use of the DOM Capture and Replay feature	<i>IBM Tealeaf CX UI Capture j2 Guide</i>
enabling DOM Capture using the Replay Server Settings	<i>IBM Tealeaf CX Configuration Manual</i>
adding the session agent that moves the captured DOM data from the UI hit into a newly created virtual hit	<i>IBM Tealeaf CX Configuration Manual</i>

Real-time access to Replay Server logging

A feature was added to Browser Based Reply (BBR) to extend Replay Server logging so that logging information displays in the Processing window when sessions are loaded.

Users with Administrative authorization can expand the Processing window to get a real-time view of the logs from the rendering engine.

The logs provide processing details associated with:

- Loading of the session
- Loading of each page

- Other rendering related logs

This real-time access improves an Administrator's capability to address problems at the server level.

In addition to providing real-time access to logging information from the Processing window, a new option named **Page Hit Logs** was added to the View menu.

The **Page Hit Logs** option displays the logs from the rendering engines that show the processing being performed by the Replay Server.

Note: This option is available to users with Administrative authorization only.

For a list of the publications with information about real-time access to Replay Server logging, see Reference table for Real-time access to Replay Server logging documentation.

Table 3. Reference table for the Real-time access to Replay Server logging documentation

For information about. . .	See the . . .
specifying the server and port for the Tracking Service used by Replay Server Logging	<i>IBM Tealeaf CX Installation Guide</i>
modifying the Tracking Service configuration with TMS	<i>IBM Tealeaf CX Configuration Manual</i>
using real-time page load logging information for session diagnostics	<i>IBM Tealeaf cxImpact Administration Manual</i>
the new Page Hit Logs option from the View menu	<i>IBM Tealeaf cxImpact Administration Manual</i>

Improved access to page load details

A **Page Load Details** button was added to the Session Replay Processing window in BBR.

The new button allows users with Administrative authorization to review the load details during session replay.

The Page Load Details window can be used to review all of the content that is requested from an individual page and whether the replay client was successful in loading it.

Users can click the **Page Load Details** button while the session is being replayed to get a real-time view of page load processing. Being able to view page load details in real-time enhances your ability to recognize problems associated with a customer's session and leads to quicker problem resolution. Additionally, being able to view page load details in real-time can help you identify specific files that might be the cause of discrepancies in fidelity.

For information about working with the Page Load details window, see the *IBM Tealeaf cxImpact User Manual*.

Improved custom template support for Native replay

IBM Tealeaf Version 9.0.1 supports custom templates for Native replay.

Prior to IBM Tealeaf Version 9.0.1, the only way to customize templates for Native replay was by modifying the shipped templates in the ReplayServer/TLT directory. Modifying the templates in this manner has drawbacks. You will likely have to re-implement the template customization when a new version of IBM Tealeaf is installed.

With the improved support for template customization, you can make session replay for mobile devices match any changes made to the out-of-the-box mobile controls in iOS or Android. And you do not have to worry about re-implementing customization efforts when a new version of IBM Tealeaf is installed.

For information about creating your own templates to customize mobile device session replay, see the *IBM Tealeaf CX Configuration Manual*.

Mobile gestures support for BBR

IBM Tealeaf Version 9.0.1 supports capture and replay of mobile device gestures.

The capability to capture and replay mobile device gestures (for example, tap and swipe gestures) gives you insight into interactions that are specific to a mobile device user's experience.

For information about mobile device gestures in BBR, see the *IBM Tealeaf cxImpact User Manual*.

Hybrid session support for BBR

In IBM Tealeaf Version 9.0.1 you can use BBR to replay sessions that contain "hybrid" data (data captured from a mobile device and from a webView).

For information about replaying sessions that have both web and mobile data, see the *IBM Tealeaf cxImpact User Manual*.

New template library functions to support improved customizability

IBM Tealeaf Version 9.0.1 includes new template library functions for improved customizability. The following functions were added to the template library:

- `fileExists("filename")`
- `readJsonFile("json filename" [, defaultJsonValue])`
- `readRawFile("filename" [, defaultStringValue])`
- `readJsonFile("json filename" [, defaultJsonValue])`

For a description of these functions, see the *IBM Tealeaf CX Configuration Manual*.

cxOverstat

The following features are new to IBM Tealeaf cxOverstat overlays.

Snapshot

With cxOverstat Snapshot, you can use a Mozilla Firefox browser extension to capture static and dynamic page states easily from live web pages and save them to the Snapshot Gallery. Saving captured page states to the Snapshot Gallery allows you to group and tag snapshots and simplifies access to cxOverstat data. Snapshots display the exact page state at the time of capture and allow you to apply the overlays to analyze the usability data.

For information about the Snapshot feature, see the *IBM Tealeaf cxOverstat User Manual*.

Color Contrast overlay

The Color Contrast overlay evaluates difficulties that users might encounter when viewing items on a website due to a lack of contrast between the foreground text and the background color.

The Color Contrast overlay uses pins to identify text where the color contrast ratio does not meet the **WCAG 2.0** standard. The Color Contrast Analyzer tool can suggest alternative foreground text and background colors to satisfy the minimum contrast ratio, or users can choose colors manually and validate whether the new contrast ratio meets the standard.

For information about Color Contrast overlays, see the *IBM Tealeaf cxOverstat User Manual*.

Accessibility overlay

The Accessibility overlay evaluates website issues that might affect users with visual, auditory, or physical impairments. The Accessibility overlay uses pins to identify page elements that violate the **WCAG 2.0** standard, categorizing the violations by severity, while also providing information about the disabilities affected.

For information about Accessibility overlays, see the *IBM Tealeaf cxOverstat User Manual*.

CX Mobile

The following features are new to IBM Tealeaf CX Mobile.

With 9.0.1, Tealeaf provides out of the box events that can be used to create reports or as a base to create new events.

The provided Mobile events are:

- Double Tap Gesture
- Exception
- Gesture
- Mobile Model
- Mobile Session Count
- Mobile Session Length (sec)
- Mobile Session Size [BB]
- Mobile Session Start [BB]

- Pinch Gesture
- Resize Gesture
- Session with at least one exception
- Step - Device Carrier [BB]
- Step - Last Gesture [BB]
- Step - Last Gesture Offset [BB]
- Step - Device Model [BB]
- Step - OS Version [BB]
- Swipe Gesture
- Tap and Hold Gesture
- Unresponsive Gestures
- Unresponsive Gestures [BB]

For information about out of the box events, see the *IBM Tealeaf CX Mobile User Manual* and the *IBM Tealeaf Event Manager Manual*.

Chapter 2. 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: IBM Tealeaf recommends upgrading to the latest available build for any release whenever possible.

Release 9.0.1 general availability

IBM Tealeaf version: 9.0.1.

Release Date: December 4, 2014

Dependencies:

- Customers can upgrade to 9.0.1 1053 from 7.X (before 7.2.12.7296) by upgrading to 7.2.12.7296 and then upgrade to 9.0.1 1053. Other customers can directly upgrade to 9.0.1 1053.

Note: Before you begin upgrading, verify that your system is properly sized for V9.0.1, as the system requirements can change.

Installation notes

These installation notes help you prepare for your installation.

- Consult the *IBM Tealeaf CX Installation Guide* for information about installing Internet Information Services (IIS) and enabling .NET framework.

Install IIS Manager to manage IIS.

- Verify that Microsoft IIS is installed and configured to use .NET 4.5 on your IBM Tealeaf servers.
- On Windows Server 2008 servers, when you install Microsoft IIS, the IIS Manager is not installed. You must install the IIS Manager and ensure that ASP pages are allowed.
- If you decide to enable your Windows firewall, you must configure firewall openings for bidirectional communication.

See the *IBM Tealeaf CX Installation Guide* for information about what ports need to be opened if you decide to leave the firewall enabled. You can do disable or enable the firewall through the **Windows Control Panel**.

- Set the slide bar to **Never notify** to disable when you are notified about changes to your computer through User Access Control in the **Windows Control Panel**. Restart your computer after you change this setting.
- Ensure that Mixed Mode is set in Microsoft SQL Serv Management Studio in **properties** and **security**.
- Verify that SQL Server is configured for TCP/IP and listening on the port referred in the report server configuration through the **SQL Server Configuration Manager**.
- Run SETUP.EXE, not IBMTealeafCX.msi.

9.0.1 5046 build issues

In addition to any IBM Tealeaf V9.01 build issues, the following are known issues of IBM Tealeaf V9.0.1A. For information about V9.0.1 build issues, see “9.0.1 1053 build issues.”

- The long term canister trims data one day earlier or one day after the configured length of time. The long term canister does not support daylight savings time.
- Half-hour time zones such as the IST time zone are not supported.

9.0.1 1053 build issues

The following are known issues of the V9.0.1 build.

- In Hybrid Replay, some pinch positions captured from an iOS device might not reflect the actual coordinates of the pinch gesture that the user performed on the iOS screen.

Points that have negative values, or points that are outside the mobile screen, are normalized to fit within the mobile skin.

- In some cases, the first page of Hybrid Replay for iOS is blank.

In these cases, session replay starts on the second page. If the first page of Hybrid Replay for iOS is blank, and you want to suppress the blank page from BBR, add the following code (as part of the application instrumentation) to any UIViewController that contains a UIWebView.

Note: Manual line breaks were applied to ensure the sample code fits on the page.

```
- (void)viewDidLoad
{
    [[TLFApplicationHelper sharedInstance]
    setConfigurableItem:kConfigurableItemLogViewLayoutOnScreenTransition value:[NSNumber numberWithInt:NO]];
    [super viewDidLoad];
    // load webpage and other view did load actions
}
-(void)viewDidAppear:(BOOL)animated
{
    [super viewDidAppear:animated];
    [[TLFApplicationHelper sharedInstance]
    setConfigurableItem:kConfigurableItemLogViewLayoutOnScreenTransition value:[NSNumber numberWithInt:YES]];
    // viewDidAppearActions
}
```

Note: Adding the code shown above addresses the issue of the first page being blank *if the web page loads during **viewDidLoad***. If the web page loads at a later point, the first page of Hybrid Replay for iOS might still be blank.

- There might be instances when a reloaded active session does not reproduce all of the hits processed by Native Replay.

For example, lets say a UI event is processed and flagged during the initial session load. If the session is subsequently updated with a new Target Post and Type 4 message, the new type 4 message is not attached to the previous Type 10 message. The session will replay correctly in BBR as soon as a new type message is encountered in later hits. Although a few type 4 pages are lost when the active session is refreshed, these pages are loaded properly if the user refreshes the browser window.

- In an environment with multiple Replay Servers, there is no way for Tealeaf to know which Replay Server has been selected.

As a result, the value displayed for the Replay Renderer in Browser Based Replay is based on a best guess scenario. Because of this, the Replay Renderer listed in the User Agent Information bar might not reflect the actual Renderer used.

Chapter 3. IBM Tealeaf documentation and help

IBM Tealeaf provides documentation and help for users, developers, and administrators.

Viewing product documentation

All IBM Tealeaf product documentation is available at the following website:

<https://tealeaf.support.ibmcloud.com/>

Use the information in the following table to view the product documentation for IBM Tealeaf:

Table 4. Getting help

To view...	Do this...
Product documentation	On the IBM Tealeaf portal, go to ? > Product Documentation .
Help for a page on the IBM Tealeaf Portal	On the IBM Tealeaf portal, go to ? > Help for This Page .
Help for IBM Tealeaf CX PCA	On the IBM Tealeaf CX PCA web interface, select Guide to access the <i>IBM Tealeaf CX PCA Manual</i> .

Available documents for IBM Tealeaf products

Use the following table to view a list of available documents for all IBM Tealeaf products:

Table 5. Available documentation for IBM Tealeaf products

IBM Tealeaf products	Available documents
IBM Tealeaf CX	<ul style="list-style-type: none">• <i>IBM Tealeaf Customer Experience Overview Guide</i>• <i>IBM Tealeaf CX Client Framework Data Integration Guide</i>• <i>IBM Tealeaf CX Configuration Manual</i>• <i>IBM Tealeaf CX Cookie Injector Manual</i>• <i>IBM Tealeaf CX Databases Guide</i>• <i>IBM Tealeaf CX Event Manager Manual</i>• <i>IBM Tealeaf CX Glossary</i>• <i>IBM Tealeaf CX Installation Manual</i>• <i>IBM Tealeaf CX PCA Manual</i>• <i>IBM Tealeaf CX PCA Release Notes</i>

Table 5. Available documentation for IBM Tealeaf products (continued)

IBM Tealeaf products	Available documents
IBM Tealeaf CX	<ul style="list-style-type: none"> • <i>IBM Tealeaf CX RealTime Viewer Client Side Capture Manual</i> • <i>IBM Tealeaf CX RealTime Viewer User Manual</i> • <i>IBM Tealeaf CX Release Notes</i> • <i>IBM Tealeaf CX Release Upgrade Manual</i> • <i>IBM Tealeaf CX Support Troubleshooting FAQ</i> • <i>IBM Tealeaf CX Troubleshooting Guide</i> • <i>IBM Tealeaf CX UI Capture j2 Guide</i> • <i>IBM Tealeaf CX UI Capture j2 Release Notes</i>
IBM Tealeaf cxImpact	<ul style="list-style-type: none"> • <i>IBM Tealeaf cxImpact Administration Manual</i> • <i>IBM Tealeaf cxImpact User Manual</i> • <i>IBM Tealeaf cxImpact Reporting Guide</i>
IBM Tealeaf cxConnect	<ul style="list-style-type: none"> • <i>IBM Tealeaf cxConnect for Data Analysis Administration Manual</i> • <i>IBM Tealeaf cxConnect for Voice of Customer Administration Manual</i> • <i>IBM Tealeaf cxConnect for Web Analytics Administration Manual</i>
IBM Tealeaf cxOverstat	<i>IBM Tealeaf cxOverstat User Manual</i>
IBM Tealeaf cxReveal	<ul style="list-style-type: none"> • <i>IBM Tealeaf cxReveal Administration Manual</i> • <i>IBM Tealeaf cxReveal API Guide</i> • <i>IBM Tealeaf cxReveal User Manual</i>
IBM Tealeaf cxVerify	<i>IBM Tealeaf cxVerify Administration Manual</i>
IBM Tealeaf cxView	<i>IBM Tealeaf cxView User Manual</i>
IBM Tealeaf CX Mobile	<ul style="list-style-type: none"> • <i>IBM Tealeaf CX Mobile Android Logging Framework Guide</i> • <i>IBM Tealeaf Android Logging Framework Release Notes</i> • <i>IBM Tealeaf CX Mobile Administration Manual</i> • <i>IBM Tealeaf CX Mobile User Manual</i> • <i>IBM Tealeaf CX Mobile iOS Logging Framework Guide</i> • <i>IBM Tealeaf iOS Logging Framework Release Notes</i>

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