



# Receiver for HTML5 2.x

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## What's new

January 14, 2019

### What's new in 2.6.9

#### Support for timestamp

This enhancement provides timestamps for the logs generated by the user device.

### What's new in 2.6.8

This release addresses a number of issues that help to improve overall performance and stability.

### What's new in 2.6.7

This release addresses a number of issues that help to improve overall performance and stability.

### What's new in 2.6.6

This release introduces several internal fixes and usability improvements. For more information, see [Fixed issues](#)

### What's new in 2.6.5

#### Multi-monitor support for desktop and app sessions

Previously available as an experimental feature, multi-monitor support for desktop and app sessions is now a fully supported feature. For more information about this feature, see [Configuring multi-monitor support](#).

### What's new in 2.6.4

#### Multi-monitor support for desktop and app sessions (Experimental feature)

As an experimental feature, Citrix Receiver provides an enhanced user experience for application and desktop sessions by allowing you to leverage secondary monitors that are connected to your device. For more information about this experimental feature, see [Configuring multi-monitor support](#).

## **Additional browser support for enhanced PDF printing experience**

Citrix Receiver for HTML5 now fully supports enhanced PDF printing on the Firefox and Chrome browsers. This enhancement is partially supported on Internet Explorer 11 with some known limitations. For more information about the enhanced PDF printing experience, see [Enhanced PDF printing experience](#).

## **What's new in 2.6.3**

This release addresses a number of issues that help to improve overall performance and stability.

## **What's new in 2.6.2**

### **Enhancement to PDF printing (Experimental feature)**

You can now print documents directly from the **Print** window that appears within your Receiver session. For more information about this experimental enhancement to PDF printing, see [Enhanced PDF printing experience](#).

## **What's new in 2.6.1**

Citrix Receiver for HTML5 now supports custom cursors on Microsoft Edge browser.

## **What's new in 2.6**

**Citrix Receiver for HTML5 now supports custom cursors on Microsoft Internet Explorer.** This enhancement ensures that you have a consistent browsing experience across browsers. By default, the custom cursor is enabled.

For more information about disabling the custom cursor, see [To disable the custom cursor in Microsoft IE or Edge using configuration.js](#)

## **What's new in 2.5.2**

This release introduces several internal fixes and usability improvements. For more information about Fixed issue, see [Fixed issues](#)

## What's new in 2.5.1

### Enhancement to PDF printing

PDF printing is getting a little faster because you no longer need to press **Continue** before you can print a PDF. For information about suppressing the **Continue** dialog, see [To suppress the Continue print dialog](#).

## What's new in 2.5

This release introduces several internal fixes and usability improvements. For more information about Fixed issue, see [Fixed issues](#)

## What's new in 2.4

### Customer Experience Improvement Program (CEIP)

The Citrix Customer Experience Improvement Program (CEIP) gathers anonymous configuration and usage data from Citrix Receiver for HTML5 and automatically sends the data to Citrix. This data helps Citrix improve the quality, reliability, and performance of Citrix Receiver for HTML5. CEIP is available with Citrix Receiver for HTML5 Version 2.4 onwards.

By default, CEIP is enabled.

When you opt-in to participate in CEIP, the data is collected on a weekly basis. However, when you disable CEIP, the data is not collected after opting out. You can choose to opt-out of CEIP program anytime.

The data is stored in the browser cache and transferred securely via HTTPS to Citrix. CEIP data is not sent to Citrix in the first 7 days after installing or upgrading to HTML5 Version 2.4.

For more information on the CEIP, see [About the Citrix Customer Experience Improvement Program \(CEIP\)](#).

To configure CEIP, see [Configuring CEIP](#)

### HDX SDK enhancement for HTML5

This release of Citrix Receiver for HTML5 provides an enhanced user experience by incorporating additional APIs to the HDX SDK paradigm. With these additional APIs, SDK consumers can:

- Send logoff message on both desktop and app sessions.

For the latest HDX SDK APIs and examples, see the [download](#) page.

For HDX SDK API documentation for HTML5, see [HDX SDK for HTML5](#).

## What's new in 2.3

### Support for selective use of H.264 in Thinwire

Citrix Receiver for HTML5 now supports selective use of H.264 in Thinwire, plus encoding of transient content instead of the JPEG encoder available on the VDA. This feature is available only on VDAs Version 7.11 or later.

For more information on configuring selective H.264, see [Configuring selective H.264](#).

### Enhancement to caching behavior of video content in Thinwire

Thinwire can now bypass caching of server-rendered video content while at the same time retaining cached bitmaps for other open windows using text-based data (for example Excel, Windows Explorer, desktop background), resulting in a 5% reduction in bandwidth use. This enhancement is available in XenApp and XenDesktop 7.11 or later.

For more information on configuring Thinwire, see the [XenApp and XenDesktop](#) documentation.

## What's new in 2.2

### Session reliability

Citrix Receiver for HTML5 now allows administrators to configure the following policies using Citrix Studio:

- Session Reliability time-out
- Reconnect user interface transparency level

For more information, see [Session reliability](#) in XenApp and XenDesktop documentation.

### Access to session logs using toolbar

With this release, Citrix Receiver for HTML5 allows users to access HTML5 session logs. This can be done using the Logging option present in the HTML5 toolbar.

### **Time zone enhancement**

With this release, Citrix Receiver for HTML5 has extended support of both English and native languages in client time zone redirection.

### **HDX SDK enhancement**

This release of Citrix Receiver for HTML5 provides an enhanced user experience by incorporating additional APIs to the HDX SDK paradigm. With these additional APIs, SDK consumers can:

- Add custom button(s) to the primary or secondary menu of the toolbar.
- Send special key combinations

For the latest HDX SDK APIs and examples, see the [download](#) page.

## **What's new in 2.1**

### **Enhanced HDX SDK**

This release of Citrix Receiver for HTML5 provides an enhanced user experience by incorporating additional APIs to the HDX SDK paradigm. With these additional APIs, the SDK consumers can:

- switch between fixed and dynamic resolution in an active session. With this functionality, users can change session resolution from fixed to auto fit and vice versa.
- disable the session close alert on reload/close of the page when the session is launched.
- set a preferred language for the session. By default, the session uses the language set in the browser.

For the latest HDX SDK APIs and examples, see the [download](#) page.

## **What's new in 2.0**

### **Redesigned toolbar**

Citrix Receiver for HTML5 provides a redesigned toolbar to improve the user experience at this release. This enhancement provides new options accessible from the toolbar to facilitate common tasks, such as:

- switching to full-screen mode
- upload or download a file
- copy content from an active session to the clipboard to enable sharing between sessions
- access additional options

For more information, see [Configuring toolbar](#).

## Client-side appswitcher

This release of Citrix Receiver for HTML5 introduces client-side appswitcher functionality. This feature provides a taskbar listing applications within an active session, with opened applications clearly labeled to facilitate switching between them. Click the Citrix Receiver for HTML5 icon at the top of the screen to use appswitcher.

### Important

With the new client side app switcher feature introduced at this release of Citrix Receiver for HTML5, an administrator no longer needs to install appswitcher separately on the VDA. Citrix recommends that you uninstall an existing instance of appswitcher on the VDA.

## Mobility support

Citrix Receiver for HTML5 enhances mobility support by allowing you to launch sessions on touch and mobile device browsers; this feature includes support for gestures, multi-touch and soft keyboard functionality. Enhanced mobility support is provided for the following:

- iPad Safari
- iPhone Safari
- Edge browser on Windows 10 phones and touch-enabled desktops
- Android Chrome

For more information, see [Configuring Mobility support](#)

## Fixed issues

July 5, 2018

### Fixed issues in Citrix Receiver for HTML5 2.6.9

Compared to: Citrix Receiver for HTML5 2.6.8

Citrix Receiver for HTML5 2.6.9 contains all fixes that were included in Version 2.6.8 and earlier, plus the following, new fixes:

- When you set the **menubar** key to **false** in the **config.js** file, attempts to start a session might fail with this error message: “Cannot find toolbarConfig of undefined.” [RFHTMCRM-2357]



- When you use the local Japanese or Chinese Input Method Editor (IME) to input text, a gray line appears and the keystrokes are incorrectly interpreted. [LC9272]
- When you use a Japanese keyboard, certain keyboard shortcuts might not work in Microsoft Excel. [LC9459]

### **Fixed issues in Citrix Receiver for HTML5 2.6.8**

Compared to: Citrix Receiver for HTML5 2.6.7

Citrix Receiver for HTML5 2.6.8 contains all fixes that were included in Version 2.6.7 and earlier, plus the following, new fix:

- Citrix Receiver for HTML5 might not support the use of H.264 video codec on Linux VDA 7.17. As a result, when you start the Linux VDA 7.17, either a black screen or Error 61 appears. As a workaround, you can disable H.264 through the configuration.js file as follows:

```
'graphics' : {  
  'h264Support' : {  
    'enabled' : false,  
    [RFHTMCRM-2308]
```

### **Fixed issues in Citrix Receiver for HTML5 2.6.7**

This release addresses a number of issues that help to improve overall performance and stability.

### **Fixed issues in Citrix Receiver for HTML5 2.6.6**

Compared to: Citrix Receiver for HTML5 2.6.5

Citrix Receiver for HTML5 2.6.6 contains all fixes that were included in Versions 2.6.5 and earlier, plus the following, new fix:

- The secondary window does not open when you start a session in a primary window in windowed mode, change the session to full-screen mode, and click Multimonitor in the toolbar to extend the session to a secondary window. The primary window is restored to windowed mode. This issue is seen more on the Mac clients that are running on XenApp and XenDesktop 7.15 Cumulative Update 1.[RFHTMCRM-2210]
- On a touch-enabled device, launching a resource in a session might fail. [#RFHTMCRM-2268]
- The non-conversion (muhenkan) key on a Japanese keyboard might not work when using Citrix Receiver for HTML5. [LC9254]

### **Fixed issues in Citrix Receiver for HTML5 2.6.5**

Compared to: Citrix Receiver for HTML5 2.6.4

Citrix Receiver for HTML5 2.6.5 contains all fixes that were included in Versions 2.6.4 and earlier, plus the following, new fix:

- Attempts to start multiple applications from different workgroups through NetScaler Gateway might fail. The issue occurs when the worker groups have same SessionSharingKey in the ICA file. [75113064]

### **Fixed issues in Citrix Receiver for HTML5 2.6.4**

This release addresses a number of issues that help to improve overall performance and stability.

### **Fixed issues in Citrix Receiver for HTML5 2.6.3**

Compared to: Citrix Receiver for HTML5 2.6.2

Citrix Receiver for HTML5 2.6.3 contains all fixes that were included in Versions 2.6.2 and earlier, plus the following, new fix:

- If you use the **Print** command to start printing additional files before a single file completes printing, only the smallest file prints. The remaining files are not printed. This issue occurs if you have enabled [Enhanced PDF printing experience](#). [RFHTMCRM-2129]

### **Fixed issues in Citrix Receiver for HTML5 2.6.2**

This release addresses a number of issues that help to improve overall performance and stability.

### **Fixed issues in Citrix Receiver for HTML5 2.6.1**

Compared to: Citrix Receiver for HTML5 2.6

Citrix Receiver for HTML5 2.6.1 contains all fixes that were included in Versions 2.6 and earlier, plus the following, new fixes:

- In a session running on macOS with a Hiragana keyboard, when you press Alt + any other key, additional characters might appear. [RFHTMCRM-1939]
- When you change the IME among Korean and English language and use a text editor, the session becomes inactive. [RFHTMCRM-1974]
- When you set the client IME to Chinese language and use a text editor, the session becomes inactive. [LC8519]

### **Fixed issues in Citrix Receiver for HTML5 2.6**

There are no fixed issues in this release.

### **Fixed issues in Citrix Receiver for HTML5 2.5.2**

There are no fixed issues in this release.

### **Fixed issues in Citrix Receiver for HTML5 2.5.1**

Compared to: Citrix Receiver for HTML5 2.5

Citrix Receiver for HTML5 2.5.1 contains all fixes that were included in Versions 2.5 and earlier, plus the following, new fix:

- In an application session, the previous app might still be highlighted in the taskbar after switching to a new app. [RFHTMCRM-953]

### **Fixed issues in Citrix Receiver for HTML5 2.5**

Compared to: Citrix Receiver for HTML5 2.4

Citrix Receiver for HTML5 2.5 contains all fixes that were included in Versions 2.4 and earlier, plus the following, new fixes:

- After upgrading NetScaler Gateway to Version 12.0 with **appflow** set to enabled, sessions fails to launch. [RFHTMCRM-1539]
- When you set the browser language to **Spanish traditional (ES-ES)** and launch a session, the Spanish-Mexico Keyboard layout is set in the session instead of the selected Spanish traditional layout. [RFHTMCRM-1643]
- In a desktop session, when you enable **Automatically adjust clock for Daylight Saving** option in the Time zone settings, the displayed time zone is incorrect. [LC7818]

### **Fixed issues in Citrix Receiver for HTML5 2.4**

Compared to: Citrix Receiver for HTML5 2.3

Citrix Receiver for HTML5 2.4 contains all fixes that were included in Versions 2.3 and earlier, plus the following, new fixes:

- When you switch a published app to a full-screen mode, the client-side App Switcher is hidden. You can switch between apps using the **Switch Apps** option from the session toolbar. This fix is not applicable to touch devices. [RFHTMCRM-1420]

### Fixed issues in Citrix Receiver for HTML5 2.3

Compared to: Citrix Receiver for HTML5 2.2

Citrix Receiver for HTML5 2.3 contains all fixes that were included in Versions 2.2 and earlier, plus the following, new fixes:

- PDF printing does not work when the packages for HDX SDK and Citrix Receiver for HTML5 are hosted in different origins. [RFHTMCRM-301]
- When a user launches a Linux VDA session using HDX SDK, session ready event is not triggered. [RFHTMCRM-435]

### Fixed issues in Citrix Receiver for HTML5 2.1

Compared to: Citrix Receiver for HTML5 2.0

Citrix Receiver for HTML5 2.1 contains all fixes that were included in Versions 2.0 and earlier, plus the following, new fix:

- After launching a session, a single tap would erroneously perform a tap and hold function which displayed a contextual menu. This issue occurred intermittently on hybrid platforms and could also occur on other mobile devices. [621064]

### Known issues

November 8, 2018

#### Known issues in Citrix Receiver for HTML5 2.6.9

No new issues have been observed in this release.

#### Known issues in Citrix Receiver for HTML5 2.6.8

The following known issue has been observed in this release.

- With **SmartControlPolicy** enabled in the NetScaler Gateway, Citrix Receiver for HTML5 might fail to connect to the Linux VDA through NetScaler Gateway 12.0 or later versions.

As a workaround, you must disable **SmartControlPolicy** in the NetScaler Gateway. [NS-5165]

### Known issues in Citrix Receiver for HTML5 2.6.7

The following known issues have been observed in this release.

- In XenApp environments, when you click the **Multimonitor** button on the toolbar, a blank white screen might appear. The issue does not occur during the initial launch after your logon but is present in subsequent launches. [RFHTMCRM-2283]
- In XenApp environments, the mouse cursor might not align correctly when the mouse is pointing at the **Multimonitor** button. [RFHTMCRM-2284]

### Known issues in Citrix Receiver for HTML5 2.6.6

No new issues have been observed in this release.

### Known issues in Citrix Receiver for HTML5 2.6.5

The following known issue was observed in Version 2.6.5. This issue is fixed in Version 2.6.6.

- The secondary window does not open when you start a session in a primary window in windowed mode, change the session to full-screen mode, and click Multimonitor in the toolbar to extend the session to a secondary window. The primary window is restored to windowed mode. This issue is seen more on the Mac clients that are running on XenApp and XenDesktop 7.15 Cumulative Update 1. [RFHTMCRM-2210]

### Known issues in Citrix Receiver for HTML5 2.6.4

No new issues have been observed in this release.

### Known issues in Citrix Receiver for HTML5 2.6.3

No new issues have been observed in this release.

### Known issues in Citrix Receiver for HTML5 2.6.2

The following known issue has been observed in this release:

- If you use the **Print** command to start printing additional files before a single file completes printing, only the smallest file prints. The remaining files are not printed. This issue occurs if you have enabled [Enhanced PDF printing experience](#). [RFHTMCRM-2129]

### **Known issues in Citrix Receiver for HTML5 2.6.1**

No new issues have been observed in this release.

### **Known issues in Citrix Receiver for HTML5 2.6**

Citrix Receiver sessions become unresponsive when you use the Alt+Gr key combination on the On-Screen Keyboard (OSK). This issue occurs in the Internet Explorer and Mozilla Firefox browsers. [RFHTMCRM-1916]

### **Known issues in Citrix Receiver for HTML5 2.5.2**

No new issues have been observed in this release.

### **Known issues in Citrix Receiver for HTML5 2.5.1**

No new issues have been observed in this release.

### **Known issues in Citrix Receiver for HTML5 2.5**

No new issues have been observed in this release.

### **Known issues in Citrix Receiver for HTML5 2.4**

The following known issues have been observed in this release:

- When the Receiver for WebUI theme is enabled on the NetScaler Gateway with StoreFront Version 3.9, launching Citrix Receiver for HTML5 might display a blank screen. If you encounter this issue, upgrade your Citrix NetScaler to version 11.1.55.13 or 12.0.53.13. [683987]
- When Selective H.264 is enabled and you run a video, the audio portion of the video might break. To improve the performance, set the **Use Video Code for Compression** policy to **For the Entire Screen** in the Citrix Studio. [RFHTMCRM-1119]
- If NetScaler Gateway times out during a session, the dynamic icons for Maximize, Restore, and Multi-touch in toolbar might turn black. [RFHTMCRM-1480]

### **Known issues in Citrix Receiver for HTML5 2.3**

The following known issues have been observed in this release:

- When you play audio in a session, switching from the active session window might cause the audio to get distorted. [RFHTMCRM-1122]
- In a desktop session, the quality and performance of a video degrade when you reposition the video player app multiple times. [RFHTMCRM-1167]

### **Known issues in Citrix Receiver for HTML5 2.2**

The following known issues have been observed in this release:

- The app switcher taskbar might not be present when launching an application session in any supported browser on a Linux VDA running on Cent OS. [662540]
- When a new application is launched from StoreFront, session sharing might not work with a published application on a Linux VDA. [662560]

### **Known issues in Citrix Receiver for HTML5 2.1**

The following known issue has been observed in this release:

- Environments with multiple VM hosted apps on the same machine are not supported on mobile Chrome devices and Edge browsers. [649809]

### **Known issues in Citrix Receiver for HTML5 2.0**

The following known issues have been observed in this release:

- A session may exit unexpectedly while copying and pasting a large amount of data inside a session. Citrix recommends copying less than 10 MB of data when using the clipboard. [586671]
- Log files are not created in Edge browser. Changes made to local storage from one tab in Edge Browser is not reflected in other tabs that are already open. To resolve this issue, restart the browser. [589469]
- Citrix Receiver for HTML5 does not support the cross-language keyboard. [602652]
- In some rare instances, a session might display a white screen on touch devices. [619196]
- The virtual keyboard fails to pop up again when a user invokes it after manually closing it. [621063]

- When using the Chrome browser on a hybrid platform, using a three finger tap fails to invoke the virtual keyboard. [621067]
- The virtual keyboard fails to display on Edge and Firefox browsers run on a hybrid device. On Edge browsers, 3 finger tapping fails but the keyboard can be invoked with the keyboard button in the toolbar, or by using the floating auto keyboard button. [621472]
- In some cases, panning up/down is not smooth and left/right panning fails to work when running a session in Firefox on a hybrid device. At this release, Citrix Receiver for HTML5 does not support mobility on Firefox running on hybrid devices. [621477]
- In some cases, the auto hide feature is not functioning for mobile devices. [625000]
- Invoking a virtual keyboard in an Edge Browser of a hybrid device in a tablet made erroneously resizes the session. [626617]
- In some situations, the toolbar may not reposition properly on the screen when launching a session in an external monitor. [631446]
- The Show Scroll Bars option is set to 'Always' in MAC Preferences; use Scroll Session if the display resolution is more than the device's pixel ratio in the Safari browser.
- On a Continuum device, Citrix recommends that you launch a session in the mobile device and extend it to an external monitor.
- Citrix recommends that you use the VDA's suggested display resolution for a better user experience on a mobile platform.
- Launching multiple instances of the same application does not group them together; a new taskbar entry is created for each instance.
- There is no option to disable the client side app switcher.

## System requirements

July 23, 2019

This topic lists the supported Citrix product versions for Citrix Receiver for HTML5 and the requirements for users to access virtual desktops and applications. It is assumed that all computers meet the minimum hardware requirements for the installed operating system.

### User device requirements

Users require devices running the following web browsers and operating systems to access desktops and applications using Citrix Receiver for HTML5.



## **Browsers**

- Apple Safari 7 or later
- Google Chrome 50 or later
- Microsoft Edge
- Microsoft Internet Explorer 11
- Mozilla Firefox 35 or later

## **Operating systems**

- Windows 10
- Windows Phone 10
- Windows 8.1
- Windows 8 Pro and Enterprise (32-bit and 64-bit editions)
- Windows 7 Service Pack 1 (32-bit and 64-bit editions)
- Windows Server 2008 R2
- Windows Server 2012 R2
- Windows Server 2016
- Mac OS X 10.8 and later
- iOS (latest version)
- Android (latest version)

## **Supported Citrix server platforms**

Citrix Receiver for HTML5 supports access to desktops and applications through the following versions of StoreFront. Stores must be accessed through Citrix Receiver for Web sites. Citrix recommends the following:

- StoreFront 2.5 (or later)
- Citrix Receiver for HTML5 allows you to upgrade from any version of StoreFront 2.5 or later.

When users connect through NetScaler Gateway, Citrix Receiver for HTML5 can be used to access desktops and applications delivered by all the versions of XenDesktop and XenApp that are supported by StoreFront.

For direct connections through StoreFront without NetScaler Gateway, Citrix Receiver for HTML5 can be used to access desktops and applications delivered by the following product versions:

- XenDesktop 7.6 and later
- XenApp 6.5 (Hotfix Rollup Pack 3 or later and the Group Policy Management 1.7 update must also be installed on the XenApp 6.5 server)

## Secure user connections

In a production environment, Citrix recommends securing communications between Receiver for Web sites and users' devices with NetScaler Gateway and HTTPS. Citrix recommends using SSL certificates with a key size of at least 1024 bits throughout the environment in which Citrix Receiver for HTML5 is deployed. Citrix Receiver for HTML5 enables user access to desktops and applications from public networks with the following versions of NetScaler Gateway.

- NetScaler Gateway 10.5 or later

Citrix Receiver for HTML5 now supports CloudBridge disabling compression and printer compression as well as using HDX Insight analytics to display in CloudBridge Insight Center.

- CloudBridge 7.4 or later

### Note

If there is an issue connecting to the SSL-enabled VDA with Citrix Receiver for HTML5, configure the cipher suites as specified in [TLS settings on VDAs](#).

## Deploy

October 9, 2019

### Deploying Citrix Receiver for HTML5

#### To enable Citrix Receiver for HTML5 on StoreFront

You must enable Citrix Receiver for HTML5 on the Receiver for Web site for the StoreFront store that provides the desktops and applications you want to make available to Citrix Receiver for HTML5 users.

**Important:** In multiple-server StoreFront deployments, use only one server at a time to make changes to the configuration of the server group. Ensure that the Citrix StoreFront management console is not running on any of the other servers in the deployment. Once complete, propagate your configuration changes to the server group so that the other servers in the deployment are updated.

1. If you have not already done so, deploy StoreFront and create a store aggregating the desktops and applications you want to make available to Citrix Receiver for HTML5 users.

A Receiver for Web site is created automatically for new stores. For more information about creating StoreFront stores, see [Create a store](#).

2. In the Citrix StoreFront management console, select the Receiver for Web node in the left pane. From the results pane, select the site providing resources for Receiver for HTML5 users and, in the Actions pane, click **Deploy Citrix Receiver**.
3. Enable Citrix Receiver for HTML5 by selecting one of the following options.
  - If you want users to access desktops and applications from the site using a locally installed version of Citrix Receiver, where available, select **Use Receiver for HTML5 if local install fails**. Users who already have Citrix Receiver installed cannot use Citrix Receiver for HTML5 to access resources from the site. Windows and Mac OS X users without Citrix Receiver are prompted to install it every time they log on to the site, but can use Citrix Receiver for HTML5 if they are unable to install Citrix Receiver.
  - If you want all users to access desktops and applications from the site through Citrix Receiver for HTML5 regardless of whether they have a locally installed version of Citrix Receiver, select **Always use Receiver for HTML5**.
4. If you changed the port used when you allowed WebSocket connections on XenDesktop or XenApp, complete the following steps to change the WebSocket port for the Citrix Receiver for Web site.
  - a) Use a text editor to open the web.config file for the Citrix Receiver for Web site, which is typically located in the C:\inetpub\wwwroot\Citrix\storenameWeb directory, where *storename* is the name specified for the store when it was created.
  - b) Locate the following element in the file.

```
<html5 ... preferences="..." />
```
  - c) Set the value of the preferences attribute to **wsPort:portnumber;**, where *portnumber* is the port that you configured in the policy.

### To enable direct connections to XenApp and XenDesktop

Citrix Receiver for HTML5 uses the WebSocket protocol to access virtual desktops and hosted applications. By default, WebSocket connections are prohibited on XenDesktop and XenApp. If you plan to enable users to access desktops and applications from the local network without connecting through NetScaler Gateway, allow WebSocket connections on XenApp and XenDesktop.

WebSocket connections are also disabled by default on NetScaler Gateway. For remote users accessing their desktops and applications through NetScaler Gateway, you must create an HTTP profile with WebSocket connections enabled and either bind this to the NetScaler Gateway virtual server or apply the profile globally. For more information about creating HTTP profiles, see HTTP Configurations.

### Warning

Editing the registry incorrectly can cause serious problems that may require you to reinstall your operating system. Citrix cannot guarantee that problems resulting from the incorrect use of Registry Editor can be solved. Use Registry Editor at your own risk. Be sure to back up the registry before you edit it.

### Note

If you are using SecureICA to encrypt communications between users' devices and your XenDesktop or XenApp servers, Citrix Receiver for HTML5 supports **Basic** encryption only.

## To enable connections to XenApp and XenDesktop using Provisioning Services

To deploy provisioned (non-persistent) machines using Provisioning Services, create the machine catalog and delivery group on which you want to enable Citrix Receiver for HTML5 connections. Ensure that the configured WebSocket policies apply to your machine catalog.

Restart the machine to apply the WebSocket policies. For Provisioning Services-based machines configured to use persistent write cache files and machines deployed using MCS (which have separate identity disks), the policies are persisted when the machines restart. However, for Provisioning Services-based machine catalogs configured to use temporary write cache files, these policies must be applied to the vDisk or they will not be implemented successfully on target devices.

Complete the following steps to ensure that the policies are correctly applied to the vDisk.

1. Using the Provisioning Services console, shut down a target device that is part of the machine catalog and delivery group. Change the access type of the target device from Production to Maintenance.  
  
For details, see [Target Devices](#). You must use a target device that is part of the machine catalog and delivery group or the policies will not be applied.
2. Create a new version of your vDisk and set the Access to Maintenance. For details, see [Manually updating a virtual disk image](#).
3. Start the maintenance target device, selecting the maintenance vDisk version from the boot menu. Verify that the following keys are added to the registry.
  - a) HKEY\_LOCAL\_MACHINE\SOFTWARE\Policies\Citrix\ICAPolicies\AcceptWebSocketsConnections
  - b) HKEY\_LOCAL\_MACHINE\SOFTWARE\Policies\Citrix\WebSocketsPort
  - c) HKEY\_LOCAL\_MACHINE\SOFTWARE\Policies\Citrix\WSTrustedOriginServerList
4. Shut down the target device, change the target device access type back to Production, and promote the new vDisk version to production. Then, start the target device and restart any other target devices currently running from the existing vDisk.

If you do not use vDisk versioning, you can apply the policies to your base vDisk image by shutting down all the target devices that use the vDisk, placing the vDisk in Private Image mode, and then starting the target device to update the image.

## Configure

November 16, 2018

To enable users to access resources hosted on XenDesktop and XenApp in their browsers, you must create a StoreFront store and enable Citrix Receiver for HTML5. You must also enable WebSocket connections on NetScaler Gateway, XenApp, and XenDesktop, as required. Additionally, you can enhance the user experience by installing optional components on the machines providing the desktops and applications.

### Configuring multi-monitor display

Multi-monitor display lets you create a secondary window of the desktop or application session to which you are connected. You can then drag the secondary window to the secondary monitor.

Multi-monitor display is available for both desktop and application sessions.

To switch to multimonitor mode, click **Multimonitor** in the toolbar. Doing so creates a secondary window with a 1024x768 resolution. It also updates the server with the dual monitor information. You can drag and resize the secondary window and even go to full-screen mode on one or both monitors. Every time you resize the window, the secondary window resolution is updated on the server. To exit multi-monitor mode, close the secondary window.



Even though the resolution details of the secondary monitor are unknown to Citrix Receiver, multi-monitor mode gives you the flexibility of resizing to adjust to the resolution you prefer.

For the session to take focus, click **Multimonitor** in the toolbar.

This feature is enabled by default.

To disable the feature, edit the **configuration.js** file and set the value of the **multiMonitor** property to **false**.

```
1   'ui' : {
2
3       'toolbar' : {
4
5           'multiMonitor' : true
6       }
7   ,
```

### Limitations:

- This feature is supported on desktop browsers except for Internet Explorer and Edge.
- On a Mac, the secondary window opens as a new tab in Chrome. When you drag this secondary window directly to the secondary monitor and resize it, the window might become invisible with an entry being shown in the Chrome taskbar.

*Workaround:* Drag the window to the primary monitor and then back to the secondary monitor.

### Configuring Custom Cursor

Citrix Receiver for HTML5 now supports custom cursors on the Microsoft Internet Explorer (IE). This enhancement ensures that you have a consistent browsing experience across browsers. By default, the custom cursor is enabled.

#### To disable the custom cursor in Microsoft IE or Edge using configuration.js

The configuration.js file is located in the HTML5Client folder. Edit this file to configure Citrix Receiver for HTML5 by performing the following step:

Open the **configuration.js** file and set the value of **'handleMouseCursorUsingDivForIE'** under **ui** to false.

```
'ui': {
'handleMouseCursorUsingDivForIE': false
}
```

### Configuring CEIP

#### Note

- When CEIP is disabled, minimal information, containing the installed Receiver for HTML5 version is uploaded; this happens weekly. This minimal information is valuable to Citrix because it provides the distribution of different versions used by customers.

- When Citrix Receiver for Chrome is launched in a public session mode, CEIP data is not collected.

No user identifiable information is collected from the customer environment with CEIP; collected information includes:

- System information details like the version of operating system installed version of Citrix Receiver, language, and the browser version.
- Usage tracking details like statistics of application launch over the course of a week, monitor resolutions, graphics mode, decoder, renderer.
- Critical to quality details like connection and launch failures and statistics on session connection time.
- Configuration tracking details like datapoints tracking to check if a feature is enabled or disabled.

### To disable CEIP using configuration.js

In Citrix Receiver for HTML5, the configuration.js file is located in the HTML5Client folder. Edit this file to configure Citrix Receiver for HTML5.

#### Note

- Citrix recommends that you back up the configuration.js file before making any changes to it.
- Citrix recommends using this method only if Citrix Receiver for Chrome is repackaged for users.
- Administrator-level credentials are required to edit the configuration.js file; after editing the file, repackage the app for the changes to take effect.

1. Open the configuration.js file and set the enabled attribute under ceip to false.

```
'ceip' : {  
    'enabled' : false  
}
```

### To disable CEIP graphical user interface

#### Note

You can modify the CEIP settings using graphical user interface only when the administrator has enabled it using configuration.js.

1. Launch Citrix Receiver for HTML5.
2. From the toolbar, select **Preferences**.

3. Uncheck **Help improve Receiver by sending anonymous usage statistics**.

#### Note

Relaunch the session for the changes to take effect.

## Configuring selective H.264

### Configuring selective H.264 using the configuration.js file

#### Note

- Citrix recommends that you back up the configuration.js file before making any changes to it.
- Citrix recommends using this method only if Citrix Receiver for Chrome is repackaged for users.
- Administrator-level credentials are required to edit the configuration.js file; after editing the file, repackage the app for the changes to take effect.

By default, selectiveH264 is set to **true**.

The configuration.js file is located under C:\program Files\Citrix\Receiver Storefront\HTML5Client. Edit this file and change **selectiveH264** to **false** as shown below.

```
'graphics': {  
    'selectiveH264': false  
}
```

## Configuring PDF printing

### To configure PDF printing

The Citrix PDF Universal Printer driver enables users to print documents opened with hosted applications or applications running on virtual desktops delivered by XenApp and XenDesktop Version 7.6. When a user selects the Citrix PDF Printer option, the driver converts the file to PDF and transfers the PDF to the local device. The PDF is then opened in a new browser tab for viewing and printing from a locally attached printer.

If you want to enable users to print documents opened with hosted applications or applications running on virtual desktops delivered by XenDesktop 7.6 and XenApp 7.6, complete the following steps.

1. Download the Citrix PDF Printing Feature Pack and install the Citrix PDF Universal Printer driver on each machine providing desktops or applications for Citrix Receiver for HTML5 users. After installing the printer driver, restart the machine.



2. In Citrix Studio, select the Policy node in the left pane and either create a new policy or edit an existing policy. For more information about configuring XenDesktop and XenApp policies, see [Policies](#).
3. Set the **Auto-create PDF Universal Printer** policy setting to **Enabled**.

## Enhanced PDF printing experience

In earlier releases, when attempting to print a PDF, a **Continue** print dialog appeared, prompting your confirmation to print.

With this release, the **Print** window appears within your Receiver session. You can directly print the document from the **Print** window.

This enhancement is fully supported and enabled by default in Chrome and Firefox. To disable it in Chrome and Firefox, set the value of **supportedBrowsers** to **false** in the **configuration.js** file. The configuration.js file is located under C:\program Files\Citrix\Receiver Storefront\HTML5Client.

This enhancement is partially supported in Internet Explorer 11 with some known limitations, and disabled by default. To enable this feature in Internet Explorer, set the value of **IE** to **true** in the **configuraton.js file**. The configuration.js file is located under C:\program Files\Citrix\Receiver Storefront\HTML5Client.

```
1      'pdfPrinting' : {
2
3          'directPrint' : {
4
5
6
7      'supportedBrowsers':true,
8
9
10         'IE':false
11     }
12
13 }
```

### Limitations:

- In Internet Explorer, the content of a printed PDF is scaled down and does not fit the page.
- In Internet Explorer, when printing a large file or a file with a large number of pages, the browser might stop responding or the print operation might fail intermittently.

### To suppress the Continue print dialog

When the enhanced printing experience feature is disabled, you can print a PDF by suppressing the appearance of the **Continue** print dialog.

By default, the **printDialog** property of the **hide** object is set to **false**.

The configuration.js file is located under C:\program Files\Citrix\Receiver Storefront\HTML5Client.

To do this, set the **printDialog** property of the **hide** object to **true**.

#### Note

- Citrix recommends that you back up the configuration.js file before making any changes to it.
- Citrix recommends using this method only if Citrix Receiver for Chrome is repackaged for users.
- Administrator-level credentials are required to edit the configuration.js file; after editing the file, repackage the app for the changes to take effect.

```
1      {
2
3
4
5      'ui' : {
6
7
8
9      "hide":{
10
11
12
13      'printDialog': true
14
15
16      }
17
18
19
20      }
21
22
23
24      }
```

## Session reliability

With session reliability, the session remains active on the server. To indicate that connectivity is lost, the user's display freezes until connectivity resumes on the other side of the tunnel. The user continues to access the display during the interruption and can resume interacting with the application when the network connection is restored. Session reliability reconnects users without reauthentication prompts.

### Note

Citrix Receiver for HTML5 users cannot override the server setting.

You can use session reliability with Transport Layer Security (TLS).

### Note

TLS encrypts only the data sent between the user device and NetScaler Gateway.

For more information on configuring session reliability, see [Session reliability policy settings](#) in XenApp and XenDesktop documentation.

## Mobility support

### To enable the auto soft keyboard popup

To enable this feature, configure the automatic keyboard policy to display the soft keyboard when clicking any editable area:

1. Open Citrix Studio on DDC.
2. Select **Policies**.
3. Click **Create Policy**.
4. Search for **Automatic Keyboard Display** and select **Allowed**.

## User experience

November 8, 2018

Citrix Receiver for HTML5 integrates with Citrix Receiver for Web sites. To access their virtual desktops and hosted applications using Citrix Receiver for HTML5, users navigate to a Citrix Receiver for Web site using a compatible browser running on a supported operating system.

The user experience with Citrix Receiver for HTML5 is as follows:

- If you did not configure the site to always use Citrix Receiver for HTML5, the site attempts to determine whether Citrix Receiver is installed locally on devices running Windows and Mac OS X. When Citrix Receiver cannot be detected, users are prompted to download and install the appropriate Citrix Receiver for their platform. For users who are unable to install Citrix Receiver, this happens every time they log on to the Citrix Receiver for Web site. Users who already have Citrix Receiver installed locally must use this version to access resources from the site and are not given the option to use Citrix Receiver for HTML5. When you configure the Citrix Receiver for Web site to always use Citrix Receiver for HTML5, all users must access resources from the site through Citrix Receiver for HTML5 regardless of whether they have a locally installed version of Citrix Receiver.
- When users access a desktop or application through Citrix Receiver for HTML5, the resource starts in a new browser tab or window, according to the user's browser settings. You can configure Citrix Receiver for HTML5 so that resources are always started in the same tab as the Citrix Receiver for Web site. For more information, see [To configure Citrix Receiver for HTML5 use of browser tabs](#).
- When a user starts an additional application, Citrix Receiver for HTML5 checks whether the application can be started within an existing session before creating a new session. This enables users to access multiple applications over a single connection so that the available resources are used more efficiently.

### File Transfer

By default, users can:

- Upload files from a local download folder or attached peripheral and seamlessly access the data from a XenDesktop sessions.
- Download files from a XenDesktop session to a folder or peripheral on their user device.

Administrators can selectively enable or disable file transfer, uploads, or downloads through policies in Citrix Studio.

### Requirements

- XenDesktop 7.6 or XenApp 7.6, with:
  - Hotfix ICATS760WX64022.msp on server OS VDAs (Windows 2008 R2 or Windows 2012 R2)
  - Hotfix ICAWS760WX86022.msp or ICAWS760WX64022.msp on client OS VDAs (Windows 7 or Windows 8.1)
- To change file transfer policies: Group Policy Management (GPM) hotfix GPMx240WX64002.msi or GPMx240WX86002.msi on machines running Citrix Studio

## Limitations

- A user can upload or download a maximum of 10 files at a time.
- Maximum file size:
  - For uploads: 2147483647 bytes (2 GB)
  - For downloads: 262144000 bytes (250 MB)

## File Transfer policies

By default, file transfer is enabled. Use Citrix Studio to change these policies, located under User Setting < ICA\File Redirection. Consider the following when using file transfer policies:

- Allow file transfer between desktop and client. Allows or prevents users from transferring files between a virtual XenDesktop session and their devices.
- Upload file to the desktop. Allows or prevents users from uploading files from their device to a virtual XenDesktop session.
- Download file from desktop. Allows or prevents users from downloading files from a virtual XenDesktop session to their device.

## Enhanced clipboard support

Prior to introducing this feature, Citrix Receiver did not support copying and pasting HTML-formatted text from a local application to another application (for example, Microsoft Excel) using the Paste Special feature. As a result, the targeted app (in this case, Microsoft Excel) would not retain its HTML formatting characteristics.

Citrix Receiver for HTML5 supports HTML format in addition to plain text between client and a session. This support is useful for Office apps and browsers. Enhanced clipboard support is only available on Chrome and Safari browsers. You can copy HTML content and retain formatting; when copying a link in Chrome, a <img> tag is added in HTML format, which effectively allows you to copy images as well as text. This feature is richer than plain text but does not work in all applications.

### **To configure clipboard support, add the following registry entry to the VDA:**

```
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Citrix\wfs\Virtual Clipboard\Additional
Formats\HTML Format
"Name"="HTML Format"
```

For additional information about the issues resolved by the introduction of this feature, see Knowledge Center article [CTX086028](#).

### Warning

Using Registry Editor incorrectly can cause serious problems that can require you to reinstall the operating system. Citrix cannot guarantee that problems resulting from incorrect use of Registry Editor can be solved. Use Registry Editor at your own risk. Make sure you back up the registry before you edit it.

## Configuring toolbar

By default, the enhanced toolbar feature is enabled.

To hide the toolbar:

1. While logged in as an administrator, access the **configuration.js** file in **C:\ProgramFiles\Citrix\Receiver StoreFront\HTML5Client**.
2. Search the configuration.js file to locate 'menubar key.'
3. In the configuration.js file, set "**menubar**":false.

You can also hide an individual icon to prevent it from showing up in the toolbar. For example, to hide the ctrl+alt+del button in the toolbar:

1. While logged in as an administrator, access the **configuration.js** file in **C:\ProgramFiles\Citrix\Receiver StoreFront\HTML5Client**.
2. Search the configuration.js file to locate 'lock.'
3. In the configuration.js file, set "**lock**":false.

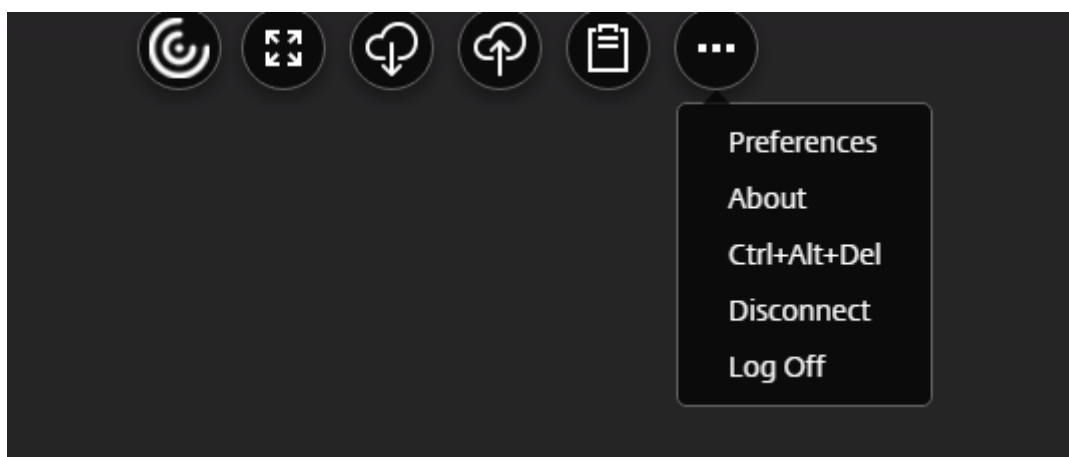
## Session sharing

For session sharing to occur, the applications must be hosted on the same machine and must be configured in seamless window mode with the same settings for parameters such as window size, color depth, and encryption. Session sharing is enabled by default when a hosted application is made available.

If App Switcher is installed on the machine providing the applications, a taskbar appears at the bottom of the window. The taskbar displays all the applications currently running in the session, enabling users to switch between those applications. Users can configure the taskbar to auto-hide and switch to small icons to minimize the amount of space taken up by the taskbar.

A floating toolbar containing controls for Citrix Receiver for HTML5 is displayed in the browser tab, as shown in the following figure. The clipboard button enables users to copy and paste Unicode plain text between the local clipboard on the device and the resource running in the browser. Users can use standard Windows shortcuts to copy data, including text, tables, and images, between hosted

applications, both within the same session and between different sessions. Users can also send the CTRL+ALT+DELETE key combination to their desktops and applications using a button on the toolbar.



When printing a document opened with a hosted application or an application running on a virtual desktop, the user is given the option to print the document to PDF. The PDF is then transferred to the local device for viewing and printing from a locally attached printer. The file is removed from the device when the user closes the PDF.

A user who clicks a link in a document opened using a hosted application is given the choice of whether to open the URL in a hosted browser application within the session or to use the browser on the local device.

### **Citrix Receiver for HTML5 logs**

Citrix Receiver for HTML5 provides timestamps for the logs generated by the user device.

**To assist with troubleshooting issues, you can view Citrix Receiver for HTML5 session logs.**

The log page allows users to:

- Enable Logging: Enable logging to view the HTML5 logs.
- Disable Logging: Disable logging to stop logging in a session.
- View logs: View the logs generated for a session.
- Clear logs: Delete the log file generated in a session.
- Download log file: Download the log file to a desired location.

**To view Citrix Receiver for HTML5 logs by navigating to the log page:**

1. Log on to the Citrix Receiver for Web site.
2. In another browser tab or window, navigate to `siteurl/Clients/HTML5Client/src/ViewLog.html`, where site url is the URL of the Citrix Receiver for Web site, typically `<http://server.domain/Citrix/StoreWeb>`.
3. On the logging page, click Start Logging.

4. On the Citrix Receiver for Web site, access a desktop or application using Citrix Receiver for HTML5.

The log file generated for the Citrix Receiver for HTML5 session is shown on the logging page. You can also download the log file for further analysis.

**To view Citrix Receiver for HTML5 logs using the toolbar:**

1. Log on to the Citrix Receiver for Web.
2. In the Citrix Receiver for Web, access a desktop or application.
3. From the session toolbar, select **Logging**.
4. Click **Start Logging**.

## SDK and API

November 8, 2018

Citrix Receiver for HTML5 enhances support for HDX and SDK sessions by enabling you to customize your delivery model for Citrix hosted apps and desktops through your website. This feature is particularly useful for building a rich app experience in your Enterprise portals. It can be used to provide a rich app experience for users as a service when hosting Citrix Receiver for HTML5 on your web server while launching Citrix hosted apps and desktops from your website.

For the HDX SDK for Citrix Receiver for HTML5 documentation, see [HDX SDK for HTML5](#).

For HDX SDK examples, refer to the Citrix [download](#) page.







### **Locations**

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