Citrix Remote Browser Isolation

Contents

Remote Browser Isolation

May 29, 2024

The Citrix Remote Browser Isolation service (formerly Secure Browser service) isolates web browsing to protect the corporate network from browser-based attacks. Remote Browser Isolation service delivers consistent, secure remote access to internet hosted web applications, with no need for user device configuration. Administrators can rapidly roll out remote isolated browsers, providing instant time-to-value. By isolating internet browsing, IT administrators can offer end users safe internet access without compromising enterprise security.

Users log on through Citrix Workspace (or Citrix Receiver) and can open web apps in the configured web browser. The website does not directly transfer any browsing data to or from the user device, so the experience is secure.

The Remote Browser Isolation service can publish remote isolated browsers for use with:

- **Shared Passcode external web apps.** If you publish a browser with shared passcode authentication, users must enter the passcode to launch an app.
- **Authenticated external web apps.** When you publish authenticated external web apps and launch the apps using Citrix Workspace, the Remote Browser Isolation service requires a resource location containing at least one Cloud Connector (two or more are recommended). For details, see Citrix Cloud Connector. For authenticated apps, you must add users with Citrix Cloud Library.
- **Unauthenticated external web apps.** When you publish unauthenticated external web apps and launch the apps using Citrix Workspace, the Remote Browser Isolation service requires a resource location containing at least one Cloud Connector (two or more are recommended). For details, see Citrix Cloud Connector.

  Although typically not recommended, unauthenticated external web apps might be used for a simple proof of concept.

For more information, see Publish a remote isolated browser.

The service also offers:

- Integration of published apps with Citrix Workspace
- Integration of published apps with on-premises StoreFront
- Simple URL allow list function for security
- Usage monitoring
- Controls for clipboard use, printing, kiosk mode, region failover, and client drive mapping

Remote Browser Isolation service with Citrix Secure Private Access

You can launch the published browsers of the Remote Browser Isolation Service by using the Citrix Secure Private Access console for accessing the Enterprise Web, TCP, and SaaS applications. You can also redirect the unsanctioned websites to open in the published browsers of the Remote Browser Isolation service through Citrix Secure Private Access.

For more information about accessing the isolated remote browsers through Citrix Secure Private Access, see the Configure an access policy with multiple rules and Unsanctioned websites in the Citrix Secure Private Access documentation.

Reference articles

- Secure Private Access service solution overview
- Citrix Cloud
- Self-service search for Remote Browser Isolation (Secure Browser)
- Citrix Enterprise Browser
- Security and Compliance Information
- Developer documentation

What's new in related products

- Secure Private Access
- Citrix Enterprise Browser
- Citrix Analytics for Security

What's new

October 4, 2022

July 2022

- **Remote Browser Isolation supports authentications for all apps with Azure Active Directory.**
  - Users can now sign in to any Remote Browser Isolation app from Citrix Workspace using Azure Active Directory credentials.
  - When Remote Browser Isolation users sign in, they use the Workspace sign-in page that you configured for your site. For more information, see Integration with Citrix Workspace.

September 2021

- **Remote Browser Isolation supports bidirectional audio**. Bidirectional audio is available in Remote Browser Isolation.
- **Remote Browser Isolation launches from launch.cloud.com are authenicated by Citrix Cloud authentication**. When users launch Remote Browser Isolation apps using the launch.cloud.com URL, Citrix Cloud authentication handles their credentials. This enhances security but does not change the user experience.

March 2021

- **Remote Browser Isolation supports authentication with Azure Active Directory**. Users can now sign in to Remote Browser Isolation apps from Citrix Workspace using Azure Active Directory credentials. For more information, see Integration with Citrix Workspace.
- **Remote Browser Isolation lets you monitor and log off users'active sessions**. Remote Browser Isolation provides user name, session ID, client IP, authentication type, application name, session start time, and session duration information about users'active sessions. You can view basic information about each active session and disconnect the session if needed. For more information, see Monitor active sessions.

Releases in 2020

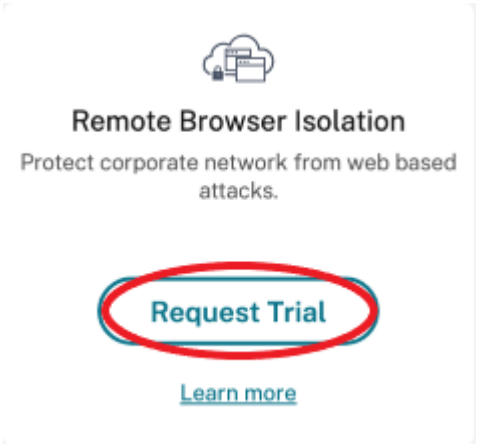
All releases of 2020 contain enhancements that help improve overall performance and stability.

Get started with Remote Browser Isolation

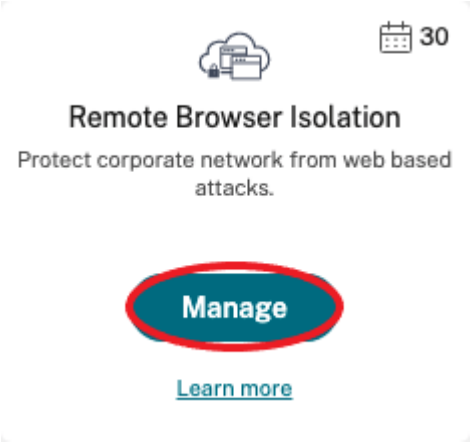
May 12, 2023

Here's a video about getting started with Remote Browser Isolation service (formerly Secure Browser service).

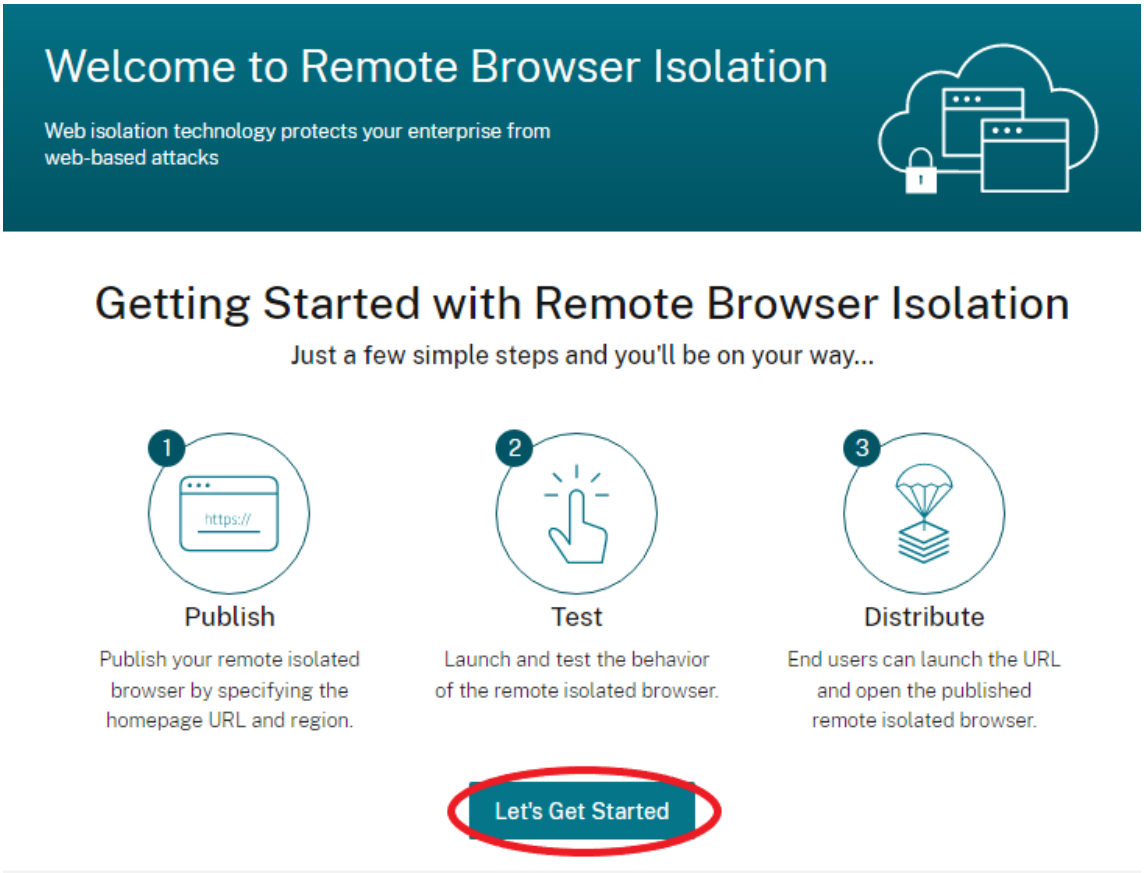
1. Sign in to Citrix Cloud. If you don't have an account, see Sign up for Citrix Cloud. You can request a 30-day trial of the Citrix Remote Browser Isolation.
2. In the **Remote Browser Isolation** tile, click **Request Trial**.



3. In a few moments, you will receive an email (the email associated with your Citrix Cloud account). Click the **Sign-in** link in the email.
4. After you're in Citrix Cloud again, click **Manage** on the **Remote Browser Isolation** tile.



5. On the **Welcome to Remote Browser Isolation** page, click **Let's Get Started**.



6. Select the type of remote isolated browser to publish: shared passcode, authenticated, or unauthenticated. Then click **Continue**.

   By default, users must launch apps with shared passcode authentication using launch.cloud.com. Citrix Workspace and the Citrix Cloud Library do not support apps with shared passcode.

   To use Citrix Workspace, you must publish authenticated apps and explicitly assign subscribers (users) or groups in the Citrix Cloud Library. The unauthenticated apps are available to all Work-

space subscribers without user assignment.

7. Configure the following settings:

   - **Name:** Type a name for the app you are creating.
   - **Start URL:** Specify the URL that opens when users start an app.
   - **Region:** Choose the location/region for the server. Available regions are West US, East US, Southeast Asia, Australia East, and West Europe.

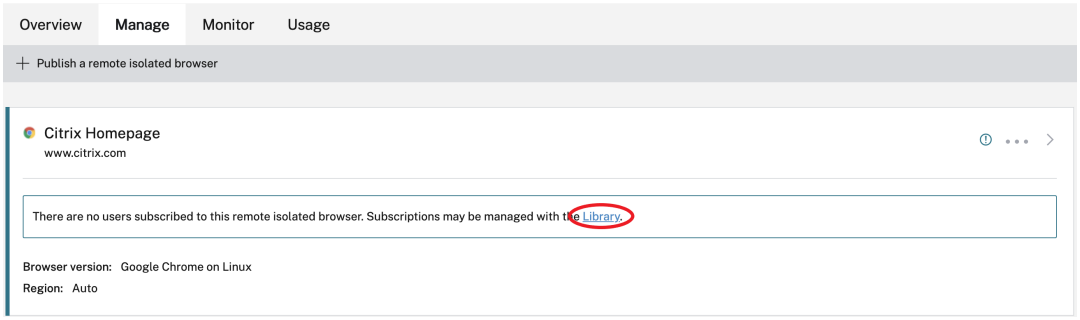
     If you select **Auto**, your isolated browser connects you to the closest region based on your geolocation.
   - **Passcode:** If you selected a browser with shared passcode authentication, enter the passcode to provide an enhanced secure access to your app. The passcode must be at least 10 characters long with at least 1 numeral and 1 symbol. Ensure that you save the passcode and share it with your users. Users must enter the passcode when they launch an app using launch.cloud.com.
   - **Icon:** By default, the icon of the Google Chrome executable is used when you publish an isolated browser. You can now choose your own icon to represent a published browser.

     Click **Change icon > Select icon** to upload the icon of your choice, or choose **Use default icon** to use the existing Google Chrome icon.

   Click **Publish**.

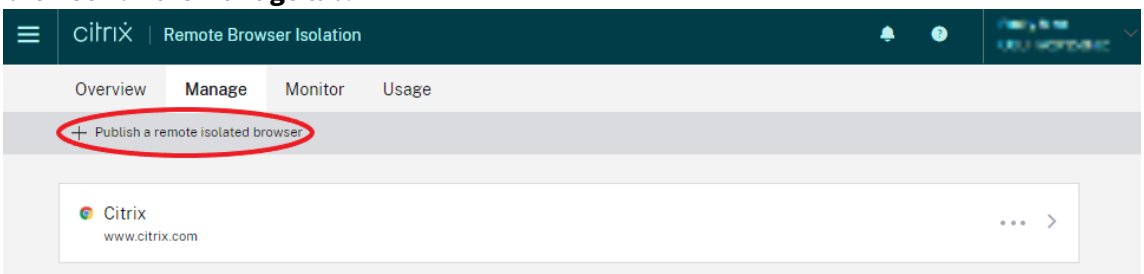
8. The **Manage** tab lists the browser you published. To launch the browser you just created, click the ellipsis on the tile containing the isolated browser and click **Launch Published Browser**.

   - If you published an authenticated isolated browser, you must use the Citrix Cloud Library to add users or groups. Click the right arrow at the end of the row to expand the details pane containing a link to the Library.

     When you click the link provided, you are guided to the Library display containing your remote isolated browser. Click the ellipsis on the tile containing the isolated browser and click **Manage Subscribers**. For information about adding subscribers, see Assigning users and groups to service offerings using Library.

You can publish another remote isolated browser by clicking **Publish a remote isolated browser** on the **Manage** tab.



For information about purchasing the Citrix Remote Browser Isolation service (formerly Citrix Secure Browser service), visit https://www.citrix.com/products/citrix-remote-browser-isolation/.

Integration with Citrix Workspace

Remote Browser Isolation can be integrated with Citrix Workspace. To ensure that it's integrated:

1. Sign in to Citrix Cloud.
2. In the upper left menu, select **Workspace Configuration**.
3. Select the **Service Integrations** tab.
4. Confirm that the Remote Browser Isolation service entry indicates **Enabled**. If it does not, click the ellipsis menu and select **Enable**.

If you haven't already done so, configure the Workspace URL, external connectivity, and workspace authentication for your Workspace, as described in Configure authentication to workspaces.

Remote Browser Isolation supports authentication with Active Directory and Azure Active Directory. Authentication with Active Directory is configured by default. For information about configuring authentication using Azure Active Directory, see Connect Azure Active Directory to Citrix Cloud.

If you configure authentication using Azure Active Directory, the on-premises domain containing your Active Directory domain controllers must contain one (preferably two) Cloud Connectors.

Integrate with your on-premises StoreFront

Citrix Virtual Apps and Desktops customers with an on-premises StoreFront can easily integrate with the Remote Browser Isolation service to provide the following benefits:

- Aggregate your published remote isolated browsers with your existing Citrix Virtual Apps and Desktops apps for a unified store experience.
- Use native Citrix Receivers for enhanced end user experience.
- Strengthen security for Remote Browser Isolation launches by using your existing multifactor authentication solution integrated with your StoreFront.

For details, see CTX230272 and the StoreFront configuration documentation.

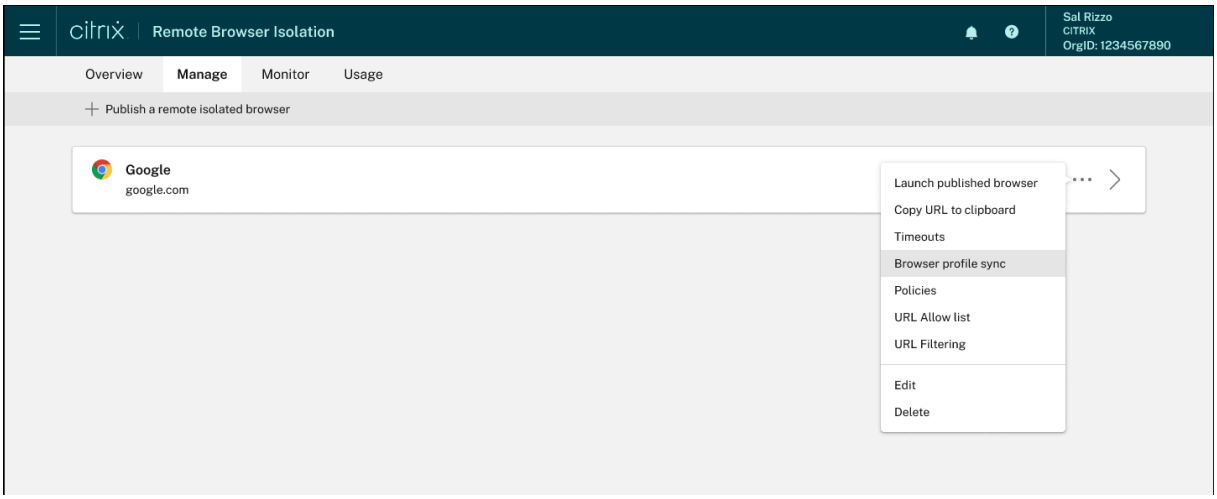
Manage and monitor remote isolated browsers

February 20, 2024

You can now manage, monitor, and check usage of the published browsers in Remote Browser Isolation.

Manage

The **Manage** tab lists the published browsers. To access management tasks, click the ellipsis at the right-end of the published browser, and then select the required task.



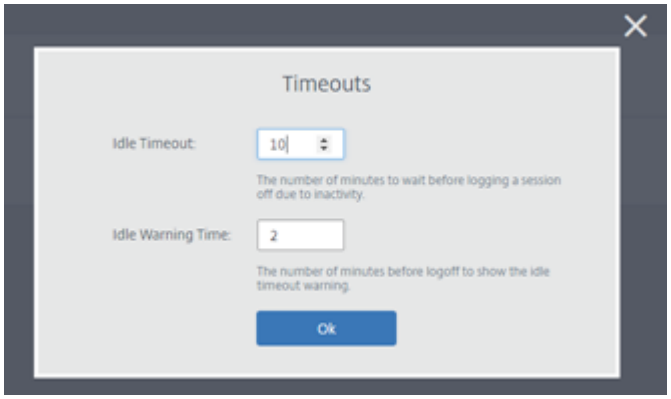
If you select a menu entry, and then decide not to change anything, cancel the selection by clicking the **X** outside the dialog box.

You can manage the published isolated browser using the following tasks:

- **Launch published browser:** Opens the published browser session. After publishing the browser, you can select this task to verify the launch of the published browser session.
- **Copy URL to clipboard:** Copies the URL of the published browser. You can share this URL with end users to access the published browsers.
- **Timeouts:** You can set the **Idle timeout** and **Idle Warning time** by selecting the **Timeouts** task.
  - **Idle Timeout:** The number of minutes a session can stay idle before it's ended due to inactivity.
  - **Idle Warning Time:** The number of minutes before ending a session that a warning message is sent to the user.

  For example, if you set Idle Timeout to 20 and Idle Warning Time to 5, the system will display a warning message if there is no activity in the session for 15 minutes. If the user does not respond, the session ends five minutes later.

  To set **Idle timeout** and **Idle Warning time** of the published isolated browser, select the **Timeouts** task and set the time for **Idle Timeout** and **Idle Warning time** in the **Timeouts** dialog box. Then, click **OK** to save the changes.

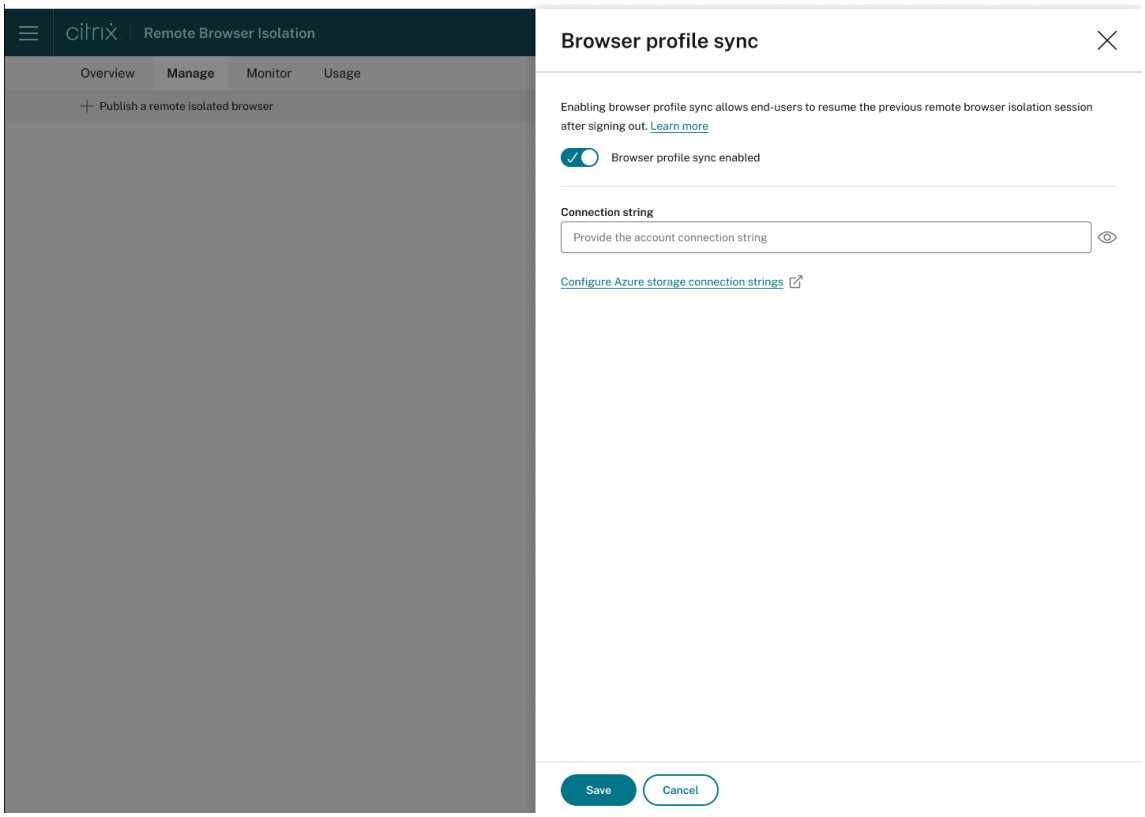


- **Browser profile sync**: Allows end users to resume their previous browser session after they sign out. Administrators can specify a connection string for their Azure storage to enable the storage of the browser's profile. When the user opens another browser session with the same profile, it restores the previous browser session from where the user left off. If the user has logged into any websites, then these websites are responsible for authentication. Although this feature can save sessions, cookies, and other information, the website might require the user to sign in again. Currently, this feature only supports tab restoration.

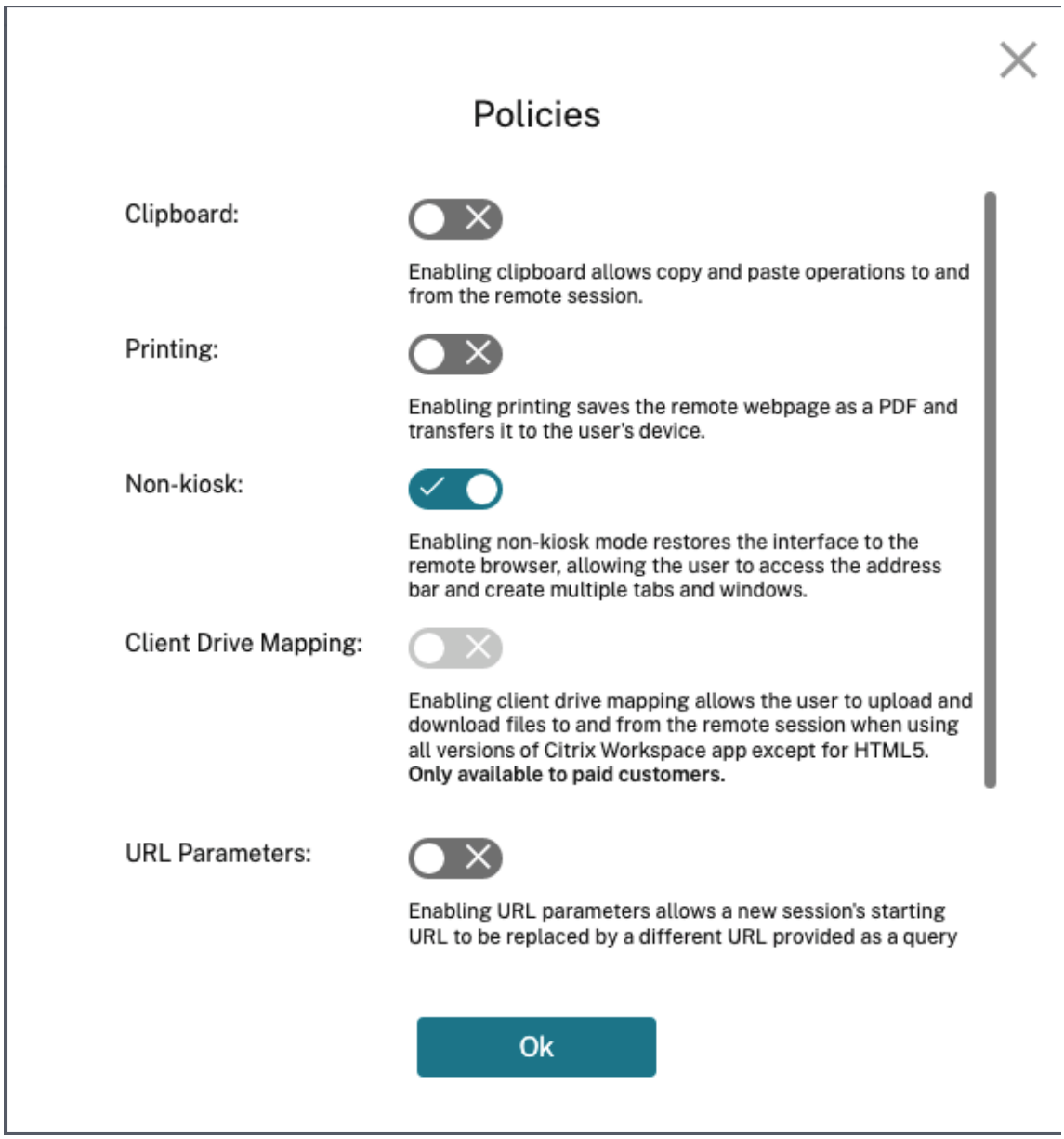
  To enable the **Browser profile sync** feature, do the following steps:

  1. Select the **Browser profile sync** task for the required published browser.
  2. In the **Browser profile sync** dialog box, enable the **Browser profile sync** and enter the **Connection string**. For more information about configuring the connection string, see Configure Azure Storage connection strings in the Azure Blob storage documentation.

3. Click **Save**.



- **Policies:** You can set policies for the published browsers.

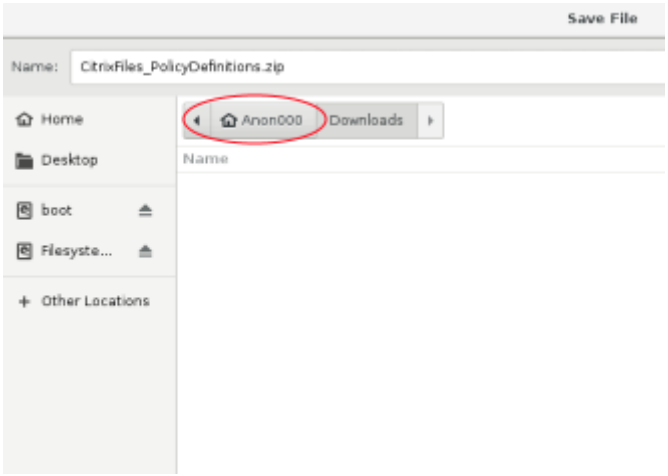


Settings on the policies page control the following:

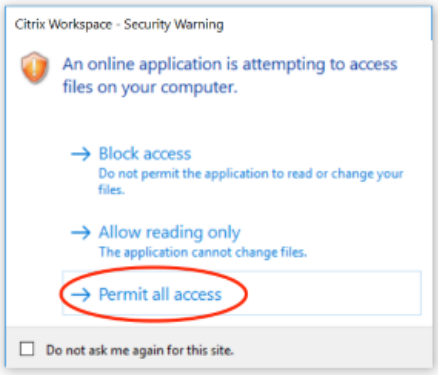
- **Clipboard:** Enabling the Clipboard policy allows copy and paste operations to and from the remote session. (Disabling the Clipboard policy removes the Clipboard button from the Citrix Workspace app toolbar.) By default, this setting is disabled.
- **Printing:** Enabling printing saves the remote webpage as a PDF and transfers it to the user's device. The user can then press Ctrl-P and select the Citrix PDF printer. By default, this setting is disabled.
- **Non-kiosk:** Enabling non-kiosk mode restores the interface to the remote browser. The user can then access the address bar and create multiple tabs and windows. (Disabling non-kiosk mode removes the remote browser's navigation controls and address bar.) By

default, this setting is enabled (non-kiosk mode is on).

- **Region failover:** The Region failover policy automatically transfers your published browser to a different region if your current region is reporting an issue. To opt out, disable the Region failover policy. If you published the browser using the **Auto** region selection, your isolated browser remains enrolled in the policy. By default, this setting is enabled.
- **Client drive mapping:** Enabling the Client drive mapping policy allows the user to upload and download files to and from the remote session. This feature is available only for sessions launched with the Citrix Workspace app. By default, this setting is disabled.
  - Users must save downloaded files only on the `ctxmnt` disk in the `Anonxxx` directory. To do that, users must navigate to the desired location for storing the file. For example, **Anonxxx > ctxmnt > C > Users > User Name > Documents**.



  - The dialog box might prompt the user to accept the **Permit all access** or **Read and Write** permissions to access the `ctxmnt` folder.



- **URL parameters:** Enabling URL parameters allows you to change a new session's starting URL when users launch an app. For this policy to take effect, configure a local proxy server to identify suspicious websites and redirect them to Remote Browser Isolation. By default,

this setting is disabled. For more information, see Proof of Concept Guide: URL Redirection to Remote Browser Isolation with Citrix ADC in Azure.

- **Hostname tracking:** Use host name tracking to enable Remote Browser Isolation to log host names during a user's session. This policy is disabled by default. This information is shared with Citrix Analytics. For more information, see Citrix Analytics.

When you're done, click **OK**.

- **URL Allow lists:** Use the **Whitelists** task to restrict users to visiting only allowed URLs within their published Remote Browser Isolation session. This feature is available for external authenticated web apps.

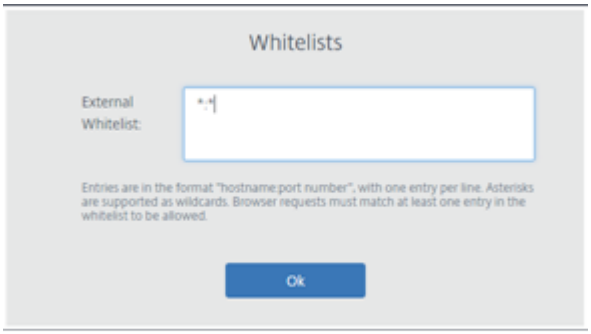
  Enter allow list entries in the form `hostname:port number`. Specify each entry on a new line. Asterisks are supported as wildcards. Browser requests must match at least one entry in the allow list.

  For example, to set `https://example.com` as an allowed URL:

  - `example.com:*` allows connection to this URL from any port.
  - `example.com:80` allows connection to this URL only from port 80.
  - `*:*` allows access to this URL from any port and from any links to other URLs and ports. The `*.*` format allows access to all external web apps from the published app. This format is the default setting for the web apps **External Whitelist** field.

  When you're done, click **OK**.

  Advanced web filtering capabilities are available through integration with the Access Control service. Learn more at Use case: Selective access to apps.



- **URL filtering:** You can configure URL filtering to control access methods based on pre-defined categories associated with risk models. URL filtering options include:

  - **None** - Allows all categories.
  - **Lenient** - Maximizes access while still controlling risk from illegal and malicious websites. Includes the following categories:

    - **Adult:** Grotesque, sex education, porn, nudity, sexual services, adult search and links, swimsuits and lingerie, adult magazines and news, sexual expression (text), fetish, and dating.
    - **Computing and Internet:** remote proxies, private IP addresses, peer-to-peer file sharing, and torrents.
    - **Gambling:** Sweepstakes, prizes, lotteries, and gambling in general.
    - **Illegal and harmful:** Terrorism, extremism, hate, slander, weapons, violence, suicide, illegal drugs, medication, illegal activities, marijuana, and advocacy in general.
    - **Malware and spam:** Hacking, malware, spam, spyware, botnets, infected sites, phishing sites, keyloggers, mobile malware, phone bots, malicious and dangerous websites.

- **Moderate** - Minimizes risk while allowing more categories with low probability of exposure from unsecure or malicious sites. Includes the following categories:

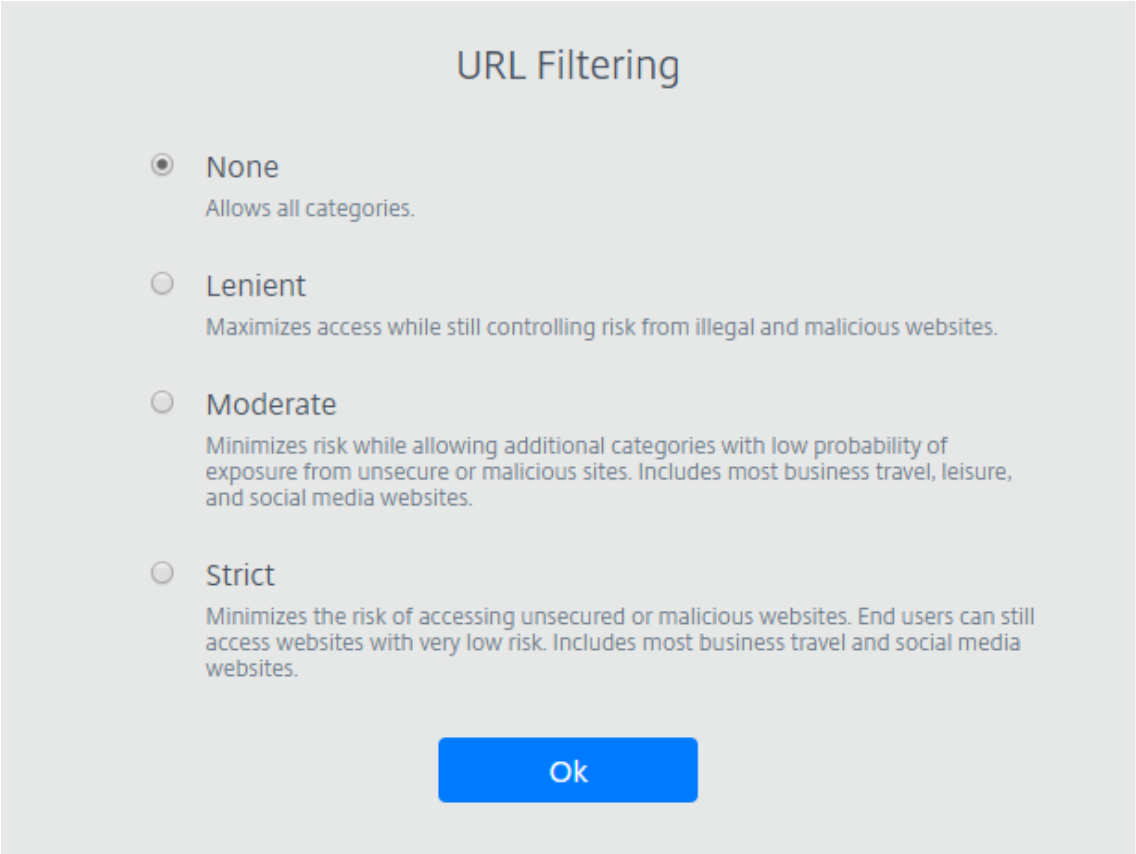
    - **Adult:** Grotesque, sex education, porn, nudity, sexual services, adult search and links, swimsuits and lingerie, adult magazines and news, sexual expression (text), fetish, and dating.
    - **Business and industry:** Auctions.
    - **Computing and Internet:** Advertisements, banners, remote proxies, private IP addresses, peer-to-peer file sharing, and torrents.
    - **Downloads:** Mobile app stores, storage services, downloads, and program downloads.
    - **Email:** Web-based mail and email subscriptions.
    - **Finance:** Cryptocurrency.
    - **Gambling:** Sweepstakes, prizes, lotteries, and gambling in general.
    - **Malware and spam:** Hacking, malware, spam, spyware, botnets, infected sites, phishing sites, keyloggers, mobile malware, phone bots, malicious and dangerous websites.
    - **Messaging, chat, and telephony:** Instant messages and web-based chat.
    - **News, entertainment, and society:** Wordpress (posts and uploads), unsupported URLs, occult, no content, miscellaneous, horoscope, astrology, fortune telling, drinking, religions, personal webpages, blogs, and online games.
    - **Social networking:** Photo search and sharing sites, IT bulletin boards, and bulletin boards.

- **Strict** - Minimizes the risk of accessing unsecured or malicious websites. End users can still access websites with low risk. Includes the following categories:

    - **Adult:** Grotesque, sex education, porn, nudity, sexual services, adult search and links, swimsuits and lingerie, adult magazines and news, sexual expression (text), fetish, and dating.

- **Business and industry:** Auctions.
- **Computing and Internet:** Advertisements, banners, dynamic DNS, mobile apps, publishers, parked domains, remote proxies, private IP addresses, peer-to-peer file sharing, and torrents.
- **Downloads:** Mobile app stores, storage services, downloads, and program downloads.
- **Email:** Web-based mail and email subscriptions.
- **Finance:** Cryptocurrency and financial products.
- **Gambling:** Sweepstakes, prizes, lotteries, and gambling in general.
- **Illegal and harmful:** Terrorism, extremism, hate, slander, weapons, violence, suicide, illegal drugs, medication, illegal activities, marijuana, and advocacy in general.
- **Jobs and resumes:** Employment, career advancement, and LinkedIn (updates, mail, connections, and jobs).
- **Malware and spam:** Hacking, malware, spam, spyware, botnets, infected sites, phishing sites, keyloggers, mobile malware, phone bots, malicious and dangerous websites.
- **Messaging, chat, and telephony:** Instant messages and web-based chat.
- **News, entertainment, and society:** Wordpress (posts and uploads), accommodations, travel and tourism, unsupported URLs, politics, fashion and beauty, arts and cultural events, reference, recreation and hobbies, local communities, miscellaneous, drinking, popular topics, special events, news, society and culture, online magazines, online games, life events, occult, no content, horoscope, astrology, fortune telling, celebrity, streaming media, entertainment, venues, activities, personal webpages and blogs, and religions.
- **Social networking:** Social networks in general, YikYak (posts), Twitter (posts, mail, and follows), Vine (uploads, comments, and messages), Google+ (photo and video uploads, posts, video chat, and comments), Instagram (uploads and comments), YouTube (shares and comments), Facebook (groups, games, questions, video upload, photo uploads, events, chat, apps, posts, comments, and friends), Tumblr (posts, comments, photo, and video uploads), Pinterest (pins and comments), IT bulletin boards, and bulletin boards.

When you're done, click **Ok**.



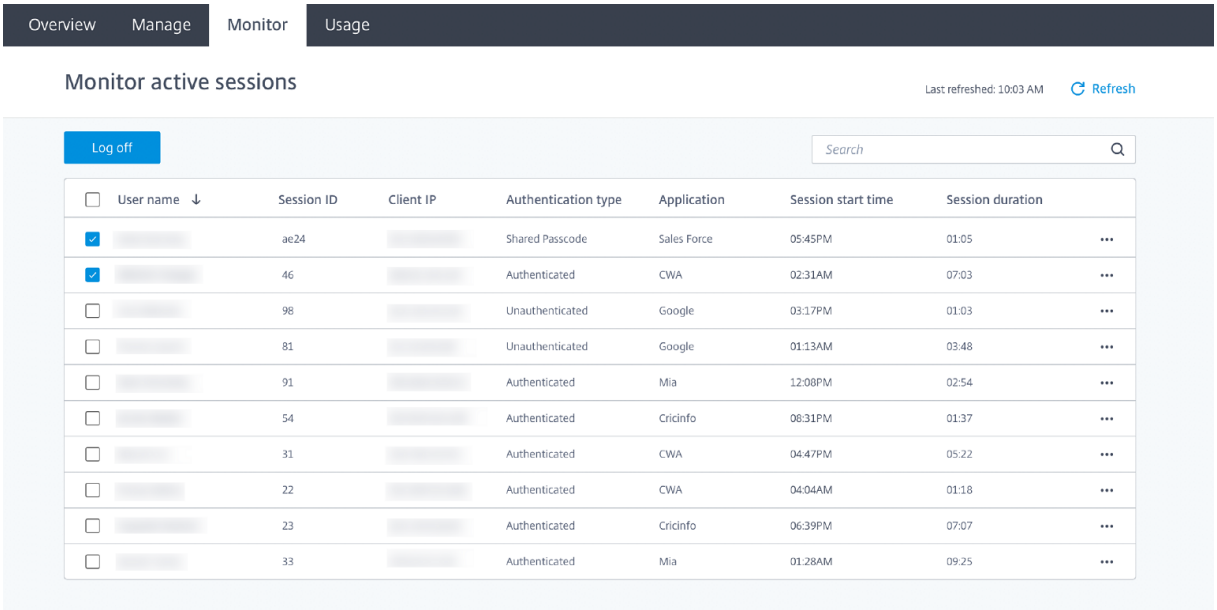
- **Edit:** You can use the **Edit** task to change the name, start URL, region of a published browser, or the passcode. When you're done, click **Publish**.
- **Delete:** You can use the **Delete** task to remove a published isolated browser. When you select this task, you're prompted to confirm the deletion.

Monitor

The **Monitor** tab provides information about users' real-time sessions. You can monitor and disconnect one or several active sessions.

To stop a single session, select the session and click the ellipsis menu at the end of an entry's row. Click **Log off session** and confirm your changes.

To disconnect multiple sessions, select the active sessions in the list and click the **Log off** button on the top of the page. After you confirm your changes, Remote Browser Isolation immediately disconnects all selected sessions.



Usage

The **Usage** tab shows the number of initiated sessions and the number of hours used.

To create a spreadsheet containing usage details, click **Export to CSV** and select a timeframe.

Remote Browser Isolation technical security overview

October 4, 2022

Remote Browser Isolation (formerly Secure Browser service) is a SaaS product managed and operated by Citrix. It allows access to web applications via an intermediate web browser hosted in the cloud.

Cloud service

The Citrix Remote Browser Isolation service consists of web browsers running on Virtual Delivery Agents (VDAs) along with the management console used to manage and connect users to these VDAs. Citrix Cloud manages the operation of these components, including the security and patching of operating systems, web browsers, and Citrix components.

While using Remote Browser Isolation service, hosted web browsers track the user's browsing history and perform caching of HTTP requests. Citrix uses mandatory profiles and ensures that this data is deleted when the browsing session ends.

Remote Browser Isolation service is accessed with a HTML5-compatible web browser. The service does not provide any downloadable clients. All traffic between the browser being used and the cloud service is encrypted using industry-standard TLS encryption. Remote Browser Isolation supports TLS 1.2 only.

Egress traffic for Remote Browser Isolation uses specific IP addresses to protect the internal network. For the list of accepted IP addresses, see Knowledge Center article CTX286379.

Web applications

Citrix Remote Browser Isolation is used to deliver web applications owned by the customer or a third party. The owner of the web application is responsible for its security, including patching the web server and application against vulnerabilities.

Security of the traffic between Remote Browser Isolation and the web application depends on the encryption settings of the web server. To protect this traffic as it flows over the Internet, administrators publish HTTPS URLs.

More information

See the following resources for more security information:

- Citrix Security site: https://www.citrix.com/security
- Citrix Cloud documentation: Secure Deployment Guide for the Citrix Cloud Platform