



IBM Aspera Connect Frequently Asked Questions

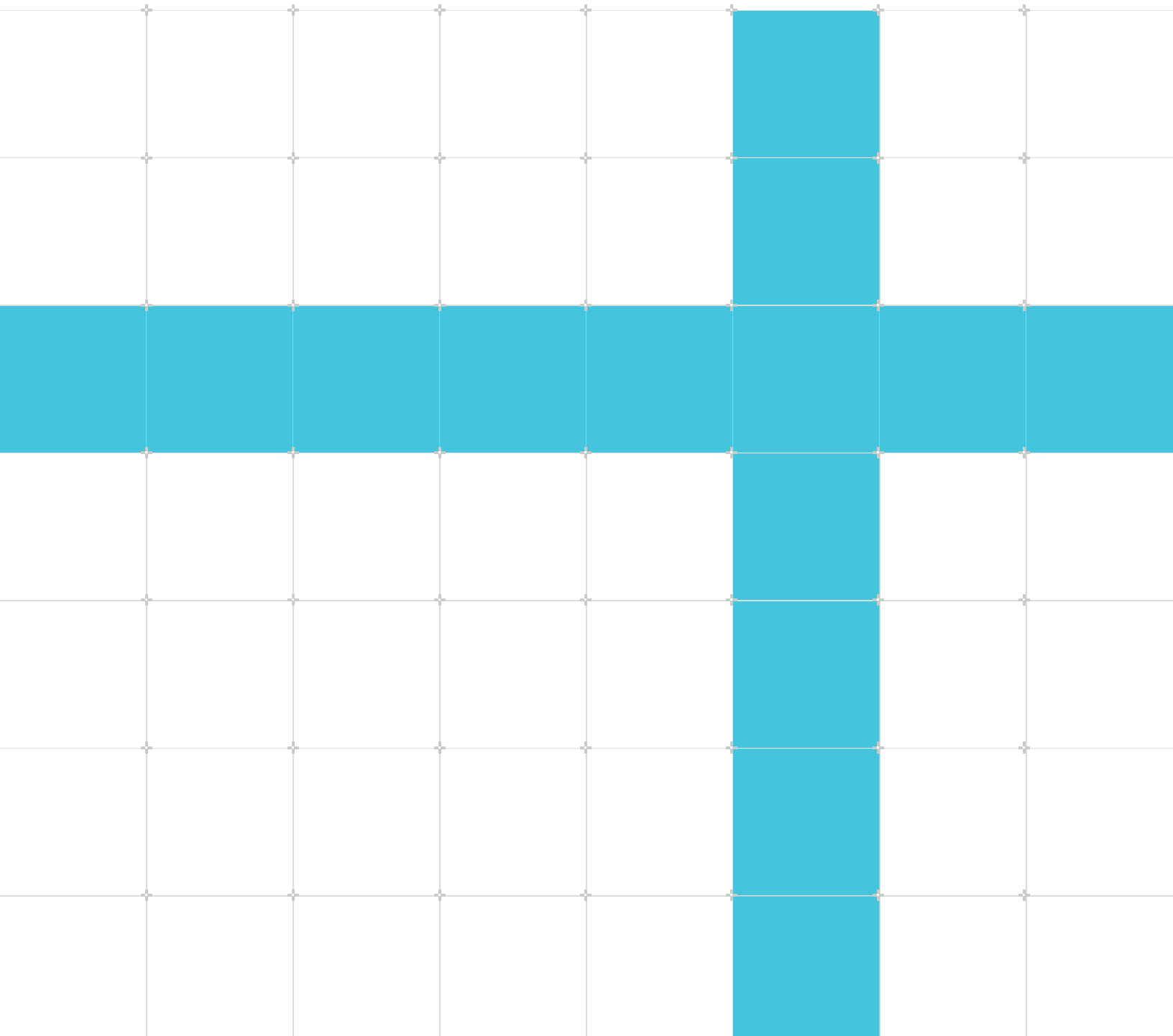
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Frequently Asked Questions

Non-Confidential

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110 Fulbourn Road, Cambridge, England CB1 9NJ.

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1. Overview

IBM Aspera takes a different approach to tackling the challenges of big data movement over global WANs. Rather than optimize or accelerate data transfer, Aspera eliminates underlying bottlenecks using a breakthrough transport technology, fully utilizing available network bandwidth to maximize speed and quickly scale up with no theoretical limit.

Here are answers to some frequently asked questions about the IBM Aspera connect:

What is the IBM Aspera Connect download manager and how do I install it?

IBM Aspera Connect is a free, install-on-demand application that plugs in to your Web browser to facilitate high-speed downloads with an IBM Aspera transfer server. It uses IBM Aspera's patented [FASP](#) transfer technology to achieve speeds that can be hundreds of times faster than FTP/HTTP.

Visit IBM's [diagnostic tool](#) which will automatically detect your OS and will present you with the correct version for your machine (and allow you to test your ports), or alternatively you can download the latest version for your operating system from [IBM Aspera's website](#) (simply click on your OS and select the latest version from the drop-down menu).

Once downloaded, open the file to run the installation wizard and just follow the steps from there (for a Linux-based OS, you will either download a shell script or a `.tar.gz` file. If you have downloaded the `.sh` file, simply download and run it. If you downloaded a `.tar.gz` file then unzip/untar the package and follow install instructions.)

Once installation is complete the application will run in the background and can be accessed at any time from your system tray in Windows, or dock in Mac OS.

For more installation help please visit the IBM Aspera Support website for [Windows](#), or [Mac OS](#).

Do I have to install IBM Aspera Connect to download from Arm?

You don't have to install IBM Aspera Connect to download from Arm, but it is the only way to get fast download speeds, which is especially useful when downloading large files. It also allows you to continue downloading from where you left off if there are any connection problems during download. Without IBM Aspera installed, downloads will be considerably slower and the entire file will be lost if they fail while downloading.

Does IBM Aspera have to be installed in each of my browsers, or is it just a single installation per machine?

The installation only needs to be done once per machine, and it will integrate itself with all of your supported browsers. It is a stand-alone application that runs alongside your browsers.

Is IBM Aspera Connect safe and secure?

All IBM Aspera products have complete, built-in security for data transfers using the standard open-source OpenSSL toolkit. The OpenSSL cryptographic libraries and the standard secure shell (SSH2) are used unmodified to take full advantage of the standard. IBM Aspera's products have been approved by the US Department of Commerce for export as a mass-market encryption

product with >64 bit encryption. The security model consists of session encryption (to establish a secure channel for exchanging a random per-session key for data encryption), secure authentication of the transfer endpoints, on-the-fly data encryption, and integrity verification for each transmitted data block. The transfer preserves the native file system access control attributes between any of the supported operating systems.

Find more information on the FASP Security Model [here](#).

How do I make sure I'm ready to download?

In most cases, all you need to do is download and install the IBM Aspera Connect application, as well as the IBM Aspera Connect browser extension and you're good to go. In some cases, companies or organisations will have a firewall that prevents the high-speed connection from occurring.

To make the connection possible, please ask your network administrator to ensure the TCP ports for SSH and the UDP ports are open.

The ports to open are: TCP 33001, UDP 33001, TCP 443 for IP addresses in the link below. Ensure traffic going in and out of these ports is allowed on both the client and server of your transfer.

IP addresses listed [here](#).

If you'd like to test that your ports are unblocked before attempting a download, please visit IBM's [diagnostic page](#).

How do I make sure I'm ready to use IBM Aspera Connect?

In most cases, all you need to do is download and install the IBM Aspera Connect application and you're good to go. In some cases, companies or organisations will have a firewall that prevents the high-speed connection from occurring.

To make the connection possible, please ask your network administrator to ensure the TCP ports for SSH and the UDP ports are open.

The ports to open are: TCP 33001, UDP 33001, TCP 443 for IP address 217.140.98.66. Ensure traffic going in and out of these ports is allowed on both the client and server of your transfer.

If you'd like to test that your ports are unblocked before attempting a download, please visit IBM's [diagnostic page](#).

Is there a user guide for IBM Aspera Connect?

You can download or view the latest user guide for your operating system from [here](#). Simply click on your OS and choose the latest user guide from the top of the list in the drop-down menu.

How often will I need to update the IBM Aspera Connect software?

There should only be around 2 to 4 updates a year. You can set the application to automatically check for updates in the General tab within Preferences (accessible from the cog icon in the bottom left of the application window). This will prompt you to download and install the latest version.

Which web browsers are supported on which operating systems?

IBM Aspera Connect integrates with most browsers (Internet Explorer, Firefox, Edge, Chrome, Safari) and operating systems (Windows, macOS, Linux). Check which [platforms](#) are supported.

2. Using IBM Aspera Connect

Here are answers to some frequently asked questions about using IBM Aspera Connect.

Can I change where my downloads are saved?

Yes. Just open up the IBM Aspera Connect application and click on the cog-wheel in the bottom left corner to access the Preferences. From there go to the Transfers tab where you can change the path of the saved files.

How can I set the IBM Aspera Connect download manager to automatically launch at start-up?

Open the IBM Aspera Connect application and then open the Preferences window from the cog icon in the bottom left. In the General tab you will see an option at the top to automatically launch the application.

What control do I have over my downloads?

Once a download has started you will be able to stop (pause) and resume downloads, open the folder where the file will be saved, retry a failed download or adjust the download speed via the Transfer Monitor.

How do I cancel a download?

You can cancel any active downloads at any time by simply clicking on the stop control. The file's download progress will be deleted once you press the Clear List button in the bottom right of the application.

If I'm downloading multiple files can I prioritise which files to download first?

When queuing is enabled to allow multiple concurrent downloads (set to 3 concurrent downloads by default, but can be changed in Preferences) any downloads that are queued can be started by pressing the resume/start control. Stopping any existing downloads will automatically start then next download in the queue.

If I stop a download does that download session get preserved even if I shut down my machine?

Yes, you can resume your download after restarting or shutting down your PC. The download progress is cached and will remain in your PC's memory until the download list is cleared manually, which means you can stop and resume downloads as many times as you like on the same machine, even after shutting down.

If my internet connection is interrupted while I'm not there is there a way I can set my downloads in IBM Aspera Connect to resume automatically?

Yes. Go to the Preferences window in the IBM Aspera Connect application and in the Transfers tab enable the auto-retry function by checking the Automatically retry failed transfers box and enter a value for the number of times to retry. You can also manually click the retry icon at any time to restart the download.

Why do I see a link to restart via browser under initiating transfer on the download page and what does it do?

If the IBM Aspera client cannot initialise, the download page will present you with a restart download via browser option to allow you to start the download using your browser download mechanism.

The system will keep trying to initialise the transfer using IBM Aspera, so if it does initialise the transfer will commence using the IBM Aspera client. If this occurs, then you may cancel the in browser download.

Why do I get a message stating that I do not have IBM Aspera installed when I do?

When accessing the download page, the system performs a check to see if you have IBM Aspera installed. This check can take a few seconds and if you press the download button before this check has completed, then the message appears.

If you encounter this issue, please reload the download page and allow a few seconds before pressing the download button.

3. Errors and troubleshooting

Here are answers to some frequently asked questions about IBM Aspera Connect errors and troubleshooting.

What is error code 47 and how can I resolve it?

Error code 47 usually means there is an issue with your ports (UDP, TCP or HTTP) being blocked by your company's internal firewall. It means that the IBM Aspera application is unable to make a connection to allow high-speed FASP downloads. Please ask your network administrator to ensure the TCP ports for SSH and the UDP ports are open.

The ports to open are: TCP 33001, UDP 33001, TCP 443 for IP address 217.140.98.66. Ensure traffic going in and out of these ports is allowed on both the client and server of your transfer.

Please also see IBM Aspera's [support page](#) related to error code 47.

What can I do if I am getting error codes 19?

This error code usually mean there is an issue with your ports (UDP, TCP or HTTP) being blocked by your company's internal firewall. It means that the IBM Aspera application is unable to make a connection to allow high-speed FASP downloads. Please ask your network administrator to ensure the TCP ports for SSH and the UDP ports are open.

The ports to open are: TCP 33001, UDP 33001, TCP 443 for IP address 217.140.98.66. Ensure traffic going in and out of these ports is allowed on both the client and server of your transfer.

I received an error message that the IBM Aspera Client Plug-in was unable to authenticate using Port 33001. What does this mean?

The IBM Aspera Connect Server at the CPTAC DCC uses nonstandard ports for security, UDP 33001 for file transfer and TCP 33001 for User Authentication (via SSH). If you are working at an organisation within a security firewall, you need to contact your IT security staff to open the following ports, UDP 33001 and TCP 33001.

SSH Connectivity Errors

If there are timeouts that occur in the middle of downloads (resulting in error codes 13, 15, or 40), or the IBM Aspera Connect application is unable to connect to the server with the error Timeout establishing connection, then this is most likely due to blocked TCP connectivity. IBM Aspera Connect is attempting to contact the server on the designated TCP port (typically configured to be 33001) and either the client-side Firewall is preventing outbound TCP access or an incorrect configuration of the server-side Firewall is not allowing inbound TCP traffic to the IBM Aspera server.

To address this issue attempt to connect to the server's TCP port through the command-line terminal on your client machine (the machine that IBM Aspera Connect is installed on). To do so,

run the following command to connect to the server on port 33001 (or the configured TCP port, if other than 33001).

```
> telnet server-ip-address 33001
```



You should replace server-ip-address with the IP address of the IBM Aspera server.

If the error received is Connection refused, the IBM Aspera server is not running the SSHD service and you will need to contact your server administrator. If the error received is Timeout, then the problem is the client-side firewall, which is likely disallowing outbound TCP traffic. Ensure that the client-side firewall allows outbound TCP traffic on port 33001 (or the configured TCP port, if other than 33001).

UDP Connectivity Errors

When IBM Aspera Connect appears to successfully connect to the server but the transfer progress reads 0% and eventually the error “Data transfer timeout” is received (error codes 14, 15, or 18). Although the files to be transferred appear at the destination, they are 0 bytes in size. This is most likely due to blocked UDP connectivity. The control connection over TCP is established, but the data connection - using UDP - cannot be established. UDP problems are generally caused by Firewall configuration. To address this issue, check that UDP port 33001 is open for outbound traffic.

Where can I find my IBM Aspera Connect logs if I need them for troubleshooting?

IBM Aspera Connect logs should be located here:

- Windows - C:\Users\[user name]\AppData\Local\Aspera\Aspera Connect\var\log
- MacOS - ~/Library/Logs/Aspera

If not, simply right click the IBM Aspera Connect application and select “Open log folder”.

The file names and other text is cut off in the IBM Aspera Connect application, how can I fix this?

This is probably due to your font size in your Windows display settings. Please visit Microsoft's [support page](#) for instructions on how to change your monitor display settings.

On the Microsoft Edge browser I'm getting a pop up that asks: “Did you mean to switch apps?” but selecting either Yes or No does nothing. How to I get past this message to use IBM Aspera?

There is a workaround for this issue that can be found on the IBM Aspera support site, [here](#).

When I go to the Diagnostic Tool page I'm getting a message that says I need to choose a new application to open fasp, what does this mean?

You can ignore this message. Just click away from or close the pop up or select cancel. You can still proceed with the download and testing of the IBM Aspera app, and once the app is installed you won't get the pop up again.

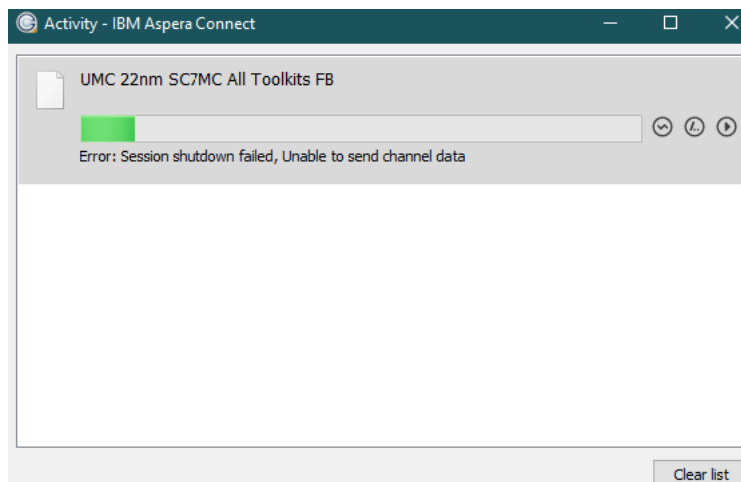
I'm on Linux using Firefox and I'm not able to download using IBM Aspera Connect. How can I fix this?

It's possible you missed the prompt in Firefox that asks you to allow 'Aspera Web' to run. If so, all you need to do is go into Firefox Tools > Add-ons > Plugins and change the Aspera Web Aspera NPAPI plugin activation dropdown from Ask to Activate to Always Activate.

Session shutdown error while downloading packages on Aspera-Dropzones

Error: Session shutdown failed. Unable to send channel data.

Figure 3-1: IBM Aspera Connect session shutdown error



This error is due to the default bandwidth setup of Aspera-Connect. It is usually 700Mbps, too high for a home network and leading to the failure while downloading.

The Aspera-Connect bandwidth should be set up to a value lower than the bandwidth of your home network. To do this, follow the steps under 'Limit Transfer Rates' mentioned in [here](#).

Your network bandwidth can be found using [this link](#).

4. Using Arm-dropzones

Here are answers to some frequently asked questions about Using Arm-dropzones.

How do I make sure I'm ready to use Arm-dropzones?

In most cases, all you need to do is download and install the IBM Aspera Connect application, as well as the IBM Aspera Connect browser extension and you're good to go. In some cases, companies or organisations will have a firewall that prevents the high-speed connection from occurring.

To make the connection possible, please ask your network administrator to ensure the TCP ports for SSH and the UDP ports are open.

The ports to open are: TCP 33001, UDP 33001, TCP 443 for IP addresses in the link below. Ensure traffic going in and out of these ports is allowed on both the client and server of your transfer.

Ports: TCP 33001, UDP 33001, TCP 443

IP addresses listed under the topic of [Allowing Traffic from Your Network to AoC](#)

Public IP addresses in <https://ats.aspera.io/pub/v1/servers/AWS/us-west-2>

Public IP addresses in <https://ats.aspera.io/pub/v1/servers/AWS/eu-west-2>

Ports: TCP 443

d3gcli72yxqn2z.cloudfront.net

If you'd like to test that your ports are unblocked before attempting a download, please visit IBM's [diagnostic page](#).

5. More support

Here are answers to some frequently asked questions about additional support.

How can I contact Arm support?

If you're unable to find a solution to your problem above, please [open a support case](#) and we'll be in touch.

Where can I access IBM Aspera documentation?

For further documentation on the IBM Aspera Connect application, including release notes and troubleshooting guides, please visit the [IBM Aspera](#) website.