



## Aspera Connect

Sky Broadcast Engineering | Content Delivery

<b>Title:</b>	Aspera Connect Sky Broadcast Engineering   Content Delivery
<b>Synopsis:</b>	Guideline for Content delivery via Aspera Connect to Sky Deutschland
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## 1. About Aspera Connect

Aspera Connect is an install-on-demand Web browser plugin that powers high-speed uploads and downloads with the Aspera Connect Server and the Aspera Faspex Server. Compatible with the most standard browsers depending on your Operating System, Aspera Connect integrates all of Aspera's high-performance transport technology in a small, easy-to-use package that provides unequaled control over transfer parameters.

## 2. System requirements

To enable the Fast File Transfer\*, your network configuration must allow traffic as shown:

Sky Aspera Connect Server IP (Source and Destination)	Protocol	Port
149.7.112.163	fasp TCP	33001
	fasp UDP	33001-33010
	SSH	33010
	Https	443
	Http Fallback TCP	8080
	Http Fallback UDP	8080

\*Fast File Transfer will only be available if the ports 33001 (TCP) and 33001-33001 (UDP) will be allowed for network traffic. Please make sure to open these ports on your firewalls as destination. The following Web browsers are supported:

### Windows:

Internet Explorer 6+ (32 bit-only)  
Firefox 3+ (32 bit-only)  
Google Chrome 5+

### Mac OS X:

Firefox 4+  
Safari 5.1+  
Google Chrome (For Mac OS X 10.5 or later, Intel only)

### Linux:

Firefox 3+



### 3. Installation

Please download the Aspera Connect Client here:

[http://www.asperasoft.com/download\\_connect/](http://www.asperasoft.com/download_connect/)

The installation instructions are based on the official Aspera Manual:

Connect\_2.7.7\_Windows\_User\_Guide.pdf

You can find the all available installers and instructions here:

[http://www.asperasoft.com/download\\_connect/](http://www.asperasoft.com/download_connect/)

WARNINGS FOR WINDOWS USERS: On Windows, you cannot install Connect under the Guest account.

Additionally, if you are installing Connect on a Windows 2003 machine, then your system must be upgraded to Service Pack 2 (SP2) before proceeding with the installation process.

IMPORTANT NOTE: For the Connect auto-installer to work properly, Java must be installed on your system. If you do not have Java installed, or your system doesn't support it, then you can manually download and set up Connect per the instructions below. For Connect to function correctly, you must have cookies enabled within your browser.

Please review your browser help for instructions on verifying this setting.

If you are running Internet Explorer 7 or 8 on a Windows system, and plan to use the Connect auto-installer, you will need to configure several browser settings before proceeding. Please refer to the table below for information on allowing Connect to install through your browser.

Browser	Instructions
Internet Explorer 7	Within your IE 7 browser, you will be prompted to run the "Aspera Connect" ActiveX control add-on. Click Run to continue.





You will then encounter a security warning when Connect Server or Faspex Server attempts to launch the Aspera Connect browser plug-in. Check the option "Do not show me the warning for this program again" and click Allow.



Internet  
Explorer 8

Within your IE 8 browser, go to Tools > Internet Options > Security > Custom level.... Under

ActiveX controls and plugins, perform the following actions:

- Enable Binary and script behaviors
- Prompt Download signed ActiveX controls
- Enable Only allow approved domains to use ActiveX without prompt
- Enable Run ActiveX controls and plug-ins
- Enable Script ActiveX controls marked safe for scripting

Under Scripting, perform the following actions:

- Enable Active scripting
- Prompt Scripting of Java applets
- Enable Only allow approved domains to use ActiveX without prompt
- Enable Run ActiveX controls and plug-ins
- Enable Script ActiveX controls marked safe for scripting

Click OK, and then the Trusted Sites zone (green check). Click the Sites button and add the following:

<http://aspera.sky.de>

<https://aspera.sky.de>

When finished, click Close and then OK. Your IE 8 browser must be restarted at this time.



Use your web browser to navigate to <https://aspera.sky.de/aspera/user> or <https://149.7.112.163/aspera/user>. Once you have reached the server's website, you will see an Install Now button. Depending on your Operating System and browser, clicking on the Install Now button will either launch the automatic installer or redirect you to the Aspera Connect download page (for manual installation). Follow the on-screen instructions to complete the installation process.

## 4. Configuration

The following table provides basic information for configuring your firewall to allow Connect file transfers. Note that the outbound connection for SSH may differ based on your organization's unique network settings. Although TCP/33001 is the default setting, please refer to your IT Department for questions related to which SSH port(s) are open for file transfer. Please also consult your specific Operating System's help documentation for specific instructions on configuring your firewall. If your client host is behind a firewall that does not allow outbound connections, you will need to allow the following:

*Outbound connections for SSH, which is TCP/33001*

*Outbound connections for fasp transfers, which is UDP/33001-33001*

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You should also specify your network's connection speed for improved transfer efficiency, as well as set up Aspera Connect to work with your organization's proxy server. To specify your connection speed and/or configure your proxy server, launch Aspera Connect (Start Menu > All Programs > Aspera > Aspera Connect), open Preferences (System Tray > Right-click Aspera Connect > Preferences) and navigate to the Network preferences option.



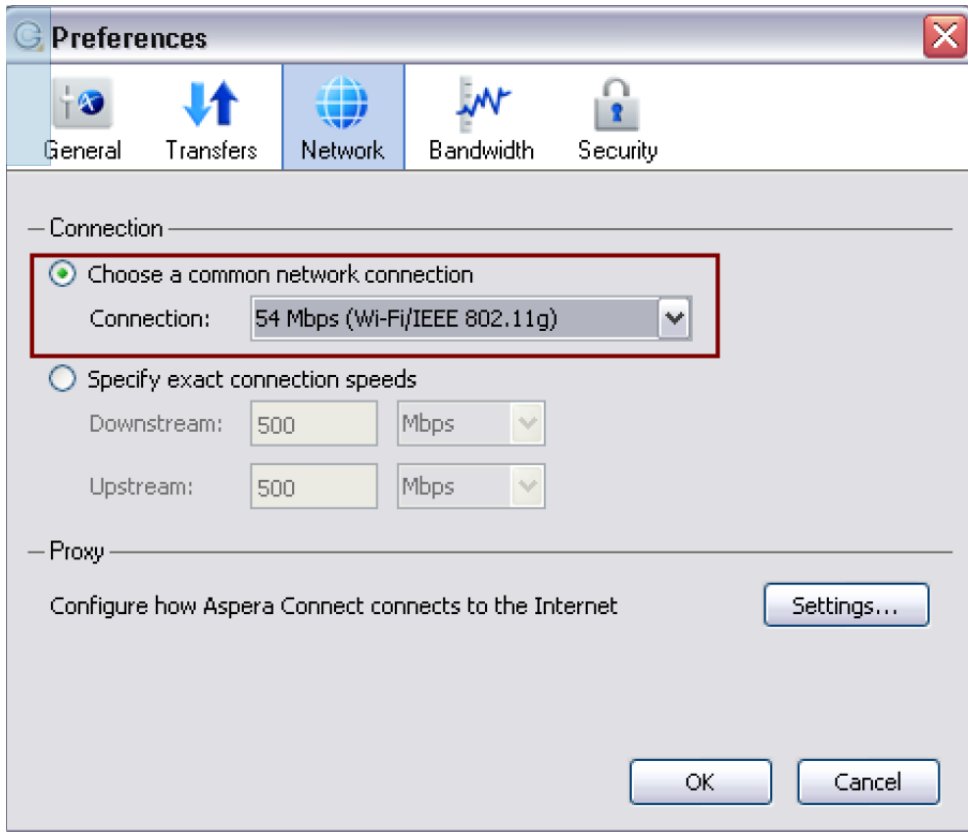
Within the Transfers tab you can enter the download path or just leave the option "Always ask me where to save download files."



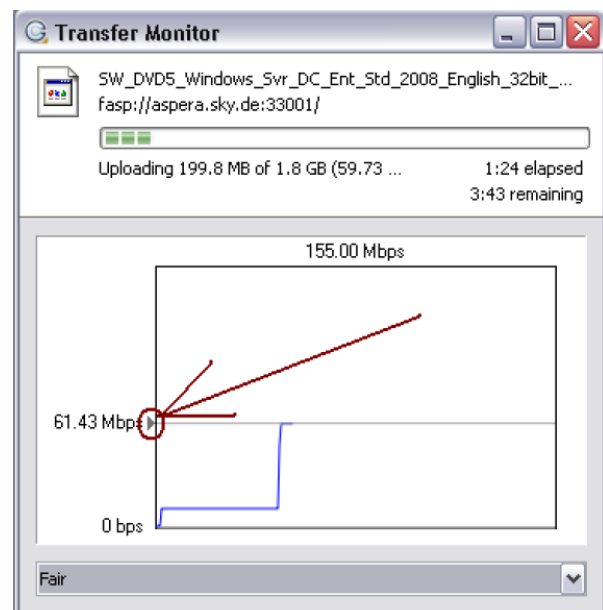
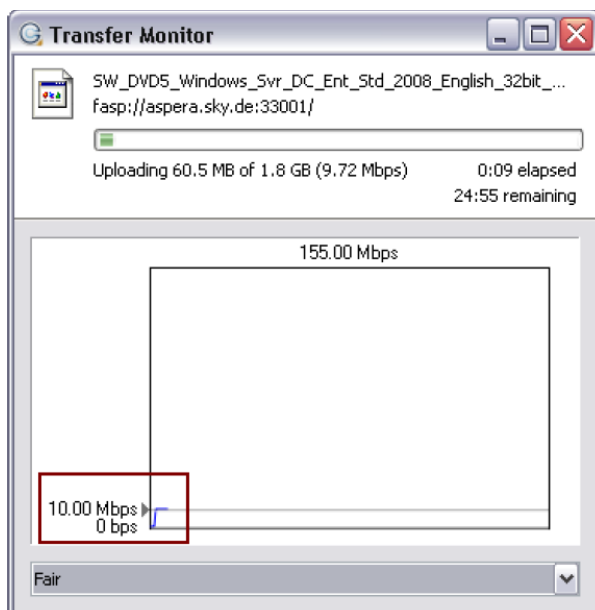
The following settings are recommended:



Within the Connection section, you may utilize the drop-down list to select a common network connection or specify exact downstream and upstream connection speeds. Please note that Connect's ability to attain these speeds is dependent upon your network bandwidth.



Depending on your network bandwidth you should adjust the default connection target rate (maximum speed) during the file upload. The graph should look as linear as possible. It is also recommended to leave the bandwidth management at the "Fair" or "High" setting.





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*In addition, your organization may require you to use a proxy. The proxy settings dialog box enables you to specify how Aspera Connect should obtain your proxy configuration. To access your Connect proxy settings, click Settings under the Proxy section.*

*Within the proxy settings dialog box, you have several configuration options that are available under the drop-down list. Please note that the HTTP checkbox and fields will only be enabled if you select "Manual" from the drop-down list.*

*System: Choose "System" if you want Aspera Connect to use the proxy settings configured for your Operating System*

*Firefox: Choose "Firefox" if you want Aspera Connect to automatically detect the proxy settings from your Firefox Web browser.*

*Manual: Choose "Manual" if you would like to manually input your proxy hostname and port number (which may require the assistance of your System Administrator).*





## 5. Using Connect

1. Login with your Username and Password to:  
<https://aspera.sky.de/aspera/user> or  
<https://149.7.112.163/aspera/user>

*Internet Explorer 7 Security Settings: When opening a Connect Server or Faspex Server web page using Internet Explorer 7, the Information Bar will appear and ask for the permission to use the Aspera Connect add-on. Click the bar and select Run ActiveX Control, and then click Run in the Security Warning window.*

2. Click any icon to download the corresponding file or folder. You may also checkmark multiple boxes and click Download to download more than one file or folder at a time.  
For up-/downloading just press the appropriate button and press Ok:



[aspera.sky.de](https://aspera.sky.de)



3. The following message will appear

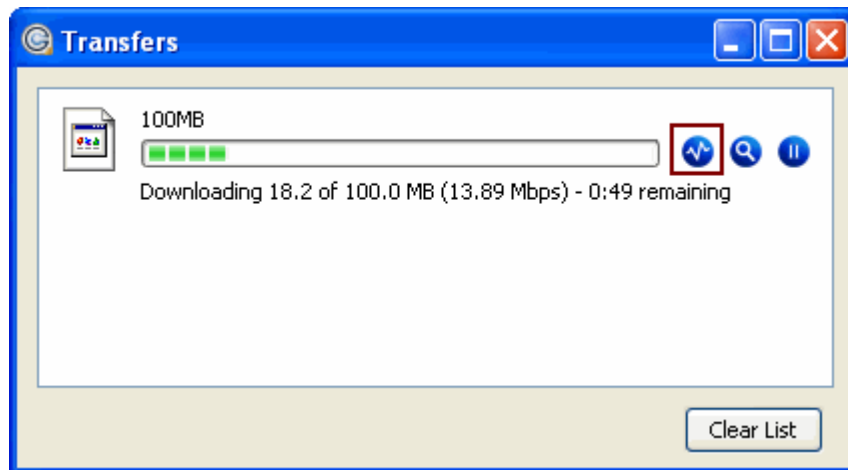


Select Allow to begin. Check the "Use my choice for all transfers with this host" option to skip this dialog in the future.

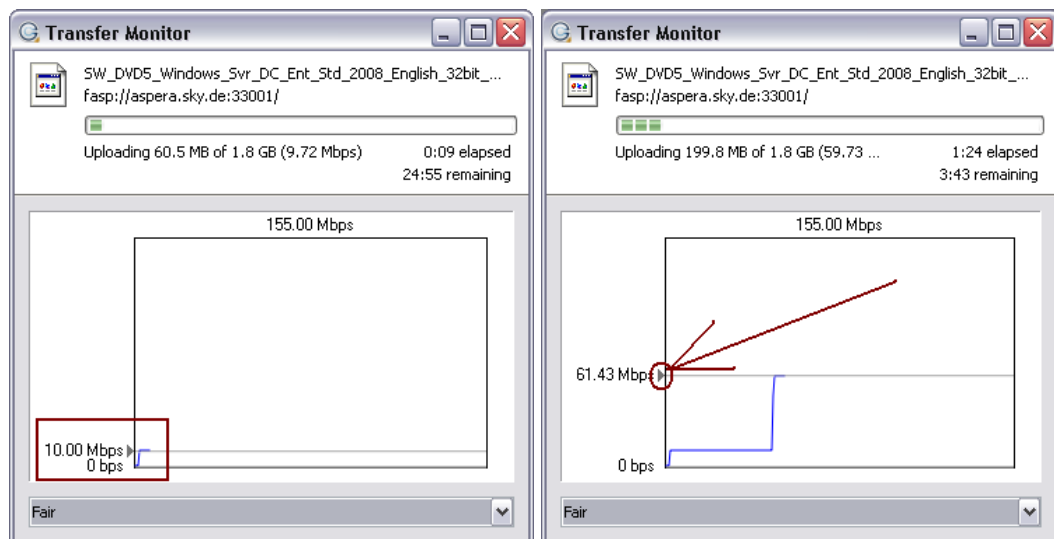


Note that when uploading, the following characters are not allowed in filenames and folders: . / \ " : ' ? > < & \* |

4. You can monitor and adjust file transfer speed by clicking the (Transfer Monitor icon) to open the Transfer Monitor. Here, you can specify the transfer policy and transfer speed.



It's recommended to modify just the maximum speed. The graph should look as linear as possible. It is also recommended to leave the bandwidth management at the "Fair or High" setting. The default target rate is set to 25Mbps (in some cases 10Mbps). Please adjust the maximum speed to your bandwidth. The value should not be higher than 10 times of you maximum connection speed. For example if you are connected via DSL (6Mbps) the maximum upload speed should not be set higher then 60Mbps.





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## 6. Troubleshooting & Support

For further information, please contact:  
Sky Broadcast Operations Support  
+49 (0)89 9958 4077

[BO\\_Support@sky.de](mailto:BO_Support@sky.de)



## A) Error Codes

No.	Name	Description	Message	Retryable
1	ERR_FASP_PROTO	Generic FASP protocol error	FASP error	No
2	ERR_ASCP	Generic SCP error	ASCP error	No
3	ERR_AMBIGUOUS_TARGET	Target incorrectly specified	Ambiguous target	No
4	ERR_NO_SUCH_FILE	No such file or directory	No such file or directory	No
5	ERR_NO_PERMS	Insufficient permission to read or write	Insufficient permissions	No
6	ERR_NOT_DIR	Target is not a directory	Target must be a directory	No
7	ERR_IS_DIR	File is a directory – expected regular file	Expected regular file	No
8	ERR_USAGE	Incorrect usage of scp command	Incorrect usage of Aspera scp command	No
9	ERR_LIC_DUP	Duplicate license	Duplicate license	No
10	ERR_LIC_RATE_EXCEEDED	Rate exceeds the cap imposed by license	Rate exceeds cap imposed by license	No
11	ERR_INTERNAL_ERROR	Internal error (unexpected error)	Internal error	No
12	ERR_TRANSFER_ERROR	Error establishing control connection	Error establishing SSH connection (check SSH port and firewall)	Yes
13	ERR_TRANSER_TIMEOUT	Timeout establishing control connection	Timeout establishing SSH connection (check SSH port and firewall)	Yes
14	ERR_CONNECTION_ERROR	Error establishing data connection	Error establishing UDP connection (check UDP port and firewall)	Yes
15	ERR_CONNECTION_TIMEOUT	Timeout establishing data connection	Timeout establishing UDP connection (check UDP port and firewall)	Yes
16	ERR_cONNECITON_LOST	Connection lost	Connection lost	Yes
17	ERR_RCVR_SEND_ERROR	Receiver fails to send feedback	Network failure (receiver can't	Yes



			send feedback	
18	ERR_RCVR_RECV_ERROR	Receiver fails to receive data packets	Network failure (receiver can't receive UDP data)	Yes
19	ERR_AUTH	Authentication failure	Authentication failure	No
20	ERR_NOTHING	Nothing to transfer	Nothing to transfer	No
21	ERR_NOT_REGULAR	Not a regular file (specific file)	Not a regular file	No
22	ERR_FILE_TABLE_OVR	File table overflow	File table overflow	No
23	ERR_TOO_MANY_FILES	Too many files open	Too many files open	Yes
24	ERR_FILE_TOO_BIG	File too big for file system	File too big for filesystem	No
25	ERR_NO_SPACE_LEFT	No space left on disk	No space left on disk	No
26	ERR_READ_ONLY_FS	Read only file system	Read only filesystem	No
27	ERR_SOME_FILE_ERRS	Some individual files failed	One or more files failed	No
28	ERR_USER_CANCEL	Cancelled by user	Canceled by user	No
29	ERR_LIC_NOLIC	License not found or unable to read	Unable to access license info	No
30	ERR_LIC_EXPIRED	License expired	License expired	No
31	ERR_SOCK_SETUP	Unable to setup socket (create, bind, etc...)	Unable to set up socket	No
32	ERR_OUT_OF_MEMORY	Out of memory, unable to allocate	Out of memory	Yes
33	ERR_THREAD_SPAWN	Can't spawn thread	Unable to spawn thread	Yes
34	ERR_UNAUTHORIZED	Unauthorized by external auth server	Unauthorized	Yes
35	ERR_DISK_READ	Error reading source files from disk	Disk read error	Yes
36	ERR_DISK_WRITE	Error writing to disk	Disk write error	Yes
37	ERR_AUTHORIZATION	External authorization failure	Authorization failure	Yes
38	ERR_LIC_ILLEGAL	Operation not permitted by license	Operation not permitted by license	No
39	ERR_PEER_ABORTED_SESSION	Remote peer terminated session	Peer aborted session	Yes
40	ERR_DATA_TRANSFER_TIMEOUT	Transfer stalled, timed out	Data transfer stalled, time out	Yes
41	ERR_BAD_PATH	Path violates docroot containment	File location is outside 'docroot' hierarchy	No



42	ERR_ALREADY_EXISTS	File or directory already exists	File or directory already exists	No
43	ERR_STAT_FAILS	Cannot stat file	Cannot collect details about file or directory	No
44	ERR_PMTU_BRTT_ERROR	UDP Session initiation fatal error	UDP session initiation fatal error	Yes
45	ERR_BWMEAS_ERROR	Bandwidth measurement fatal error	Bandwidth measurement fatal error	Yes
46	ERR_VLINK_ERROR	Virtual link error	Virtual link error	No
47	ERR_CONNECTION_ERROR_HTTP	Error establishing HTTP connection	Error establishing HTTP connection (check HTTP port and firewall)	No
48	ERR_FILE_ENCRYPTION_ERROR	File encryption error, e.g. corrupt file	File encryption error, e.g. corrupt file	No
49	ERR_FILE_DECRYPTION_PASS	File decryption bad passphrase	File decryption bad passphrase	no