TECHNICAL DATA SHEET

Minimum Requirements to operate the Moderator and Client modules

Web Client HTML5	• Microsoft Edge • Mozilla Firefox Version 80.0 or higher • Google Chrome Version 24 or higher • Safari (only on OS X, for iOS a native APP is available) • Opera
MAC OS Client	• Apple macOS Sierra Version 10.12 • Apple macOS High Sierra Version 10.13 • Apple macOS Mojave Version 10.14 • Apple macOS Catalina Version 10.15 • Apple macOS Big Sur Version 11 • Apple macOS Monterey Version 12
Windows Client	• Windows 8.x • Windows 10 • Windows 11 • Windows Server 2012 R2 • Windows Server 2016 • Windows Server 2019 • Windows Server 2022
Mobile App iOS/Android	• At least iOS 12 • At least Android 8.0

Bandwidth Requirements of FastViewer

A FastViewer session with desktop sharing requires about 15 kbit/s per user. The video function additionally requires an average of 400 und 1500 kbit/s per user (depending on the video quality).

The Audio Chat feature of FastViewer requires an average of 20 kbit/s.

The above information may vary, depending on the constellation and the used functions.

Requirements of the Video Function

Port 5000/HTTPS 443 (chunked): One of this ports must be open if you want to use the video function (transmission/reception of the webcam image).

Max. number of simultaneously transmitted videos: Up to 16 video participants per session
Resolution of the transmitted video: 480p (848 x 640 / 30 FPS)

Supported Languages

Due to the Unicode support, all languages are possible. The moderator and client modules using automatic speech recognition. This depends on the language of the operating system.

Already available languages:

DE, EN, IT, FR, SP, PL, PT, NL, RU, TR, JP, GR, CN, RO, BR, CZ, SE, SK, KA

Minimum Prerequisites for the Use of a FastViewer Server Solution

Minimum requirements for installing the FastViewer WebConference server for up to 100 concurrent users:

- **Hardwareanforderungen**
  - Xeon processor operating at a clock speed of at least 2,5 GHz and 4 cores
  - At least 8 GB RAM
  - At least 30 GB of free hard disk space
  - GBit network card

- **Operating Systems**
  - Windows Server 2012 R2
  - Windows Server 2016
  - Windows Server 2019
  - Windows Server 2022

- **Databases**
  - At least Microsoft SQL Server 2012 including der Express Versions

- **Supported virtualization platforms**
  - Microsoft Hyper-V
  - VMware
  - Citrix

- **Bandwidth requirements**

  This requirement is heavily dependent on the functions used. The average requirements per participant are as follows:

  These are on average - per participant as follows:

  Desktop-Sharing: 15 kbit/s

  Video transmission: Depending on the settings of image quality, between 400 und 1500 kbit/s per transmitted video

  VoIP: 20 kbit/s.

- **IP-/DNS Configurations**
  The server requires an IP address, or alternatively a DNS name pointing to the appropriate IP address.

NOTE: When configuring the WebConference server, the fully qualified domain name (FQDN) should preferably always be used instead of the IP address. For example, if the IP address is used, and a change in the IP address occurs, the existing conferences are not updated to access the new IP address, so these web conferences can no longer be started.

- **Open ports**
  The following ports must be opened in a firewall to ensure that the WebConference server can be accessed over the LAN and Internet:
  - TCP port: 5000 (optimal for performance)
  - HTTPS port: 443 (minimum requirement)
  - HTTP port: 80 (optional)

NOTE: If the moderator- and client-modules are in the same network, the connection can be established directly via the TCP port 5005. This function must be activated in the FastViewer customer portal first.

- **Number of parallel users per server**
  Please note that an accurate statement about the maximum number of concurrent users cannot be made because this number is highly dependent on the use of the functions described above. When scrolling through Excel lists, for example, or when frequent screen switching occurs, this value increases accordingly.

A further aspect that must be noted is the connection of FastViewer Webclient server. When participating in a session via the WebClient, the data is provided through the IIS (Internet Information Server) from Microsoft.

We generally recommend that this service be run on a separate server so that the performance of the FastViewer server is not adversely affected.

Minimum requirements for installing the FastViewer WebClient server

- **Operating Systems**
  - Windows Server 2012 R2
  - Windows Server 2016
  - Windows Server 2019
  - Windows Server 2022

- **.NET Framework**
  - .NET Framework 3.5.1 SP1

- **Server-Rollen**
  - IIS (Internet Information Services) incl. ASP.net

- **Supported Web Browsers**
  Any web browser with JavaScript support, e.g.,
  - Microsoft Edge
  - Mozilla Firefox Version 80.0 or higher
  - Google Chrome Version 24 or higher
  - Safari (only on OS X, for iOS a native APP is available)
  - Opera

Overview of Features for Clients

Funktionen	Windows		MAC OS		Web Client	Mobile Apps	
	Master	Client	Master	Client	HTML5	iOS/ Android	
Transmit own Desktop	✓	✓	✓	✓	-	✓	Collaboration
Transmit multiple Screens	✓	✓	✓	✓	-	-	
Participants List	✓	✓	✓	✓	✓	✓	
View Whiteboard	✓	✓	-	-	-	-	
Edit Whiteboard	✓	✓	-	-	-	-	
Chat	✓	✓	✓	✓	✓	✓	
Receive Videos of Participants	✓	✓	✓	✓	✓	✓	
Transmit own Video	✓	✓	✓	✓	✓	✓	
Transmit Audio (VoIP)	✓	✓	✓	✓	-	✓	
Display Call Numbers for phone conference	✓	✓	✓	✓	✓	-	
Use Arrow Pointer	✓	✓	✓	✓	✓	✓	
Application Selection	✓	✓	✓	✓	-	-	Security
Disconnect participants	✓	-	✓	-	-	✓	
Session Recording	✓	✓	-	-	-	-	
View Session Information	✓	✓	✓	✓	✓	-	
View Session Log	✓	✓	✓	✓	-	-	
Use Active-Directory User Lock	✓	✓	-	-	-	-	
Use Black List / White List	✓	✓	-	-	-	-	
Panic Button to Exit the Remote Control	✓	✓	✓	✓	-	-	
256 Bit AES Encryption	✓	✓	✓	✓	✓	✓	

End to End

Funktionen	Windows		MAC OS		Web Client	Mobile Apps	
	Master	Client	Master	Client	HTML5	iOS/ Android	
Receive / Grant Moderator Rights	✓	✓	✓	✓	-	✓	Moderation and Control
Grant Remote Control Rights	✓	-	✓	-	-	✓	
Perform Remote Control	✓	✓	✓	✓	✓	✓	
Access to Remote Management Console	✓	✓	-	-	-	-	
File Upload / Download	✓	✓	✓	✓	-	-	
File Transfer	✓	✓	-	-	-	-	
Session Scheduler	✓	✓	✓	✓	-	✓	
Start User Manager	✓	✓	-	-	-	-	
Disconnect Connection without participants	✓	✓	✓	✓	-	-	
Use Direct Connection	✓	✓	-	-	-	-	
Start FastViewer Session	✓	✓	✓	✓	-	✓	
Gesture Control for mobile Input	-	-	-	-	-	✓	
Direct session start from Invitation	✓	✓	✓	✓	✓	✓	
Show dynamic (HTML) Sidbar	✓	✓	-	-	-	-	Customization
Keyboard: Transmit Scan Codes	✓	✓	-	-	-	-	
Use Start Parameters	✓	✓	✓	✓	-	-	
Start with elevated Privileges (Windows UAC)	✓	✓	-	-	-	-	