



Minimum Laserfiche Avante Hardware Specifications

Appendix A – Recommended Server/Workstation Specifications

SQL Express Server and System

CPU	Quad Core or Better Preferred
Memory	8 GB RAM or more (Note that to have 8 GB RAM or above recognized, OS must be 64 bit.)
Operating System	Windows Server 2012 R2 or above
Database Engine	Recommended: Microsoft SQL Server 2014 Express and above (10 GB db capacity/approximately 2.5 million images)
Framework	Latest .Net Version in relation to your OS (Client responsible for install)
Browser	Edge (latest version), Chrome (latest version)
Hard Drives	Assume 10,000 Standard Images (black and white, Type IV TIFF, 8.5” by 11” in size, scanned in at 300 DPI) per 1 GB of hard drive space RAID array recommended Minimum of 5GB of Free Space Required on the C Drive for Laserfiche Installation
NIC	Gigabit recommended for optimal speeds
Network Licenses	Laserfiche uses one Windows license for each Laserfiche user
UPS/Tape Backup	UPS and tape or other backup system to ensure data integrity
Virtual Environment	Laserfiche can be configured to run in a virtual environment. A technical whitepaper is available on request

Client Responsibilities

- *The client is responsible for acquiring, installing, and configuring the database software.*
- *The client is responsible for acquiring, installing, and configuring the Server Operating System.*
- *The client is responsible for acquiring, configuring, and implementing any database backup plans.*
- *The client is responsible for testing the integrity of their backups on a regular basis.*

Appendix A – Recommended Server/Workstation Specifications

Full SQL Server and System

CPU	Quad Core or Better Preferred
Memory	16 GB RAM or more (Note that to have 8 GB RAM or above recognized, OS must be 64 bit.)
Operating System	Windows Server 2012 R2 or above
Database Engine	Microsoft SQL Server 2019+, 2017+, 2016 SP2+, 2014 SP3+ (Client must provide MS SQL licensing.) – Latest Version Preferred <i>[Note: A SQL CAL will be needed for each Laserfiche user. This can be achieved through purchasing individual CALs or a processor license. Public Portal and/or Web Access requires a MS SQL processor license.]</i>
Framework	Latest .Net Version in relation to your OS (Client responsible for install)
Browser	Edge (latest version), Chrome (latest version)
Hard Drives	Assume 10,000 Standard Images (black and white, Type IV TIFF, 8.5” by 11” in size, scanned in at 300 DPI) per 1 GB of hard drive space RAID array recommended Minimum of 5GB of Free Space Required on the C Drive for Laserfiche Installation
NIC	Gigabit recommended for optimal speeds
Network Licenses	Laserfiche uses one Windows license for all Laserfiche users
UPS/Tape Backup	UPS and tape or other backup system to ensure data integrity
Virtual Environment	Laserfiche can be configured to run in a virtual environment. A technical whitepaper is available on request.

Client Responsibilities

- The client is responsible for acquiring, installing, and configuring the MS SQL server software.
- The client is responsible for purchasing, installing, and configuring the Server Operating System.
- The client is responsible for purchasing, configuring, and implementing any SQL maintenance/backup plans.
- The client is responsible for testing the integrity of their backups on a regular basis.

Combined Laserfiche/SQL Server Specifications:

CPU	Quad Core or Better Preferred
Memory	32 GB RAM or more (Note that to have 8 GB RAM or above recognized, OS must be 64 bit.)
Operating System	Windows Server 2012 R2 or above
Database Engine	Microsoft SQL Server 2019+, 2017+, 2016 SP2+, 2014 SP3+ (Client must provide MS SQL licensing.) – Latest Version Preferred [Note: A SQL CAL will be needed for each Laserfiche user. This can be achieved through purchasing individual CALs or a processor license. Public Portal and/or Web Access requires a MS SQL processor license.]
Framework	Latest .Net Version in relation to your OS (Client responsible for install)
Browser	Edge (latest version), Chrome (latest version)
Hard Drives	Assume 10,000 Standard Images (black and white, Type IV TIFF, 8.5” by 11” in size, scanned in at 300 DPI) per 1 GB of hard drive space RAID array recommended Minimum of 5GB of Free Space Required on the C Drive for Laserfiche Installation
NIC	Gigabit recommended for optimal speeds
Network Licenses	Laserfiche uses one Windows license for all Laserfiche users
UPS/Tape Backup	UPS and tape or other backup system to ensure data integrity
Virtual Environment	Laserfiche can be configured to run in a virtual environment. A technical whitepaper is available on request.

Client Responsibilities

- The client is responsible for acquiring, installing, and configuring the MS SQL server software.
- The client is responsible for purchasing, installing, and configuring the Server Operating System.
- The client is responsible for purchasing, configuring, and implementing any SQL maintenance/backup plans.
- The client is responsible for testing the integrity of their backups on a regular basis.

Web Server Specifications for Laserfiche Web Components (Public Portal and/or Web Access)*:

CPU	Minimum 8 cores or greater
Memory	Minimum 8GB or greater
Operating System	Windows Server 2012 R2 or above
Web Server	Windows Server 2022, Windows Server 2019, Windows Server 2016, Windows Server 2012 R2
Browser	Edge (latest version), Chrome (latest version)
Framework	Latest .Net Version in relation to your OS (Client responsible for install)
NIC	Gigabit recommended for optimal speeds
Network Licenses	Laserfiche uses one Windows license for each Laserfiche user
Back-ups	Installed backup agent for existing back-up system

****If you anticipate high usage from the Laserfiche Web components (Web Access or Public Portal), we advise the Web Server be a separate server.***

If you require external/public access, an additional DMZ server is strongly recommended for security reasons.

For any of the Laserfiche Web-based components (e.g., Web Access, Weblink/Public Portal, Laserfiche Forms Portal), if the client desires website security via SSL, the client is responsible for acquiring, installing, configuring and maintaining that certificate.

Laserfiche Forms Server Specifications*:

CPU	Minimum 4 cores or greater
Minimum Memory	12 GB or greater
Operating System	Windows Server 2012 R2 or above, Latest Version Preferred
Web Server	Windows Server 2022, Windows Server 2019, Windows Server 2016, Windows Server 2012 R2
Framework	Latest .Net Version in relation to your OS (Client responsible for install)
Browser	Edge (latest version), Chrome (latest version)
NIC	Gigabit recommended for optimal speeds
Network Licenses	Laserfiche uses one Windows license for all Laserfiche users
Back-ups	Installed backup agent for existing back-up system

*Laserfiche Forms Notes:

- **Microsoft IIS must be installed on the forms server.**
- **Laserfiche Forms will work with Laserfiche 9.0.1 (and above), and either Laserfiche Rio or Avante are required (Laserfiche Forms will not work with Classic, Executive or Desktop systems).**
- **One forms server can only access one Laserfiche repository. If you have more than one Laserfiche repository, separate forms servers would be required for each repository.**
- **Hardware requirements may fluctuate based on the number of users logged into the server. If you expect to have many simultaneous connections to the forms server, you may want to configure it with a faster CPU and/or add more RAM. If you have any questions on your specific situation, please contact your General Code representative.**
- **If you are using Forms with Direct Email Approval, then you will need an email account with an Inbox that Forms can check.**

Web Browsers*

Products	Chrome	Firefox	Safari	Edge
Web Access 11	Y	Y	Y	Y
Forms 11 publicly available pages	Y	Y	Y	Y
Forms 11	Y	Y	Y	Y
Web Administration Console 10.3.1	Y	Y	Y	Y
Weblink 11	Y	Y	Y	Y

*Assume latest version of the above browsers

Mobile Operating Systems

Products	iOS 7	iOS 8+	Android 5.0	Windows 10	Windows 11
Laserfiche Mobile 10.3	Y	Y	Y	Y	Y
Laserfiche Mobile 10.4	N	Y	Y	Y	Y
Laserfiche Mobile 11.0	N	Y	Y	Y	Y

Full User / Scanner Workstation:

CPU	Intel i3 7 th Gen or better
Memory	8 GB or greater (Windows 10, Windows 11)
Operating System	Supported: Windows 10, Windows 11
Browser	Edge (latest version), Chrome (latest version), Firefox (latest version), Safari (latest version)
Hard Drive	Hard drive running at a minimum of 7,200 rpm 3 GB of free disk space for software and temporary files created during scanning
Framework	Latest .Net Version in relation to your OS (Client responsible for install)
NIC	Access to the network server running Laserfiche
Monitor	Resolution 1366X768 or better recommended for optimal viewing
USB Port	Available USB 2 port for scanner connection if the scanner will support a USB connection
Scanner	Scanners need to have access to TWAIN and ISIS drivers, in theory any scanners with access to these drivers should work with Laserfiche. Please reach out to your ICC-CDS Representative with questions regarding specific scanners

“Light” User Workstation (e.g., primarily retrieval user):

CPU	Intel i3 7 th Gen or better
Memory	Operating System minimum or greater
Operating System	Supported: Windows 10, Windows 11
Browser	Edge (latest version), Chrome (latest version), Firefox (latest version), Safari (latest version)
Hard Drive	At least 1 GB of free disk space
Framework	Latest .Net Version in relation to your OS (Client responsible for install)
NIC	Access to the network server running Laserfiche
Monitor	Resolution 1366X768 or better recommended for optimal viewing

QuickFields Agent Processing PC

CPU	Intel i3 7 th Gen or better
Memory	16 GB RAM or more
Operating System	Windows 10, Windows 11 or Server 2012 R2 or above, 64 bit
Framework	.NET 4.7+
Hard Drives	120 GB or higher SATA SSD
NIC	Gigabit 10/100/1000 Ethernet

- QuickFields is extremely intensive on the CPU and disk I/O, so a Quad Core processor and SSD are highly recommended.

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