interMediate runs as either a single user system or as a shared, network accessible system. Each computer using interMediate also runs its own copy of FileMaker Pro 12 version 3 or later, the underlying database software.

interMediate and FileMaker Pro run on Windows 7, Windows Server 2008 or Mac OS X 10.6 or later. Windows XP and Vista are also supported in managed environments using modern hardware and/or virtualised systems based on Citrix XenApp 5 or 6; or Windows Server 2003/2008 Terminal Services. Any combination of Windows and Mac OS X can use the system concurrently, as host or client. FileMaker Pro 12 supports up to 10 concurrent users as a network host. FileMaker Server supports up to 100 users.

The oldest and least powerful system for which interMediate is tested is a 2007 Dell Vostro 200 with a Core2Duo E6550 2.33 GHz processor, 3 GB main memory and Windows 7 Professional.

Single user systems and network clients – recommended minimum requirements
A medium speed or fast Core2Duo or Core i3 based computer, Windows 7 Pro 32 or 64 bit, a CD/DVD reader, 1024 x 768 display, 4 GB memory, 5,400 rpm disk, 1,000 Mbit Ethernet.
A medium speed or fast Core2Duo or Core i3 based Macintosh with OS X 10.6 or later and 4 GB memory.

Host computers with up to 10 users – recommended minimum requirements
A Core i5 based computer, Windows 7 Pro 64 bit, a CD/DVD reader, 1024 x 768 display, 4 GB memory, 7,200 rpm disk, 1,000 Mbit Ethernet.
A Core i5 based Macintosh with OS X 10.6 or later and 4 GB memory.
Budget computers should not be used as network hosts.
For systems with more than 4 concurrent users a dedicated host computer is recommended. The host computer's memory requirement increases with the number of concurrent users.

Host computers with more than 10 users – recommended minimum requirements
A Core i5 or Core i7 based computer, Windows 7 Pro SP1 64 bit or Windows Server 2008 R2 SP1 64 bit, a CD/DVD reader, 1024 x 768 display, 4 GB memory, 7,200 rpm disk with at least 10 GB free, 1,000 Mbit Ethernet.
A Core i5 or Core i7 based Macintosh with OS X 10.7 or later, 10 GB free disk space and 4 GB memory.
Budget computers should not be used as network hosts.
For more than 10 concurrent users interMediate is hosted by FileMaker Server 12. The host computer's memory requirement increases with the number of concurrent users.

Networks
For high speed, simultaneous two way traffic, networks should operate with full duplex switched connections. Any half duplex network devices must be replaced. The interMediate host must have a fixed IP address and an unchanging MAC address. Port 5003 should be open for host-bound traffic in any firewall between the host and client, and for outbound traffic from the host and clients to the Internet.

Fast broadband Internet access, delivering at least 2mbps download, 500 kbps upload and 85% service quality. An Internet speed test is recommended. (See http://myspeed.visualware.com.)

interMediate must not be shared by any method except its own network. It is essential that the interMediate Folder on the host can not be shared across the network by file sharing. The interMediate Back Up folder inside the interMediate folder can be shared on the network, usually for inclusion in back up routines. Live interMediate files should not be accessible for file sharing, back up copying, anti-virus scanning or search indexing.

There is no need for a FileMaker host or server to run on the server editions of Windows or Mac OS X. General purpose systems are usually less costly and easier to administer.

Other Dependencies

interMediate sends email via either the client computer's simple MAPI mail client or via access to an SMTP server.

On Windows computers running the Windows Dialer, if the computer has a modem connected to the same PSTN telephone socket as the user's telephone, interMediate will be able to dial voice calls directly from the database.

interMediate support documents are provided as PDF files. The Adobe Reader software is available for free of charge download from www.adobe.com/reader.

About Network Speed

Multi-user relational databases like interMediate are time sensitive in the way they handle data. This is essential to ensure that users' changes to the data are applied in the correct order. Record locking, unlocking and indexing operate very fast to keep up with multiple users working on the same database at the same time. If network communication speed fluctuates a lot over time or between users, the database host has much more work to do to keep everything operating fast and smoothly.

The following recommendations are to ensure that networks operate well with time sensitive data.

Use 1,000 mbps (gigabit) Ethernet wiring and wire speed switches instead of wireless networking or PhoneNet. Ethernet is the fastest, most consistent, most reliable and most secure local area network technology.

Network cable should be Category 5e or better, with no damage to the plugs or cable. RJ45 line connectors have high failure rates and if present should be removed. All devices should be full duplex all the time.

Check that network routers, hubs, switches and internet access devices all conform to the system requirements.

If wireless network access is used, whether it carries interMediate traffic or not, the security protocol should be WPA2. WEP security is easily broken and inadequate for protecting a network carrying interMediate data.

About Low Performance Computers

Low performance computers are inadequate as shared database hosts because they lack the power and speed to handle the work of several people at the same time. Until recently low performance machines were easy to recognise, mainly because they featured low power processors, often Intel Celeron or similar AMD types. Recently the major manufacturers have started producing low price/power machines based on nominally more powerful Intel Core2Duo or AMD processors. To keep the price down these machines are often fitted with outdated or low performance hard disks, memory, graphics processors and motherboards, whilst the manufacturer also emphasises the performance of the processor chip in the marketing materials. Some of them contain main components that were introduced years ago, making them obsolete when new for organisations that change computers when they're three to five years old.

The easiest way to recognise these computers is by the price - the major manufacturers carefully manage their price/performance ratios. If a computer is cheap, it probably isn't fast and shouldn't be used as a database host. Another way is by checking component ages and capabilities, especially the processor, system bus, memory size/speed and hard disk size/speed. For people who aren't familiar with what's fast and what isn't, it's strongly recommended to get independent buying advice from a trained person. Processors should be recent and mid range or high performance, host computer disks should be 7,200 rpm and not 5,400, and memory should be fast and large enough to satisfy the system requirements. A good source of component performance and age information is: http://www.wikipedia.org/

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