

The following charts include the minimum and recommended desktop configurations.

Windows-specific (x86 Architecture)

| Standard Desktop | | |
|----------------------|---|---|
| | Minimum | Recommended |
| Processor | Intel Pentium 4 (or AMD equivalent) with clock speed of 1.3 Ghz | Intel Pentium Dual-Core (or AMD equivalent) with clock speed of 2.2 Ghz or Intel Pentium 4 (or AMD equivalent) with clock speed of 3.0 Ghz |
| Memory | 1 GB RAM | 2 GB RAM |
| Video | Super VGA (1024 x 768) or higher-resolution monitor with true color (16 million colors) | Super VGA (1024 x 768) or higher-resolution monitor with true color (16 million colors) |
| Hard Drive | 20GB (minimum 2 GB free) | 60 GB (minimum 2 GB free) |
| Monitor | 15-inch CRT Monitor capable of supporting the minimum video resolution or laptop equivalent | 17-inch LCD Monitor capable of supporting the recommended video resolution or laptop equivalent |
| Network Connectivity | Integrated 10/100 Ethernet Port | Integrated Gigabit Ethernet Port |

Mac OS-specific (PowerPC or x86 Architecture)

| Standard Desktop | | |
|----------------------|--|--|
| | Minimum | Recommended |
| Processor | PowerPC with clock speed of 1.1 Ghz | Intel Core2 Duo with clock speed of 2.0 Ghz |
| Memory | 1 GB RAM | 2 GB RAM |
| Video | Super VGA (1024 x 768) or higher-resolution monitor with true color (16 million colors) | Super VGA (1024 x 768) or higher-resolution monitor with true color (16 million colors) |
| Hard Drive | 20GB (minimum 2 GB free) | 60 GB (minimum 2 GB free) |
| Monitor | 15-inch CRT Monitor capable of supporting the minimum video resolution or MacBook equivalent | 17-inch LCD Monitor capable of supporting the recommended video resolution or MacBook equivalent |
| Network Connectivity | Integrated 10/100 Ethernet Port or Airport Extreme | Integrated Gigabit Ethernet Port or Airport Extreme |

Browser Requirements

MiSACWIS is fully compatible with the Internet browsers listed below:

- Internet Explorer 6.0 or a later version
- Firefox 3.6 or a later version
- Safari 4.0 or a later version
- Chrome 12.0 or a later version

All of the above browsers support 128-bit TLS² or SSL³ encryption, as required by the State of Michigan security policy. Users may be able to access MiSACWIS with browsers not listed above; however, MiSACWIS

² Transport layer security.

³ Secure sockets layer.

project staff will not test for compatibility against unlisted browsers, and the browser editions are considered unsupported.

Printers

All MiSACWIS users must have access to a printer; it can be a stand-alone printer or a network printer.

Scanners

MiSACWIS users will be scanning documents in to the MiSACWIS application. Scanners must support the following set of specifications in order to interface with the content management and document retention functions of MiSACWIS. These specifications are:

- Optical Resolution: minimum 300 dpi (dots per inch)
- Bit Depth: minimum 24-bit
- Document Size: 8.5x 11 and/or 8.5x14

Additional Software Requirements

As MiSACWIS is a web-based application, there is no MiSACWIS software installed on a user's computer to run the application; the web-browser is the primary user-interface with MiSACWIS. However, in order to provide for compatibility with the MiSACWIS server software, as well as the State of Michigan's security policies, the following additional software is required on each computer system:

- Java™ Platform Standard Edition 6⁴
- Adobe® Acrobat® Reader X⁵
- Anti-virus software, configured for automatic signature update.

Agencies and institutions accessing MiSACWIS will be required to run full-system, virus scans at least monthly. Quick scans or real-time scans do not meet this requirement. DHS staff will revise private agency and residential contracts to include this as a contractual requirement.

End-User Connectivity Requirements

Private agencies and institutions with multiple users will need to provide higher bandwidth to satisfy concurrent users. The table below provides guidelines for the available bandwidth necessary to support environments of varying sizes. The table assumes all users at a site are using MiSACWIS, but agencies should consider how many users would actually access MiSACWIS at once. For example, if a site has 250 MiSACWIS users, but only a small number use the system on a daily basis, the bandwidth requirements will be far lower than the requirements listed below for a 250-user site.

| Environment | Average Kbps ⁶ | Peak Kbps |
|-------------|---------------------------|-----------|
| 10 users | 448 | 1356 |
| 25 users | 1,120 | 3,390 |
| 50 users | 2,240 | 6,780 |
| 100 users | 4,480 | 13,560 |
| 250 users | 11,200 | 33,900 |

Multiple User Site Bandwidth Requirements (in Mbps)

⁴ Java™ Platform is available as a free download from <http://www.java.com/en/>

⁵ Reader is available as a free download from <http://get.adobe.com/reader/>

⁶ Kilobits per second (Kbps) are a measurement for data transfer speeds.

Dial-up connectivity (56 Kbps maximum) is inadequate to efficiently process transactions. In summary, all agencies and institutions will need to use Broadband networking or a full T1 fiber-optic line (1.544 Mbps⁷) to receive acceptable MiSACWIS performance.

Note: Downloading files, playing online games, and live media streaming (music, video or TV) will significantly affect processing speeds within an office. Therefore, DHS cannot guarantee adequate response times if staff within an office is executing these functions.

Summary

MiSACWIS project staff will be contacting those agencies and institutional staff who completed the survey and indicated that their systems do not meet the minimum specifications. If an agency or institutional staff has concerns about their systems, they may contact the MiSACWIS project at MiSACWIS@Michigan.gov.

⁷ Megabits per second.

