



TRICARE
MANAGEMENT
ACTIVITY

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MEMORANDUM FOR DEPUTY SURGEON GENERAL OF THE ARMY
DEPUTY SURGEON GENERAL OF THE NAVY
DEPUTY SURGEON GENERAL OF THE AIR FORCE

SUBJECT: Communications Bandwidth Management

The availability of fast, reliable and secure data communications is critical to the efficient delivery of quality healthcare within the Military Health System. To ensure mission critical information is available when and where needed, the attached guidelines provide recommendations for conserving bandwidth. These guidelines provide recommendations for implementing conservation practices for Technical Program Managers, end users, and server administrators.

Each Component is strongly encouraged to develop implementation guidance tailored to best fit its needs. The adoption of conservation methods will help achieve a more efficient use of available bandwidth to support our mission.

A handwritten signature in black ink, appearing to read "M. Cowan", with a long horizontal line extending to the right.

Michael L. Cowan, RADM, MC, USN
Deputy Executive Director

Attachment:
As stated

MHS Guidelines for Conserving Communications Bandwidth

Technical Program Managers

Technical Program Managers of Military Health System (MHS) Automated Information Systems (AISs) deployed or under development, are strongly encouraged to pay close attention to system resource demand as they develop and/or redesign their respective AISs. Applications should be designed and tested to ensure efficient use of bandwidth. Program Managers are encouraged to use formal capacity planning processes, including simulation-modeling tools and techniques to accurately predict bandwidth demand and most efficiently use bandwidth resources.

End Users

User e-mail practices can have a dramatic impact on bandwidth. Conversation methods include:

- Send e-mails with large attachments only when essential. Avoid use of rich context pictures requiring large amounts of memory. Wherever possible, produce text and graphics in black and white and avoid background graphics such as logos and seals.
- MHS personnel should use government provided e-mail services, not commercial web-based e-mail services, such as HOTMAIL, YAHOO, and EXCITE. Bandwidth overhead associated with web-based e-mail is excessive.
- Documents should be placed on Web Servers whenever possible to minimize the individual distribution of lengthy e-mail, or e-mail with large attachments or a long list of addresses. Provide a Uniform Resource Locator (URL) in a brief e-mail indicating where the documents can be accessed via the Internet.
- Download large files from Web sites should be performed only when necessary and for official business only. However, having interested parties "pull" briefings off a Web site is preferable to sending lengthy files to large lists of addressees. Transmit frequently shared documents to webmasters for posting and sharing across the organization.
- Compress all large e-mail attachments with utilities such as WINZIP
- Limit official newsgroups subscriptions to those needed to support mission requirements. Individual subscriptions to newsgroups, not mission-related, are strongly discouraged.
- When using the "Reply" and "Reply to All" e-mail feature, avoid quoted replies/in-line replies (i.e., complete e-mail strings). Limit the use of the "cc:" feature.
- Use the "Message Read" e-mail feature only on official e-mail when receipt must be positively verified (i.e., where the e-mail has a direct bearing on the mission).
- Do not access web applications that utilize streaming audio and/or video except for official business. Examples of applications that should be avoided include radio over the Internet and real-time stock market tickers.

Server Administrators

Efficient server administration can have a favorable impact on bandwidth utilization.

Conversation practices include:

- Use Intranets to post and download commonly used documents. Post large files on an FTP or Web server and provide a Uniform Resource Locator (URL) in a short e-mail that indicates where the documents can be easily accessed.
- Prioritize traffic into mission priorities based on application type, protocol (TCP or UDP), source and destination IP address, URL group, and type of service.
- Impose limits on items such as: the size of e-mail attachments, access to web applications that provide streaming audio and video, or real-time stock market ticker applications.
- When teleconferencing, use video bandwidth compression techniques to the fullest extent possible.