



NEWS RELEASE

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EN Driving Information Technology to the Next Level

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MAXWELL AFB GUNTER ANNEX, Ala -- Headquarters Standard Systems Group is raising the performance bar for systems operating on GCSS and Air Force architectures.

Application performance on the Air Force network infrastructure is a major concern of SSG professionals. SSG system engineers identified poorly applied data handling methodologies between end-users and application servers as the driving reason for slow performance.

Using a network analyzer or "sniffer", SSG engineers evaluate how well an application is tuned for the network. Detailed data from the sniffer reveals the type of data transmitted and methodology used during transactions.

SSG then employs various techniques to improve data handling and minimize the amount of data transmitted to dramatically improve end-user performance. SSG tuning typically improves the end-user performance by 90 percent without impacting application functionality.

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EN Driving Information Technology

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Another major initiative is performance monitoring. As applications are fielded, end-user feedback becomes subjective, since a 5-second response may be acceptable for one user but unacceptable for another. Currently, there is no standard to ensure response times are measured fairly and accurately.

SSG engineers designed a method called "instrumentation" to obtain and quantify near real-time performance information. By inserting several lines of pre-developed code into programs, SSG can measure and track software performance, identify trouble or "slow spots" and optimize both the application program and network architecture. The result is improved response times for operators and minimized bandwidth requirements for systems worldwide.

Using this internally developed methodology, SSG can capture and quantitatively measure individual activities and total system performance. Detailed information about each transaction may include the time transmitted, where processed, application name, user location, specific transaction, user response time, server response time and communication time.

SSG organizes instrumented data into performance reports which reveal application and communication issues. The information is shared with both major commands and base communications and information directorate personnel to enable objective assessment of their information technology systems, networks, architecture and operator response times. These technologies have impressed senior Air Force leaders along with many industry partners as absolutely critical to commanding and maintaining the information technology edge over our adversaries.