

The Citrix Solution

Best Practices & Recommendations

General High-Latency Network considerations: In a low-latency, high-bandwidth environment, administrators rarely have to take latency into account.

Administrators utilizing satellite (and in some circumstances other wireless) based **GALAXY[®] SKYDATA** Managed Services for IT service delivery can improve end user experience by reducing client-to-server round trip times, caching data, batching records and packets, and leveraging compression and acceleration technology.

Limit the number of client to server round trips: Every round trip from a remote client, through the satellite network and back will typically take between 600 – 800 milliseconds, and occasionally more. While the approximate one second round trip seems almost trivial, a process that makes multiple round trips will become an issue. On a LAN this is not a concern. It is definitely a problem when multiple transactions must take place sequentially over a satellite or other high latency wide area network.

Batch Data Records Together: Multiple 'records' transfer, either upload or download, to/from a server over the network are almost always best batched together rather than sent individually. This may seem like antithetical advice to keep network payload small, but pushing on a record by record basis will entail a heavy price in communication overhead involving multiple server requests and round trips. The real saving is in reducing these round trips.

Citrix Optimization Techniques

- 1. SpeedScreen Latency Reduction:** Network latency and bandwidth availability can impact the performance of connections to published applications and content. SpeedScreen technology allows administrators to configure several features to improve connection speed and responsiveness. SpeedScreen Latency Reduction Manager helps reduce a user's perception of latency with mouse click feedback and local text echo. Enabling mouse and local text echoing on several applications improved the end user experience with applications delivered by XenApp and Presentation Server.
- 2. Session Reliability/ICA Keep-Alive:** Session reliability allows a client to reconnect and avoid inconvenience to a user during a short network interruption. Instead of removing all unresponsive applications and desktops from the client workbench, they are kept open until the connection is re-established. ICA Keep-Alive enables a server to detect broken sessions. If the server loses connectivity to the client, the connection is placed into a disconnected state, allowing a user to re-connect to a dropped session. These settings can be implemented at the farm-wide/server-default level or at an individual server level.