

# Software Management on a Global or Enterprise Network

When Westinghouse needed to build a support system for 7,500 computers in their care at the Hanford, WA Department of Energy site, the support team knew they could trust KeyServer to do the job of managing software. After they had thoroughly tested several products, it became clear to them that KeyServer stood head and shoulders above the rest.

KeyServer's transparent, instantaneous service and its relentless ability to support the demands of thousands of desktop clients was unsurpassed by other systems in their tests.

The Westinghouse support staff's confidence in KeyServer was reinforced by the presence of two other KeyServers on the base that had been supporting in excess of 6,000 computers for two years prior to the Westinghouse installation.

A.G. Edwards & Sons, of St. Louis, Missouri, had a different experience but came to the same conclusion as Westinghouse. After several frustrating years of attempting to solve problems with another vendor's software metering system, the IT staff turned to Sassafras for a solution to support their 3,100 computers.

Edwards' IT staff had been repeatedly told by the other vendor that the problems they were experiencing could not be solved. The vendor simply did not know how to fix their own software to make it work in Edward's enterprise environment. Upon installing KeyServer they discovered they had suffered unnecessarily; that an "active

metering" process could indeed work on an enterprise-level network.

The experiences of these two companies would have been no surprise to Tokyo Marine in Japan which had been managing their 20,000+ desktops with a single KeyServer since 1997.

## Robust Network Protocol Support.

One of the things that allows a single KeyServer to serve tens of thousands of users simultaneously was Sassafras' choice of UDP rather than TCP as a network protocol. UDP is a "connectionless" network protocol that provides greater efficiency than TCP in certain circumstances. "Connection oriented" protocols like TCP offer advantages with ease of programming, but have related traffic and 'overhead' costs.

Two of the more relevant costs in the use of TCP as a protocol are that each connection reserves memory on the server (which limits the number of possible simultaneous connections), and each data exchange is accompanied by consequential overhead to "build up" and "tear it down" the session. With the use of UDP KeyServer is able to eliminate the need for connection orientated server-based memory and dramatically reduce the traffic associated with each transmission.

## More Efficiency – Less Traffic.

All of this translates into a more efficient system supported by significantly less traffic. But that is just the beginning. KeyServer's

architectural design also lends an important assist to reduced network traffic and greater stability, making KeyServer eminently qualified for global, enterprise-level networks.

The common architectural frameworks of client-driven remote data searches, or mid-level slave servers are known to generate excessive traffic and cause delays in responding to desktop-client demands. Alternatively, KeyServer employs an extremely efficient, "active server" process that eliminates excessive traffic. KeyServer's process does not require clients to conduct their own interrogation of remote data repositories. Nor does it demand the addition of chatty "load balancing", "license sharing", or noisy multi-tiered technologies which other systems must employ in their efforts to scale up to enterprise-level and global network support.

The noisy technologies common in other software management systems are known to produce in excess of 4-Mb of network traffic per client, per eight hour day. In contrast, KeyServer clients produce a maximum of 24-K of network traffic per day. This translates into more reliable service for your clients.

## Measure Twice – Buy Once.

We encourage any organization considering WAN-level license management to conduct tests for network traffic and scalability. To that end, we offer free testing tools. Contact us at 603-643-3351 or by email at <info@sassafras.com> for an evaluation copy and stress-testing tools.

