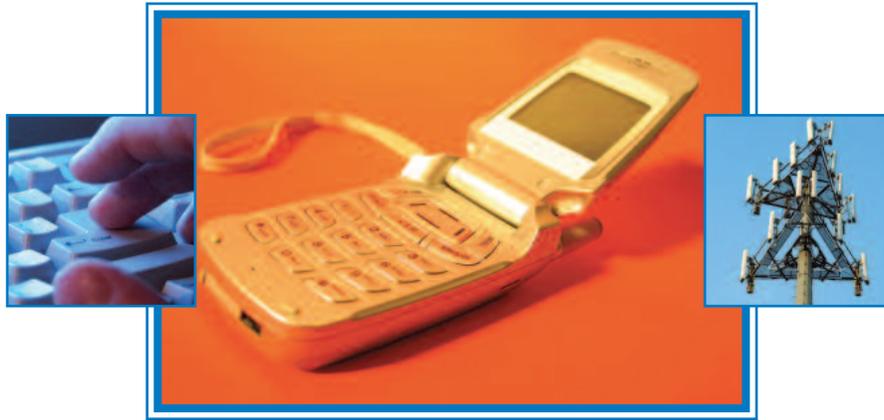


## GRAPHON HAS THE RIGHT ANSWER FOR CINGULAR WIRELESS.



### ***GO-Global Speeds UNIX Application Access and Improves User Satisfaction for Cingular's Regional Data Center.***

#### ***Customer Solution at a Glance***

**Company Profile:** Serving over 57 million subscribers, Cingular Wireless is the largest wireless company in the United States.

**Business Need:** Cingular needed to improve performance and response times for internal users accessing the company's UNIX-based network management applications.

**GraphOn Solution:** With the server-centric GO-Global® for UNIX solution, internal users now have fast, reliable, secure access to SUN and HP server-resident applications from Windows XP and other client platforms.

#### **Results:**

- High-performance UNIX application access from any client over any connection.
- Improved overall user satisfaction.
- Outstanding data compression and security.

When Cingular Wireless recently merged with AT&T Wireless Services, the result was the nation's foremost wireless carrier with the largest digital voice and data network in the country. The newly combined company, with more than 57 million customers and an extensive nationwide network, offers its consumers maximum convenience and flexibility, improved reliability, enhanced call quality, and the widest array of advanced services.

Of course, integrating these huge networks presented the company with a number of technical challenges. In the Western Region, for example, when the Regional Data Center combined the internal networks to improve security and implement a new network infrastructure, users such as Engineering, Provisioning, and Field Operations noticed increased latency when accessing mission-critical, UNIX-based network management applications.

To remedy the problem, Cingular deployed GO-Global for UNIX, the high-performance, server-based solution featuring the patented Rapid-X Protocol.



**Access to Applications Anywhere.**

## Application Latency

When the Western Regional Data Center combined the internal networks following the merger, they needed to implement Network Address Translation (NAT) and firewalls to eliminate duplicated IP addressing while keeping security rules in place.

“By combining our networks, setting security, and implementing a new network structure, we introduced latency for the users of our network management applications,” said Thomas Pola, Design Engineer V at Cingular.

Cingular’s network users included Engineering Planning studying network growth and utilization, Network Provisioning building network connectivity, Field Operations maintaining and troubleshooting network issues, and the Regional Network Operations Center monitoring network components.

Increasingly, these users were calling in to complain about “slow response” or “unstable applications.” Pola explained that “when clients can’t use their applications, they become ineffective in performing their tasks. This leads to frustration and it jeopardizing our success.”

## The Quest for a Solution

“We kept on trying to find a better solution to minimize the latency within the network,” continued Pola. “We tried alternatives such as standard Telnet, WRQ Reflections, Hummingbird Exceed, and Citrix, but none of these tools solved the problem nor met our users’ requirements.”

Next, Pola tried GO-Global for UNIX. “I downloaded a free trial copy of GO-Global from GraphOn’s Web site and immediately put it to the test,” said Pola. “Using GO-Global, application responsiveness was greatly improved. I ran comparisons against all client software tools available and none of them matched the performance response time we gained from this solution.”

## The Server-Centric Solution

Cingular discovered that unlike less efficient alternatives, GO-Global uses a true server-centric computing model. The solution runs X Server software only on the UNIX server, not on the individual clients. This greatly reduces system complexities, improves overall performance, and thereby saves time, resources and money.

On the client side, network users simply run an ultra-thin client consisting of a near zero-footprint native client, a browser plug-in, or a Java applet.

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*“With GO-Global, we have improved performance and productivity, simplified administration, and heightened security. The response from department managers has been excellent.”*

Thomas Pola  
Cingular Wireless

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## Relying on Rapid-X

The primary reason for GO-Global’s performance advantages can be found in GraphOn’s unique Rapid-X Protocol (RXP). This patented technology incorporates highly-efficient data compression technology – much better than traditional remote X solutions. Only display commands are transmitted over the network from the server to the clients – not entire screen bitmaps. From the client side, only mouse and keyboard events are transmitted back to the central server.

## Improved Security

With GO-Global, application and data security is improved, since they remain on the servers behind the firewall. Only the application’s user interface is transmitted to the clients. What’s more, GO-Global transmissions are fully encrypted using 256-bit AES encryption.

Looking to the future, Pola concluded, “As new applications are developed, we are implementing a GO-Global solution from the start based on previous performance.”

### *Cingular’s Western Regional Data Center Infrastructure*

**Servers:** Multiple Sun and HP servers running UNIX and HP-UX.

**Applications:** Alcatel 5620 Network Management System, Alcatel 1353 Element Management System, and Tellabs Metro Watch Application.

**Clients:** Upwards of 100 clients, including Dell and HP PCs running Windows XP Professional, and Sun workstations running Solaris 5.9.

**Connectivity:** Local clients connect over the LAN, while remote clients from across the Western Region connect over a wide mix of bandwidths, ranging from T1 down to OC12.

**Third-Party Components:** Clustering tools from VERITAS, proprietary software for backup and disaster recovery, and Network Information System (NIS).



**Access to Applications Anywhere.**

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