

The logo consists of a white stylized 'A' shape with a light orange shadow or secondary shape behind it, positioned above the text.

Allscripts™

# Optimizing Performance of Your Healthcare Delivery System

Harwant Sethi

Director, Hardware Services  
Enterprise  
Allscripts-Misys Healthcare



# Allscripts Citrix Relationship

- › Partnership started in 2006
- › Allscripts & Citrix co-existed for years in customer data-centers for with no formal relationship
  - Many Customers already were familiar with Citrix Presentation Server (now called XenApp)
- › Initially, we needed to improve the end-user experience (Response-Time)
- › A relationship centered around Citrix Netscaler was formed to provide web-server load-balancing and application compression
- › The relationship has evolved to take advantage of other Citrix technologies to improve the Application Delivery System of the Allscripts healthcare portfolio

# Network requirement averages

- › Web Client Network Bandwidth Usage Average = 80 kbps
- › PDA Client Network Bandwidth Usage Average = 45 kbps
- › Document Scanning Actions = 390 kbps
- › Image Viewing Actions = 540 kbps
- › Printing Network Bandwidth Usage Average = 235 kbps

Problem: Not all clinicians had uniform or consistent network bandwidth available to them.



Solution: Netscaler improved the application delivery experience.

# Maximum application availability



## Load Balancing/GSLB

Most powerful load balancer in the industry

## Proximity Based Load Balancing

## Content Switching

Customize delivery for each unique app

## Attack Prevention

No slow down even under heavy DDoS attack

## Surge Protection

Unexpected peak traffic poses no problem

# Performance for End Users



## Advanced TCP Optimization

Far more efficient connections

Allscripts Servers

## AppCache

Static and Dynamic caching

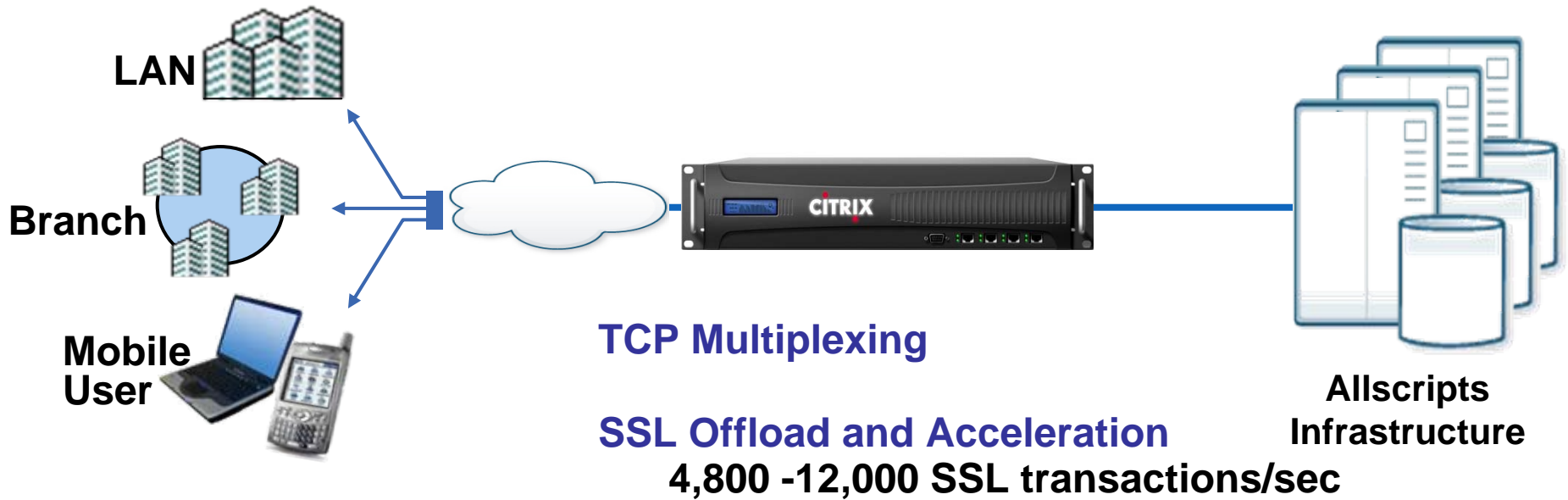
## AppCompress

Data compression across all TCP protocols

## AppCompress Extreme

Advanced differential compression

# Reduce Load on Backend Servers



**TCP Multiplexing**

**SSL Offload and Acceleration**

**4,800 -12,000 SSL transactions/sec**

**TCP Buffering**

**AppCache**

**Allscripts  
Infrastructure**

# Security



# Netscaler field experience

- › Up to 8:1 compression ratio
- › Application performance increases on T1 connections up to 300% for remote practices
- › End-user Stop-watch testing sampling using standard test
  - 58% to 76% improvement in overall application performance

# XenApp: Applications on demand

- › Reduce application costs by up to 50%<sup>1</sup>
- › Instantly deliver applications for business agility
- › Ultimate user mobility, productivity and satisfaction.



<sup>1</sup> Gartner, Total Cost of Ownership Comparison of PCs with Server Based Computing, Aug '08

# XenApp

- › Need to reduce time & cost of implementation
- › Ability to deliver Allscripts anywhere at anytime without user input or interruption
- › Improve Secure Access
- › Excellent response time even when outside of the corporate network
- › Important solution for Allscripts with our Healthcare MSOs

Note: XenApp was previously known as “Presentation Server”

# Citrix Access Gateway

Problem: Large enterprises may have SSLVPN solutions, however many smaller customers appreciate Allscripts providing a more “turn-key” solution.

Solution: Allscripts provides the Citrix Access Gateway for Smart Policy-based Remote Access.

- › Smart Access (policy based access to defined resources)
- › Secure Access from outside
- › Mobile device awareness
- › Advanced XenApp integration



# Citrix Access Gateway

- › Customer Success Story:  
Olean Medical Group, Olean, NY

Citrix Access Gateway is used for secure remote access.

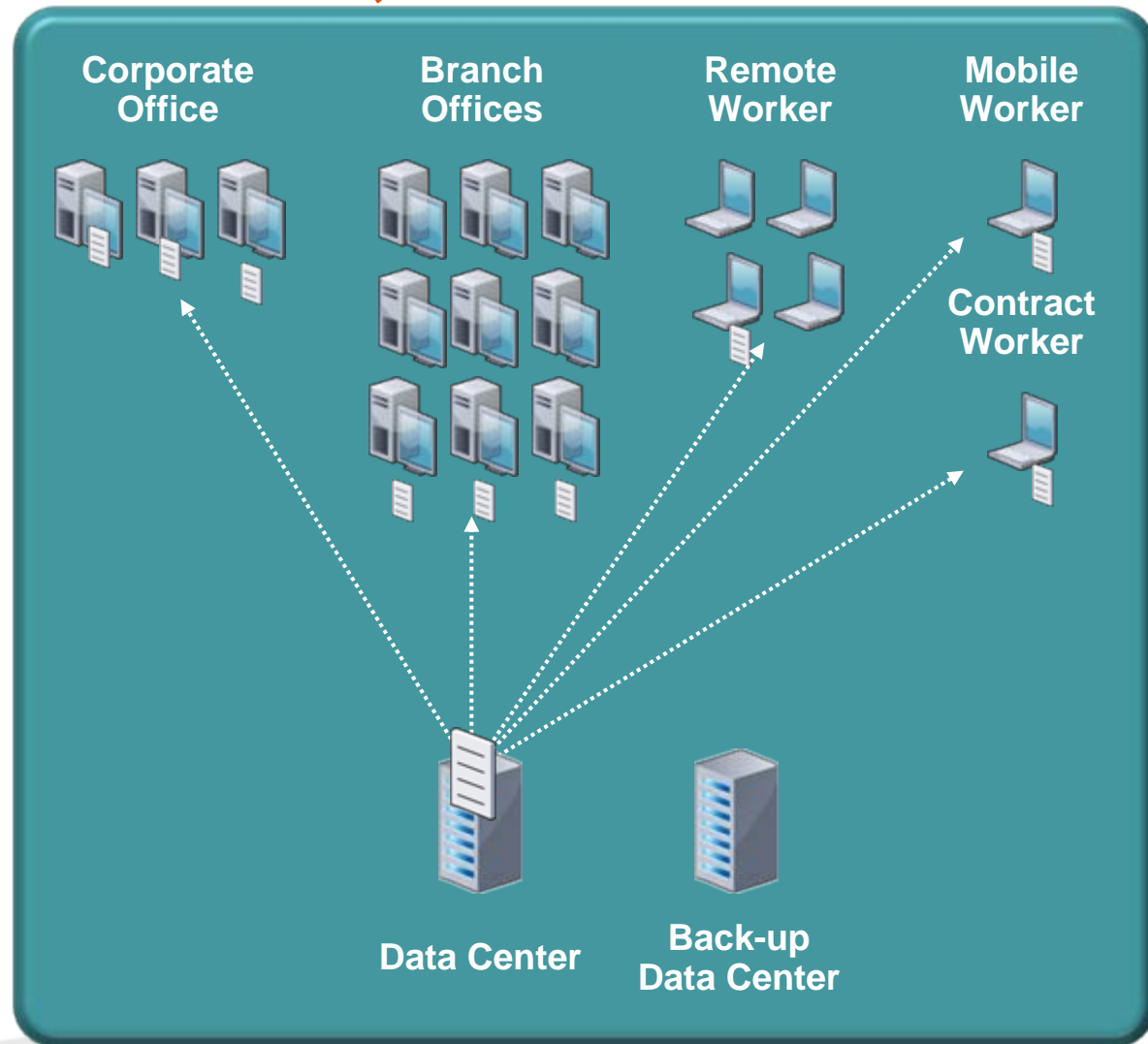
Citrix XenApp for the EHR mainly to extend the life of existing legacy end-user client systems.



# A Better Approach: Centralize, Virtualize, Deliver on Demand

## Separate applications and operating environments

- Move applications and data from individual machines to the data center
- Maintain and test in one secure place
- Deliver instantly and on-demand to any device, any where



# Citrix XenApp & Netscaler



**Grand River**  

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**Hospital District**

- › Customer Success Story:  
Grand River Hospital District

Citrix XenApp for Single Location for all Applications

Remote Desktop

Password Management

Citrix Netscaler for Load-balancing

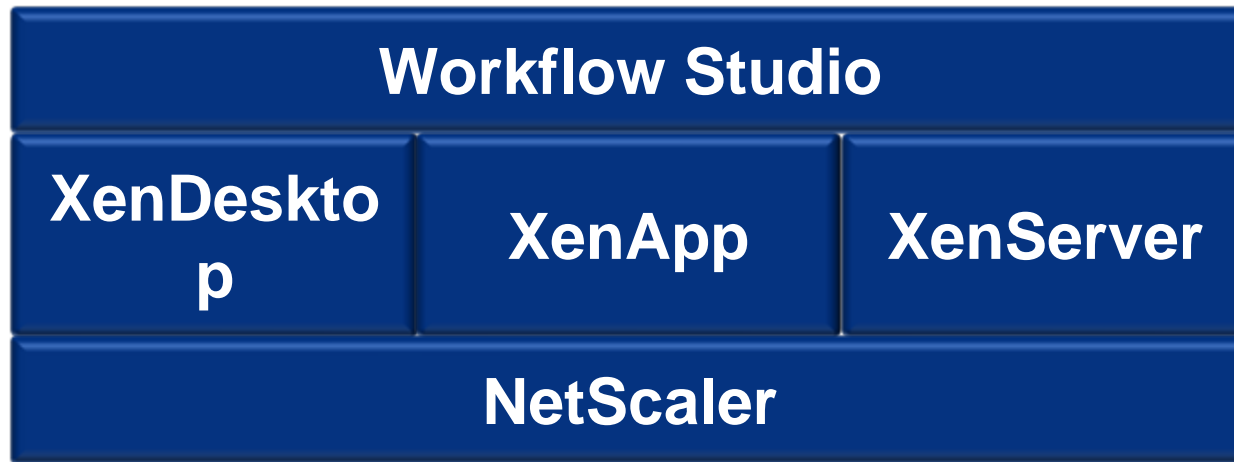
EHR Web-Servers

# Citrix Delivery Center™

*“Transforming Datacenters into Delivery Centers”*



Users



Apps

**IT delivery systems** for applications, desktops,  
and servers  
that improve **performance**, lower **costs** and  
enable **agility**

The logo icon consists of a white, stylized 'A' shape with a rounded top and a pointed bottom. Behind it is a semi-transparent orange shape that resembles a triangle or a stylized 'A' with a horizontal bar, creating a layered effect.

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