



# Terminal Services

December 15, 2003



# What are some trends?

- Faster Desktop Machines
- Increasing Application Requirements
- Result in 2½ - 3 Year Desktop Replacement Cycle
- Result in 2 – 2½ Year Laptop Replacement Cycle
- Increased Network Requirements Force Network Upgrades

**PROBLEM:**  
High Upgrade Costs vs.  
Slow Application Performance



# The Problem

- How can I minimize Upgrade costs without sacrificing performance?
- How can I get the maximum performance out of my Network and avoid bottlenecks?

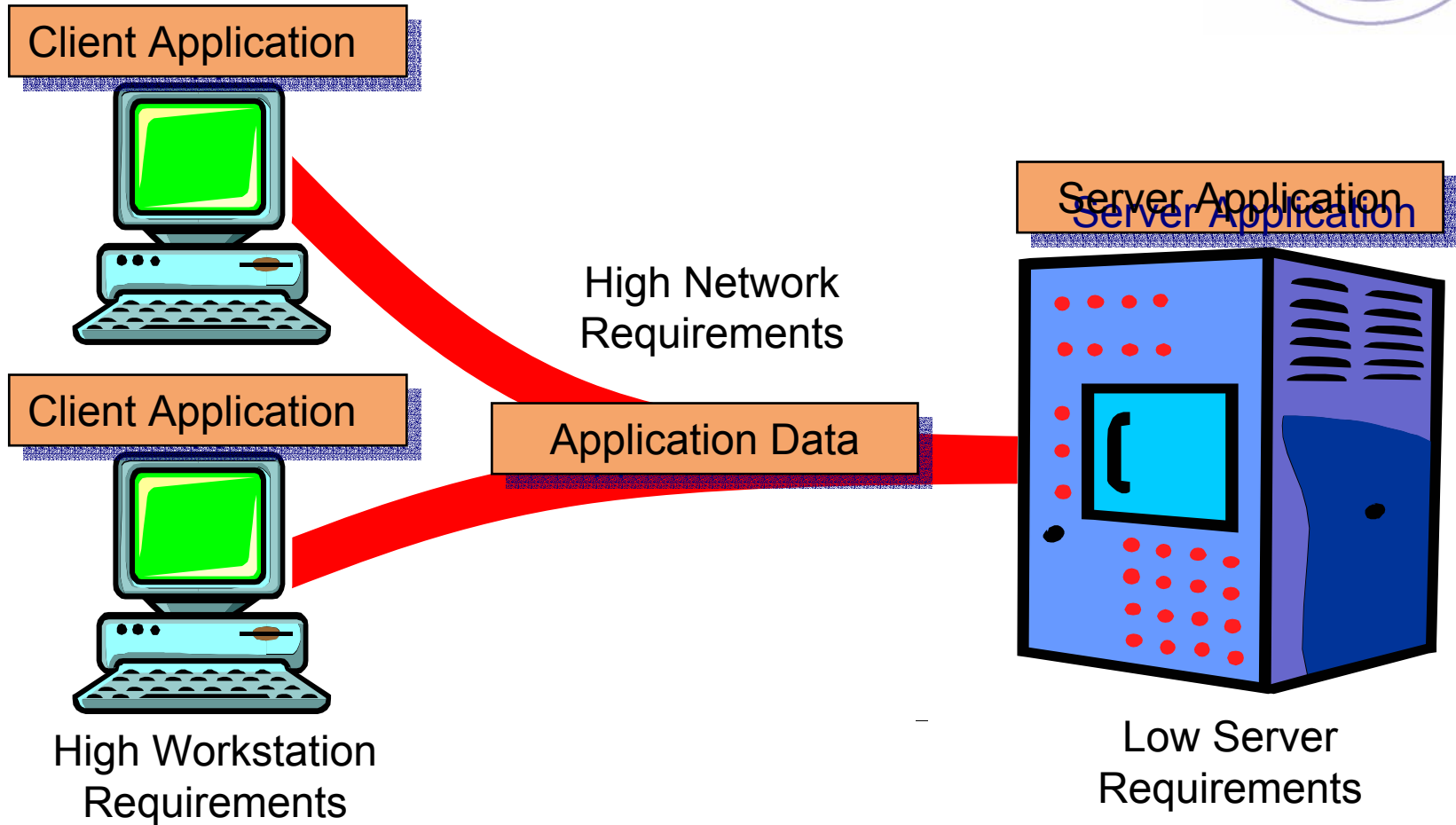


# What are Terminal Services

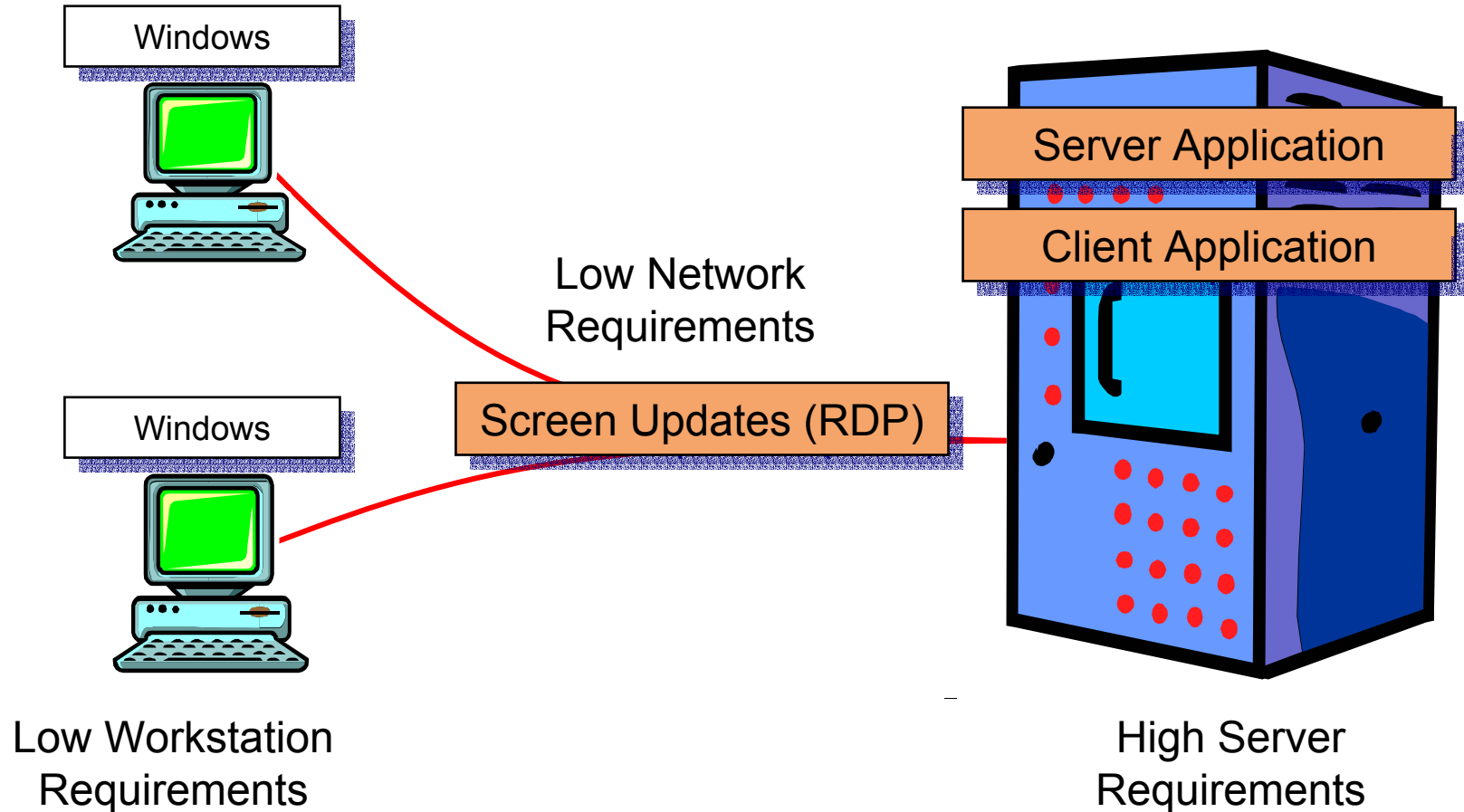
- Client/Server Applications
- Built into Windows (Win9x, WinNT, Win2000, WinXP)
- Allow Remote Control of Applications
- Use Remote Desktop Protocol (RDP) to pass screen updates, mouse movements, and keystrokes between the client and server

Thick Client vs. Thin Client

# Thick Client



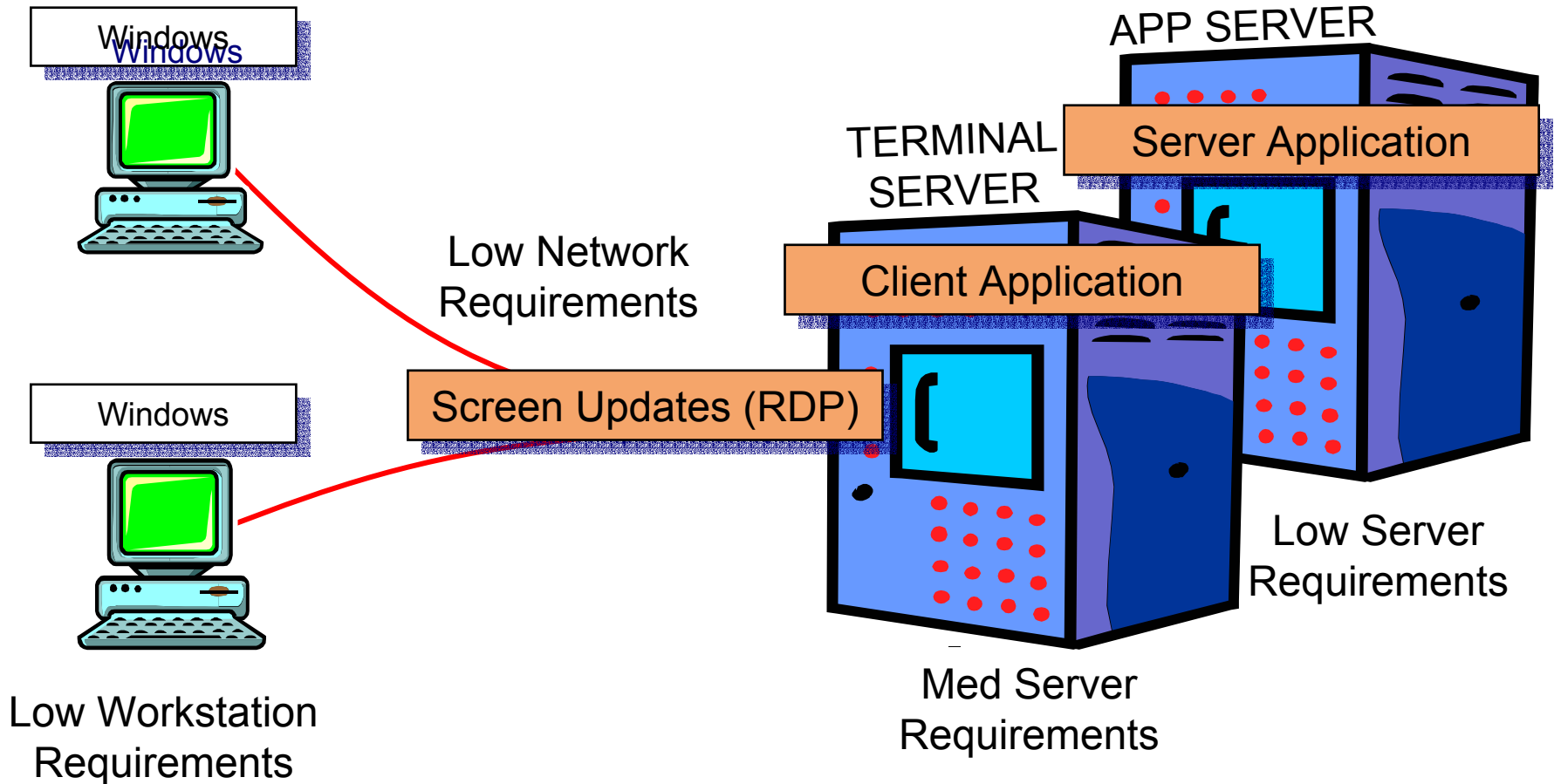
# Thin Client



Low Workstation  
Requirements

High Server  
Requirements

# Thin Client (Alternative)



# Benefits of Terminal Services



- Reduced Requirements for Workstations
- Reduced Requirements for Network Bandwidth
- Simplified Software Deployment, Maintenance
- Extend Hardware, Software Life Cycle



# Terminal Services Options

## ■ Microsoft Terminal Services

- Native to Windows OS
- Low or No Licensing Cost (\$80 for 2003 license)
- Good for Installations <100 Clients

## ■ Citrix

- Higher Cost (About \$250 per user - \$25K for 100 users)
- Supports Load Balancing Across Multiple Servers
- For Installations of 100+ Clients



# Using Terminal Services

## ■ Case Study – Microwave Data Systems

- Migration to new version of ERP Software forced higher requirements on workstations.
- Large deployment effort for rolling out new hardware, software and subsequent updates.
- Terminal Services
  - allowed keeping existing machines and simplified deployment and updates.
  - lowered cost of upgrading to new version of ERP.
  - improves machine availability and performance.



# Using Terminal Services

## ■ Case Study – Company X

- Acquisition of new factory required a rollout of Financial Software at the new plant (remote location in Idaho).
- Terminal Services allowed running Financial Software in new plant over a slow speed wireless connection.
- Almost Zero Deployment effort in remote site.



# How can we help?

- PPG has Extensive Experience with Terminal Services Deployments
- Leverage Experiences in Multiple Environments and Installations
- Familiarity with Network, Server, Workstation Implications
- Packaged Terminal Services Server / Software Solution direct from HP/Compaq Reseller
- Leverage PPG's Experience to Reduce your Risk
- Fixed price implementation – Call us for a quote!

# Contact Us



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