



DELIVERING VDI DESKTOPS

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What is a Desktop?

Your desktop isn't a device, it's where you get work done



Microsoft
Windows



Mac OS X

Microsoft
Windows



solaris

Microsoft
Windows

Application and Desktop Evolution

From Simple Terminal Applications To Rich Network Desktops

Simple Terminal Applications & Devices



Rich Apps Running Locally



Rich Apps Running Locally & From Network



Rich Apps, All From Network



The Network Is The Computer

Virtualized Desktop Solutions



One operating system is used to service multiple users. Each user has a separate session but shares the operating system and applications with others.



Multiple Users
Per Server



Each user has a dedicated blade system and operating system. Applications are installed individually for each user and the blades are managed individually.



Each User With
Dedicated Blade



Like the blade solution, but each user's system is a virtual machine instead of a physical one. OS and applications are installed and managed individually.



Each User With
Dedicated VM (VDI)

Emerging Access Requirements

Disasters

Need for Instant Desktop Recovery & Provisioning

Quickly recover, re-provision and re-establish user access to ensure business continuity.

Alternative Workspace

Need for Remote Offices, Virtual Offices, Hoteling

Support for a virtual work environment where users have alternative access to complete desktop resources while working remotely.

Outsourcing

Need for Secure and Controlled Access by Outsourcing Entities

Secure data and resources within the corporate data center and Provide outsourced or offshore developers.

Compliance

Need for Desktop Consolidation & Standardization

Contain desktop proliferation and build a standardized, centrally-managed desktop environment that adheres to internal and external compliance guidelines.

Client Virtualization – What is it?

- There are three categories
 - > Presentation Virtualization (Citrix Presentation Server)
 - > Desktop Virtualization (VMWare / VDI)
 - > Application Virtualization (MSFT SoftGrid)
- Desktop Virtualization is broken down by
 - > Server Hosted Desktops –
 - > Dedicated Remote Desktops (Blade PC's)
 - > Shared Remote Desktops (VMWare VDI)
 - > Diskless Clients (Ardence)
 - > Client Hosted Desktops (partitioning)

Source: Worldwide Virtual Client Computing 2006-2011 Forecast, April 2007, Humphreys & Rose

What is Desktop Virtualization ?

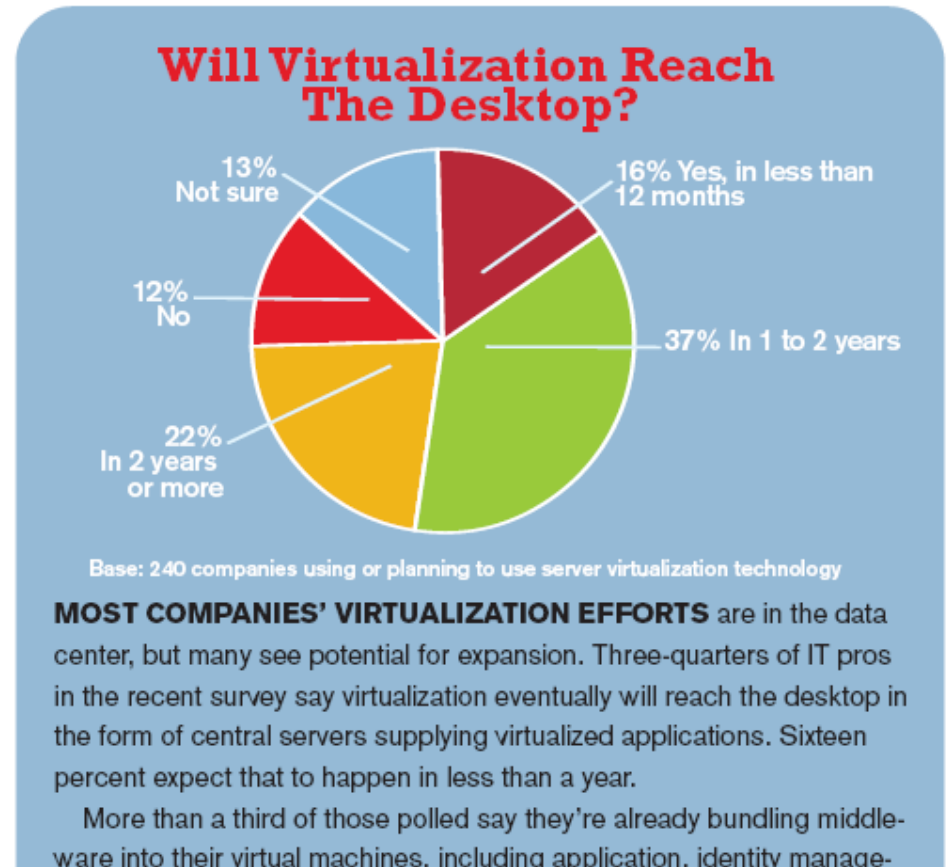
- The separation of the Desktop Operating System and some or all of its applications from the underlying hardware
- Each desktop instance executes in a self contained environment
- The interaction of individual desktop instances and the resources it uses, are controlled and managed by a virtualization layer

Most of the benefits from server based computing are gained without all the challenges and time constraints of migrating and testing all your desktop applications

Market Opportunity

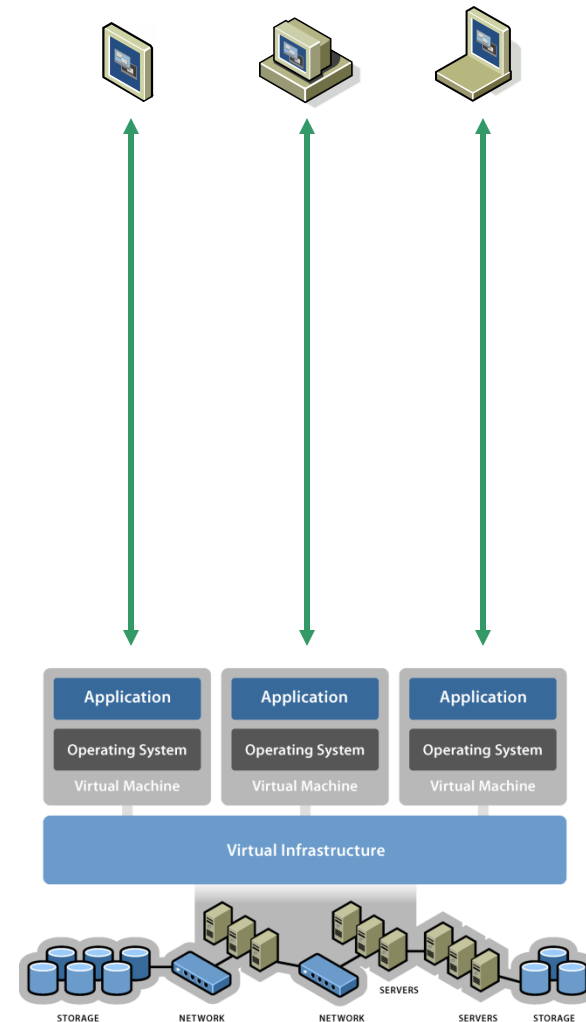
In a recent survey of business technology professionals recently polled by Information Week, over 50% said they would virtualize their desktops by 2008*

*InformationWeek Feb. 2007



VDI Architectures – Basic

- A “One-to-One” relationship between endpoints and Virtual Machines is established
- End-users are assigned the hostname of a VM which belongs to them.
- Connections take place over an existing secured corporate network.
- Remote viewing of VMs is done through desktop RDP software

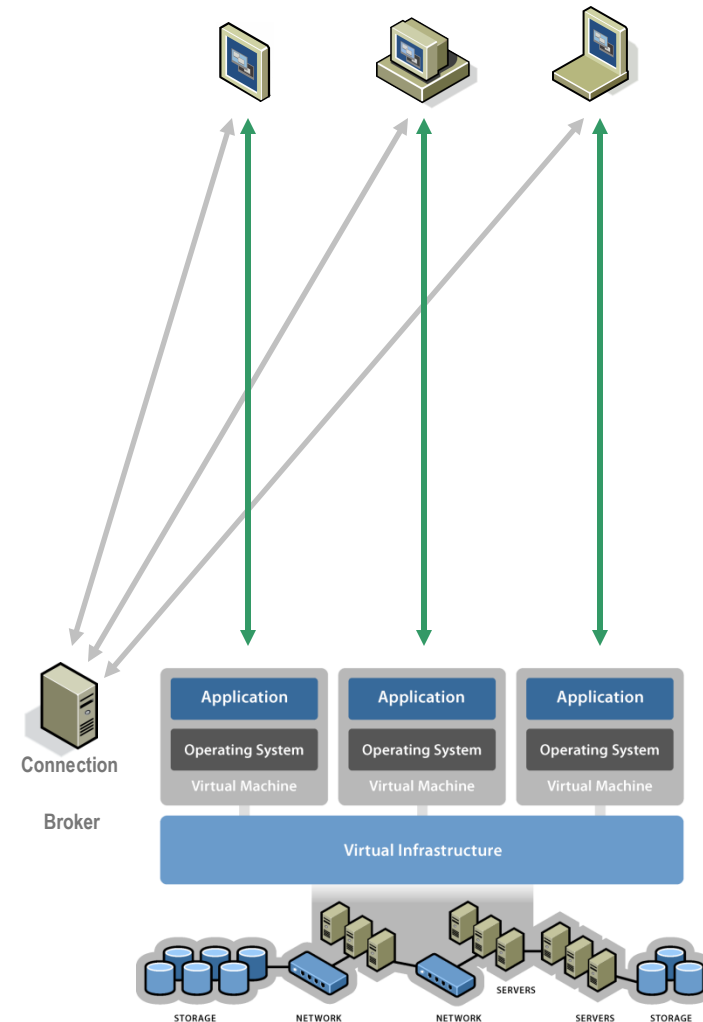


The Connection Broker

What is it and why is it important?

Simple Brokering

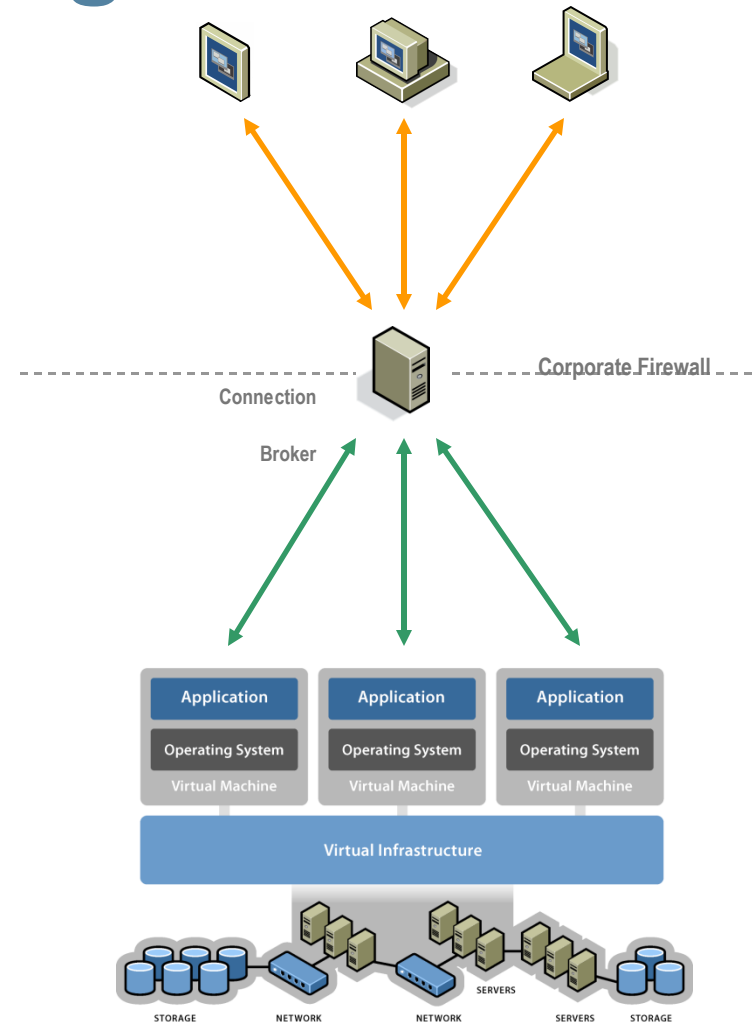
- > The broker provides a list of available resources to the end-user.
- > The end-user establishes a connection directly to the VM.



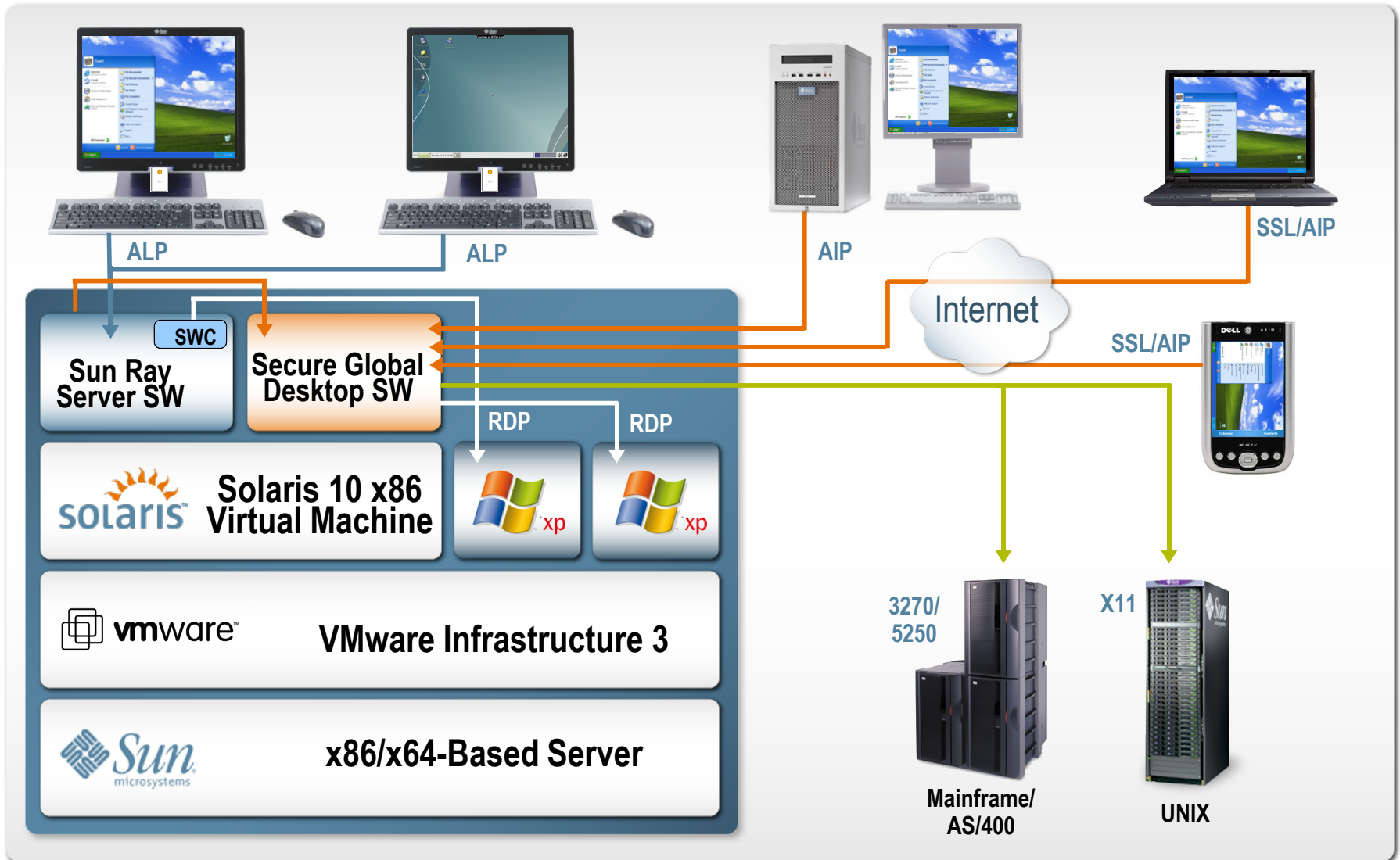
Tunneled Brokering

- The connection broker links the end-user via an encrypted tunnel to the VM.

- > The encrypted tunnel is a mini-VPN component designed to route only RDP traffic.



Sun Virtual Desktop Solution



Sun Virtual Desktop & VMware Integration

Feature

- Access Windows XP virtual machines from highly secure Sun Ray clients or other popular client devices

Feature

- Dynamically create virtual machines based on user demand

Feature

- Create pools of virtual machines that can be reset as users log off to prevent virus proliferation

Feature

- Handle RDP connectivity issues

Sun Virtual Desktop & VMware Integration

Benefit

- Solve problems with applications that aren't terminal services friendly

Benefit

- Provide a highly manageable environment while still allowing users to customize their desktops

Benefit

- Improve server utilization and session resiliency

Benefit

- Provide access to VMs securely using SSL with up to 256-bit AES or other ciphers

Sun Virtual Desktop Access Kit

- VDA Client
 - > Installed on access tier
 - > Communicates directly with VDA service
 - > Delivers IP address of Virtual Desktop to RDP client
- VDA Service
 - > Installed on Virtual Center server
 - > Implements control logic
 - > Uses VI3 SDK
- VDA Tools
 - > Installed on guest OS
 - > Avoids freezing RDP connections

Sun VDAK for VMware

- Glue between access tier (SRSS/SSGD) and virtualization tier
- Access to your “encapsulated” and individual XP-Pro virtual desktop from anywhere
- Seamless access through
 - > VM lifecycle management
 - > Automated VM deployment
 - > Dynamic or static assignment of users to VMs
 - > Efficient usage of components
 - > Load balancing between ESX servers
 - > Automatic suspension of unused VMs

Why not just use an RDP client?

1

Security

Sun Secure Global Desktop Software provides industrial strength security and understands complex network transports

2

Manageability

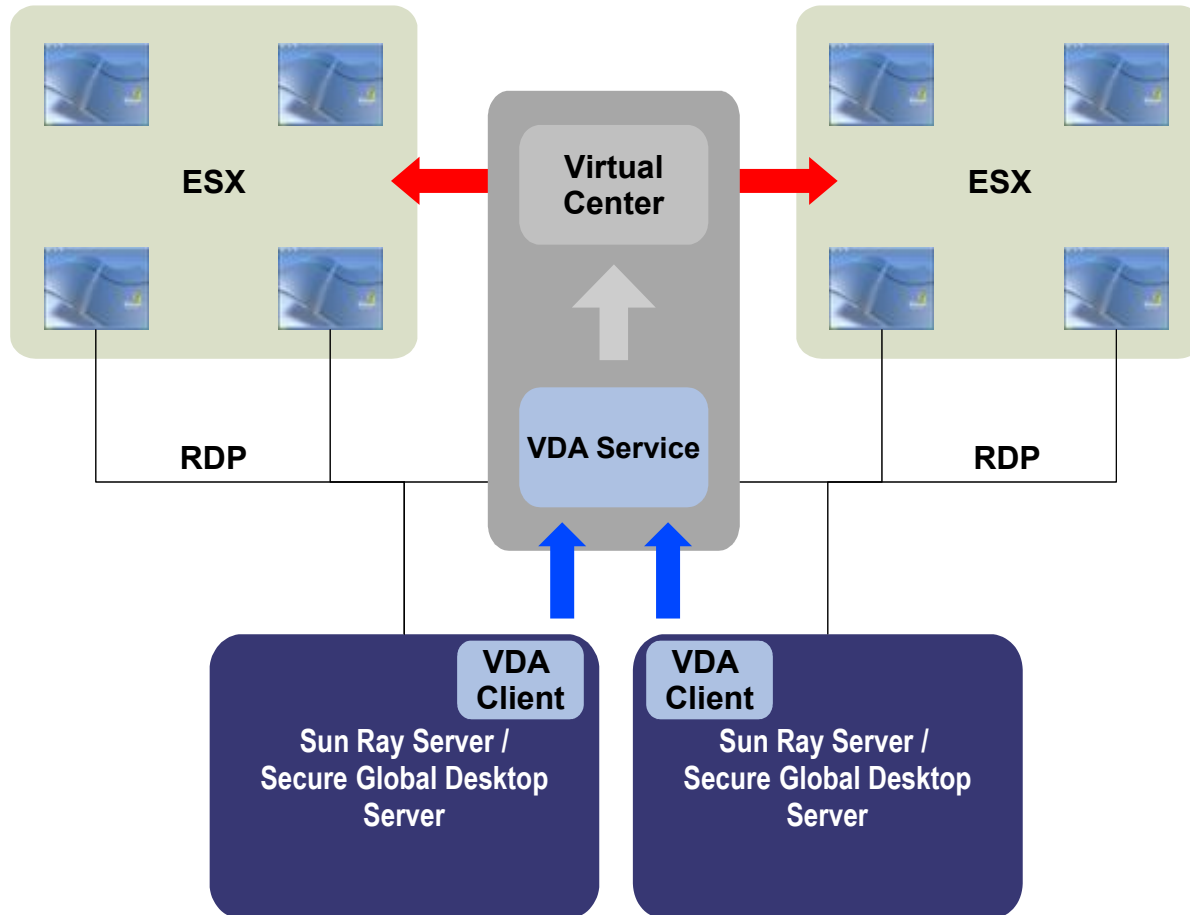
No client side management of potentially different RDP / RDC clients on different operating systems

3

Avoid Redundant OS Licensing

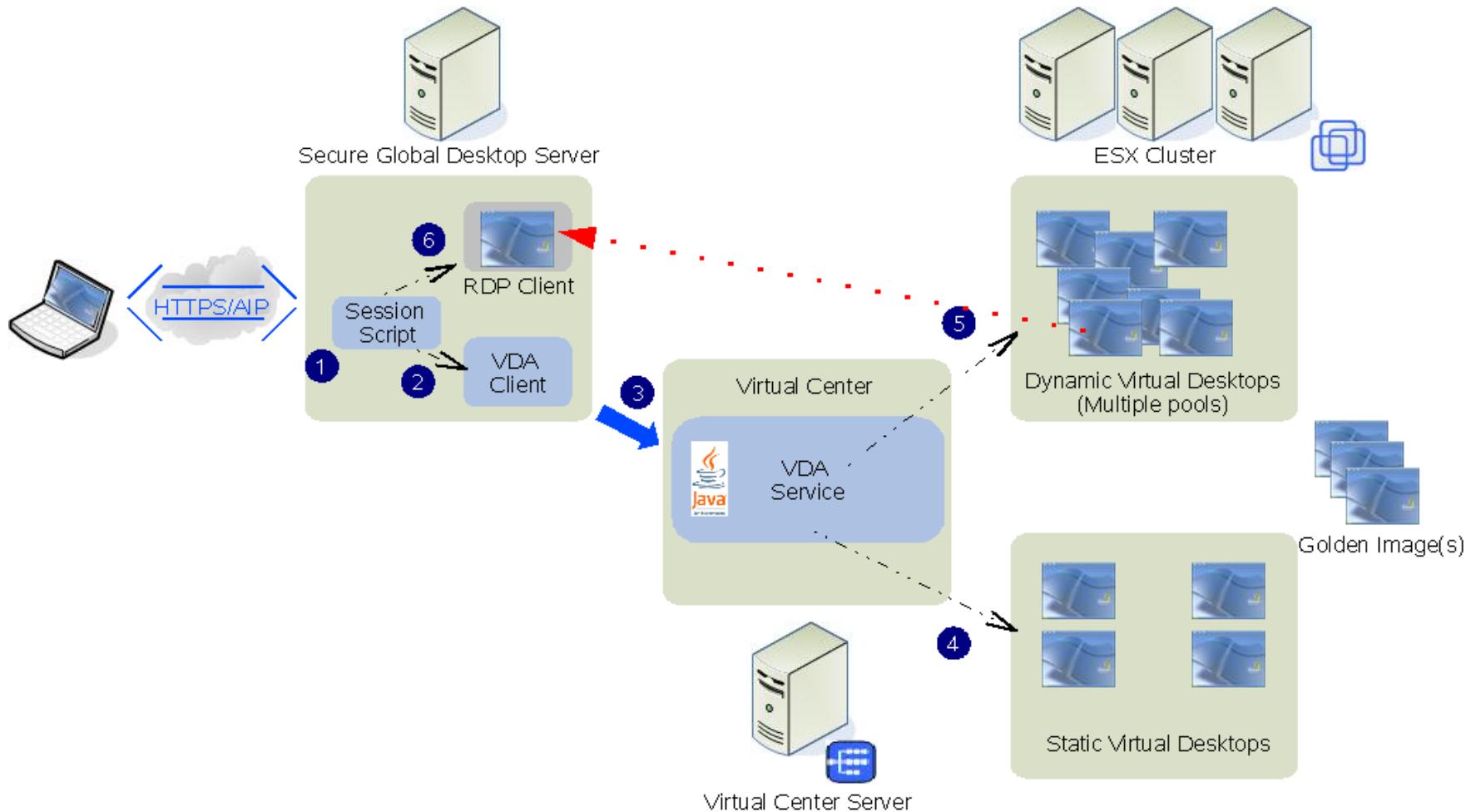
Using Sun Ray clients with no local OS eliminates the double whammy of paying for OS licenses on both the VM and the client device

Sun VDA Kit Architecture



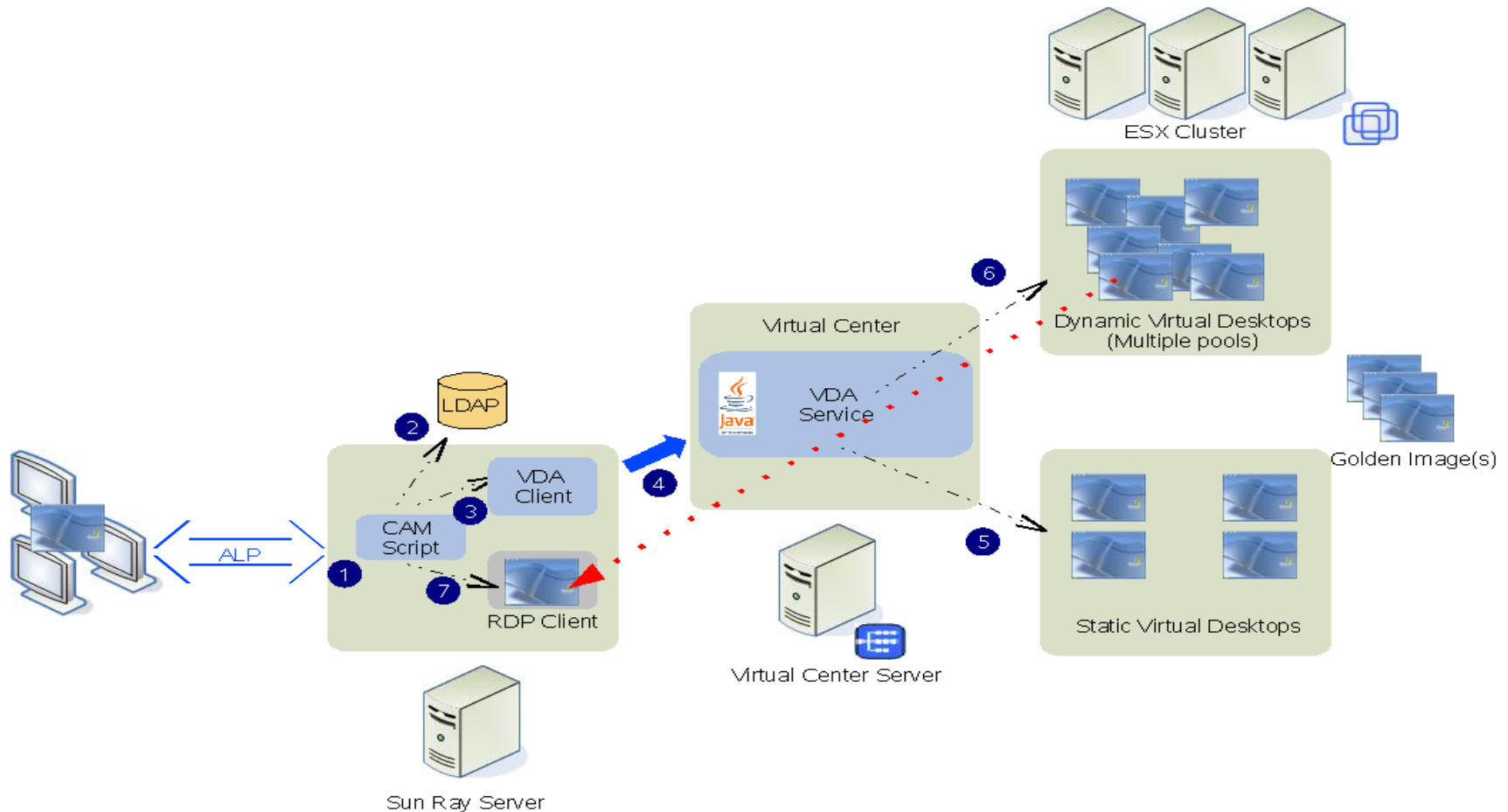
Virtual Desktop Access Scenario

Sun Secure Global Desktop Software



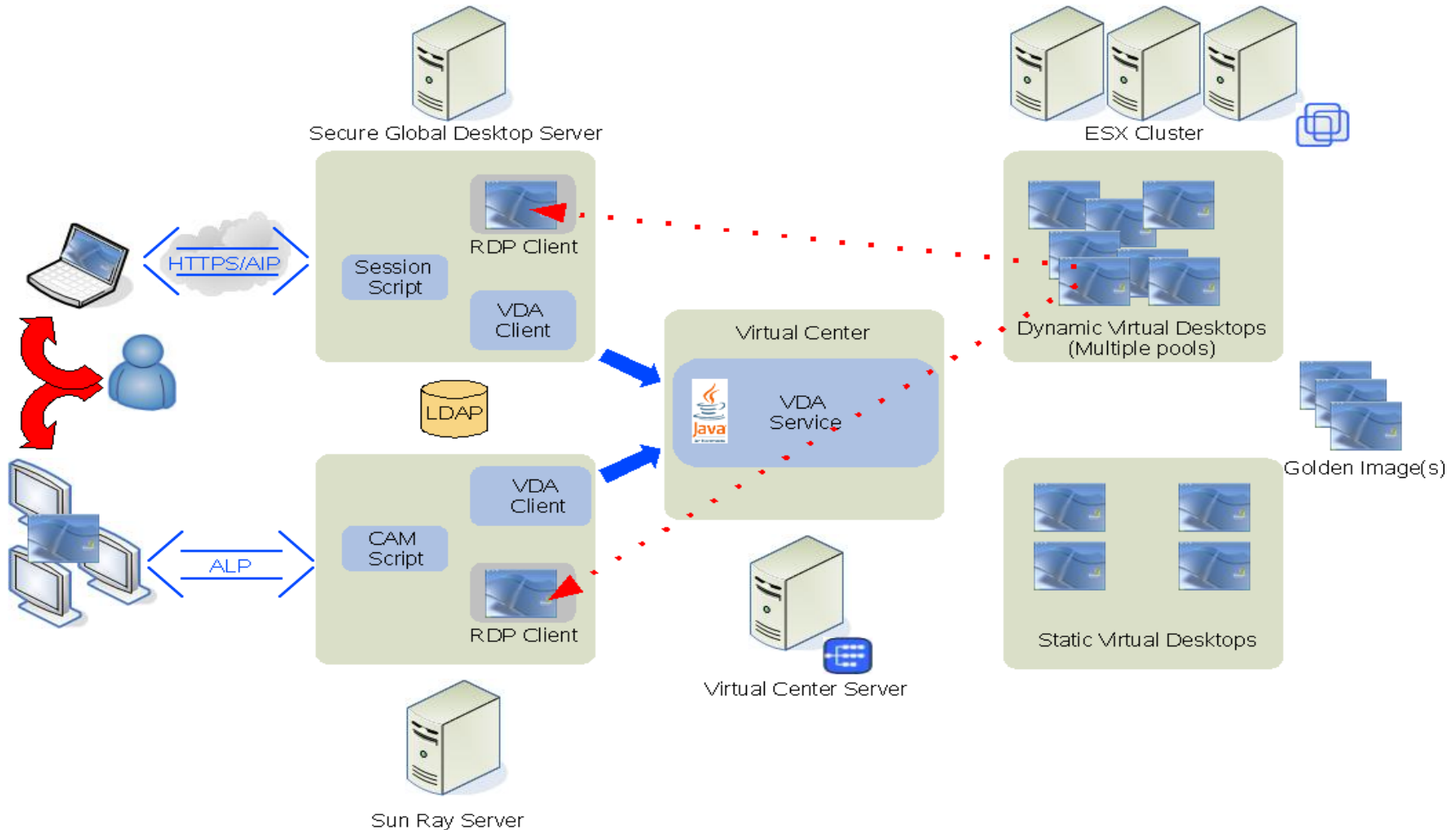
Virtual Desktop Access Scenario

Sun Ray Clients



Virtual Desktop Access Scenario

Desktop Session Redirection



Next Steps

- Product Information:
 - > Email interest list
 - virtualdesktop@sun.com
 - > Web info
 - <http://www.sun.com/sgd>
 - <http://www.sun.com/sunray>
 - <http://www.vmware.com/solutions/desktop/vdi.html>
 - > White Papers
 - Sun Desktop Virtualization Blueprint
 - Sun Virtual Desktop Access Kit for VMware Blueprint



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