

## SVISTA™ Virtualization on Servers

For consolidation of enterprise desktops

Information technology consultants have begun to advise clients: "Change your thinking about desktop consolidation! Instead of consolidating desktop and migrate legacy applications, implement a virtualization strategy!" Desktop consolidation on servers improves system utilization and cost effective systems management.

**Recommended Action for 2004:  
Enterprises should start now to build a  
multiyear strategy for virtualization.**

Beyond virtualization strategies, trade press demonstrates that virtual machine technology is entering every phase, every area, of the IT infrastructure.

### What is SVISTA™?

Today's computers are extremely powerful, utilizing fast processors and large amounts of memory. Today's applications utilize only a part of this power.

Employees require access to legacy applications using different operating systems (OS). They run test or support environments, or development systems requiring many compile runs.

In the server area, organizations are moving towards "server farms", configurations which centralize desktops to lower support and management costs.

A software solution which can resolve these issues should have the ability to run several operating systems on a single machine. This means creating several virtual computers to run inside one real computer.

**This is the solution provided by  
Serenity Virtual Station (SVISTA™).**



Serenity Virtual Server™

for

- ▶ Windows Terminal Server
- ▶ Citrix MetaFrame
- ▶ LINUX Terminal Services
- ▶ LINUX onDemand Services

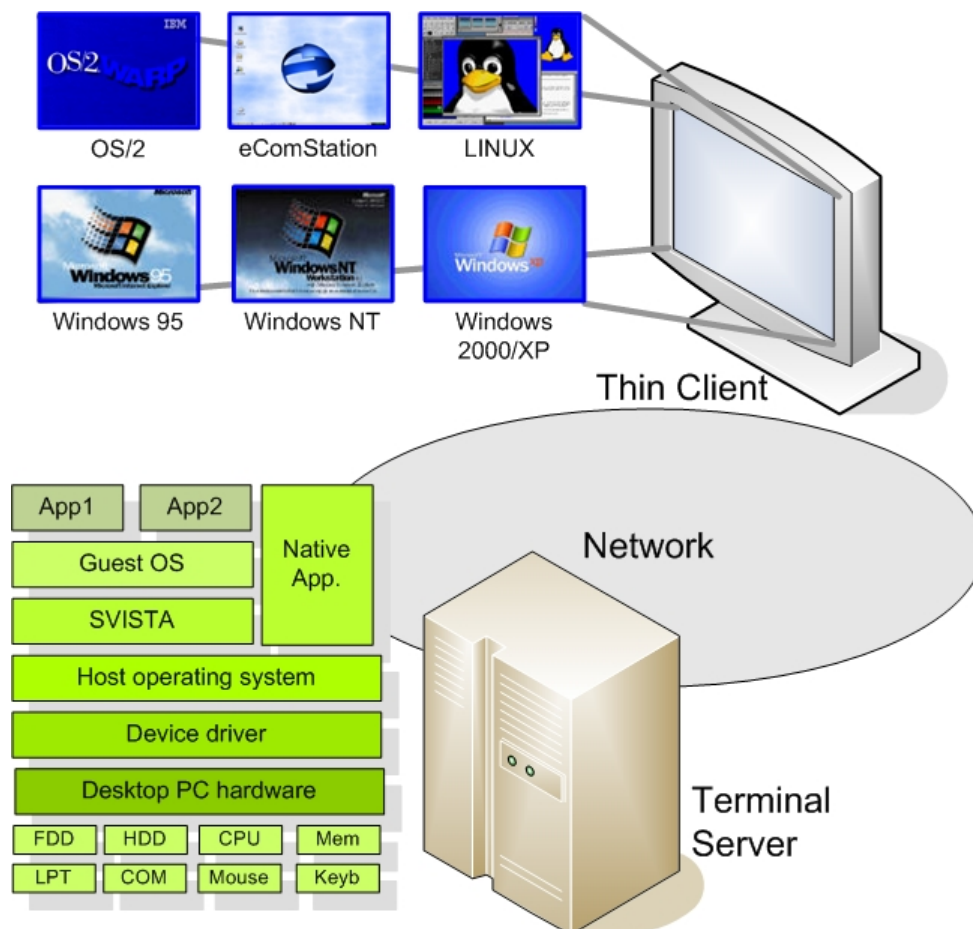
## How does SVISTA™ work?

SVISTA™ is a virtualization technology for PCs, allowing a user to install multiple Operating Systems (OSs) on a single computer, running these Operating Systems simultaneously, without the need for the user to shut down and reboot. SVISTA™ is launched as an application under the "host" operating system and it creates a set of "virtual computers" or virtual machines (VMs). Each virtual computer can run a "guest" Operating System. Each virtual computer has its own virtual processor, set of virtual devices, and full network support.

The "desktop" of a virtual computer can appear in a separate window, or it can occupy the entire display (full screen). In the full screen mode, users can "hot key" between the different virtual computers, or desktops.

SVISTA™ employs quasi-emulation technology which enables the execution of a guest Operating System in an isolated program environment, under the full control of the virtual machine monitor. At the same time, most of the guest code instructions are executed directly by the processor, without emulation. This insures high performance and responsiveness of applications running on the guest operating system, in the virtual computer.

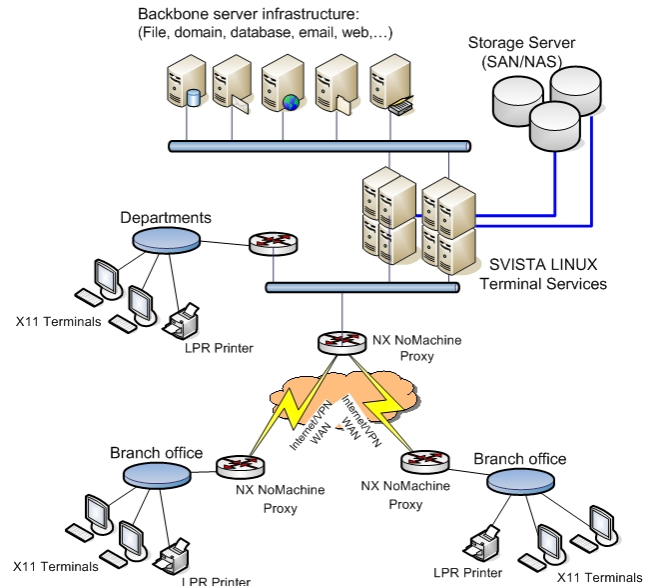
**SVISTA™ provides several guest operating systems on the desktop:**



## How does SVISTA™ run in my enterprise?

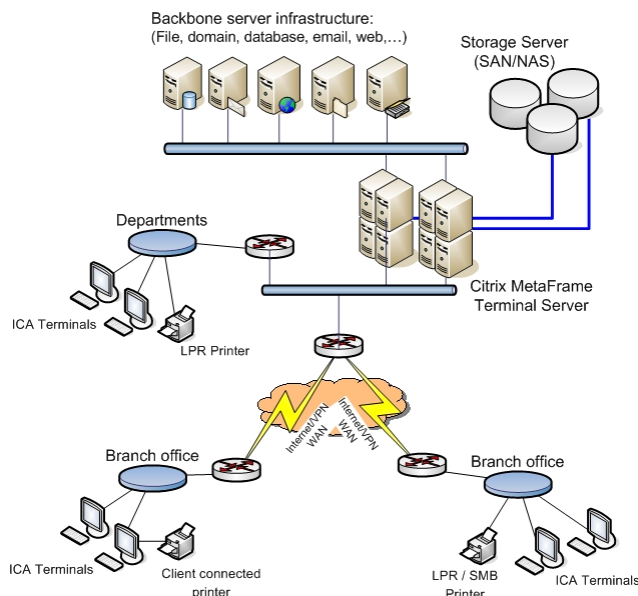
### ► LINUX based enterprise

SVISTA™ for LINUX Terminal Server is a powerful extension for the thin client strategy using industry standard systems and protocols to provide access to legacy application on the desktop. SVISTA™ builds on RedHat enterprise server and cluster services to provide a load-balanced fault-tolerant virtual client pool. Thin clients connect to this pool and load their virtual machine stored on a storage server (SAN/NAS). As remote desktop protocol SVISTA™ relies on X11, the industry standard with broad support of devices and utilities. The virtual computer itself has direct access to the backbone infrastructure; virtual hard disks are stored on storage servers for best performance and availability.



For branch offices connected though low bandwidth networks (WAN) X11 proxies for compression and reliability are recommended.

### ► Citrix based enterprise



SVISTA™ for Windows Terminal Server is an add-on to Windows Terminal Service and Citrix MetaFrame. It smoothly integrates into the existing environment using ICA or RDP clients to publish applications on the desktop. SVISTA™ runs as an additional application, with optimized interfaces for the use on remote servers. Though SVISTA™ may run on standard Terminal servers sharing resources with word processors, email and spreadsheet it is best practice to use dedicated servers for SVISTA™ within the farm. The virtual computers have direct access to the backbone infrastructure; virtual hard disks are stored on storage servers for best performance and availability.

## Benefits

### ► Legacy applications

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Legacy applications may not be supported on new hardware or on the current standard operating system. SVISTA™ allows the user to run a "legacy environment" on the same system as the current environment protecting the investment in software, skills, and training.

### ► Recreate desktop environments

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SVISTA™ allows a support organization to simulate a user's failing environment on their own equipment which can improve response times. It also allows support to create save, isolated environments to test applications and carry out other support activities. Allowing support groups to implement SVISTA™ can result in a more reliable, secure computing environment for the entire organization.

### ► Improving security

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Server based computing with SVISTA™ can facilitate the backup of user data and programs, improving security and data integrity.

Virus protection, security fixes, and update for operating systems and applications are applied centrally without delay.

### ► Desktop consolidation

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SVISTA™ can be used to consolidate workloads of underutilized systems, desktops and servers. This can reduce hard dollar expenses in equipment, utilities, and so forth. It can also reduce the management and support activities required.

### ► Multiple configurations

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SVISTA™ can allow an organization to create a standard virtual hardware footprint which can be deployed throughout an organization, simplifying support activities.

SVISTA™ makes it easy to create specialized standard desktops for activities such as training or sales demonstrations.

### ► Remote access

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Server based systems can deploy virtual desktops to remote boot clients throughout a network, providing all the benefits of server managed clients to users of multiple operating systems with one set of tools.

Remote workstations can access these farms, providing users of a variety of workstations with access to standard desktops and applications, or a variety of support desktops and operating systems.

SVISTA™ provides an enterprise with a powerful, cost effective tool which supplies solutions to a wide range of support challenges and computing requirements while simplifying many of the complex tasks associated with running and supporting the computing environment.

## Requirements

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### Server

#### Software

- ▶ Microsoft Windows 2000 Server or
- ▶ Microsoft Windows 2003
- ▶ Citrix MetaFrame (optional)

For LINUX environments

- ▶ Red Hat Enterprise Server
- ▶ Linux Terminal Server Project (optional)
- ▶ NX Nomachine (optional)

#### Hardware for est. 10 VM:

- ▶ Dual Intel Pentium 4 or XEON 3.0 GHz
- ▶ 4 GB Memory
- ▶ 40 GB Hard disk (NAS recommended)
- ▶ Gigabit Ethernet

### Client

#### Software

- ▶ Any operating system providing ICA Client (e.g. Windows, OS/2, LINUX, MacOS, Java, Solaris) or
- ▶ Any operating system providing X11 protocol

#### Hardware

- ▶ Any thin client providing ICA or X11
- ▶ Up to 1600x1200 24bpp
- ▶ Ethernet
- ▶ Keyboard, Mouse
- ▶ Client connected printer (ICA only)

## Contacts:

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