RED HAT ENTERPRISE
VIRTUALIZATION FOR DESKTOPS
THE DESKTOP YOU WANT. THE SECURITY YOU DEMAND.
OVERVIEW

With Red Hat Enterprise Virtualization for Desktops, complete desktop environments are hosted as virtual desktops on servers located in a centralized datacenter. Users connect to these virtual desktops, which can be either Windows or Red Hat® Enterprise Linux® desktops, using either inexpensive thin clients or repurposed PCs.

Red Hat Enterprise Virtualization for Desktops is an end-to-end desktop virtualization solution featuring everything an enterprise needs to deploy virtualized desktops:

- **Red Hat Enterprise Virtualization Hypervisor** – A standalone, high-performance and secure hypervisor based on the Red Hat Enterprise Linux kernel with KVM (Kernel-based Virtual Machine) technology

- **Red Hat Enterprise Virtualization Manager for Desktops** – a centralized management console with a comprehensive set of management tools that administrators can use to create, monitor, and maintain their virtual desktops

- **SPICE (Simple Protocol for Independent Computing Environments)** – an adaptive remote rendering protocol able to deliver an end user experience comparable to that of physical desktop

- **Integrated connection broker** – a web-based portal from which end-users can log into their virtual desktops

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**RED HAT ENTERPRISE VIRTUALIZATION FOR DESKTOPS**

![Diagram of Red Hat Enterprise Virtualization for Desktops]

- **Virtual Desktops**
- **Image Manager**
- **Connection Broker**
- **Provisioning Manager**
- **HA Manager**
- **Thin client or repurposed PC**
- **SPICE remote rendering protocol**
- **Enterprise Virtualization Hypervisor**
- **Enterprise Virtualization Manager for Desktops**
KEY BENEFITS

IMPROVED DATA SECURITY

By moving desktop environments off of the end point and into the datacenter, Red Hat Enterprise Virtualization for Desktops helps enterprises safeguard their data and keep pace with today’s fast-changing environment.

INCREASED MANAGEABILITY

With Red Hat Enterprise Virtualization for Desktops, desktop environments can be centrally created, monitored, and managed, reducing or even eliminating the need for on-site support.

INCREASED BUSINESS AGILITY AND CONTINUITY

By eliminating the dependencies between the operating system and the underlying hardware, Red Hat Enterprise Virtualization for Desktops allows enterprises to defer desktop replacements and their associated costs. Additionally, this separation allows different operating systems to be accessed from the same device. Finally, the centralized nature of Red Hat Enterprise Virtualization for Desktops makes it possible to easily backup entire desktop environments, ensuring business continuity in the event of hardware failure or catastrophic event.

KEY FEATURES

SECURITY AND SCALABILITY

• SSL Encryption – Ensures secure data transmission between virtual desktops and the devices used to access them
• Memory page sharing and ballooning – Maximizes the number of virtual desktops that can be hosted on a single hypervisor, lowering infrastructure and management costs
• Multiple virtual CPUs – Virtual desktops can have up to four virtual CPUs, maximizing performance

ADVANCED DESKTOP MANAGEMENT

• Rapid provisioning – Create new desktop environments in minutes
• Linked images – Provision new virtual desktops based on master images, saving up to 90 percent storage capacity
• Desktop pooling – Create groups of virtual desktops that can be accessed on-demand, simplifying the provisioning process and increasing flexibility
• Search-based management – Easily search for virtual desktops with specific applications and specific versions, enabling rapid identification of virtual desktops in need of upgrades or patches
• Auto suspend – Automatically suspend inactive virtual desktops, conserving resources
HIGH AVAILABILITY

- **Live migration** – Move virtual desktops from one host to another without any end-user interruption, facilitating maintenance, scheduled power savings, and load balancing
- **Load balancing** – Automatically load balance virtual desktops across available hosts to ensure optimal performance
- **Snapshots** – Capture the state of a virtual desktop at any given point in time, enabling rapid restoration of desktop environments in the case of an end point hardware failure
- **Flexible storage** – Store virtual desktop images and data using either iSCSI, FCP or NFS

EXCEPTIONAL END-USER EXPERIENCE

- **Hi-resolution display** – Users experience native color (32 bit), full resolution displays of their virtual desktops
- **Streaming video** – Users can view high-quality streaming video on their virtual desktops
- **Multi-monitor display** – Users can connect up to four monitors to a single virtual desktop
- **Bi-directional audio and video** – Users can make VoIP and video-conference calls from their virtual desktops
- **USB redirection** – Users can connect any USB 1.0 or 2.0 device to their virtual desktops
- **WAN optimization** – Compression algorithms ensure optimal performance, even across wide-area networks

Red Hat Enterprise Virtualization for Desktops increases the security, manageability, and agility of enterprise desktop deployments. Built upon the industry-leading security and scalability of Red Hat Enterprise Linux, with support for both Microsoft Windows and Red Hat Enterprise Linux desktops, Red Hat Enterprise Virtualization for Desktops breaks down the barriers that have prevented enterprises from realizing the promise of desktop virtualization.

Learn more at [www.redhat.com/virtualization](http://www.redhat.com/virtualization)