



Parallels RAS Assists in Building a HIPAA Compliant IT Infrastructure

White Paper | Parallels Remote Application Server (RAS)

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Introduction

Healthcare providers have a responsibility to keep personal and sensitive data safe. In addition to the damage that can be done to a brand's reputation, data loss or a security breach can result in hefty fines due to the Health Insurance Portability and Accountability Act (HIPAA). Businesses operating in the healthcare industry can be HIPAA compliant and avoid data leaks with the use of Parallels® Remote Application Server (RAS).

This white paper provides a high-level overview of HIPAA compliance and explains how Parallels RAS features provide optimal solution to application, and desktop virtualization for Healthcare providers.

Health Insurance Portability and Accountability Act (HIPAA)

In 1996, the HIPAA legislation was enacted in the United States. It provides data privacy and security policies for safeguarding medical information. These regulations have become more relevant due to the proliferation of cyber-attacks, compromising the security of health and medical companies around the world. HIPAA has been updated several times since it was initially enacted. The Security Rule, which is most applicable to this discussion, took effect in 2003. Additional rules have been added and modified over the past 20 years.

HIPAA Titles and Rules

HIPAA is broken up into five different Titles. This document focuses on how Parallels RAS assists IT professionals in building an IT infrastructure that is compliant with the policies included in the Privacy and the Security Rule of Title II: Preventing healthcare fraud and abuse; administrative simplification; medical liability reform.

Privacy Rule

The Privacy Rule establishes standards and regulates the use and disclosure of the Protected Health Information (PHI) and medical records of individuals.

Security Rule

The Security Rule is closely related to the Privacy Rule and establishes a standard for protection of the information on data access, transmission, and storage. Three types of safeguards are required— administrative, physical, and technical—to ensure the confidentiality, integrity, and security of the information.

Healthcare Providers Need to Be Compliant

A HIPAA violation occurs when a healthcare provider fails to comply with one or more of the provisions of the HIPAA Rules. There are four categories of violations and each has a corresponding tier of penalties. Fines vary from \$100 (category “one”) to \$50,000 (category “four”) per violation or record. The maximum penalty is \$1.5 million per year for each violation.

Parallels RAS Assists in Building a HIPAA Compliant IT Infrastructure

Parallels RAS is an application and virtual desktop delivery solution that enables healthcare providers to create their own private and secure cloud. When using Parallels RAS, Protected Health Information (PHI) and medical records of individuals never leave this private cloud. Parallels RAS is a perfect solution for healthcare providers who need to maintain a HIPAA compliant IT infrastructure, facilitating adherence to the policies defined in the administrative, physical, and technical safeguards of the HIPAA Security Rule.

Administrative, Physical, and Technical Safeguards

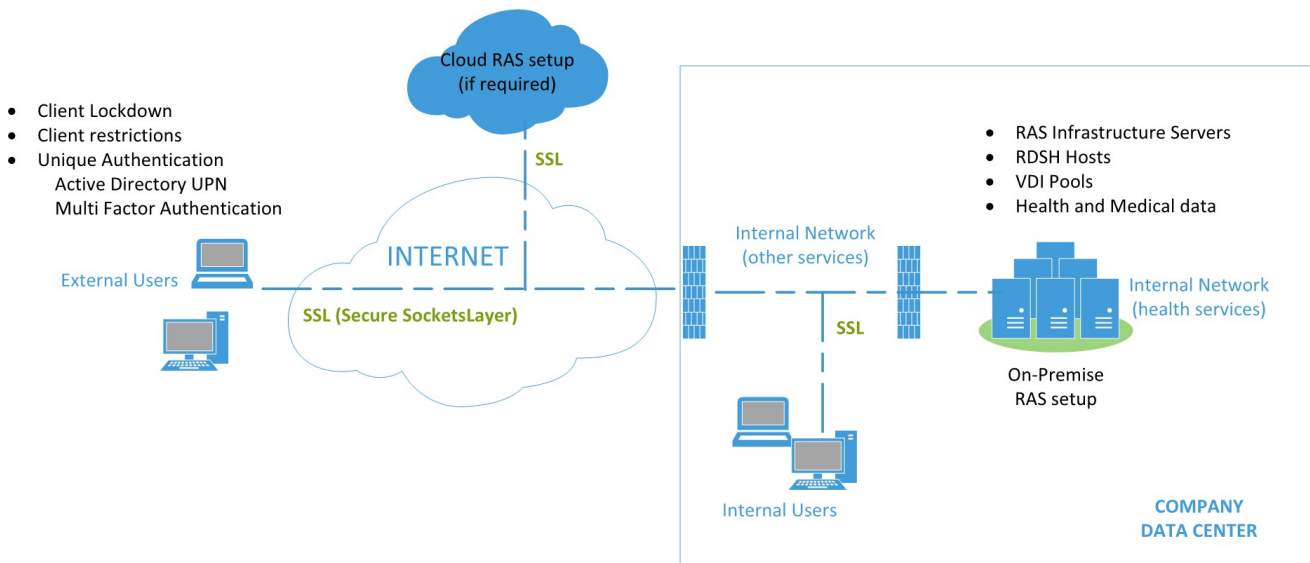
Administrative Safeguards are policies and procedures designed to manage the selection, development, implementation, and maintenance of security measures to protect electronic protected health information. Physical Safeguard are the physical measures, policies, and procedures to protect covered entity's electronic information systems, including the protection of buildings and equipment from natural and environmental hazards, and unauthorized intrusion.

Finally, Technical Safeguards are the technology and the policy and procedures for its use that protect electronic Protected Health Information (PHI) and control access to it.

Parallels RAS helps healthcare providers build a complete and secure environment as follows:

- Central management of applications and desktops.
- IT professionals can dynamically control who accesses which applications and desktops. They can also control the times when data can be accessed and maintain a log of every user action. In order to simplify General Data Protection Regulation (GDPR) compliance maintenance, RAS provides a tool that allows administrators to remove all logged data for any specified user.
- VDI desktops can be restricted through RAS Infrastructure: necessary permissions will be granted during logon process and revoked on logoff.
- Integration with Microsoft Active Directory, where each user has a unique User Principal Name (UPN), can be enhanced with a multifactor authentication solution such as Google Authenticator or Microsoft Azure MFA server. Unique identifications guarantee that each person is uniquely traceable.
- Configurable policies determine which clients can connect to the environment (Mac address, client type, etc.) and what data they can access, ensuring data is only accessed by authorized users.
- IT professionals can lockdown client guests and configure user policies that transform the client device into a thin client/kiosk mode. Windows10 PIN-code based login feature is completely integrated with RAS Client Single Sign On.
- Centralization of data and processes, with everything hosted in the private cloud. If a device is compromised, the setup can be restored in minutes using linked clone technology and the Parallels RAS prep tool without altering data or risking data loss.
- User sessions are centrally managed. IT professionals determine under what conditions users can be disconnected or logged off from their applications or desktop. Administrators can also define the VDI desktops behavior after users' logoff process – unassign, suspend, shutdown or reboot. All this can be defined via template configurations.
- Centralized monitoring and reporting. RAS Performance Monitoring tool centralizes all your company RAS deployments in a single panel, even in multi-farm scenarios or RDS groups-based setups. Apart from a complete set of reports already included out-of-the-box, custom reports can be also defined.
- Parallels RAS integrates with Transport Layer Security (TLS) protocol to guarantee an end-to-end encrypted and secure channel between the remote client and the server.
- On-premise, hybrid, and cloud deployments, such as Microsoft Azure, Alibaba Cloud and Amazon Web Services (AWS), are supported. Under emergency circumstances, a hybrid deployment can guarantee business continuity.

The diagram below shows one implementation of Parallels RAS in a company:



Additional Features of Parallels RAS

Easy Installation and Quick Setup Saves Time

Healthcare providers can get started easily with the Parallels RAS straightforward and easy installation process. The default setup ensures that main infrastructure components are completely installed and configured (SSL, HTML5 client support, Load Balancing). There is no learning curve so users can start in the environment within minutes.

All Features Included with Licensing

All enterprise features are included in the same product license. Companies do not have to choose among complex sets of features and products editions. License only the number of concurrent users connected to the environment—the same license includes published applications solutions and Virtual Desktop Infrastructure (VDI) solutions.

Parallels RAS Client Available for a Variety of Devices

The Parallels RAS client is available for Windows, Mac, and Linux operating systems. It can also be installed on mobile devices such as Android or iOS phones. In addition, published resources are accessible from any HTML5 enabled-browser, making Parallels RAS a client-independent solution, perfect for Bring Your Own Device (BYOD) or Choose Your Own Device (CYOD) scenarios found in fast paced environments such as hospitals.

Auto-Provisioning and Auto-Scaling

Parallels RAS can dynamically create and release machines to guarantee that the load hold by each server or desktop complies with the criteria predefined by IT. With very good response time, in the case of load peaks, it guarantees an optimized use of the company resources.

Easy Migration

Migration to Parallels RAS from any other third-party solution, such as Citrix XenApp, is simple and straightforward. Parallels offers detailed procedures and, in some scenarios, a migration tool to help complete the virtualization setup without downtime.

Parallels RAS Helps IT Professionals Build a HIPAA Compliant Infrastructure

Ensuring data security is vital for any company. When medical or health data is involved, a security breach may lead to HIPAA violation and a disastrous economical penalty. Don't become another statistic: Parallels RAS is the ideal desktop and application delivery solution to help IT professionals build a HIPAA compliant infrastructure.

Windows Server 2019 Support

All RAS Infrastructure components are compatible with Windows Server 2019. Additionally, Virtual Desktop Infrastructure (VDI) desktops and Remote Desktop Session Host (RDSH) servers can be provisioned, scaled and maintained on Microsoft Hyper-V 2019.

Session Pre-Launch

With RAS administrators can enable the session pre-launch feature to reduce application launch time. Using cutting-edge Artificial Intelligence (AI) technology, RDP sessions are started automatically just a few minutes before the user normally starts the applications to improve the user experience and reduce waiting times.

VDI solution Scale Computing HC3 Support

Among the complete list of supported hypervisors such as VMware ESXi and Microsoft Hyper, RAS also supports Scale Computing HC3 support for VDI deployments. Scale Computing HC3 is a new hyperconverged infrastructure, which includes compute, storage, virtualization, backup and disaster recovery in a single system. With Scale Computing HC3, RAS administrators can provide faster VDI solutions at a more affordable price.