RAS Solution Guide | Parallels Remote Application Server

IT Infrastructure Solution Guide for Healthcare Organizations

Who Is This Guide Intended For?

This guide is designed for IT administrators who manage the IT department at a healthcare organization and are looking for an efficient application and VDI desktop delivery solution to centralize administrative tasks and improve network versatility.

The ideal software solution for healthcare professionals should provide the flexibility and mobility necessary to deliver optimal patient care. Healthcare organizations need an affordable solution that reduces their overheads. Furthermore, these organizations require top-rated security and confidentiality frameworks to access and manage patient information. The solution's security features should allow a healthcare organization to comply with government mandates with respect to electronic health records (EHR) and other regulatory standards. Moreover, the application and VDI desktop delivery solution should the provide business continuity assurances that healthcare IT administrators need to keep emergency systems running 24/7.

Why Should Healthcare Organizations Invest in Their IT Infrastructure?

IT solutions enable healthcare providers to deliver optimal patient care while increasing availability of patient data and healthcare-related applications, even when medical professionals are away from the facility. For example, with a modern application delivery solution, physicians can securely access documentation and approve charts at home, without being at the hospital or clinical facility. Below are some of the benefits for a healthcare organization that invests in an application and VDI desktop delivery solution:

Regulatory Compliance

Medical facilities must comply with federal regulations. Furthermore, many healthcare providers choose to use electronic health records (EHR) to receive federal reimbursements under Meaningful Use regulations. Virtualization solutions provide major benefits to EHR deployments by allowing IT to update, manage, and deliver complex medical applications to any staff member on any device.

Sophisticated Security

Within the healthcare industry, there is the rising threat of cybercrime. As a result, IT departments are struggling to protect sensitive patient information from malicious users who can potentially connect to their networks via physical or Internet-based connections. Furthermore, when healthcare providers implement BYOD or CYOD policies, security concerns can become even more complicated. However, an application delivery solution will protect against data breaches by providing strong tools for central data and application management. With an advanced application delivery tool, IT managers can maintain strict separation between healthcare data and personal data on remote mobile devices. Furthermore, software security patches can be deployed to all user devices at one time from the central host.

Reduce Both Hardware and Software Expenses

Building a robust and scalable IT infrastructure without spending a fortune is completely achievable when healthcare organizations invest in an application and VDI desktop delivery solution. Application and desktop delivery solutions reduce maintenance costs by centrally hosting and managing data, applications, and virtual desktops. This streamlines the installation and update processes because changes will only need to be performed once in a single virtual environment. Furthermore, converting legacy machines into thin-client-like machines can extend the hardware lifecycle, prolonging the time between infrastructure purchases. Through secure application delivery on a wide range of mobile devices and platforms, healthcare institutions will have the ability to institute BYOD policies that save revenue for other projects.

Centralized Data in Real Time

Application delivery provides administrative and medical professionals the ability to pool and update centrally managed data. Therefore, all medical professionals remain constantly up to date on the latest changes to critical patient information. As a result, they will be able to avoid life-threatening errors during point-of-care—whether in the ambulance, hospital, or home. Real-time data availability has become a mandatory requirement in the healthcare industry, because delays in the information delivery system can be life threatening.

Ensure 24/7 Uptime and Business Continuity

The healthcare industry is a 24/7, year-round business. Patients will continue to require medical attention, even while asleep. A robust application and desktop delivery solution allows the IT department to build a reliable and high-availability network easily, without the need to set up a complex configuration or buy specialized hardware.Furthermore, this straightforward, low-cost application delivery solution works without sacrificing the organization's quality-of-service level.

Improve Mobility and Productivity

Modern technology allows the medical staff more freedom; they are not restricted from accessing patient information or medical applications based on their device of choice, or physical location. They can connect securely from anywhere, and access a patient's record and give feedback to the nursing staff without the need to walk long distances between hospital wards. In the event of an emergency, doctors have access to patient data and critical software from anywhere, which can prevent life-threatening situations.

Choose-your-own-device (CYOD) and Out-of-the-box Compatibility

The wide variety of devices and operating systems used by medical staff makes it technically challenging to support all of them. This is one of the many problems that a modern IT and virtualization solution can address. Application and desktop delivery solutions enable Bring-your-own-device (BYOD), CYOD, and out-of-the-box compatibility with today's most popular mobile devices by creating instant, secure access to data, and native-like experiences on any device.

IT Challenges for the Healthcare Industry

Data Security & Confidentiality

For the healthcare industry, data security and compliance is a key challenge. It's of critical importance that healthcare IT teams are careful when pooling this data to ensure it doesn't fall into the wrong hands. Therefore, it's vital for the technical team to safeguard this data in a system that is extremely quick in delivering these resources to increase efficiency.

Complex IT Infrastructure

The more secure and reliable an IT network is, the more complex the physical infrastructure tends to be. This also means that organizations need an army of systems administrators to maintain the system, and that can be costly.

Legacy Software Support

Like almost any other industry, organizations in the healthcare industry still use legacy software, and because of their complexity and size, they cannot easily migrate to updated software. The process to maintain and support medical applications is typically cumbersome, not to mention that such software often does not run on the modern mobile devices of most medical staff. Yet, it has to be supported and it should be readily available to the staff; this can be accomplished by an application delivery solution. By continuing to deliver legacy software across modern devices and operating systems, application delivery solutions allow IT administrators to migrate the software at their own pace.

The Recommended Application Delivery Solution for the Healthcare Industry

Parallels Remote Application Server (RAS)

Parallels® Remote Application Server (RAS) is an industry-leading solution for virtual application and desktop delivery. With an impressive, native-like mobile experience on iOS and Android™ devices, Parallels RAS is popular with healthcare organizations not only because it requires minimal effort and is easily scalable, but also because it works with Microsoft® RDS and all major hypervisors. Parallels RAS makes healthcare IT challenges easy to overcome by:

- **Setting strict safeguards on patient information** to comply with government mandates in regard to electronic health records (EHR) and other regulatory standards.
- **Delivering a brilliant, multiplatform-supported customer experience** that allows medical professionals to provide top-level patient care.
- **Centrally managing databases and updates** to deliver live updates on patient information to avoid life-threatening errors during point-of-care.

- **Optimizing the IT department budget's ROI** through increased infrastructure efficiency, and lowering IT staff overhead thanks to highly streamlined management and advanced control options.
- **Boosting business continuity** through a high-availability network that includes effective, easy-to-configure load balancing to ensure emergency services are provided without interruption.

In addition, the ability to encrypt end-user connections and load balance incoming connections makes Parallels RAS an ideal, secure, and scalable IT solution for the healthcare industry. Moreover, Parallels RAS protects healthcare providers who are under constant scrutiny regarding the risks of exposing patients' personal information.

Why Should the Healthcare Industry Adopt Parallels Remote Application Server?

Unrestricted and Hassle-free CYOD

Parallels RAS is an application and desktop delivery solution that delivers Windows® applications to just about any device, including Windows PC, Mac®, Chromebook™, or Linux® computer, or modern mobile device such as a smartphone or iPad®. This means that the IT department is not restricted to purchasing specific expensive hardware, thus saving on costs. At the same time, with an out-of-the-box installation of Parallels RAS, organizations can support access to medical applications such as EHRs, real-time voice and video collaboration tools, and imaging viewers.

Centralized Data for Improved Security, Backup, and Data Management

Security is at the forefront of healthcare IT professionals concerns. Parallels RAS allows the technical team to secure data by centralizing it on a private cloud. From there, the IT administrator team can easily configure who can access what, and at what time. By centralizing data in a private cloud, the IT department also ensures that it can be easily backed up and is protected from potential data breaches or theft. Moreover, storing the data in a private cloud means that data will not be corrupted, compromised, or lost if an end-user terminal breaks down or is lost

A System That Is Easier to Use and Maintain

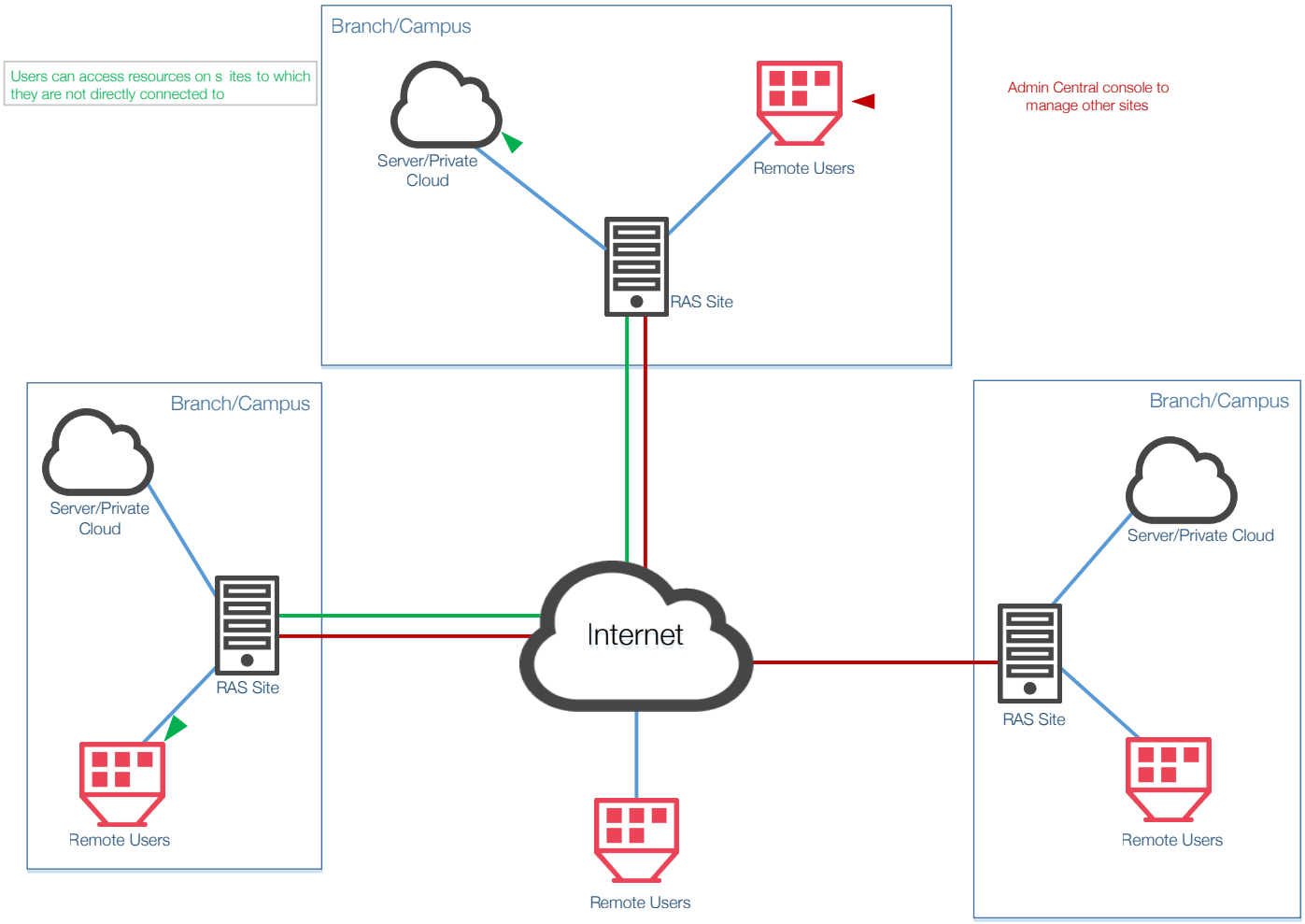
It's easy to set up Parallels RAS and even easier to keep it running. IT administrators do not have to spend days planning the IT infrastructure and reading through a stack of user manuals. Its intuitive setup wizards allow the IT administrator to set up a private cloud with an application and virtual desktop solution within just a few minutes. This quick and intuitive installation, coupled with the built-in zero-admin load balancing tools, mean both the installation and maintenance are hassle-free.

Reduce Hardware Costs by Prolonging Hardware Life

The desktop replacement features in Parallels RAS allow traditional desktop computers to be stripped-down into thin-client-like operating system. The desktop replacement features require fewer resources than a full operating system, therefore, the IT department can prolong the life of old computers, capping the budget capital drain that occurs each year for new hardware or upgrades. Moreover, Parallels RAS takes care of a major issue with old devices: security. When the thin client locks down the device, the user is only allowed access to virtual applications and data, so the device itself and all of its security flaws are secured, ensuring data is not compromised.

Seamless System Upgrades and Top-notch Software Responsiveness

An out-of-the-box Parallels RAS installation can be easily scaled up without requiring any downtime and without affecting the productivity of the staff. Adding a new server to the farm takes just a few seconds with a wizard tool. Furthermore, the built-in, resource-based load balancing of Parallels RAS will automatically take care of assigning new connections to the new server. Therefore, the users will always have enough resources allocated.



Recommended Implementation & Features for Organizations in the Healthcare Industry

Centrally Manage the IT Infrastructure of Physically Dispersed Facilities

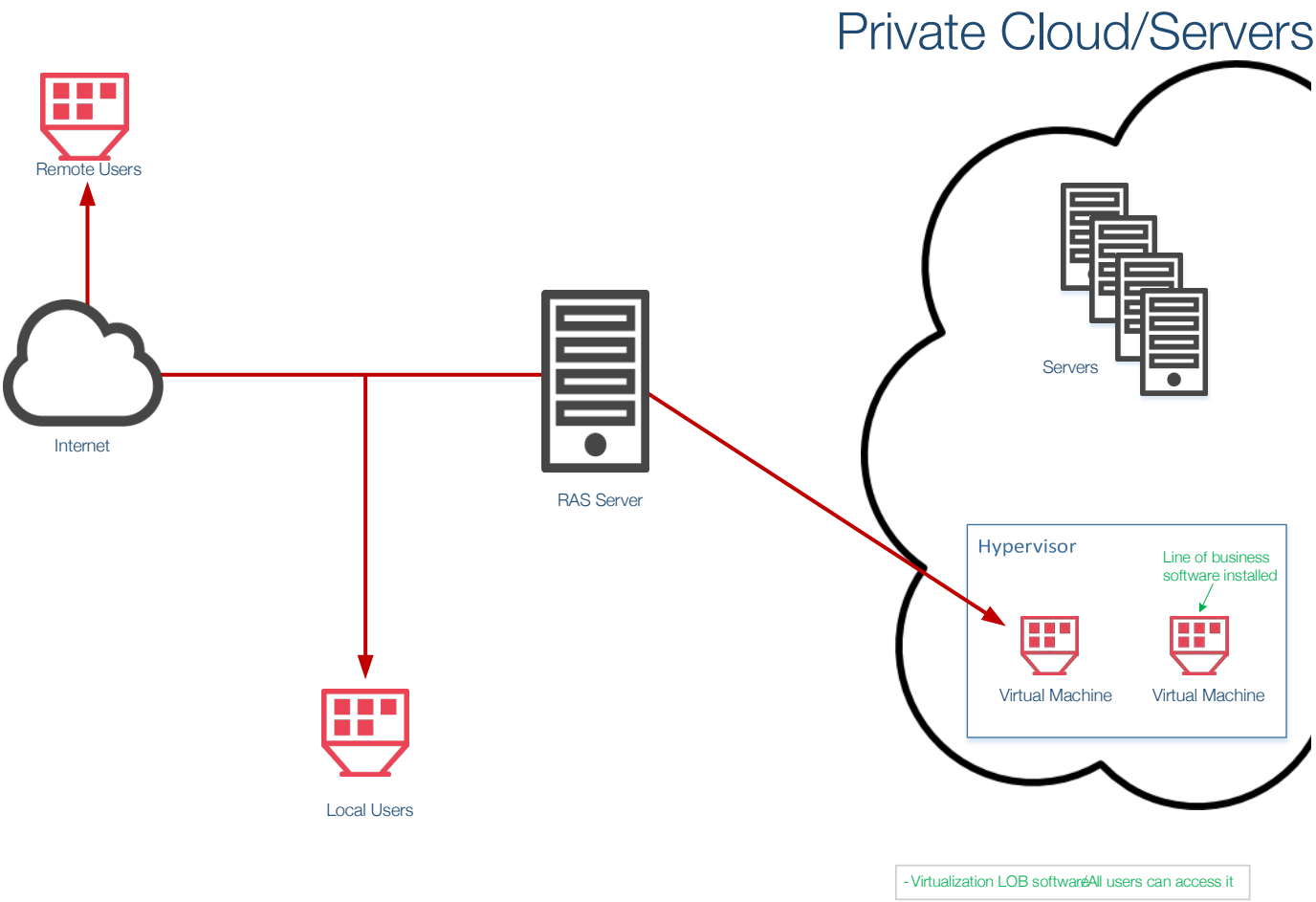
It's normal for a medical facility such as a hospital to have several buildings in different geographical locations. In such a scenario, IT staff can still manage the entire infrastructure of all the facilities from a central management console when using Parallels RAS. The staff can also access resources that are published on sites to which they are not directly connected, allowing better distribution of available resources.

Delegate the Management of the IT Departments

Parallels RAS allows IT administrators to configure granular permissions for different roles. This allows the IT manager to easily delegate administrative tasks, such as allowing a department's IT technician to manage the department's network segment and its published resources, so executives can focus on the upkeep of the global system.

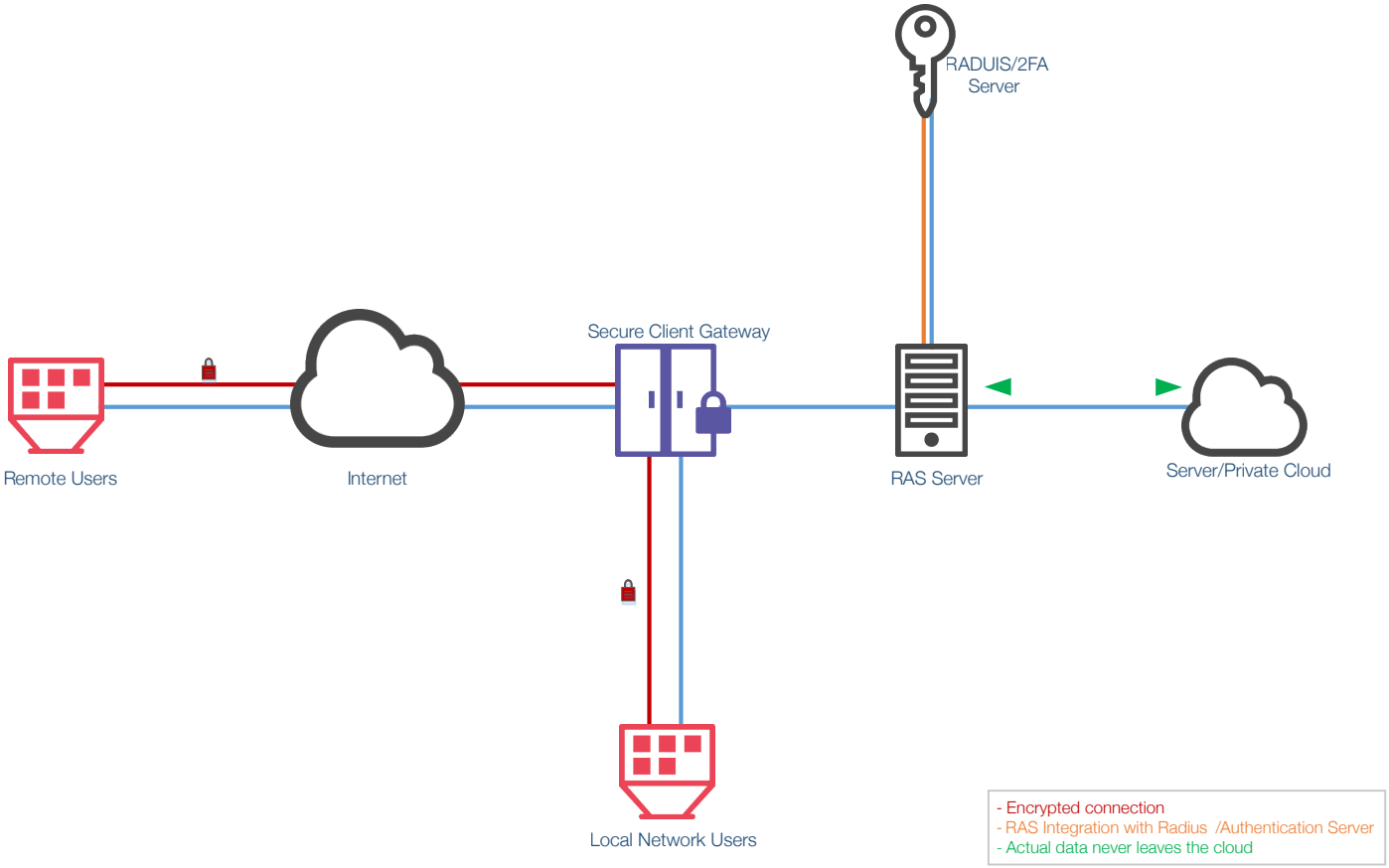
Run Legacy Software on Virtual Desktops

Even when running legacy software on virtual desktops, all confidential patient data is securely stored in the organization's private cloud. In this sort of setup, if a terminal is damaged, stolen, or broken into, there is no risk of sensitive information leakage. Healthcare providers can use virtual desktops to protect their organization's private data even when using legacy software applications.



Extend Hardware Life

Hospitals and other medical facilities are resource-hungry facilities because they run a lot of equipment and operate 24/7. By using the Parallels RAS desktop replacement features to convert the bulky operating systems into stripped down, pseudo thin-clients, IT administrators can prolong the life of existing hardware and save on upgrade costs. This is beneficial not only for the organization, but also the environment because it will reduce the amount of natural resources used.



Encrypt All User Connections

Like other public places, hospitals are susceptible to malicious hack attacks. There's always the risk that an attacker plugs in their laptop to the organization's network to capture traffic and steal sensitive data. IT administrators must not allow these attacks to be carried out successfully. To avoid this, they can encrypt all the connections between the private clouds and the end users with just a few clicks in the Parallels RAS central console.

What Customers Say About Parallels Remote Application Server

"Parallels Remote Application Server is easy to deploy and easy to manage. Our number one benefit is having the ability to provide access to selected applications based on user-group needs."

– Mariusz Mazek, Norwegian American Hospital

"With the implementation of Parallels Remote Application Server, we solved the performance and connectivity problems on our network and servers, improving the user experience significantly. Our previous provider failed to deliver a cost-effective and high-performance solution."

– Juan Rosa, IT Manager for Bay Dermatology

"Within five minutes of being shown what the product is and how it performs load balancing functions, I was fully comfortable with using the product, being able to monitor each server without an issue. I know Parallels products are built in a simple way that allows them to perform exactly as expected."

– Jacob Brokke, IT Manager for Abilene DC