

The logo for virtustream, featuring the word "virtustream" in a white, lowercase, sans-serif font. Above the letter "u" is a small icon consisting of several vertical bars of varying heights, resembling a signal or data visualization. The logo is set against a red rectangular background.

virtustream

Data Sheet

Healthcare Cloud

Enterprise-class Cloud Services for Healthcare

Virtustream Healthcare Cloud, which runs on Virtustream Enterprise Cloud, enables healthcare providers to modernize their health IT environments in a cloud environment purpose-built for mission-critical healthcare applications. Virtustream Healthcare Cloud adheres to the Cloud Infrastructure Service Providers in Europe (CISPE) certification and incorporates appropriate data protection standards to protect data consistent with the security requirements of the European Union's General Data Protection Regulation 2016/679 (GDPR).

Virtustream Healthcare Cloud adheres to the Cloud Infrastructure Service Providers in Europe (CISPE) certification to demonstrate that Virtustream uses appropriate data protection standards to protect your data consistent with the strict requirements laid out in the EU's General Data Protection Regulation (GDPR). It includes enterprise-class infrastructure availability guarantees of up to 99.999% and options for data geo-fencing, to give healthcare providers a proven, secure platform for patient records while meeting regional data residency requirements to protect personal information. The service includes all the advantages of Virtustream Enterprise Cloud, which is engineered to support the full breadth of digital health solutions, including systems of records like electronic health record (EHR) systems and enterprise resource planning (ERP). Additionally, Virtustream Healthcare Cloud supports patient engagement, precision health platforms, workforce management, collaboration and nearly any IT system.

By leveraging Virtustream Healthcare Cloud, healthcare decision makers can modernize their health IT infrastructure without a significant up-front investment in new hardware, software or infrastructure services. With the support of hybrid deployment models, this offering enables

modernization strategies that balance speed to value while fully utilizing legacy investments and existing operational models. Virtustream's advanced security services and defense in depth framework ensure end-to-end protection against the ever-present risks associated with increasing cybersecurity pressures. By engaging Virtustream Healthcare Cloud, healthcare providers have the option to implement a 24/7 white-glove managed service, which is critical to keeping healthcare IT systems running around the clock while reducing costs.

Healthcare's Digital Transformation

Healthcare IT is rapidly embracing digital transformation, expanding their use of EHRs, improving patient engagement, and connecting EHRs with new precision health platforms. Cloud adoption for health IT is accelerating in support of this digital transformation. Global healthcare cloud spending on services and products is expected to reach an estimated \$12.6 billion in 2020, growing at an average annual rate of 20.1%¹.

Healthcare providers can expedite their digital transformation by embracing Virtustream Healthcare Cloud. By off-loading portions of their existing IT environment to Virtustream, hospitals can maintain in-house infrastructure for necessary on-premises areas while running digital health solutions and applications in the cloud on a high scale, economical, enterprise-class infrastructure platform.

Security and Compliance in the Cloud

One of the primary responsibilities of healthcare providers today is maintaining the security of personal data. Healthcare providers subject to the GDPR are required to protect personal data and implement technical and organizational measures that ensure a level of security that is appropriate to the risk². Additionally, GDPR requires the notification of certain data breaches to data protection supervisory authorities and, in some cases, to the individuals themselves³. It is therefore of critical importance for healthcare providers to have in place robust incident management procedures and appropriate security measures to safeguard PHI, especially as this kind of data carries a high risk of harm to individuals if it is compromised or lost. When evaluating the use of off-premises or hybrid cloud, the ability to protect personal data and meet the requirements of the GDPR must remain a top consideration of any healthcare provider.

1 Intersoft Consulting, "Art. 1 GDPR Subject-matter and objectives" accessed May 10, 2018. <https://gdpr-info.eu/art-1-gdpr/>

2 GDPR Article 32

3 GDPR Article 33



Virtustream cloud services and software complies with the GDPR as of the effective date, May 25, 2018. Virtustream follows established guidelines and protocols when it comes to data protection of personal and non-personal data, providing the technologies, processes, and expertise to assist healthcare providers in protecting health information and keeping it secure.

Virtustream cloud services, including Virtustream Healthcare Cloud, are designed to help organizations better manage security and privacy risks.

- Virtustream can assist organizations to manage risk more effectively in the areas of data security and incident management, which will help organizations address the requirements of the GDPR in these areas.
- Virtustream can deliver a multi-dimensional, end-to-end strategy to protect PHI, including data protection, threat detection, identity access controls and security information and event management (SIEM).
- Virtustream can provide a dedicated team focused on end-to-end security to enable large-scale, highly compliant, highly automated systems.
- Virtustream can provide role-based access controls, multi-factor authentication, data encryption at rest and in motion, multiple levels of threat detection, and a myriad of other advanced security options.



Hybrid Deployments of Virtustream Healthcare Cloud

Hybrid architectures for mission-critical, highly connected environments are the most common deployment model, enabling healthcare providers to connect legacy on-premises environments with the off-premises cloud-based services securely and economically.

By engaging Virtustream Healthcare Cloud, healthcare providers use the same multiprotocol label switching (MPLS), point-to-point or VPN network architectures in use today, extending them to Virtustream Healthcare Cloud. Virtustream experts work with organizations to

develop a deep understanding of the unique application interdependencies of a given environment, such as which applications need to be in the same location and which can tolerate expected latency.

Virtustream and its healthcare customers work together to create a migration strategy that delivers a smooth transition to the cloud while receiving the highest time-to-value for their investment. This time-to-value can be seen through lower startup costs, non-disruptive upgrades and non-impactful redeployments of infrastructure resources and pay-for-use models during the implementation phase. Along with these advantages, healthcare providers gain the flexibility to scale-up resources during intensive development and scale-down when that development ends.

When moving any part of the healthcare IT landscape to a cloud environment, Virtustream and the customer pay close attention to the management of the interfaces that keep data flowing smoothly between separate systems.

Enterprise-class Services with True Consumption Economics

Built with redundancy and business continuity by design, Virtustream Healthcare Cloud can deliver an infrastructure availability SLA of up to 99.999%, which is less than 6 minutes of unplanned downtime per year.

Only Virtustream offers true consumption economics. By using patented Virtustream MicroVM™ technology, Virtustream Enterprise Cloud provides a single, unified metric known as the MicroVM for IT organizations to measure their usage of cloud resources, allowing healthcare providers to only pay for the resources actually consumed, unlike the typical t-shirt sized utility billing from the general purpose public cloud providers. The MicroVM enables healthcare customers to shift from capital expenditures to operational expenditures while delivering market-leading performance SLAs.

For healthcare customers pursuing digital transformation and IT modernization across their health IT landscape, Virtustream Healthcare Cloud provides the speed for deployment, scalability and economics, all within a highly secure, industry compliant cloud.

Contact

For more information about Virtustream Healthcare Cloud, please contact us at info@virtustream.com or visit us at www.virtustream.com.



Virtustream Healthcare Cloud

Features

End-to-end security to enable large-scale, highly-compliant, highly-automated systems

Unique MicroVM technology, enabling true consumption-based pricing that reduces inefficiencies and creates significant cost savings

Strict guidelines and protocols for data protection, providing guarantees to secure protected personal information

Shorter time-to-value through rapid deployment, lower startup costs, non-disruptive upgrades and non-impactful redeployments

Ability to support the breadth and depth of robust health IT environments

Options for 24/7 white-glove service, keeping healthcare IT systems running around the clock while reducing costs

About Virtustream

Virtustream, a Dell Technologies Business, is the enterprise-class cloud service and software provider trusted by enterprises worldwide to migrate and run their mission-critical applications in the cloud. For enterprises, service providers and government agencies, Virtustream's xStream® Management Platform and Infrastructure-as-a-Service (IaaS) meets the security, compliance, performance, efficiency and consumption-based billing requirements of complex production applications in the cloud - whether private, public or hybrid.

