

Data Sheet

Virtustream Enterprise Cloud

Enterprise-class cloud platform

Virtustream Enterprise Cloud, powered by xStream management software, is an integrated IaaS solution that enables cloud service providers and enterprise IT organizations to deliver enterprise-class application services to their customers.

Using patented Virtustream cloud resource management technology (μ VM), xStream creates secure, multi-tenant cloud environments that deliver assured SLA levels for business-critical applications and services. xStream can be deployed as a private cloud, public cloud and enables secure federation to create hybrid clouds.

Empowering the business to better leverage IT

In today's global marketplace, nearly every business decision is also an IT decision. But IT organizations are struggling to find the right balance between maintaining mission-critical systems and implementing new innovation for the business. They need a way to improve the performance of existing applications, reduce overall IT costs, and gain a level of flexibility that can help differentiate their products and services.

Enterprise cloud computing

Most cloud computing offerings in the market today are only focused on low-cost, best-effort delivery. For many Enterprise IT environments, this is not acceptable for the majority of their business-critical applications. Virtustream's IaaS solution is the only cloud computing platform that delivers true enterprise cloud computing. Available as a private cloud or public cloud, xStream supports complex heterogeneous Enterprise IT environments and multiple business models for cloud service providers. By using patented MicroVM (μ VM) technology, xStream is able to deliver

application-level performance SLAs for both traditional and web-scale applications. For most customers, this results in performance improvements of up to 30%, and cost-savings of 30-50% over legacy environments. μ VM provides a single, unified metric for IT organizations to measure their usage of cloud computing resources, allowing businesses to pay for IT services on a truly consumption basis.

Enterprise security, trusted deployments, business agility

While all businesses are looking for greater flexibility from their IT investments, concern about cloud computing security continues to be a critical factor when looking for ways to solve business challenges. xStream resolves these concerns by integrating multi-level security and encryption that provides trusted application environments that are continuously monitored and comply to industry and government regulations. The deployment flexibility of xStream allows businesses to be confident that their applications and data are secure and protected, regardless of where they are deployed.

Secure multi-tenant cloud management

The screenshot displays a comprehensive management portal with a red and dark blue color scheme. The interface is organized into several functional sections:

- Portal (UNIFIED MANAGEMENT):** Includes buttons for Self Service Onboarding, UI Portal, SDK, and API.
- Platform Extensibility (NORTHBOUND AND SOUTHBOUND INTEGRATIONS):** A header section for integrations.
- Resource Optimization & Business Services (ANALYZE, CONTROL, REPORT):** Contains buttons for Billing, Reporting, Entitlement, Capacity Planning, and Service Catalog.
- Infrastructure Orchestration (AUTOMATION & PROVISIONING):** Lists Workload Optimization, Storage Automation, Network Automation, and VMware vSphere / Openstack.
- Application Automation (DEPLOYMENT & CONTROL):** Lists App Director, xStream BPM, Service Orchestration, Material Repository, and Cloud Service Factory.
- Security & Compliance:** Includes System Integrity, Encryption, Policy, and Tenancy.
- Cloud Architecture:** Lists Private, Hosted Private, Public, and Hybrid deployment models.



xStream Management Platform functionalities

Migrating to the cloud

Too often, business critical applications remain costly and stagnant because they do not appear to have a technology path forward. Virtustream is able to help businesses migrate legacy applications to their platform to improve performance, reduce costs and to take full advantage of the power of the cloud to deliver dynamic, scalable and agile IT delivery. It also enables production and mission-critical applications to take advantage of emerging technologies such as Big Data analytics (eg. SAP HANA, Hadoop) and cloud advantages like agility, backup and disaster recovery.

Assured application-level SLAs*

- Virtustream μ VM resource management
- Dedicated and dynamic application resource pooling (compute, storage, network)
- Data Center, application and infrastructure high availability

Application and data security

- 2-Factor authentication
- Intel TXT – Trusted Computing
- Isolated application zones
- Integrated GRC
- Continuous compliance monitoring

Deployment flexibility

- Private cloud (on premise)
- Virtual private cloud (cloud SP)
- Public cloud (cloud SP)
- Public + private cloud (hybrid)
- Trusted federated cloud exchange

Application flexibility

- Business Critical, production applications (ERP, CRM, HCM, Financials, SAP, Oracle, Microsoft)
- Tier-2, Tier-3 applications
- Content management
- Unified communications and collaboration
- Enterprise test and development applications
- Mobile application development
- Big data analytics
- Re-platform mainframes & AS400 migrations**
- Re-platform RISC/UNIX applications**
- Off-the-shelf software to SaaS delivery model conversations

Reliability*

- 99.5 to 99.999 SLAs
- Geographically dispersed data centers
- Dynamic high-availability compute, network, storage
- Geographically distributed backup service
- Integrated disaster recovery service

Manageability

- Multi-tenant system administration
- Enterprise portal with role based access controls
- Application catalog and deployment orchestration
- Customer self-service portal
- Operations monitoring and reporting
- Multi-level billing and chargeback

Interoperability

- VMware and Openstack
- Windows, Linux OS
- Amazon EC2/S3-robust APIs

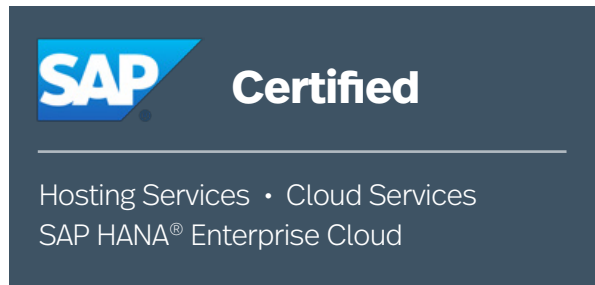


Compliance certifications and authorizations

- FedRAMP
- FISMA/NIST 800-53 (Civilian)
- DIACAP/DIARMF (DoD)
- ICD503 (Intelligence)
- FISMA (Government)
- G-Cloud (U.K. Government)
- SSAE16, SAS70 (Audit)
- ISO27001-2005 (Service),
- HIPAA (Healthcare)
- PCI (e-commerce)

* Reliability assurance statements dependent upon following Virtustream recommended best practices. Functionality varies by software version so refer to documentation for exact features/capabilities.

** Migrations require Cloud Integration Services (CIS).



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.

