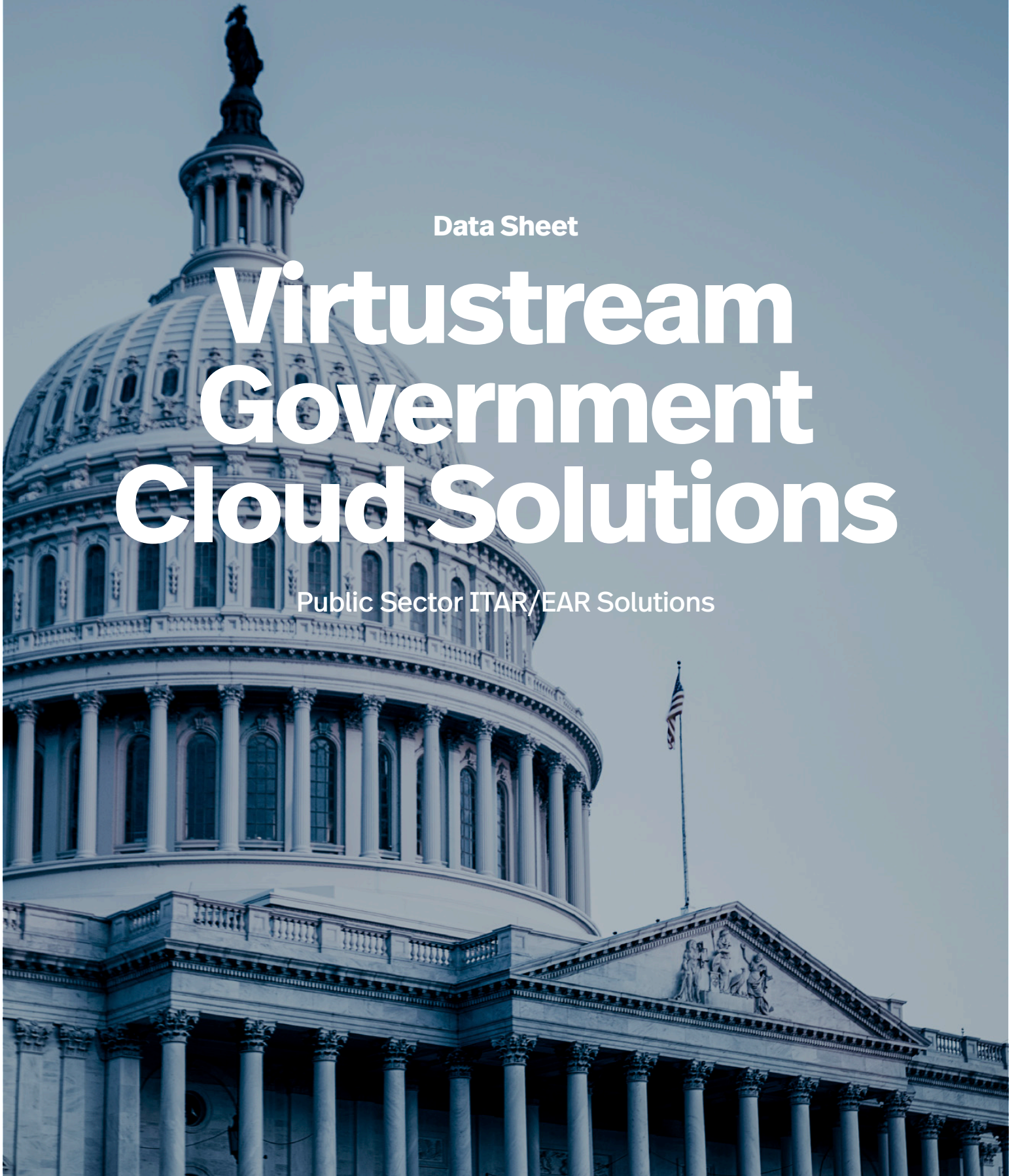


Data Sheet

# Virtustream Government Cloud Solutions

Public Sector ITAR/EAR Solutions



Public sector IT decision makers are facing unprecedented pressure to adapt to the delivery and consumption of technological services. With this technological demand, the goal is to find a cloud provider who can deliver a platform that meets the highest performance, uptime and security demands while simultaneously lowering overall costs of ownership.

Virtustream cloud and managed services solutions are purpose-built from the ground up to increase the ability of public sector organizations to support a mission-focused agenda. Virtustream service offerings include basic server hosting services through fully-managed ERP environments, managed security services and a broad suite of professional services to assist customers as they transform their IT landscapes to take advantage of new cloud-based paradigms.

### **Mission-Critical Computing**

Designed from the ground-up to support mission-critical, performance-intensive applications, Virtustream's IaaS cloud leverages industry-leading Intellectual Property based on over 10 years of virtualization experience, combined with best-in-class security features to support the vast array of state and local government agency applications.

By combining industry-leading uptime and performance-based SLAs with a flexible pricing model that supports capacity on demand and true consumption-based billing, Virtustream's offerings will satisfy all the requisite customer needs while providing better application performance, greater agility and efficiency, and more robust security.

### **Virtustream xStream Cloud Management Platform**

Virtustream xStream Cloud Management Platform provides a unified, control plane that integrates infrastructure orchestration, enterprise application automation and a suite of business intelligence and service management tools to run mission-critical

applications in private, public and hybrid clouds. This powerful combination allows for the delivery of enterprise IT as a service, with true consumption economics, service-level agreements, best-in-class security and compliance features and services to assist in the migration of mission-critical applications to the cloud. Sure that federal government customers are paying only for what their organization uses. Customer's benefit from the ability to increase or decrease aspects of their environment, as their business/mission needs fluctuate or evolve.

### **What is ITAR/EAR?**

International Traffic in Arms Regulations (ITAR) are federal regulations that govern the export and temporary import of defense-related articles, technical data and defense services. Export Administration Regulations (EAR) are a set of United States government regulations on the export and import of most commercial items that include electronically transmitted and stored technology and software. These regulations state that no non-US person can have physical or logical access to the information stored in the ITAR/EAR environment and this data remains encrypted at all times between the originator and the recipient with no ability for unauthorized third parties to decrypt.

The U.S. State Department governs both the permanent and temporary exports of defense articles, technical data, and defense services specifically designed, developed, configured, adapted, or modified for ITAR/EAR application via the ITAR/EAR regulations. This also includes the temporary imports of defense articles.

### **ITAR/EAR Requirements in the Cloud**

With the cloud, ITAR/EAR requirements are intended to keep technically sensitive and advanced information having military potential out of the hands of foreign persons and foreign nations. The U.S. State Department maintains the ITAR/EAR United States Munitions List (USML), which governs both the permanent and temporary exports of defense articles, technical data, and defense services specifically designed, developed, configured, adapted, or modified for military application via the ITAR/EAR regulations.

### **How Virtustream Can Support ITAR/EAR Customers**

For those customers who do not meet the Controlled Unclassified Information (CUI) requirement to be placed in the standard Virtustream cloud platforms, Virtustream can support their specialized security and compliance requirements. For these customers, Virtustream has established specially designed nodes with enhanced logical and physical security mechanisms. Each node



is accessed via a different jump host which features a warning banner stating that the environment is restricted. Hosts in each node are uniquely identified by a naming convention that features zone and data center information. Access to each node is granted to Virtustream staff, U.S. citizens only, as required per job function.

## Security at a Glance

Virtustream Cloud Services, including the Virtustream Enterprise Cloud ITAR/EAR node, are designed to meet the exacting requirements of complex enterprise, government, and service provider customers. xStream provides a wide range of innovative and unique features to help businesses automate and meet these requirements. In each area of security and compliance the Virtustream cloud solutions, both cloud IaaS services and xStream software, follow the core tenets of cloud security:

- Compliance
- Trust
  - Intel Trusted Execution Technology (TXT)
  - Two-Factor Authentication
  - Encryption
- Visibility
  - Auditing
  - Alerting
  - Security Information and Event Management (SIEM)
- Control
  - Role-Based Access Control (RBAC)
  - Virtual Firewall

## Compliance

A key requirement for enterprise, government, and service provider clients is to maintain compliance with a variety of laws, regulations, and mandates. Virtustream Cloud Services are aligned with the industry recognized security and compliance standards. Virtustream's architecture significantly contributes to achieving and maintaining compliance with FedRAMP, FISMA, ITAR/EAR, SSAE16/SOC2/ISAE3402, PCI-DSS 3.1, ISO 27001:2013, ISO 9001:2015, ISO 22301:2012, HIPAA/HITECH/HITRUST and other certification and compliance frameworks.

Given the global footprint, Virtustream's compliance initiative includes our customer's local and regional requirements. Virtustream's governance, risk and compliance team lead all audits to meet security, compliance and certification objectives.

## Trust

Trust is the cornerstone of any security strategy. This is particularly the case for cloud-based systems, where distributed users, systems and software must be able to validate the identity of other users, systems and software. Virtustream Cloud Services employ industry-leading innovations such as Intel TXT, two-factor authentication, and encryption throughout the system to enable secure cloud computing environments.

## Intel Trusted Execution Technology (TXT)

Virtustream xStream software provides support for Intel TXT, ensuring a trusted boot environment when used with TXT-enabled hardware. Intel TXT protects critical system software by validating the code belonging to trusted programs (e.g., a "known good" BIOS or hypervisor, or the xStream software itself) before allowing it to run.

By preventing host machines from emerging threats such as hypervisor attacks, BIOS and firmware attacks, malicious root kit installations, or other software exploits, xStream and Intel TXT deliver a trusted computing platform upon which enterprise-grade cloud services may be delivered.

## Two-Factor Authentication

Virtustream Cloud Services utilize strong two-factor authentication as a standard authentication mechanism for users accessing its management portal. Users are authenticated via a user-selected PIN and a one time password generated via a software-based token, providing a high degree of confidence that access to the management console is restricted to authorized users.

## Encryption

Encryption – a foundation of confidentiality and integrity – is supported by Virtustream Cloud Services. Various third-party products are used to secure data at rest and data in motion as well to authenticate the components of the Virtustream cloud technology stack. Utilizing FIPS-compliant cryptographic technology, Virtustream can support all major encryption requirements for file system, database, and network transport protection.

## Visibility

Visibility into the state of your cloud computing environment is foundational to security. xStream ensures full visibility into the entire cloud stack—from the network layer up through the organization's overall security and compliance posture, resource consumption, Disaster Recovery status, archive information, ticketing – all via an integrated management interface.





## Auditing

Effective security auditing demands that everything within the Virtustream cloud management tier is logged. Virtustream Cloud Services support this logging all system-auditable events with full reporting to the Security Intelligence Operations Center (SIOC) portal. Customers can extend their auditing tools into their tenant space or elect to implement Virtustream's fee-based, audit logging capability.

Virtustream Cloud Services provide continuous auditing and compliance features to satisfy the continuous compliance and security auditing requirements of modern information assurance and compliance frameworks.

## Alerting

Virtustream Cloud Services employs an alerting engine that helps organizations monitor and manage ongoing security risks by allowing administrators to set alerts and alarms on a wide variety of system security events.

## Security Information and Event Management (SIEM)

To meet the most stringent enterprise security requirements, Virtustream Cloud Services provide a tightly-integrated, real-time SIEM framework to ensure high degrees of situational awareness. The SIEM offers advanced log management, event correlation, alarms and alerts, and comprehensive security dashboards. The SIEM also offers many compliance management features.

## Control

With trust and visibility established, a healthy security plan puts controls in place to enforce enterprise policy. Virtustream Cloud Services offer several features to enact enterprise security controls, including role-based authorization, network controls and advanced multi-tenancy and cloud federation features.

### Role-Based Access Control (RBAC)

Minimizing the risk of internal threats requires a strict separation of administrative responsibilities. To facilitate this, Virtustream Cloud Services provide role-based access controls capable of providing granular authorization based on user-defined roles. Roles range in scope from super-administrators with total control to read-only access for restricted users.

As part of the employment process, employees undergo a screening process applicable per regional law. Dell's annual compliance training includes a requirement for employees to complete an online course and pass an assessment covering information security and data privacy. This security awareness program may also provide materials specific to certain job functions.

### Virtual Firewall

Virtustream Cloud Services provide full-featured virtual firewall technology that can be enabled to protect virtual infrastructure from transport layer attacks. With a complete view of all network traffic, virtual network settings and virtual machine states, the virtual firewall provides access control using stateful policies that define which ports, protocols, destinations and virtual machines should be blocked.

## Contact

For more information about Virtustream's federal government offerings, please contact us at [info@virtustream.com](mailto:info@virtustream.com) or visit us at [www.virtustream.com](http://www.virtustream.com).

## 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.

