

# Data Protection

## keep your data secure and always available

US Signal offers a comprehensive suite of data protection services designed to safeguard critical business information against threats such as data loss, breaches, and ransomware attacks. These services are built on a foundation of innovative technology and best practices, ensuring that organizations can maintain business continuity and compliance while protecting their sensitive data.

### Technical Overview

Starting by thoroughly assessing your entire IT stack, US Signal ensures that the selected data protection strategies align with specific business requirements, including off-site location, media type, application dependencies, hardware configurations, recovery point objectives (RPO), recovery time objectives (RTO), and budgetary constraints. This meticulous approach allows organizations to implement robust and cost-effective backup and disaster recovery solutions without incurring prohibitive capital expenditures. The US Signal team is well-equipped to manage and monitor these services, providing expert oversight through their Technical Operations Center (TOC), which operates around the clock, every day of the year, including holidays. This level of support frees your internal staff to concentrate on strategic initiatives rather than routine maintenance.

In addition to state-of-the-art data protection services, US Signal collaborates with clients to develop a comprehensive disaster recovery (DR) playbook. This playbook is regularly tested and updated to ensure optimal functionality in the event of a disruption, thus mitigating risks associated with data loss. All US Signal solutions adhere to stringent compliance standards, including HIPAA and PCI, ensuring that sensitive data is protected in accordance with regulatory requirements. Leveraging leading-edge technologies, these data protection solutions are deployed and managed according to industry best practices, allowing for seamless integration with other US Signal IT solutions.



### At-A-Glance:

- Disaster Recovery as a Service (DRaaS) strategically designed to ensure business continuity in the event of a disaster
- Assist in navigating the complexities of compliance
- Regular testing and validation of processes
- Develop a personalized comprehensive incident response plan for your business
- Regular audits and detailed reporting help businesses demonstrate compliance



## Disaster Recovery (DRaaS) Solutions

Use any of US Signal's Disaster-Recovery-as-a-Service includes scalable architecture with high-capacity memory and compute clusters make it possible to protect critical workloads for high memory applications. Hybrid and all-flash storage arrays allow you to choose storage that produces the performance you need to keep your workloads running optimally.

### DRaaS with Zerto:

With US Signal's Disaster-Recovery-as-a-Service (DRaaS), your primary production environment will be continuously replicated to a US Signal cloud environment or between two US Signal virtual data centers. When needed, a fully replicated instance of your environment can be deployed with just the click of a button.

US Signal's DRaaS solution leverages Zerto Virtual Replication technology. It's available as a fully managed solution to fit your applications, business requirements, and budget.

The fully managed DRaaS solution will be set up, monitored, and maintained by US Signal engineers, and includes documented RTO and RPO SLAs and a full DR playbook. The self-managed DRaaS option allows you to replicate to one or more US Signal purpose-built DRaaS clusters using US Signal's licensing or your existing perpetual enterprise licensing with Zerto. Test your DR solution up to twice per year for free.

### Advantages:

- Continuous replication and simplified failover operations maximize application availability
- Monthly, usage-based licensing
- Multi-cloud replication agility simplifies workload mobility to protect, recover, and move workloads
- Monthly, usage-based licensing
- Built-in data compression to reduce bandwidth requirements for initial data sync and ongoing replication

- Granular point-in-time recovery with write-order fidelity across all protected virtual machines in a single virtual protection group
- Easily recover individual applications or entire data centers with industry-leading RPOs
- Managed recovery testing available to validate recovery operations with supporting reports to satisfy compliance requirements

## Backup as a Service (BaaS)

With Backup-as-a-Service (BaaS), US Signal's agent-based data backup solution, you can back up your data from any physical or virtual infrastructure or Windows workstation to the US Signal Cloud. Then, easily access it anytime and restore it to anywhere using the Internet and outgoing TCP ports.

Individual servers are protected by installing a backup agent inside any supported operating system. Or install an agent on any server with network visibility to your hypervisor to provide backup and recovery for VMware vSphere or Microsoft Hyper-V. For efficient backups of SaaS platforms such as Microsoft 365 and G-Suite all that's needed is the account credentials to set up a backup plan.

All traffic from the client machine to US Signal Cloud storage is transmitted over SSL encryption. Choose fully managed Backup-as-a-Service or a manage-it-yourself data backup option.



## Cloud Availability for Veeam

Work with US Signal as your single-source Veeam solution provider to address your data protection needs, from Veeam licensing and on-premise hardware to disaster recovery and long-term data archival. Select a specific service or combine services to best meet your requirements for RPO/RTO, cost management, and more.

### Cloud Backup for Veeam:

Cloud Backup for Veeam, provides a fast, secure way to get your VM backups off-site and into the US Signal Cloud, eliminating the cost and complexity of building and maintaining off-site infrastructure.

All backups and offsite copies are managed and recovered directly from your Veeam backup console. Easily employ the 3-2-1 data protection best practice: 3 copies of your data stored on 2 different types of media with 1 copy off-site. Pay only for the resources you need.

Cloud Backup for Veeam integrates with Veeam Cloud Connect making it quick and easy to set up offsite backups from a single pane of glass. If you already have a Veeam license, no additional licensing is required. Veeam licenses are also available directly from US Signal for rent or purchase.

### Cloud Replication for Veeam:

US Signal's Cloud Replication for Veeam offers a flexible cloud-based replication target for your on-premises virtual machines (VM's). There's no need to maintain a second site. Your protected workloads replicate directly into vCloud Director, creating ready-to-start copies of customer VMs in a secure US Signal resource pool.

Restoring files is fast and easy. Just failover to the replication environment and back to source as needed. RPO's as low as 15 minutes can be achieved as well as an RTO of minutes to hours based on production site bandwidth, latency, and overall workload size.

Whether replicating and restoring an entire site or specific VMs, you'll experience rapid failover/failback with almost zero data loss and minimal disruption.

No additional licensing is required if you already have a Veeam license. Veeam licenses are available directly from US Signal for rent or purchase. On-premise hardware is also available directly from US Signal.

### Advantages:

- Quickly replicate and failover workloads offsite
- Full and partial-site failover
- RPOs as low as 15 minutes & an RTO of minutes to hours
- Secure connections, network extension appliances and traffic reduction mechanisms
- Flexible scaling of resources
- Can be used to meet various HIPAA and PCI compliance requirements
- Layer 2 extensions available to support existing IP schemes

### Cloud Archive for Veeam:

US Signal's Cloud Archive for Veeam enables you to leverage the lower cost, simplicity and elasticity of object storage. Using the Cloud Tier feature in Veeam Backup & Replication 9.5 Update 4, Cloud Archive for Veeam automatically archives backup data into US Signal S3 Object Storage. You get unlimited capacity for long-term data retention at the lower cost of object storage.

The integration with object storage also results in a space- saving, smaller footprint on your local storage that doesn't hinder recovery operations. Backups that have been offloaded to object storage remain transparently accessible to all Veeam functionality and are readily available for restores to production directly from object storage without prior staging. You can still perform instant virtual machine recoveries, computer and disk-level restores and file-level and item-level restores.



### **Veeam Licensing:**

Leverage the benefits of Veeam backup and replication, and simplify vendor management and support. It's easy when you purchase or rent your Veeam license directly from US Signal.

US Signal offers multiple ways to acquire Veeam Backup and Replication Software. Choose the one that works best for your particular environment and use case.

Options include:

- Perpetual license — based on the number of sockets with the right to perpetual use of any software version. Perpetual licenses are applicable per host regardless of the number of CPU cores or VMs. One year of basic support and maintenance is included. Support can be renewed year to year.
- Universal license — based on instances with most workloads requiring a single license instance. Terms are available for one to five years with support included for the entire term of the license. One-year terms are billed annually; multi-year terms are paid upfront at discounted rates.
- Rental license — available as an add-on to Cloud Backup for Veeam and Cloud Replication for Veeam. Rental licenses are billed month to month, moving costs from a CAPEX to OPEX model and making it more affordable to start using Veeam services from US Signal.

### **Data Management for Cohesity**

Data Management for Cohesity enables you to combine Cohesity's converged data protection platform with US Signal's secure and scalable cloud resources for an optimized approach to data management and protection.

It features SLA-backed 100% data availability and meets the requirements of a variety of use cases. It's available managed or unmanaged and uses a pay-as-you-go consumption model, making it flexible as well as cost effective.

It also provides you with the wide range of benefits associated with US Signal, the largest debt-free, privately held cloud services provider in the Midwest. That includes reliable connectivity and site redundancy courtesy of US Signal's 9,500 miles of fiber network that connects 8 geodiverse data centers.

Data Management for Cohesity includes Backup and Archival as well as Cloud Recovery.