Server Backup Services

Last updated 10/23/23

Server Backup Services (SBS) provide a comprehensive system for backing up and restoring almost any type of server over the State Government Network (SGN). SBS can backup and restore a single file, all files on disk or an entire server, whether physical or virtual. Agencies not using WaTech's Washington State Cloud virtual infrastructure can use this service to back up their own servers.

Veeam Backup and Replication uses the block cypher encryption algorithm. Encryption works at the source side. Veeam Backup and Replication reads virtual machine (VM) or file data, encodes data blocks, transfers them to the target side in the encrypted format and stores the data to a file in the backup repository or archives the data to tape. Data decryption is also performed on the source side: Veeam Backup and Replication transfers encrypted data back to the source side and decrypts it there.

SBS uses a variety of technologies to provide backup and restore services, archival and retrieval, storage management and disaster recovery. It can support both physical and virtual servers, running a Windows Operating System (OS) or Linux/Unix variants. The service can support servers that are co-located within the State Data Center or almost anywhere else in the state if they are accessible via the State Government Network.

Backup files are copied to two locations:

- On premises for seven days.
- On AWS S3 object lock (immutable) storage for customers desired retention period.

Server Backup quick facts

Agencies, boards, and commissions using Server Backup	29
Total on premise NetApp storage usage	360TB
Total AWS storage usage	600TB
Total number of unique workloads	949
Virtual machines	770
Computer (via agent)	163
File Shares	11
Average first attempt success rate (last month)	99.24
All backups which fail on first attempt are automatically resubmitted and result in eventual success.	

Intended customers

Historically the Server Backup Services was intended primarily for agencies utilizing the Washington State Cloud. This service has been expanded to support all agencies on the SGN with their own hypervisor or physical servers. This service can quickly scale to meet agency needs. Soon this service will also be able to natively support agency cloud workloads in Azure and AWS.

Helpful information

Service category
Cloud

Service availability
24/7/365

Planned maintenance
Performed as required during non-peak hours.

Related services
- Washington State Cloud
- Managed Server Support
- NetApp storage
- Firewall Services
- DNS Service
- VPN Service
- SGN
- Colocation Olympia
- Colocation Quincy

How to request service
Submit a request for service through our Customer Portal.

Service owner
Bill Moneer

Options available with this service

Customer agencies select the retention period of their choosing for the VCC storage (14, 30, 60 days, etc.) and the immutable storage is kept for 30 days.

Customer engagement

- Semi-annual customer Town Hall with all Computing Services teams providing updates and gathering customer feedback.
- Monthly Technology Management Council meeting and weekly CIO call.
- Monthly status meetings with Business Relationship Managers.
- Regular outreach to solicit feedback, provide updates and inform agencies on emerging projects, initiatives, and services.
- Requests for new consultations and modifications to existing applications.

Action plan

Current activity

- Prepare for the Veeam 12a upgrade.
- Onboard new customers and expand current operations to meet customer demand.
- Work with AWS on a storage contract to reduce administrative storage fees and egress charges.


One- to two-year goals

- Revisit Veeam SureBackup solution after storage platform is upgraded.
- Explore designating this Server Backup service with an enterprise service designation for the cloud workloads in coordination with the Enterprise Cloud Computing program.
- Rate review.
- Veeam version upgrade.

Three- to five-year goals

- Continue to assess backup software and storage providers and work with customers to ensure products best meet the needs of Washington state.
- Veeam version upgrade.
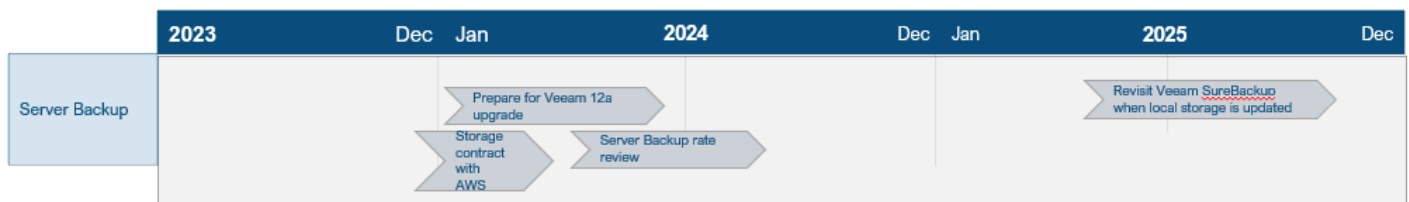
Service review and fully loaded service budget projection

Revenue source

The service operates on a pay per use rate structure. Revenue received from this rate structure goes directly against the cost incurred to provide the service.

Net Income over time:

In 2019 one large agency left the Washington State Cloud to stand up their own VMware environment, and in 2020 one large agency stood up their own backup infrastructure. These events occurred while we were still using Dell Avamar as our backup software. The Server Backup rate was reduced from .50 cents per GB per month to .39 cents per GB per month, effective July 2021. In July 2023, WaTech lowered the rate again to .25 cents per GB per month.

Revenues & Expenses | Backup