

VAST Data Cluster As-Built Report

Customer Information

Field	Value
Customer:	Acme Corporation
Cluster Name:	ACME-PROD-01
PSNT Number:	VST-2025-AC-001234
Site Location:	New York Data Center
Deployment Date:	September 13, 2025
Report Version:	2.1.0

Executive Summary

This as-built report documents the configuration and deployment details of the VAST Data cluster installed at Acme Corporation's New York Data Center. The cluster consists of a 4x4 configuration with Dell IceLake CBoxes and VAST Mavericks DBoxes, providing high-performance storage capabilities with enterprise-grade data protection and security features.

Cluster Overview

Component	Configuration
Cluster Architecture	4x4 Configuration
Total Capacity	5.3 PB Raw / 4.2 PB Effective

Component	Configuration
Compute Nodes (CNodes)	16 Nodes (4 CBoxes)
Data Nodes (DNodes)	16 Nodes (4 DBoxes)
Network Fabric	NVIDIA SN3700 200GbE
Data Protection	Triple Replication + Snapshots
Encryption	AES-256 with External KMS
Protocols Enabled	NFS, SMB, S3, NVMe-oF

Hardware Inventory

Compute Boxes (CBoxes)

Name	Manufacturer	Model	Serial Number	Rack Position	Power
CBox-01	Dell IceLake	QUAD-4N-IL-1NIC	DL-CB-001234	U25-U26	2.3kW
CBox-02	Dell IceLake	QUAD-4N-IL-1NIC	DL-CB-001235	U27-U28	2.3kW
CBox-03	Dell IceLake	QUAD-4N-IL-1NIC	DL-CB-001236	U29-U30	2.3kW
CBox-04	Dell IceLake	QUAD-4N-IL-1NIC	DL-CB-001237	U31-U32	2.3kW

Data Boxes (DBoxes)

Name	Manufacturer	Model	Serial Number	Rack Position	Power
DBox-01	VAST Data	DF-5630 Mavericks	VD-DB-567890	U15-U16	1.5kW
DBox-02	VAST Data	DF-5630 Mavericks	VD-DB-567891	U17-U18	1.5kW
DBox-03	VAST Data	DF-5630 Mavericks	VD-DB-567892	U19-U20	1.5kW
DBox-04	VAST Data	DF-5630 Mavericks	VD-DB-567893	U21-U22	1.5kW

Network Switches

Name	Manufacturer	Model	Serial Number	Rack Position	Role	Power
Switch-A	NVIDIA	SN3700 Spectrum-2	NV-SW-789012	U13	A	0.3kW
Switch-B	NVIDIA	SN3700 Spectrum-2	NV-SW-789013	U14	B	0.3kW

Network Configuration

VIP Pool Configuration

Pool Name	IP Range	Count	Purpose	Status
VMS-Pool	192.168.100.10-19	10	Management	Active
Data-Pool-A	10.1.1.100-149	50	Client Data	Active
Data-Pool-B	10.1.2.100-149	50	Client Data	Active
Backup-Pool	10.2.1.50-59	10	Backup/Replication	Active

Protocol Configuration

Protocol	Version	Status	Description
NFS	v3, v4.1	Enabled	Primary file access
SMB	v2.1, v3.0	Enabled	Windows file shares
S3	Compatible API	Enabled	Object storage access
NVMe-oF	TCP	Enabled	Block storage access

Data Protection Configuration

The VAST cluster is configured with comprehensive data protection features including triple replication, automated snapshots, and AES-256 encryption with external key management through HashiCorp Vault integration.

Feature	Configuration	Details
Local Encryption	Enabled (AES-256)	Hardware accelerated
External Key Management	Enabled (HashiCorp Vault)	vault.acme.com:8200
Data Replication	Triple Replication	Automatic failure recovery

Feature	Configuration	Details
Snapshot Policies	Hourly, Daily, Weekly	Automated retention
Data Efficiency	Deduplication + Compression	2.8x average ratio