# **VAST As-Built Report**



## **Customer Deployment Documentation**

Cluster: selab-var-204 PSNT: selab-var-204

**Release:** release-5.3.1-sp3-1898015 **Management IP:** 10.143.11.204

CBox Hardware: supermicro\_gen5\_cbox, two dual-port NICs

CBox Quantity: 3

DBox Hardware: ceres\_v2

DBox Quantity: 1

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## **Executive Summary**

#### **Cluster Overview**

| Description    | Value                                   |  |  |
|----------------|---|--|--|
| ID             | 1                                       |  |  |
| Name           | selab-var-204                           |  |  |
| Management VIP | 10.143.11.204                           |  |  |
| URL            | https://10.143.11.204/api/v7/clusters/1 |  |  |
| Build          | release-5.3.1-sp3-1898015               |  |  |
| PSNT           | selab-var-204                           |  |  |
| GUID           | 127db70c-0197-5f4f-8af8-44bead61cda2    |  |  |
| Uptime         | 18 days, 17:32:33.907311                |  |  |
| Online Since   | 2025-09-17T22:34:29.502591Z             |  |  |
| Deployed       | 2025-08-07T18:57:44.259621Z             |  |  |

#### **Hardware Overview**

| Description | Value |
|-------------|-------|
| Total Nodes | 5     |
| CNodes      | 3     |
| DNodes      | 2     |
| CBoxes      | 3     |
| DBoxes      | 1     |
| Switches    | 0     |

## **Cluster Information**

Cluster Name: selab-var-204

| Function                   | Status          |  |  |
|----------------------------|-----------------|--|--|
| State                      | ONLINE          |  |  |
| SSD RAID State             | HEALTHY         |  |  |
| NVRAM RAID State           | HEALTHY         |  |  |
| Memory RAID State          | HEALTHY         |  |  |
| Leader State               | UP              |  |  |
| Leader CNode               | cnode-3-11      |  |  |
| Management CNode           | cnode-3-12      |  |  |
| Management Inner VIP       | 172.16.4.204    |  |  |
| Management Inner VIP CNode | cnode-3-11      |  |  |
| Enabled                    | Yes             |  |  |
| Similarity Enabled         | Yes             |  |  |
| Deduplication Active       | Unknown         |  |  |
| Write-Back RAID Enabled    | Yes             |  |  |
| Write-Back RAID Layout     | DATA_6_PARITY_2 |  |  |
| DBox HA Support            | No              |  |  |
| Rack Level Resiliency      | No              |  |  |
| Metrics Disabled           | No              |  |  |

## **Hardware Summary**

## **Storage Capacity**

| Metric                     | Value  |  |  |
|----------------------------|--------|--|--|
| Usable Capacity            | 223 TB |  |  |
| Free Usable Capacity       | 38 TB  |  |  |
| Data Reduction Ratio (DRR) | 1.6:1  |  |  |
| Physical Space             | 282 TB |  |  |
| Physical Space In Use      | 233 TB |  |  |
| Free Physical Space        | 49 TB  |  |  |
| Physical Space In Use %    | 83%    |  |  |
| Logical Space              | 349 TB |  |  |
| Logical Space In Use       | 288 TB |  |  |
| Free Logical Space         | 60 TB  |  |  |
| Logical Space In Use %     | 83%    |  |  |

## **CBox Inventory (Compute)**

| ID | Model                                    | Name/Serial Number   | Status | Position |
|----|--|----------------------|--------|----------|
| 1  | supermicro_gen5_cbox, two dual-port NICs | cbox-S929986X5306437 | ACTIVE | U23      |
| 3  | supermicro_gen5_cbox, two dual-port NICs | cbox-S929986X5306720 | ACTIVE | U24      |
| 4  | supermicro_gen5_cbox, two dual-port NICs | cbox-S929986X5306758 | ACTIVE | U25      |

## **DBox Inventory (Data)**

| ID | Model                   | Serial Number      |        | Position |  |
|----|-------------------------|--------------------|--------|----------|--|
| 1  | dbox-515-25042300200055 | C15-25042300200017 | ACTIVE | N/A      |  |
| 2  | dbox-515-25042300200055 | C15-25042300200021 | ACTIVE | N/A      |  |

## **Physical Rack Layout**

Visual representation of hardware positioning in the rack with U-number assignments.

[Physical Rack Layout Diagram Placeholder]

## **Network Configuration**

| Setting                  | Value          |  |  |
|--------------------------|----------------|--|--|
| Management VIPs          | 10.143.11.204  |  |  |
| External Gateways        | 10.143.254.254 |  |  |
| DNS Servers              | 10.140.3.248   |  |  |
| NTP Servers              | 10.140.0.17    |  |  |
| External Netmask         | 255.255.0.0    |  |  |
| Auto Ports Ext Interface | outband        |  |  |
| Ethernet MTU             | 9000           |  |  |
| InfiniBand MTU           | 65520          |  |  |
| IPMI Gateway             | 10.143.254.254 |  |  |
| IPMI Netmask             | 255.255.0.0    |  |  |
| B2B IPMI                 | False          |  |  |

## **CBox Network Configuration**

| ID                    | Hostname             | Mgmt IP      | IPMI IP      | VAST OS                | VMS Host | Net Type |
|-----------------------|----------------------|--------------|--------------|------------------------|----------|----------|
| 8                     | se-az-arrow-cb4-cn-1 | 10.143.11.81 | 10.143.11.82 | 12.14.19-1809895 False |          | eth      |
| 2                     | se-az-arrow-cb4-cn-2 | 10.143.11.83 | 10.143.11.84 | 12.14.15-1791040       | False    | eth      |
| 1 se-az-arrow-cb4-cn- |                      | 10.143.11.85 | 10.143.11.86 | 12.12.15-1440723       | True     | eth      |

## **DBox Network Configuration**

| ID | Hostname            | Mgmt IP        | IPMI IP      | VAST OS          | Position | Ceres | Ceres v2 | let Typ |
|----|---------------------|----------------|--------------|------------------|----------|-------|----------|---------|
| 4  | se-az-arrow-db4-dn- | 1 10.143.11.41 | 10.143.11.42 | 12.14.15-1791040 | right    | True  | True     | eth     |
| 5  | se-az-arrow-db4-dn- | 2 10.143.11.43 | 10.143.11.44 | 12.14.15-1791040 | left     | True  | True     | eth     |

#### **Network Services**

VIP Pools: 35 pools configured

## **Logical Configuration**

Tenants: 20 tenants configured

Views: 276 views configured

View Policies: 115 policies configured

## **Security & Authentication**

#### **Active Directory:**

• Enabled: True

• Domain: Unknown

#### **Encryption Configuration:**

• Encryption Enabled: False

• Encryption Type: INTERNAL

• S3 AES Ciphers Only: Not Configured

• EKM Servers: Not Configured

• EKM Address: Not Configured

• EKM Port: 5696

• EKM Auth Domain: Not Configured

• Secondary EKM Address: Not Configured

• Secondary EKM Port: 5696

#### **Data Protection**

Protection Policies: 19 policies configured

#### **Enhanced Features**

#### **Rack Positioning:**

• Supported: Yes

• Automated U-number generation for hardware positioning

• Physical rack layout visualization available

#### **PSNT Tracking:**

• Supported: Yes

• Cluster Product Serial Number available for support tracking

• PSNT: selab-var-204

## **Appendix**

#### **Report Generation Information:**

• Generated on: 2025-10-06T09:07:16.397078

• Data completeness: 84.1%

• API version: v7

• Cluster version: 5.3.1.1.10603406698381149702

#### **Physical Rack Layout:**

• Occupied positions: 4

• Position range: U18 - U25

• Total CNodes: 3

• Total DNodes: 2