

## Supported Configuration Specification and Customer Acknowledgement

The customer understands, acknowledges and agrees that Qumulo's obligations under the "Qumulo Software Subscription Support" and "Qumulo Mission Q Services" support offerings described under "Support Offerings" listed on <a href="https://qumulo.com/terms-hub/">https://qumulo.com/terms-hub/</a> shall be limited to the below specified hardware configurations under Platinum and/or Gold Tiers.

Should the customer elect to run an unsupported hardware configuration, Qumulo will utilize commercially reasonable efforts to support the customer, but makes no guarantee that our software will operate as designed. Commercially reasonable efforts shall specifically exclude any obligation on Qumulo for any custom software development required to make its software function properly on unsupported hardware. Finally, Qumulo will not be responsible for any data loss or business interruptions that occur due to the customer's use of such unsupported hardware.

See the <u>Qumulo End of Life Policy</u> for more information on support timelines. See the <u>Software Use Guidelines</u> for information on software transferability and additional use restrictions



# **Qumulo Supported Hardware Platforms - Platinum Tier**

Platinum Tier platforms consist of locked qualified SKUs with Qumulo-OEM/ODM Partners who have an established Go-to Market motion. All changes to the SKUs will require Qumulo and the Partner to review, approve and release them, at their discretion.

### Key Qualified Components in Platinum Tier Locked SKUs

| Partner | Platform                        | Chassis                         | НВА   | CPU                                       | HDD<br>(Hot-swappable)  | NVMe/<br>SATA SSD<br>(Hot-swappable)                              | NIC   |
|---------|---------------------------------|---------------------------------|---|---|---|---|---|
|         | Apollo 4200<br>Gen10 Plus       | ProLiant<br>XL420 Gen10<br>Plus | E208i-p SR<br>/P408i-p SR<br>/P816i-a SR<br>Gen10 | Intel: Xeon 4310                          | Toshiba: MG04/MG08/MG10<br>WDC: HC320/HC330/HC560<br>Seagate: Exos 7E8/ 7E10/X20  | Kioxia: CD6/CD8<br>Micron: 7450/7500<br>SKHynix:<br>PE8030/PE8130 | Mellanox:<br>CX4/CX5/CX6<br>Broadcom: P225P<br>Intel: E810CQDA2 |
| HPE     | Apollo 4200<br>Gen10            | ProLiant<br>XL420 Gen10         |   | Intel: Xeon:<br>4210/4210R/<br>4208       | Toshiba:MG04/MG06/MG07/<br>MG08/MG09<br>WDC: HC320/HC330/HC530<br>/HC550<br>Seagate: Exos<br>7E8/7E10/X10/X16/<br>X18/X20 | Micron: 5300<br>Samsung:<br>SM883/PM897                           | Mellanox: CX4/<br>CX5   |
|         | Apollo 4200<br>Gen9             | ProLiant<br>XL420 Gen9          |   | Intel: Xeon<br>2620                       | Toshiba: MG07/MG09<br>WDC: HC520<br>Seagate: Exos<br>X12/X14/X18/X24  | Micron: 5200<br>Samsung: PM883                                    | Mellanox: CX4/<br>CX5   |
|         | Proliant<br>DL325 Gen10<br>Plus | ProLiant<br>DL325 Gen10<br>Plus | N/A   | AMD: EPYC<br>7402P                        | N/A   | Samsung: PM1733   | Mellanox: CX5/CX6   |
|         | Alletra 4110                    | Alletra 4110<br>20 EDSFF        | N/A   | Intel: Xeon<br>4410Y/4510/<br>4416+/6526Y | N/A   | Samsung: 1743<br>Kioxia: CD7/CM7<br>Solidigm P5430                | Mellanox: CX6<br>Intel: E810CQDA2                               |



| Partner     | Platform              | Chassis  | НВА                               | CPU                      | HDD<br>(Hot-swappable)                | NVMe/<br>SATA SSD<br>(Hot-swappable)                  | NIC  |
|-------------|-----------------------|--|-----------------------------------|--------------------------|---------------------------------------|---|--|
|             | HPE Alletra<br>4140   | HPE Alletra<br>Storage<br>Server 4140<br>92LFF | HPE 41X0<br>SR 32-port            | Intel: Xeon<br>4410Y     | Any SAS/SATA qualified by<br>HPE      | Any NVMe qualified<br>by HPE                          | Intel E810-XXVDA2                              |
| HPE         | HPE Alletra<br>4140   | HPE Alletra<br>Storage<br>Server 4140<br>68LFF | PCle FIO<br>Storage<br>Controller | Intel: Xeon<br>4410Y     | Any SAS/SATA qualified by<br>HPE      | Any NVMe qualified<br>by HPE                          | Intel E810-XXVDA2                              |
| FUJITSU     | PRIMERGY<br>RX2540 M7 | PYR2547RAN                                     | Fujitsu<br>PSAS<br>CP2100-8i      | Intel: Xeon<br>4410T     | Seagate: Exos X18                     | Kioxia: CM6/CM7                                       | Intel: E810-XXVDA2                             |
|             | Quiver 1U All<br>NVMe | RS500A-<br>E12-RS12U                           | N/A                               | AMD: EPYC<br>9254        | N/A                                   | WDC: SN640/650<br>Micron: 7450                        | Mellanox: CX6<br>Broadcom: P2100G              |
| ARROW       | Quiver 1U<br>Hybrid   | QuantaGrid<br>D52T-1ULH                        | SAS 9300-8i<br>(SAS3008)          | Intel: Xeon<br>3204/4210 | WDC: HC320/HC560<br>Seagate: Exos X20 | WDC: SN640/650<br>Samsung: PM983<br>Micron: 7300/7450 | Mellanox: CX4/CX5<br>Broadcom:<br>P225P/P2100G |
| C           | Quiver 2U<br>Hybrid   | SIENAD8-<br>2L2T                               | Broadcom<br>9500-8i               | AMD: EPYC<br>8124P       | WDC: HC580                            | Solidigm: P5620<br>Micron: 7450                       | Broadcom:<br>P225P/P2100G                      |
| ARROW - ODM | AIC 2U<br>Hybrid      | QAIC-2UH-G1                                    | Broadcom<br>9305-16i              | AMD: EPYC<br>7282        | WDC: HC320/HC550                      | Micron: 7300, 7450<br>WDC: SN640                      | Mellanox: CX4/CX5<br>Broadcom:<br>P225P/P2100G |



| Partner     | Platform             | Chassis                                       | НВА                    | CPU                      | HDD<br>(Hot-swappable)   | NVMe/<br>SATA SSD<br>(Hot-swappable)                              | NIC  |
|-------------|----------------------|---|------------------------|--------------------------|--|---|--|
| ARROW - ODM | Quanta 1U<br>Hybrid  | SD1Q-1ULH                                     | Broadcom<br>QS-3008-8i | Intel: Xeon<br>D-1531    | WDC: HC310/HC530<br>Vela-A/HE12  | Micron: 5300/5400   | Mellanox: CX4  |
|             | Intel 2U All<br>NVMe | S2600WFT                                      | N/A                    | Intel: Xeon 6126         | N/A  | Micron: 7450/9300<br>WDC: SN640/<br>SN650/SN840<br>Samsung: PM983 | Mellanox: CX5<br>Broadcom: P2100G                                |
| SUPERMICRO  | SMC 1U All<br>NVMe   | A+ WIO<br>1114S-WN10RT                        | N/A                    | AMD: EPYC<br>7402P/7443P | N/A  |   | Mellanox: CX6<br>Broadcom: P2100G                                |
|             | SMC 1U<br>Hybrid     | A+<br>ASG-1014S-AC<br>R12N4H                  | Broadcom:<br>SAS 3916  | AMD: EPYC<br>7232P/7313P | WDC:<br>HC320/HC550/HC560/<br>He8<br>Seagate: Exos<br>7E8/7E10/X18/X20 | Micron 7300/7450<br>WDC: SN640/SN650<br>Samsung: PM983            | Mellanox: CX4/CX6<br>Broadcom:<br>P225P/P2100G                   |
|             | SMC 2U<br>Hybrid     | Storage A+<br>Server<br>ASG-2015S-E1<br>CR24L | SAS3808                | AMD EPYC<br>9124         | Seagate: Exos X24  | Micron: 7450 MAX  | Mellanox: CX6<br>Broadcom:<br>P225P/P2100G<br>Intel:<br>E810-XXV |



# **Qumulo Supported Hardware Platforms - Gold Tier**

Gold Tier Platforms consist of compatible key components in the form of chassis, drives, NICs that are requested by customers and/or reseller partners to allow for a specific sale through opportunity for Qumulo Software. Qumulo intends to grow this list by engaging with internal and external Sales teams. Customers and/or partners are allowed to build SKUs of their choice as long as the below listed "Must Haves" and "Recommendations" are met.

#### This could include:

- Hardware, the customer has onsite already (or)
- Hardware, the customer intends to buy through an existing Qumulo <> OEM/ODM channel but not part of the pre-defined Platinum SKUs (or)
- Hardware, the customer intends to buy directly through a non Qumulo <> OEM/ODM channel or vendor

#### **Must Haves:**

- X86 Architecture only
- Non-JBOD (HDD) Architecture only
- Hybrid Architecture needs an approved HDD: SSD/NVMe ratio
- Ethernet networking only
- Minimum of 4x Nodes in a cluster
- Power fault safe HDDs/SSD/NVMe

### **Minimum Recommendations for performance benchmarking:**

- 24x Core CPU for All-flash configurations
- 6x NVMe for All-flash configurations
- 0.5 DWPD endurant NVMe drives for All-flash configurations
- 8x Core CPU for Hybrid configurations
- 128GB of RAM for All-flash/Hybrid configurations
- 4x NVMe in a Hybrid configuration
- Populate all HDD bays in a Hybrid configurations



## Key Compatible Components in Gold Tier Platforms

| Vendor/<br>Partner | Platform             | Chassis  | HBA                           | CPU         | HDD   | NVMe/<br>SATA SSD<br>(Hot-swappable)  | NIC  |
|--------------------|----------------------|--|-------------------------------|-------------|---|---|--|
| DELL               | PowerEdge<br>R7615   | Chassis with up to<br>12x, 16x, 24x<br>NVMe Drives | N/A                           | AMD: EPYC   | N/A   | Recommended min QTY: 10<br>Capacity: Any                                      | Broadcom:<br>57414/57416/57508<br>Intel:<br>E810-XXV/E810-CQDA2<br>Mellanox: CX6 |
| DELL               | PowerEdge<br>R760XD2 | PERC 11 w/ 4x 3.5"<br>Rear NVMe Drives             | HBA355i,<br>PERC12            | Intel: Xeon | Any SAS/SATA<br>HDD.<br>Supported<br>Capacities: 8, 12, 16,<br>20, 22 | 4x[960GB - 7.68TB]*<br>*Higher Cache recommended<br>for higher raw capacities | Broadcom:<br>57414/57416/57508<br>Intel:<br>E810-XXV/E810-CQDA2<br>Mellanox: CX6 |
| HPE                | HPE A4200<br>Gen10+  | HPE A4200<br>Gen10+ 56SFF<br>TAA CTO System        | HPE Smart<br>Array<br>E208i-p | Intel: Xeon | N/A   | Any SAS/SATA SSD  | Mellanox: CX6<br>Intel: E810CQDA2  |



## **Qumulo Supported Platforms (Onprem, Edge, Cloud) - Lifecycle Information**

Below is a list of all platforms (Onprem, Edge, Cloud) Qumulo is currently supported to run on.

End of Availability (EoA) : Defined by the Hardware/Cloud vendor as the last date a platform will be available for sale

End of Platform Support (EoPS) : Defined by the Hardware vendor as the last date a platform will be supported

| SKU                                      | Active<br>Platform | Software<br>License<br>Class  | Cluster<br>Type    | Platform<br>Release<br>Date                    | Minimum Software<br>Version Required<br>For Hardware<br>Support | End of<br>Availability<br>Date (EoA) | End of Platform<br>Support Date<br>(EoPS) |
|--|--------------------|-------------------------------|--------------------|--|---|--------------------------------------|---|
| Arrow AH576T                             | Yes                | Active/<br>General<br>Purpose | Hybrid             | November<br>2024                               | v7.3.1  |                                      |   |
| HPE Alletra 4140 1200T,<br>1600T         | Yes                | Active/<br>General<br>Purpose | Hybrid             | June 2024                                      | v7.1.2  |                                      |   |
| Fujitsu RX2540M7-48T, 96T,<br>144T, 240T | Yes                | Active/<br>General<br>Purpose | Hybrid/<br>Archive | October 2023                                   | v6.3.2  |                                      |   |
| Arrow QVRNVMEG1-46T,<br>92T, 184T, 245T  | Yes                | Active                        | All-NVMe           | July 2023                                      | v6.2.0  |                                      |   |
| Arrow QVRG2-48T, 96T,<br>240T            | Yes                | Active/<br>General<br>Purpose | Hybrid/<br>Archive | December<br>2022/April<br>2023/October<br>2024 | v5.3.1/v6.0.2/v7.2.3  |                                      |   |
| Arrow C-192T, C432T, K432T               | Yes                | Active/<br>General<br>Purpose | Hybrid/<br>Archive | August<br>2021/October<br>2021                 | v3.3.1/v4.2.6   |                                      |   |
| HPE Alletra 4110 38T, 153T,<br>307T      | Yes                | Active                        | All-NVMe           | August 2023                                    | v7.0.0.1  |                                      |   |



| SKU   | Active<br>Platform | Software<br>License<br>Class  | Cluster<br>Type    | Platform<br>Release<br>Date    | Minimum Software<br>Version Required<br>For Hardware<br>Support | End of<br>Availability<br>Date (EoA) | End of Platform<br>Support Date<br>(EoPS) |
|---|--------------------|-------------------------------|--------------------|--------------------------------|---|--------------------------------------|---|
| HPE Apollo 4200<br>Gen10+36T, 90T, 240T, 480T                         | Yes                | Active/<br>General<br>Purpose | Hybrid/<br>Archive | December<br>2022               | v5.3.3/v6.2.1   |                                      |   |
| Supermicro A+ ASG-2015S<br>576TB                                      | Yes                | Active/<br>General<br>Purpose | Hybrid             | April 2024                     | v6.2.2  |                                      |   |
| Supermicro A+ WIO<br>1114S-WN10RT All-NVMe 30TB,<br>76T, 153TB        | Yes                | Active                        | All-NVMe           | August 2021                    | v4.2.0  |                                      |   |
| Supermicro A+<br>ASG-1014S-ACR12N4H NVMe<br>Hybrid 96T, 216T, 240T    | Yes                | Active/<br>General<br>Purpose | Hybrid/<br>Archive | November<br>2022/April<br>2023 | v5.2.5/v6.0.2   |                                      |   |
| Amazon Web Services   | Yes                | Not<br>Applicable             | Not<br>Applicable  | September<br>2017              | Not Applicable  |                                      |   |
| Azure Native Qumulo   | Yes                | Not<br>Applicable             | Not<br>Applicable  | November<br>2023               | Not Applicable  |                                      |   |
| Google Cloud Platform   | Yes                | Not<br>Applicable             | Not<br>Applicable  | August 2019                    | Not Applicable  | June 1st, 2024                       | Not Applicable                            |
| HPE ProLiant DL325 Gen10<br>Plus 34TB, 145TB, 291TB<br>All-NVMe Flash | Yes                | Active                        | All-NVMe           | December<br>2020               | v3.3.3/v4.2.0   | October 31st,<br>2023                | October 31st, 2028                        |
| HPE Apollo 4200 Gen10 36T,<br>90T, 192T, 336T                         | Yes                | Active                        | Hybrid             | December 2019                  | v2.14.3   | October 31st,<br>2023                | October 31st, 2028                        |



| SKU   | Active<br>Platform | Software<br>License<br>Class  | Cluster<br>Type    | Platform<br>Release<br>Date  | Minimum Software<br>Version Required<br>For Hardware<br>Support | End of<br>Availability<br>Date (EoA)          | End of Platform<br>Support Date<br>(EoPS) |
|---|--------------------|-------------------------------|--------------------|--|---|---|---|
| Arrow P-23T, 92T, 184T,<br>368T                     | Yes                | Active                        | All-NVMe           | August 2021  | v2.12.2   | June 30th, 2023                               | June 30th, 2028                           |
| Arrow C-72T, C168T, K144T,<br>K168T                 | Yes                | Active/<br>General<br>Purpose | Hybrid/<br>Archive | August 2021  | V2.12.6/v2.13.0   | January 30th,<br>2023                         | January 30th, 2028                        |
| Qumulo QC24, QC40,<br>QC104, QC208, QC260,<br>QC360 | Yes                | Active/<br>General<br>Purpose | Hybrid/<br>Archive | August 2014/<br>December<br>2016/May<br>2015/December<br>2016/April 2018 | v2.12.2   | February 28th,<br>2021                        | February 28th, 2026                       |
| HPE Apollo 4200 Gen9 90T,<br>180T, 288T             | Yes                | Active/<br>General<br>Purpose | Hybrid/<br>Archive | February<br>2018/April<br>2017/October<br>2018                           | v2.7.11/v2.6.2/v2.12.3  | April 30th, 2020                              | May 31, 2025                              |
| Qumulo P-23T, 92T, 184T,<br>368T                    | Yes                | Active                        | All-NVMe           | June 2018/<br>November<br>2018/<br>August 2019/<br>March 2020            | v2.12.2/v2.13.5/v3.0.3  | Replaced by<br>Arrow P-23T                    | June 30th, 2028                           |
| Qumulo C-72T, C168T, K144T,<br>K168T                | Yes                | Active/<br>General<br>Purpose | Hybrid/<br>Archive | April 2019   | v2.12.6/v2.13.0   | Replaced by<br>Arrow<br>C-72T/K144T/K16<br>8T | January 30th, 2028                        |
| Qumulo C-192T, C432T                                | Yes                | Active/<br>General<br>Purpose | Hybrid/<br>Archive | November<br>2020   | v3.3.1  | Replaced by<br>Arrow C-192T,<br>C432T         |   |

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