

The logo for Facilis Technology features a stylized, dark blue graphic on the left that resembles a speech bubble or a dynamic arrow pointing towards the right. The word "FACILIS" is written in a large, bold, white, italicized sans-serif font, and the word "TECHNOLOGY" is written below it in a smaller, white, all-caps sans-serif font.

FACILIS TECHNOLOGY

Online Certification Training:
Version 7 / 7.1

Configurations

Connectivity options

Every Facilis server comes with several slots available for connectivity and capacity expansion cards. By model:

- TerraBlock 24xx (5u) Server: 4 Slots
- TerraBlock 8D (2u) Server: 7 Slots
- Hybrid24/xx (5u) Server: 4 Slots
- SSD8 (2u): 7 Slots
- Hub Server (2u): 7 Slots (after required FC card)

Connectivity types, port counts:

- 1Gb Copper RJ45 Ethernet: Intel Dual
- 10Gb Optical SFP+ Ethernet: Myricom Single/Dual
- 10Gb Copper RJ45 Ethernet: ATTO NT11 Single; NT12 Dual
- 40Gb Copper QSFP/QSFP+ Ethernet: Mellanox Dual
- 8Gb Fibre Channel: ATTO 81EN Single; 82EN Dual
- 16Gb Fibre Channel: ATTO 161EN Single; 162EN Dual
- 32Gb Fibre Channel: ATTO 321EN Single; 322EN Dual
- SAS 6Gb: ATTO H680 (TX16); ATTO R680 (NL16)

Sample Connectivity

Direct and switch connect clients can be accommodated, as well as expansion storage and LTO or nearline backup.



- 16Gb Fibre Channel Direct Clients
- 8Gb Fibre Channel Brocade Switch
- 10Gb Ethernet SFP+ House Network Uplink
- SAS R680 (NL16)



- 32Gb Fibre Channel Direct Clients
- 1Gb Copper Ethernet for 1Gb Switch Team
- 10Gb Ethernet SFP+ Switch Uplink
- - - SAS H680 (TX16)



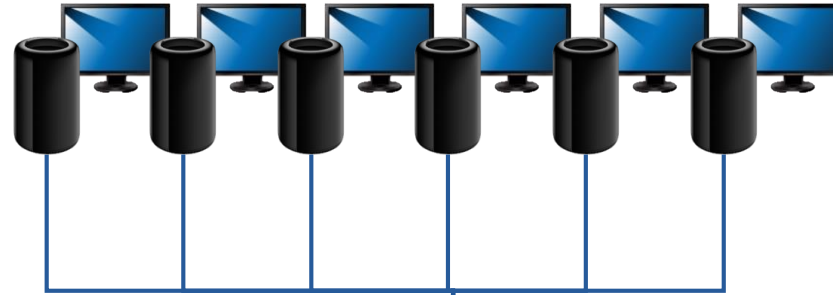
- 32Gb Fibre Channel Direct Clients
- 32Gb Fibre Channel Member Server Connectivity
- 40Gb QSFP Ethernet Switch Uplink
- 10Gb Ethernet SFP+ House Network Uplink
- SAS H680 (NL16)
- SAS H680 (NL16)

16Gb Fibre Channel Clients



- 16Gb Fibre Channel
- 10Gb Ethernet

10Gb Ethernet Clients



Direct Connection Example

Up to 8 workstations can be directly connected to a 5u server, and up to 12 workstations on a 2u server. Keep in mind that expansion TX and NL units must have a slot available on the server, so it's best to avoid filling up the available slots with client cards, and instead provide a switch.

16Gb Fibre Channel Clients



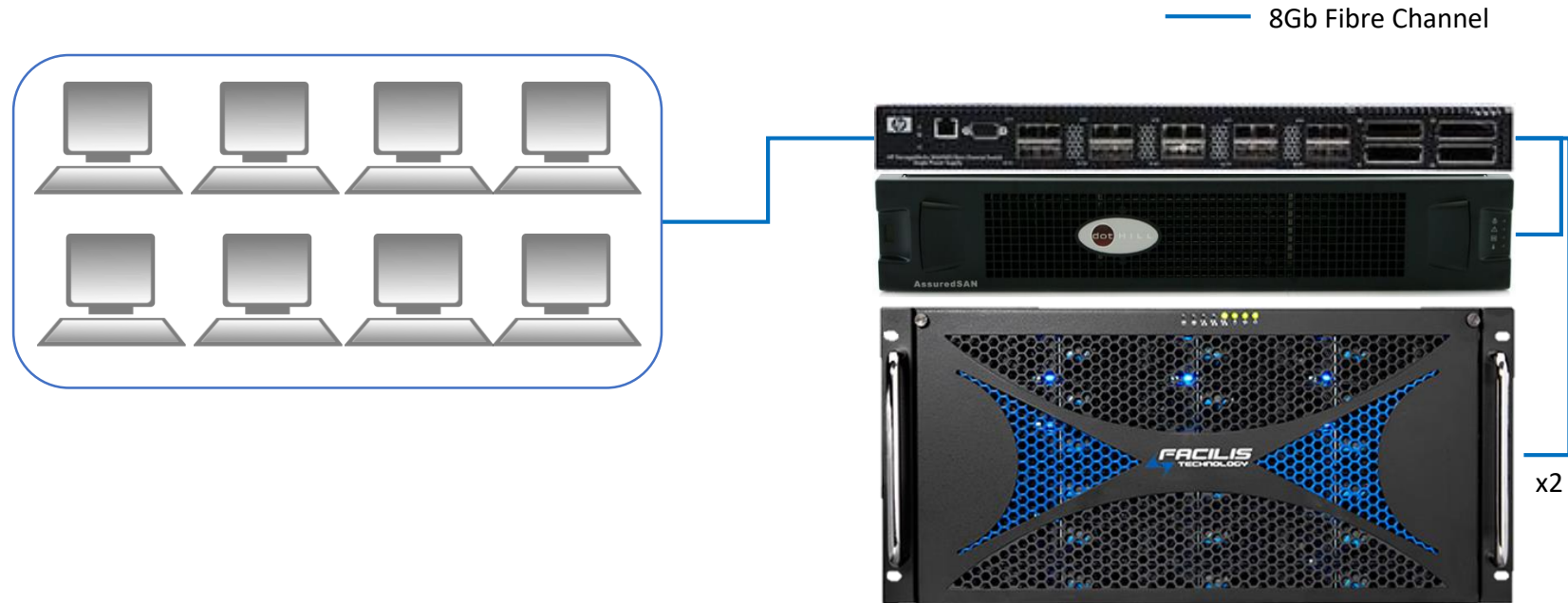
- 16Gb Fibre Channel
- 10Gb Ethernet
- SAS

10Gb Ethernet Clients



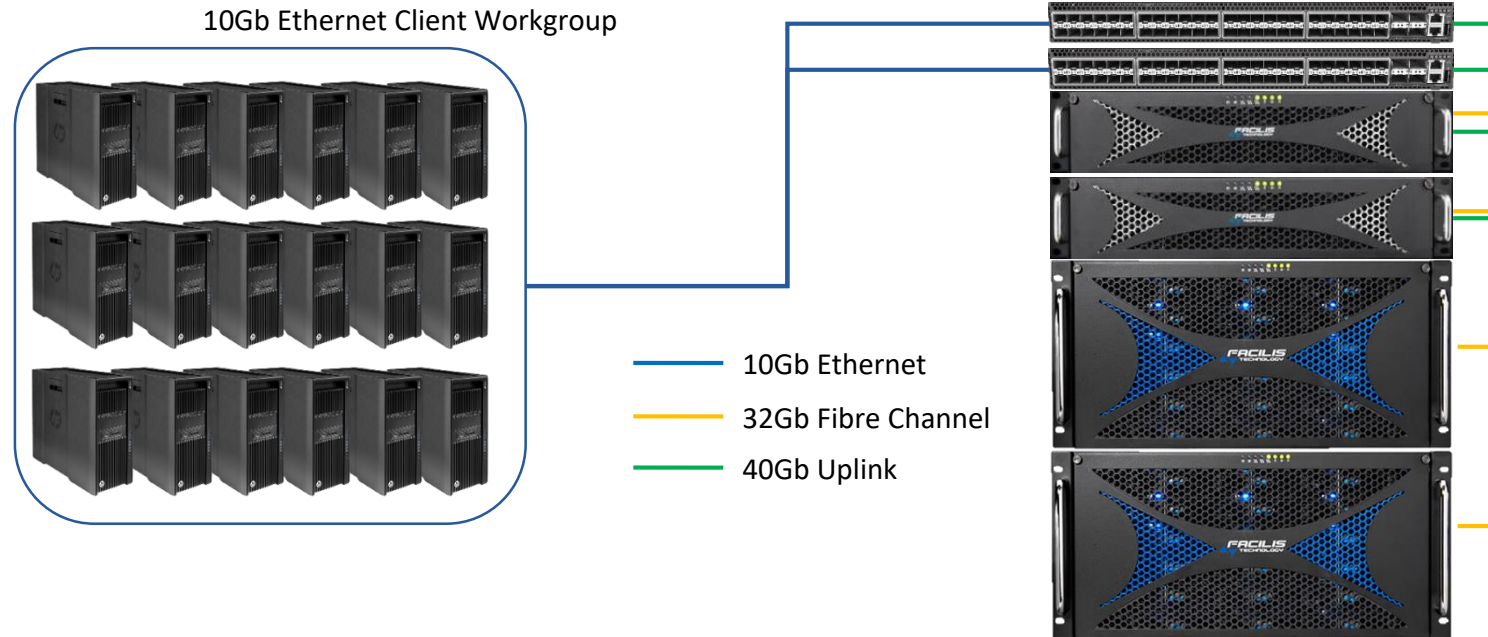
Direct/Switch Connection

By using a 10Gb switch, only one connectivity card is required for the same number of 10Gb clients, and there are two slots remaining for future expansion.



Existing Fibre Channel and OSA

By utilizing existing 8Gb Fibre Channel switch and cabling, the TerraBlock server only requires the included dual-port 8Gb card (4 x 8Gb uplinks are required for 24EX/32 and Hub server). The attached storage left when the customer upgraded an older infrastructure can be left on the fibre channel switch, reformatted and shared as Multi-user volumes.



Fully Redundant Configuration

Dual Hub Server system shares the load unless one of the Hub Servers must be shut down. The remaining Hub Server can assume ownership of the volumes and make them available to the clients. When using RAID51, the volumes are mirrored between TerraBlock servers, so if a server has to be shut down, the other server will continue feeding the data to the hub and clients. Using dual-port 40Gb links, each 40Gb port is redundant as the clients will load balance and failover between the two available ports. When using two switches, the clients will load balance across the 10Gb ports, and failover automatically in the case of a switch failure