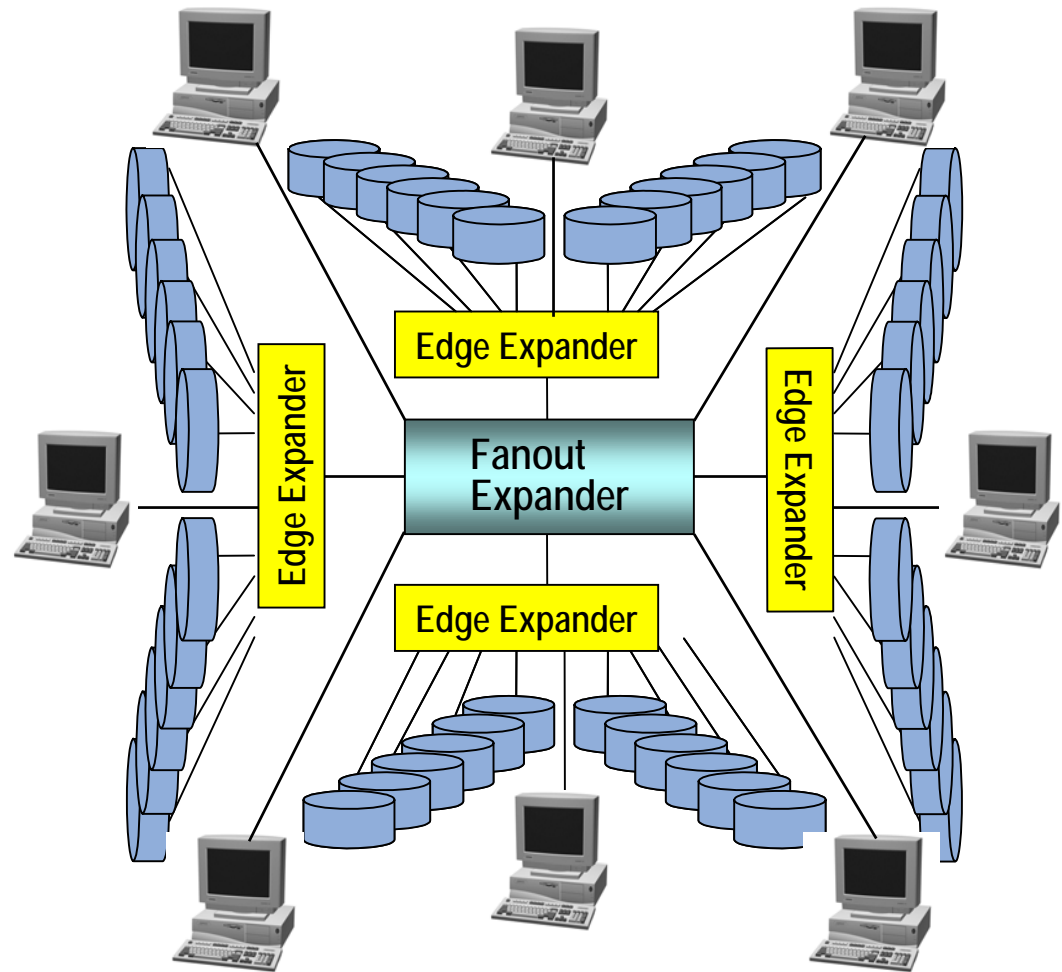


SAS vs. SATA

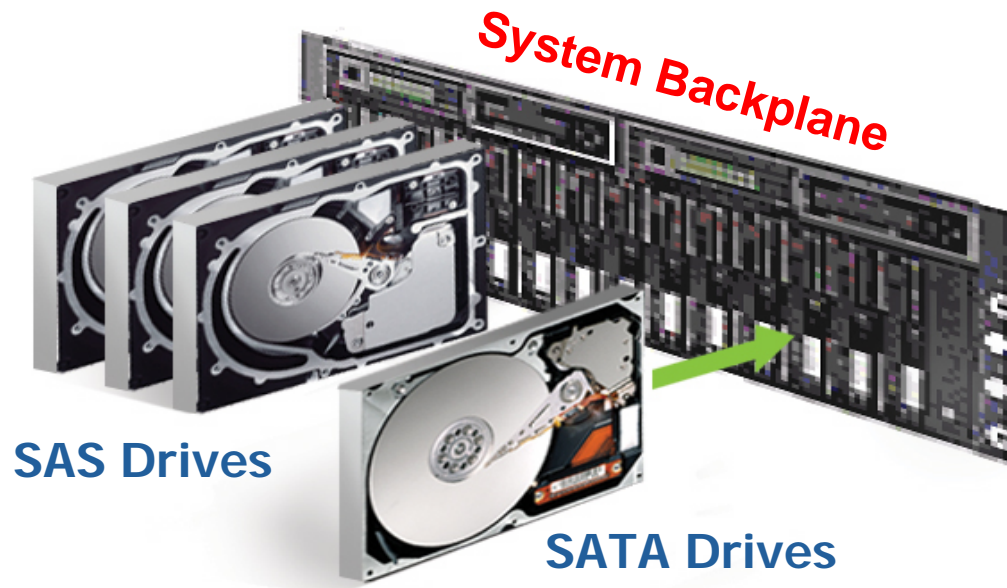


SAS is Exceptionally Scalable

- SAS supports up to 16,384 devices in a single domain Greatly improving on 16-device limit of Parallel SCSI Bus
- Each device is assigned a unique World Wide Name (WWN) as well as FCAL Making SCSI Bus IDs no longer necessary
- Smaller connector size enables Small Form Factor (SFF) HDDs for increasing drive density and spindle count

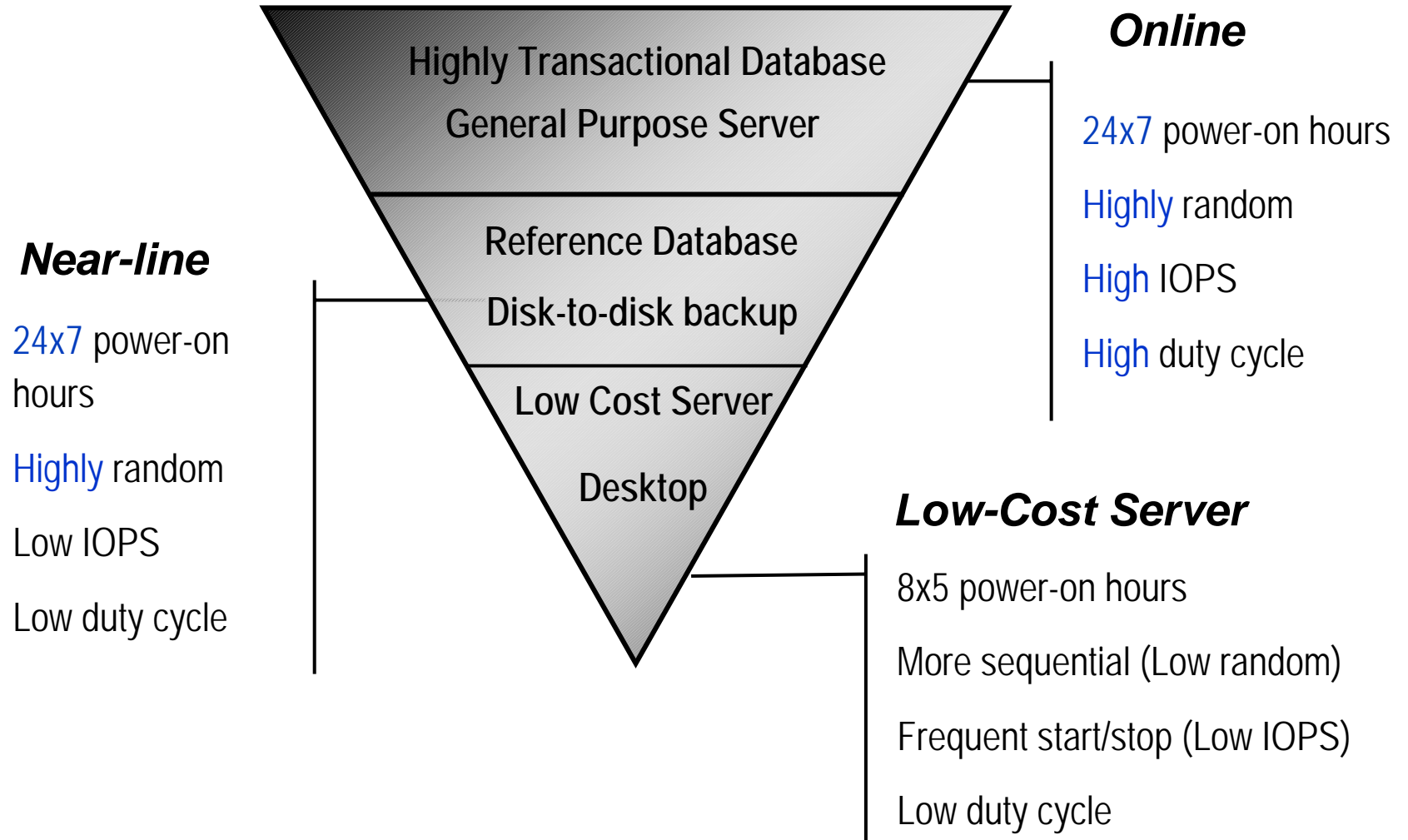


One backplane accommodates either SAS or SATA HDDs

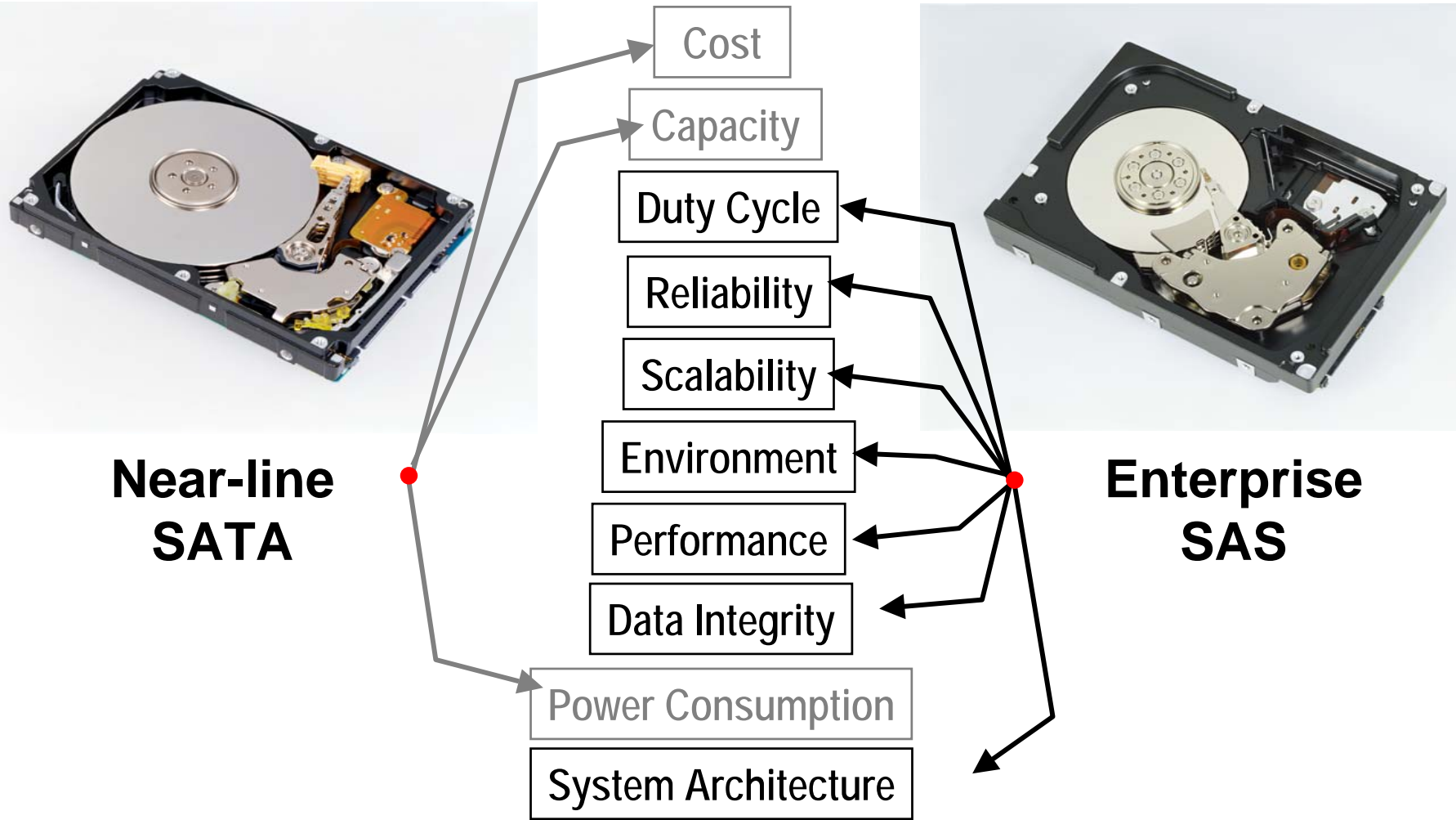


- High-performance & highly reliable serial attached SCSI disk drives are suitable for mission critical and performance oriented applications
- High capacity SATA drives can be used for disk enhanced backup or reference data

Difference on System Requirements







Difference on System Requirements



Each application gets parameters it needs

Key Decision Factors

SATA		SAS
	<div data-bbox="1138 232 1601 408" style="border: 1px solid black; background-color: #00AEEF; color: white; padding: 5px; margin-bottom: 10px;"> <i>Note: This matrix reflects the inherent capabilities of the interface, not vendors' product features</i> </div> <ul style="list-style-type: none"> ■ <u>Highest performance capability</u> <ul style="list-style-type: none"> ■ Full duplex, higher bandwidth, port aggr.. extensive command queuing, rich command feature set 	
	<ul style="list-style-type: none"> ■ <u>Lowest cost per gigabyte</u> <ul style="list-style-type: none"> ■ Low acquisition cost 	
	<ul style="list-style-type: none"> ■ <u>Best performance for transactional data</u> <ul style="list-style-type: none"> ■ High frequency immediate random-access type data ■ Database, on-line purchase, bank transactions, CRM etc. 	
	<ul style="list-style-type: none"> ■ <u>Most cost effective for reference and sequential-type data</u> <ul style="list-style-type: none"> ■ Low frequency access, streaming and sequential data ■ File-sharing/Email/Web/Nearline/Backup and archival data 	

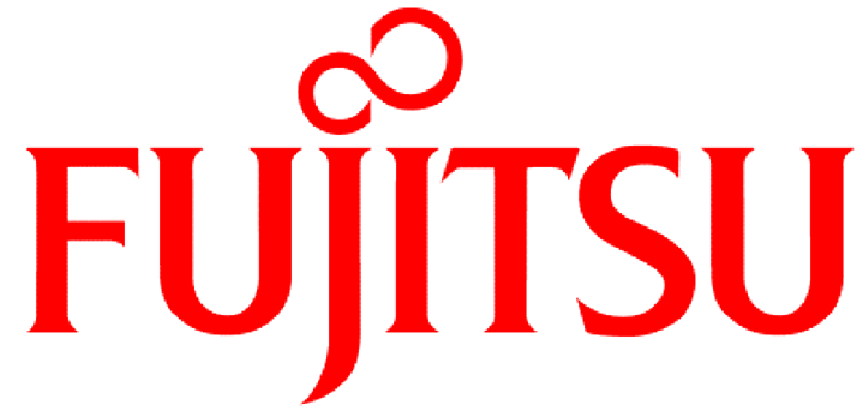
Key Decision Factors

SATA

Note: This matrix reflects the inherent capabilities of the interface, not vendors' product features

SAS

	<ul style="list-style-type: none"> ■ <u>Highest reliability and availability</u> <ul style="list-style-type: none"> ■ More extensive error recovery techniques ■ Multi-initiator (simultaneous access) + Dual-active port support 	✓
	<ul style="list-style-type: none"> ■ <u>Greatest device flexibility</u> <ul style="list-style-type: none"> ■ Support for Serial Attached SCSI and Serial ATA devices 	✓
✓	<ul style="list-style-type: none"> ■ <u>Power management</u> <ul style="list-style-type: none"> ■ Saves power by automatically powering-down when not in use 	
	<ul style="list-style-type: none"> ■ <u>Greater Scalability</u> <ul style="list-style-type: none"> ■ Greatest physical device addressing range ■ Connection to out-of-box storage, long (8-meter) cable length 	✓



FUJITSU

THE POSSIBILITIES ARE INFINITE