

# STAYING AHEAD WITH AI

IS YOUR NETWORK READY?

## Understanding AI Model Traffic Patterns

### High Bandwidth

Needs ultra-high bandwidth and High-radix fabric to meet intensive AI workloads.

### Ultra Low Latency

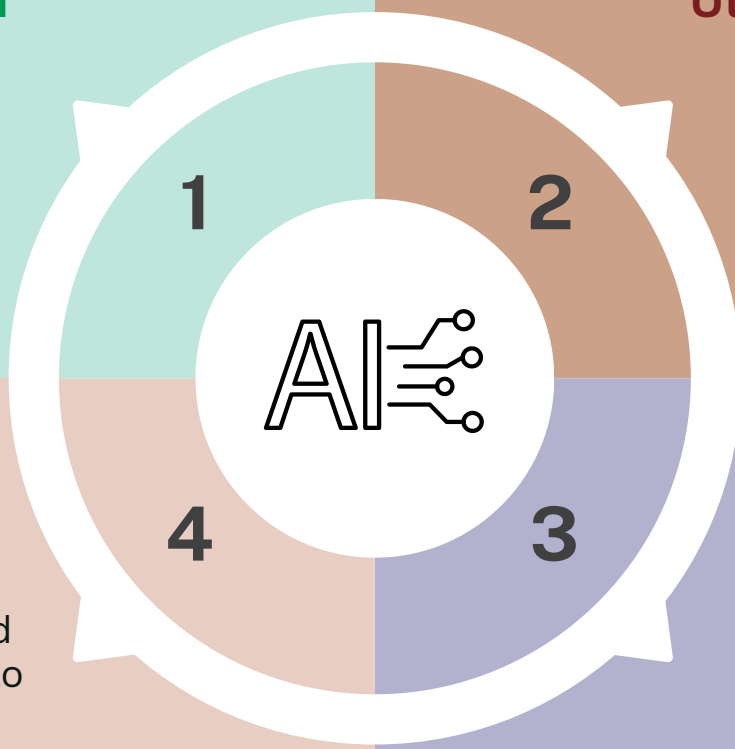
GPUs computation cycles require extremely low latency to deliver results in real time.

### Burst Traffic

AI training cycles involve elephant and mice flows, leading to fluctuating resource consumption rates.

### GPUs synchronization

GPU servers cooperate for parallel computing and synchronized communication



## How UfiSpace DDC can benefit you ?

UfiSpace Distributed Disaggregated Chassis (DDC) is an innovative networking architecture designed to **create flexible, high-scale routing systems tailored for the AI age**. It features the following key attributes:



### Scalability

Enables easy scalability for high bandwidth and radix up to **32K\* GPUs in 800G**, meeting growing processing demands.



### High Utilization

Enables load balancing, spreading cells evenly to all available fabric interfaces to maximize utilization.



### Consistent Latency

All packets take a fixed number of hops from the source to any destination node, enabling consistent latency.



### Failover

Detects any hardware- level link failure, allowing nano-second-level failover with no impact to job completion.



### Low Latency

Various congestion control mechanisms to ensure low latency.

For example, in credit-based congestion control, transmission data is stored in the Virtual Output Queue (VOQ) of the source switch until the destination grants permission for passage.

**Experience Comparative Success in the AI Age with UfiSpace DDC Architecture**