HSDD

High Speed Data Distribution

Ubertal's HSDD delivers a breakthrough, production grade, hyperscale data distribution software platform. With its unique key strength of scale-out parallel transfers, the platform solves the problem of "moving hyperscale data at maximum speed over distance" under various conditions. The term "hyperscale data" means file and data set sizes equal to or larger than a Terabyte (TB).
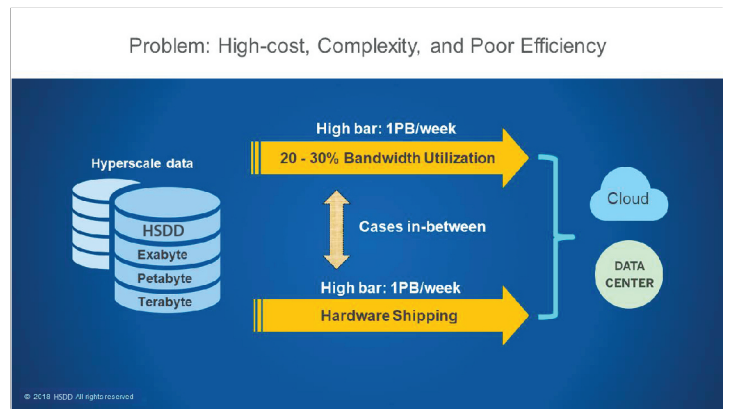
THE PROBLEM

The two common approaches for transferring hyperscale data, over network connections and with physical devices plus shipping, are both highly inefficient.

Modern artificial intelligence, machine learning, digital transformations and intelligent enterprises all demand the movement of massive amounts of data.

Two examples:

1. According to Intel's prediction, a typical autonomous vehicle will generate 4,000GB per day. Even collecting a fraction of the data will result in hundreds of PB/day just in the US alone.

2. With the introduction of ultra high definition television (UHDTV) resolutions such as the 8K UHD, the media & entertainment industry must deal with hyperscale data now and in the future. All other existing solutions are not effective in this regard.

Problem: High-cost, Complexity, and Poor Efficiency
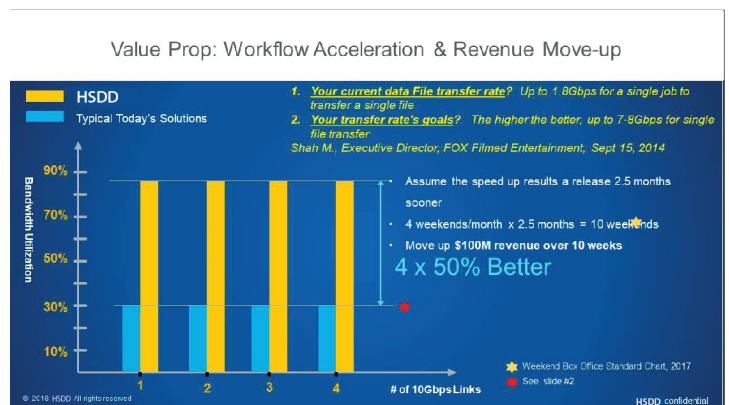
THE HSDD SOLUTION

By integrating the world's only petascale-proven commercial hyperscale data distribution software platform with the proven hardware from well-established hardware vendors and solution integrators, customers have the assurance that everything will be tuned optimally, ready for cost-effective operations and high ROI. In case a customer wishes to use a cloud platform, virtual appliances are available as well.

Solution: Hyperscale Data Transfer Appliance (H/W & S/W)

VALUE PROPOSITION

The HSDD hyperscale data distribution software platform enables much higher transfer rate (50% or more) per 10G link than all currently available data transfer solutions in the market.

For a major movie studio, having such a solution can easily speed up the release of a blockbuster by 10 weeks.

Value Prop: Workflow Acceleration & Revenue Move-up

PRODUCT STRENGTHS

HSDD has many uses and can accelerate data transport tasks for low-bandwidth / disconnected sites and high-bandwidth sites.

For example:

1. Low-bandwidth / disconnected: The software can speed up AWS Snowball-like devices by 6X.

2. High-bandwidth: It is the world's only commercial Petabyte-proven hyperscale data distribution solution. 1PB data transferred in 29 hours, the HSDD hyperscale data distribution software platform is designed with the most advanced co-design principle, i.e. consider storage, compute, networking, and application with an integrated overall design. The principle is employed by the US Department of Energy for the Exascale Computing Project, which will have profound effects on the lives of people, improving the nation's national security, economic competitiveness, and scientific capabilities. All other existing commercial data transfer solutions are based on decade or older designs, which only focus on the network aspect alone.

NO SPEED CAPS

HSDD is unlike other commercial offerings, which not only have much lower performance ceilings, but also come with caps of transfer speeds. Given the rapid progress of hardware, such a practice puts extra financial burdens on the users. HSDD hyperscale data distribution platform does not come with such a legacy limit.

Over the same network, it's 540X faster than the ubiquitous rsync and scp, and 80X faster than bbcp.

HSDD vs The Competition

	aspera an IBM company	amazon web services	Petascale DTN Project	HSDD
Top Transfer Rate	20Gbps	N/A	20Gbps	100Gbps
Moving Capacity	No published data	1PB/week	1PB/week	1PB in 29 hours
Server required	6 Servers	Snowball Edge Shipping	6 Servers	2 Servers
Scale-out ready	No	No	Yes	Yes
Petascale Proven	No	Yes	Yes	Yes

© 2018 HSDD. All rights reserved.

KEY FEATURES

• **Scale-out parallel transfers over LAN, metropolitan, and WAN** – aggregate many slow transfers into a fast one and many other uses with consistent data transfer performance

• **Transfer task priorities and throttling** – flexible and accommodating to various production requirements

• **Snapshot comparison and differential transfers** – to facilitate large scale data migration and technology refresh hardware "cut-over"

• **Data distribution pattern support** – point-to-point, hub-and-spoke, and tree for various data transport tasks and needs

• **Optimize your data transfer setup with a simple machine learning based tool** – no more tedious and ineffective manual tuning and guessing

• **Scale-out TLS encryption** – no need to pay for expensive Hardware TLS accelerators

• **Built-in Web UI and RESTful API, plus Python SDK** – easy to use for new users and automation via scripting made easy

UBERTAL™
IGNITE THE EXTRAORDINARY

HSDD

ubertal.com/HSDD | info@ubertal.com

HSDD is a break-through production-grade hyperscale data distribution software platform. With its unique key strength: scale-out parallel transfers, the platform solves the problem of moving hyperscale data at maximum speed over distance under various conditions.