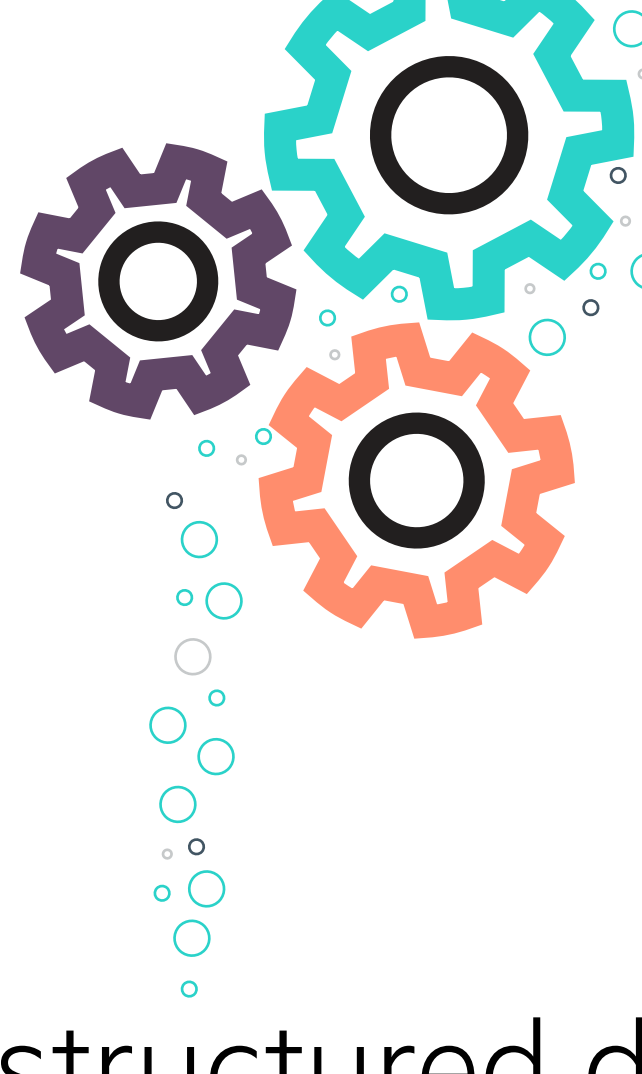


The Storage Challenge

Ride the wave with HPE and SUSE!



Using ALL your data can make a difference to your business!

- Leverage your structured and unstructured data
- Give customers what they want—before they ask for it
- Grow revenue with targeted customer service
- Gain consolidated insights from across your entire business
- Make better business decisions—faster
- Adapt to changing market conditions—rapidly

Unstructured data waves are ... **changing the world**

Explosive data growth is being fueled by Big Data, the Internet of Things, and Social Media.

More data was created in the last two years than in all human history¹

2000: 25% of the world's stored information was digital²

2016: More than 98% of all stored information is digital²

- By 2020, about 1.7MB of data will be created every second for every human on the planet
- By 2020 the digital universe will grow to 44 zettabytes—about 5,200GB for every person¹
- > 70% of data is created by individuals; enterprises are responsible for storing and managing 80% of it²
- 80-90% of all data is unstructured²

10X
faster growth of **Human** and **Machine** data over **Business** data

Human data:
Emails, Photos, Videos, Text Messages, etc.



Business data:
Transactional

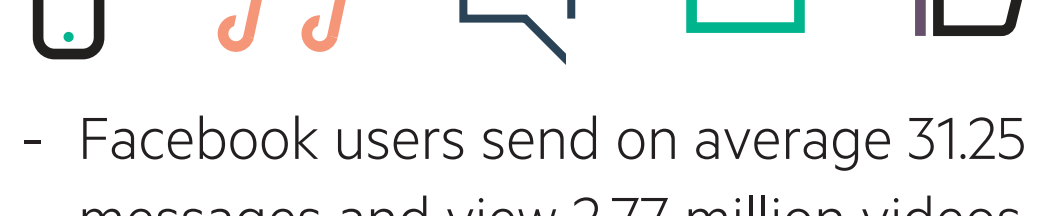
Machine data:
Internet of Things

Unstructured data vs. structured data ... **driving data growth**

Structured data—or **Business data**—fits neatly into traditional table-row-column databases. Unstructured data doesn't. It's made up of:

Human data:

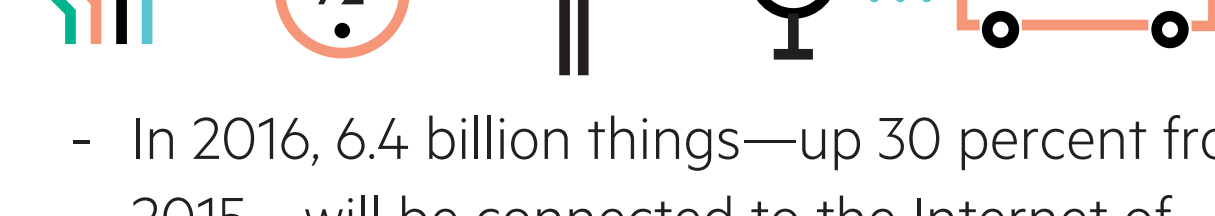
Email, text messages, music, photos, video



- Facebook users send on average 31.25 million messages and view 2.77 million videos every minute¹
- Every minute, up to 300 hours of video are uploaded to YouTube alone¹
- Every year, 1 trillion photos are taken and billions of them shared online¹

Machine data:

Internet of Things



- In 2016, 6.4 billion things—up 30 percent from 2015—will be connected to the Internet of Things (IoT), with 5.5 million new things being connected every day
- By 2020, 20.8 billion things will be connected to the Internet (Gartner)³

Unstructured data waves are ... **creating new challenges**

Capacity and capabilities of legacy storage architectures is being challenged. Traditional approaches to block and file storage are unable to meet the volume, velocity, and variety demands of unstructured/semi-structured data due to cost and complexity.

“The storage industry faces disruption as organizations transition away from traditional SAN / NAS to software-defined storage strategies. ... The challenge many organizations face is how to leverage an **open source** based **software-defined storage** approach while **ensuring enterprise level service, performance and reliability** requirements.”⁴

- IDC, June 2016

Storage questions you need to ask ... **and answer**

- How do I store and protect** my unstructured data in view of its volatility and variety?
- How do I back up** my unstructured data and restore it when I need to?
- How do I organize and catalog** my data to ensure its easy accessibility?
- How do I reduce storage costs** while ensuring the performance and availability my business needs?

You can ride the storage wave ... **and win**

SUSE Enterprise Storage for HPE Apollo and ProLiant Systems—powered by Ceph technologies—provides the massive scalability you need to efficiently and cost-effectively master your storage challenge.

Define	Build	Run
<ul style="list-style-type: none"> - Open source, software-based object storage architecture - Unlimited scalability - No single point of failure - No vendor lock-in - Pennies on the dollar 	<ul style="list-style-type: none"> - Purpose-built, all-in-one, pre-integrated, enterprise-ready Ceph object storage solution - High performance, industry-standard HPE Apollo and HPE ProLiant servers - Reuse legacy systems 	<ul style="list-style-type: none"> - Tested, validated reference architectures - Seamless integration with existing backup and disaster recovery solutions - End-to-end support with one number to call - Shift CAPEX to OPEX with HPE Financial Services

Win

- | | |
|--|---|
| <p>Cost-effective:
Industry-standard x86 servers</p> <p>Simple scalability:
Just add more x86 nodes</p> <p>Built-in data durability:
Software protection in the event of a hardware failure</p> | <p>Sustainable performance:
Add compute and storage as you grow</p> <p>Rapid retrieval:
Always online and available</p> <p>Secure and cost-effective:
Better security and cost-control than public cloud with anywhere cloud accessibility</p> |
|--|---|

Use Cases

- | | |
|---|--|
| <p>Backup Target:
Typical backup scenarios</p> <p>Video Archive:
Archive surveillance video to meet compliance</p> <p>Cloud Storage:
Ad hoc consumer and enterprise cloud backup</p> | <p>Content Distribution:
Distribute videos, music, etc.</p> <p>Content Repository:
Rapid retrieval and recovery of miscellaneous items</p> <p>Media Archive:
Media archive of Emails, Texts, Tweets, etc.</p> |
|---|--|

“Customers considering a software-defined storage approach can **leverage SUSE's innovation and active advancement of Ceph** in the **open source** community **combined with HPE's proven hardware platform, service and support expertise** to **confidently deploy an SDS** based on the widely accepted Ceph software.”⁵

- IDC, June 2016

Ride the storage wave and win—**with HPE and SUSE**

Learn more.
hpe.com/partners/suse/

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