SOFTWARE-DEFINED STORAGE

Why it will continue to be relevant

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Red Hat Gluster Storage,

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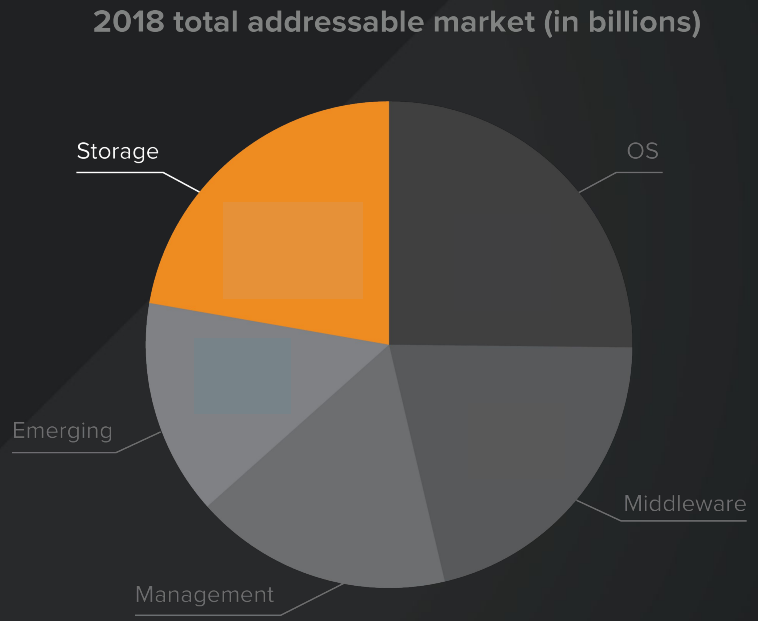
redhat.

WHY YOU SHOULD CARE

STORAGE IS A BIG PART OF I.T. BUDGETS

- A very large share of IT budgets is spent on storage solutions.
- Storage in the enterprise has been growing at 40%+ per year, and there is no sign this growth trend is slowing.
- Storage is a top 3 spending category in any large infrastructure project, alongside servers and networking.



More reasons to care

Storage is changing because data is changing

(both in size and type)

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Traditional solutions are not able to handle current need of storage

(because of rapid changes in the application layers)

CURRENT TRENDS

THE DATA EXPLOSION

Web, mobile, social media, cloud

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Analytics / Big Data

With growing number of application and web users, the amount of informations captured by applications and their logs are growing at unprecedented pace.

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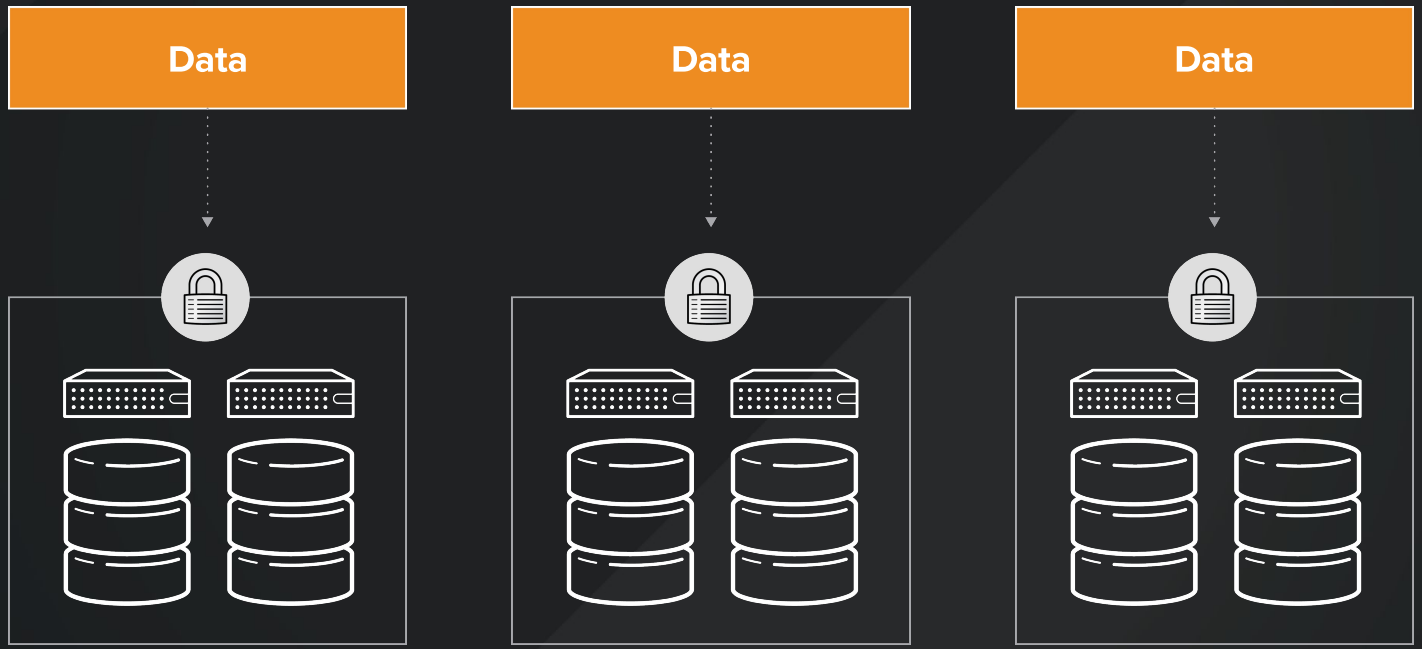
2. The need for access to data from anywhere, anytime, on any device requires **unprecedented agility.**
3. Modern services require the **flexibility** to store data on-premises or in the cloud.
4. Growing content requires **advanced data protection** that ensures integrity & high availability at very large scale.

FLEXIBILITY IS CRUCIAL

MORE ON SDS

TRADITIONAL STORAGE SILOS



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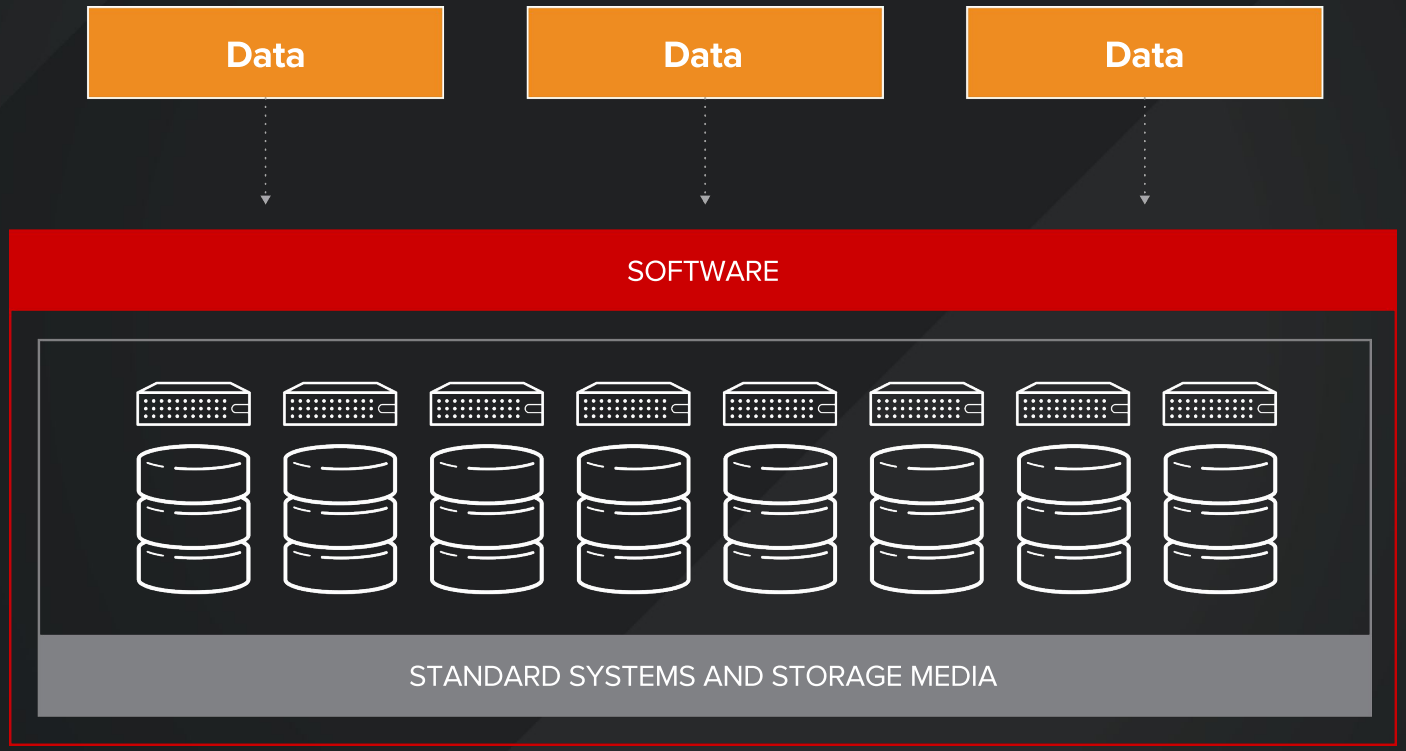
SOFTWARE-DEFINED STORAGE



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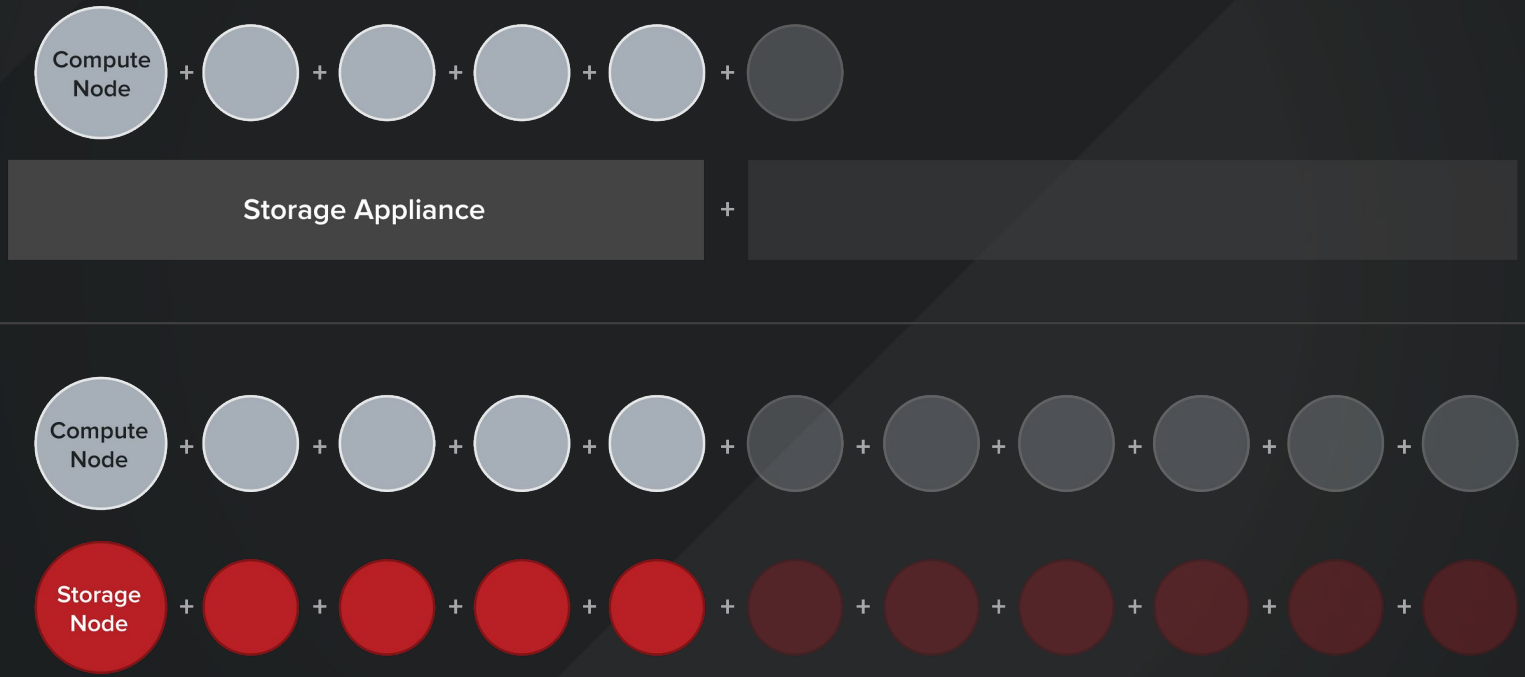
SDS SCALES BETTER



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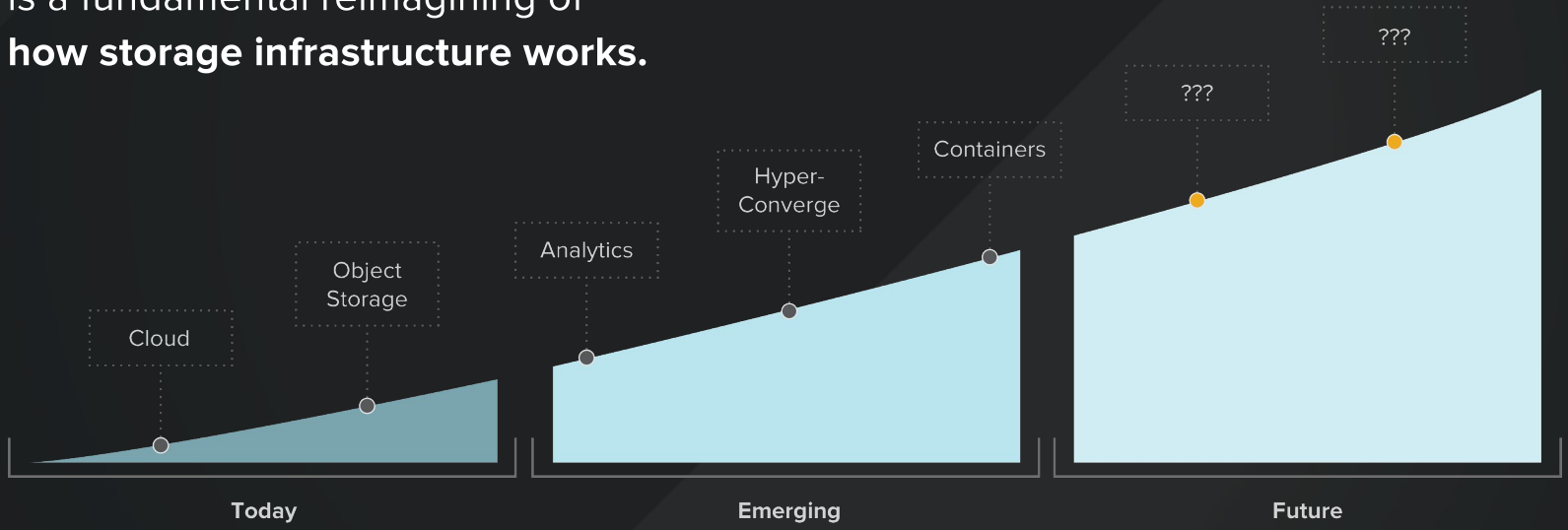
CLOSED DEVELOPMENT PROCESS	**Open development process**	More flexible, well-integrated technology

GOING FORWARD

MODERN STORAGE WORKLOADS

Open Software-Defined Storage
is a fundamental reimagining of
how storage infrastructure works.



THE BALANCE

Appliances

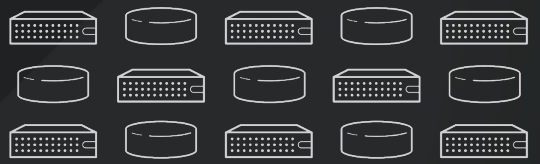
are suitable for small-scale, workloads, but they do not scale economically.

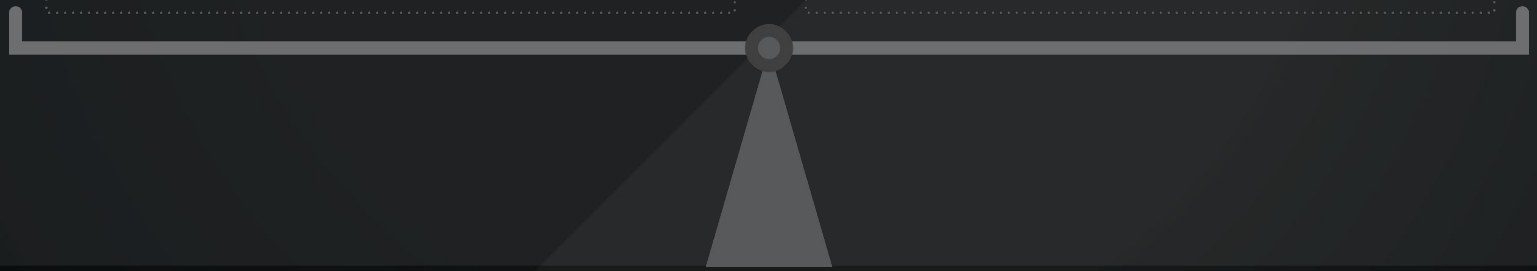
Durable, inflexible, convenient, expensive at large scale

Software-defined storage

has a learning curve, but bring performance and economy at petabyte scale.

Durable, powerful, flexible, economical at large scale





THE ROBUSTNESS OF SOFTWARE

SDS is more flexible than hardware

SDS can do things hardware appliances can't.

- Can be deployed on bare metal, inside containers, inside VMs, or in the public cloud.
- Can deploy on a single server, or thousands, and can be upgraded and reconfigured on the fly.
- Grows and shrinks programmatically to meet changing demands

OPERATIONAL EFFICIENCY

Standardization makes storage more convenient

Customers can build clusters using standard hardware from existing vendors that's perfect for their workload.

- Clusters can be performance-optimized, capacity-optimized, or throughput-optimized.
- Need capacity? Add more disks. Too slow? Add more servers.
- Clusters can become larger or smaller with no downtime.

A RISING TIDE

Software-Defined Storage is leading a shift in the global storage industry, with far-reaching effects.

- "By 2020, between 70%-80% of unstructured data will be held on lower-cost storage managed by SDS."

  Innovation Insight: Separating Hype From Hope for Software-Defined Storage

- "By 2019, 70% of existing storage array products will also be available as software only versions."

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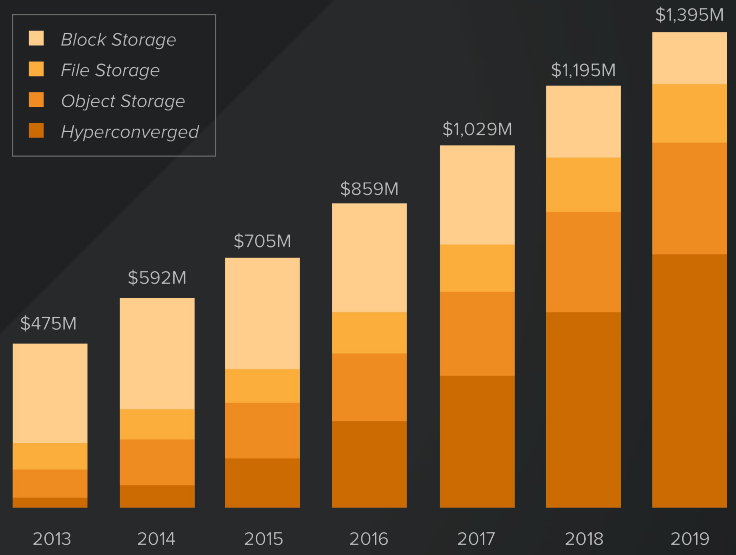
SDS-P Market Size by Segment



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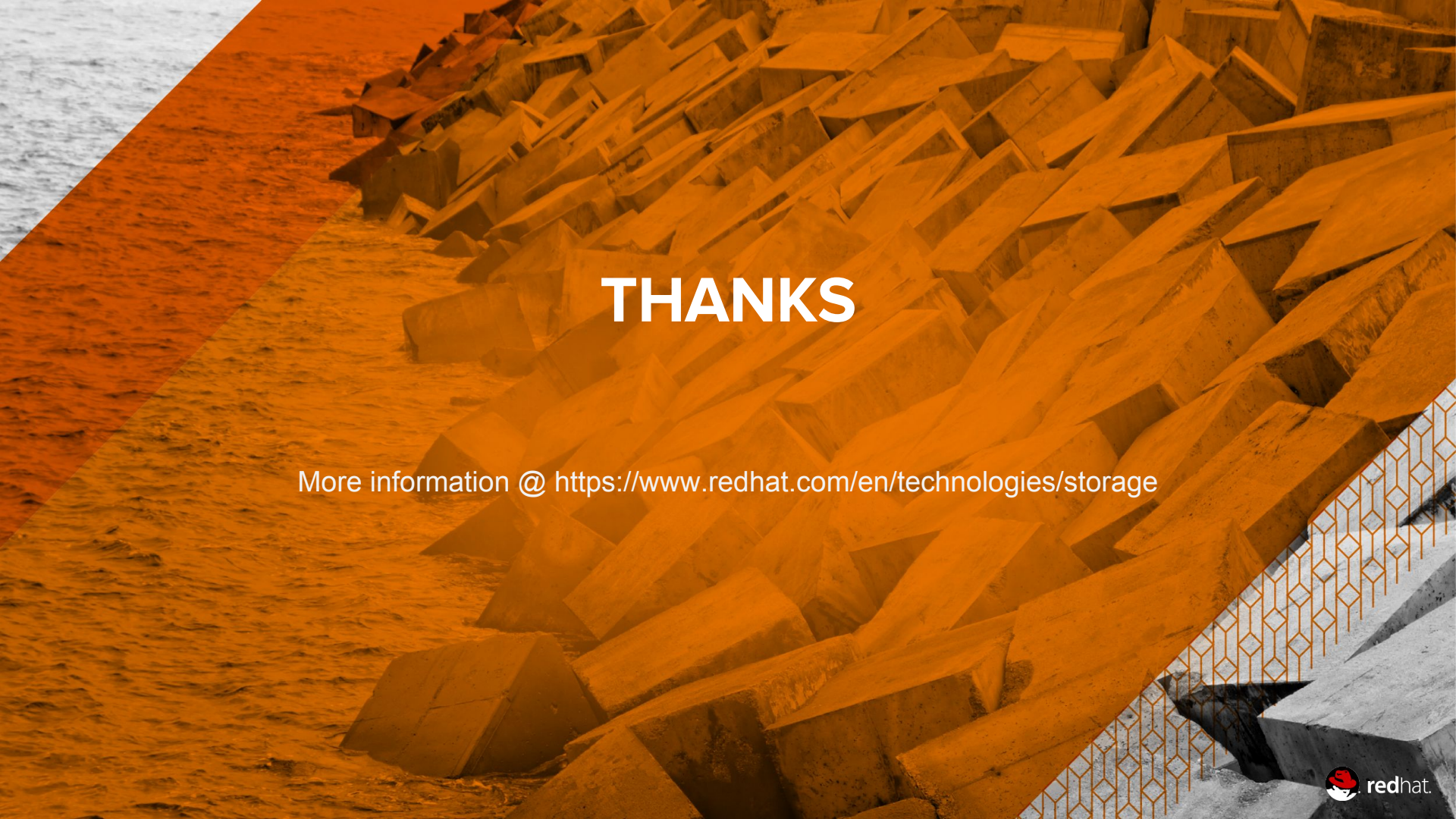
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