

Empowering our customers to change the world with data

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The World Is Changing Fundamentally and Quickly



Those at the forefront of digital transformation use technology to radically improve the performance and reach of their enterprise



67% of Global 2000 CEOs will put **digital transformation** at the center of their growth and **profitability strategies**.

—Forbes, December 2015

By 2020 it is expected that...

50% of the G2000 will see the majority of their business depend on their ability to create **digitally-enhanced** products, services and experiences

—IDC Directions 02/17

Exercise: Please take out your mobile phones

Apps (Total? / Kids Edu/Games?)	Cloud Native	Enterprise	Examples (C, E)
Collab (Email, IM)	10	2	Exchange, iMessage, WhatsApp
Social Media	6	1	Facebook, Snapchat, Line
Photo	6	1	Flickr, PhotoBucket
Navigation (GPS)	4	1	Google Maps
Travel (Air, Hotel)	0	15	AirBnB, Agoda, Cathay Pacific
Car Services	4	6	Uber, GoGoVan
Hotel Aggregators	6	2	Hotels.com, Zuji
Shopping	3	10	Amazon, Taobao, Alibaba
Entertainment / Gaming	3	3	NHN, MyTV, Netflix, Pokemon Go
Payments	3	4	Samsung Pay, ApplePay, LinePay
Banking/Wire Xfer	0	6	HSBC, SCB, Citi Bank
Stock (Info, Trading)	1	3	AAStock, E*Trade
Insurance	0	2	AIA, FWD
Healthcare	2	4	FitBit, Nike+, Garmin
Home Security	1	1	Nest, Samsung, Phillips
SmartCities	0	3	HKO, MTR, Citybus
Mobile Acct Mgmt	1	1	iTunes, T-Mobile
TOTAL	50	65	

- Categorize
 - How many?
 - Our LIVES are digitized
- Cloud-native applications
- Enterprise applications
- Internet of Things

Customers are transforming digitally to create value

New commercial services



... OpenStack on NetApp laid the foundations for our gaming and new B2B and Fintech services

Foster new innovation




... building the FICO Analytic Cloud that enables their customers to create and deploy data analytics applications and services up to 70% faster

Modernizing existing platforms



... AI-based recommendation engine allows us to bring unique services to our customers



Becoming a
data-centric organization
is no small undertaking

It is especially difficult given today's IT realities

Budget

On-premises, traditional IT budgets will remain constrained between 2017–2020

—IDC

Skills

Nearly 6 out of 10 CIOs believe skills shortages will prevent their organization from keeping up with the pace of change—one-third more than just three years ago.

—Harvey Nash/KPMG CIO Survey 2015

Time

Market demand for app development will grow at least 5x faster than IT's capacity to deliver it through 2021—one out of every three new B2E mobile apps will fail within six months of launch by 2019.

—Gartner

No longer is data locked away on devices hidden behind firewalls. Instead, it is becoming:



Distributed

Stored in multiple locations — on-premises, and multiple cloud locations



Dynamic

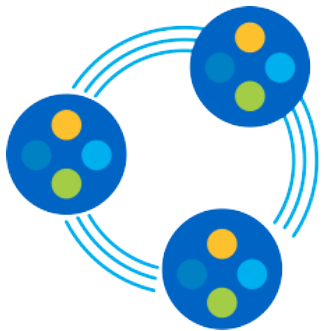
An influx of constantly changing data that requires you to know where the data is and its source



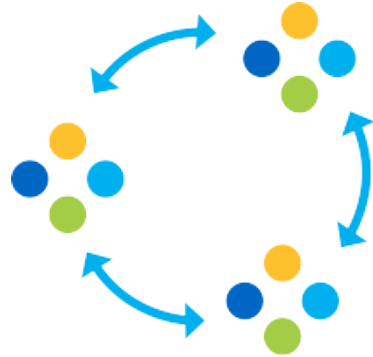
Diverse

Structured, unstructured, machine learning, and streaming — generated in and outside the organization

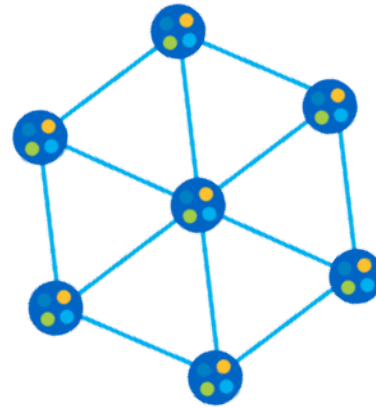
This requires a holistic approach to hybrid cloud data services that is:



Secure



Efficient



Future-proof

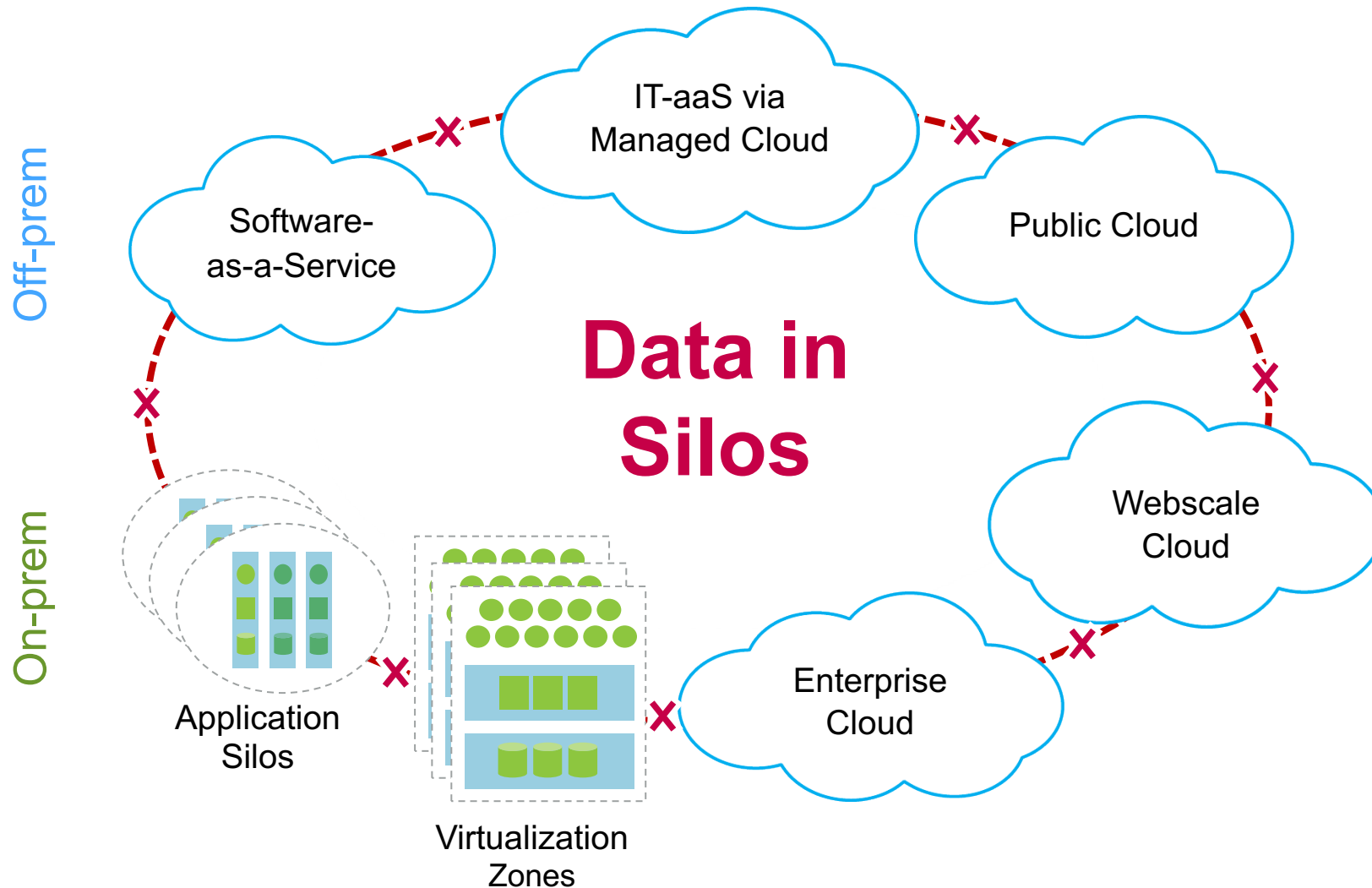


**Freedom of
choice**

...and enabled by a Data Fabric

Data Fabric Enables IT's Digital Transformation

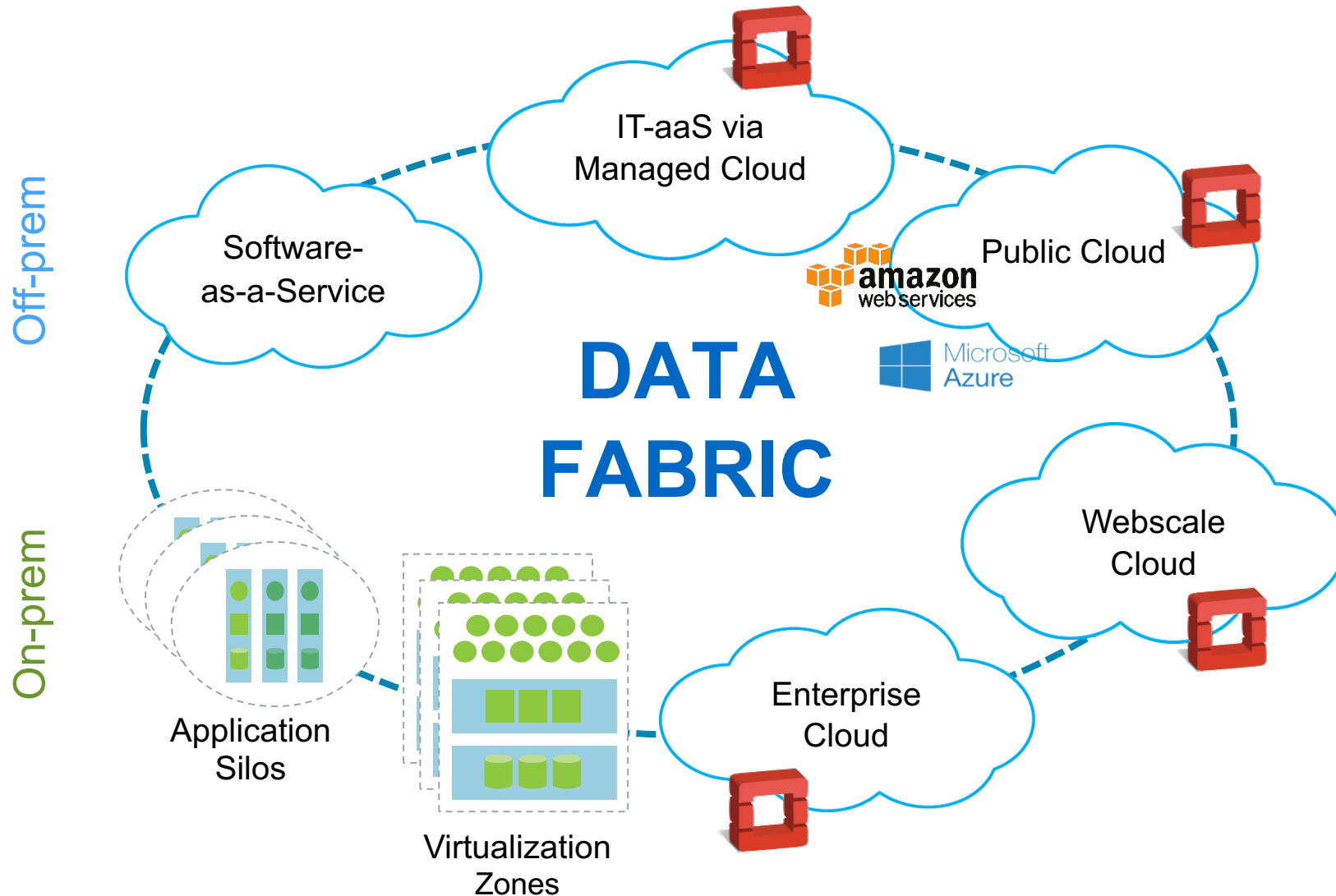
Helping customers unleash data to accelerate digital transformation and address their business imperatives



Simplify and Modernize IT Infrastructure

Scale and Accelerate Business Performance

Data Fabric Enables IT's Digital Transformation

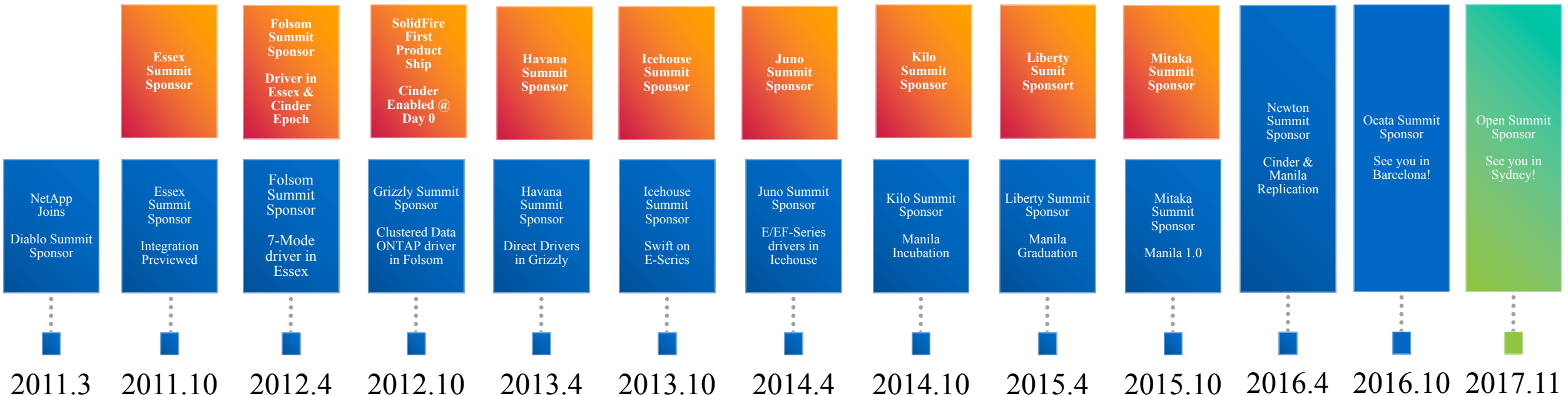


Leverage Data and Compute from Anywhere

NetApp and OpenStack

A Long term commitment

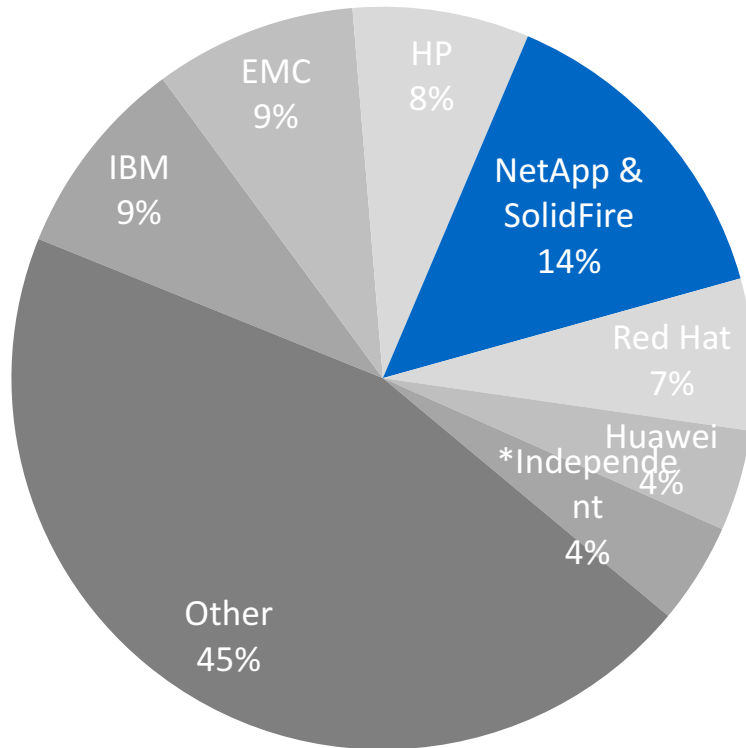
- OpenStack Foundation:
 - Charter Gold Member
 - Elected board representation
- 1st and leading storage provider
- Community project leadership
- Production deployments and deployer



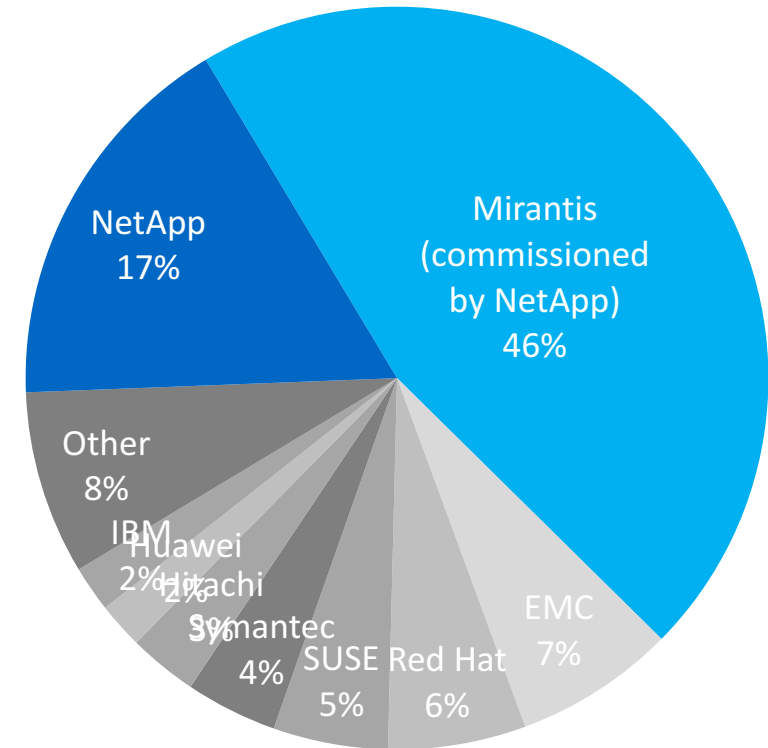
NetApp and OpenStack: the leader in storage development

Cinder & Manila Lines of Code since inception

Cinder



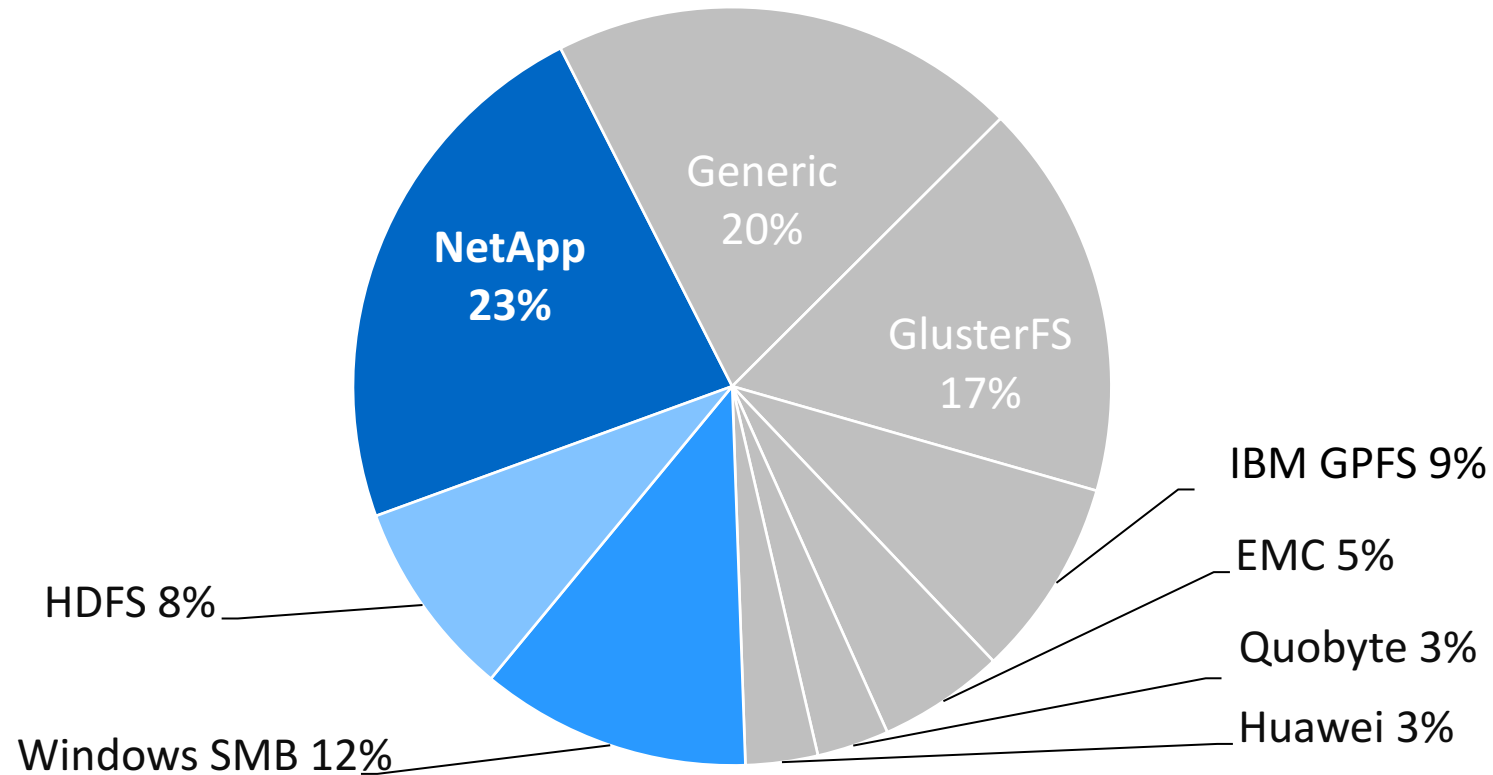
Manila



- The combined NetApp & SolidFire leads 2 out of the 3 OpenStack storage projects

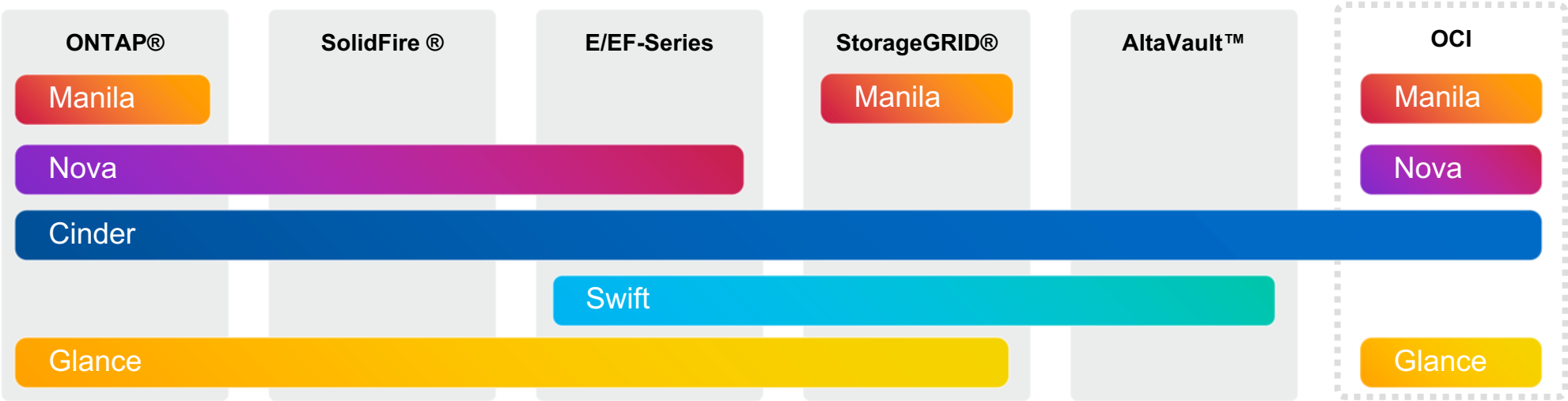
OpenStack Foundation User Survey Results

Shared File System Drivers in Use (April 2016)



- NetApp is the founder of, leading contributor to, and most widely deployed option for Manila

NetApp OpenStack Portfolio Enablement



SolidFire

All-flash storage platform for the next generation data center



- The 1st storage to support Cinder
- SolidFire Cinder driver included in OpenStack source - 4 lines of config file
- Features of the SolidFire Cinder driver: QoS, Cluster Pairing, Volume & Site Replication, Snapshots, Clones, Migration

Proven in the
Most Demanding
Service Provider
& Enterprise Data
Centers Globally





How will you
change the world
with data?