

10th Central and Eastern European Software Engineering
Conference in Russia - CEE-SECR 2014



Концепция Третьей платформы информационных систем



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**BILLIONS
OF USERS**



**MILLIONS
OF APPS**



3RD PLATFORM

Mobile Cloud Big Data Social
Mobile Devices

**HUNDREDS OF MILLIONS
OF USERS**



2ND PLATFORM

LAN/Internet Client/Server
PC

**TENS OF THOUSANDS
OF APPS**



**MILLIONS
OF USERS**



1ST PLATFORM

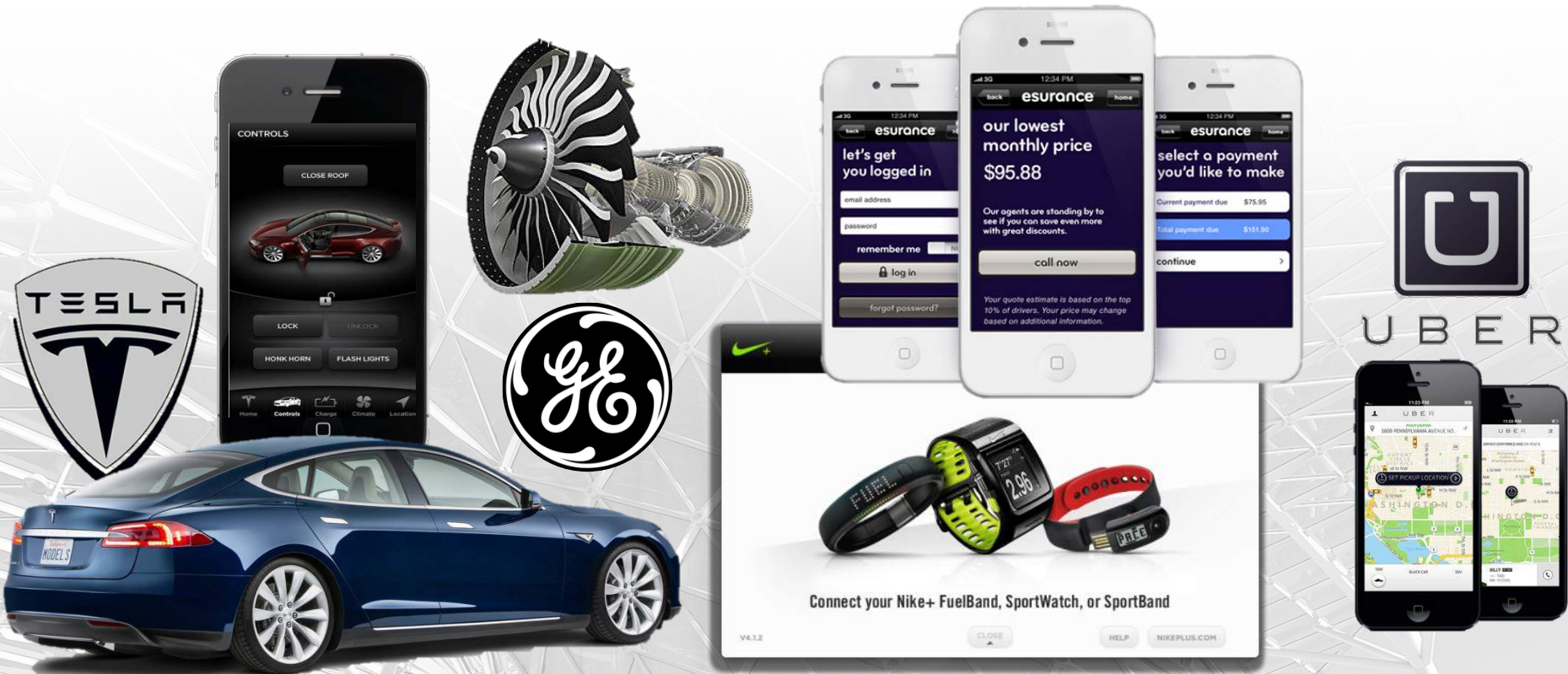
Mainframe, Mini Computer
Terminals

**THOUSANDS
OF APPS**



Source: IDC

Many Industries Face Structural Change



Starbucks Mobile Application

“The Winning Hand As Mobile, Card & Online Sales Converge”

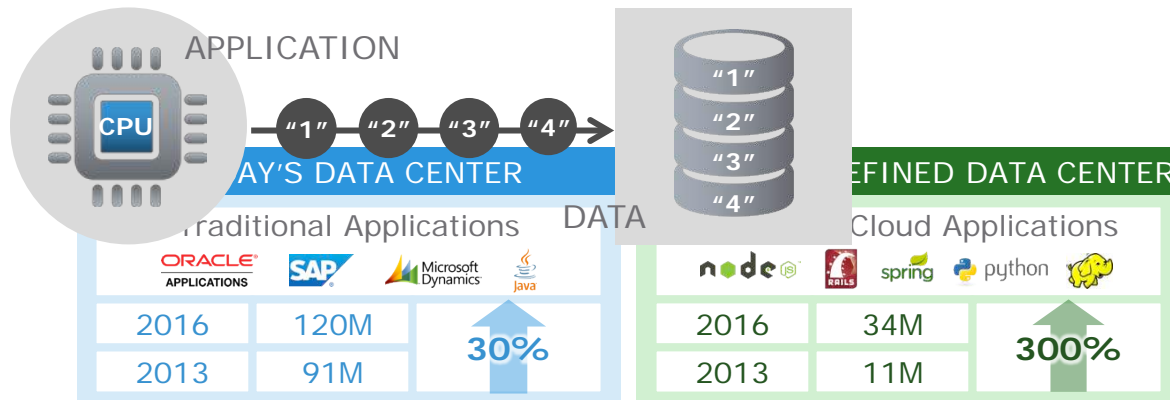
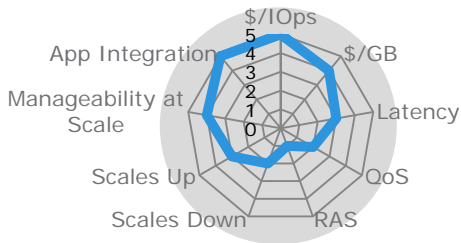


“Starbucks was prepared for these shifts having invested over many years in the creation & development of proprietary world class digital & mobile payment and card technology & expertise. We are just beginning to appreciate the full magnitude & possibilities of the Starbucks mobile payment platform opportunity.”

*Howard Schultz - Chairman, President and CEO
January 23, 2014*

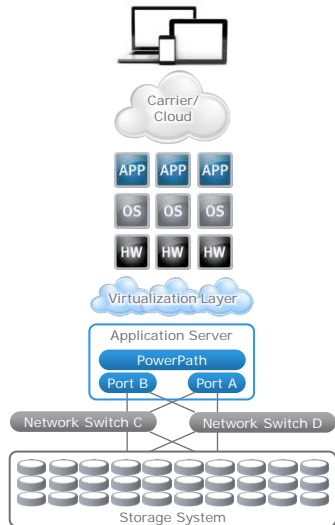
10 MILLION MOBILE APPS USERS
5 MILLION MOBILE TRANSACTIONS / WEEK
\$1.6 BILLION ON PAYMENT CARDS IN Q4 '13

2014 Current State

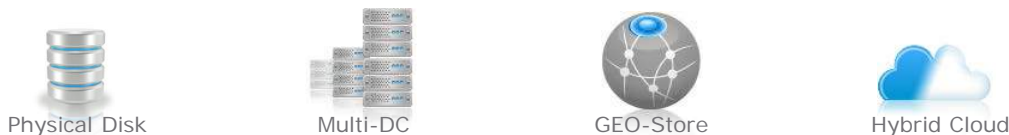


Year	Traditional Applications	Cloud Applications
2016	120M	34M
2013	91M	11M
		300%

APPLICATION DISTANCE



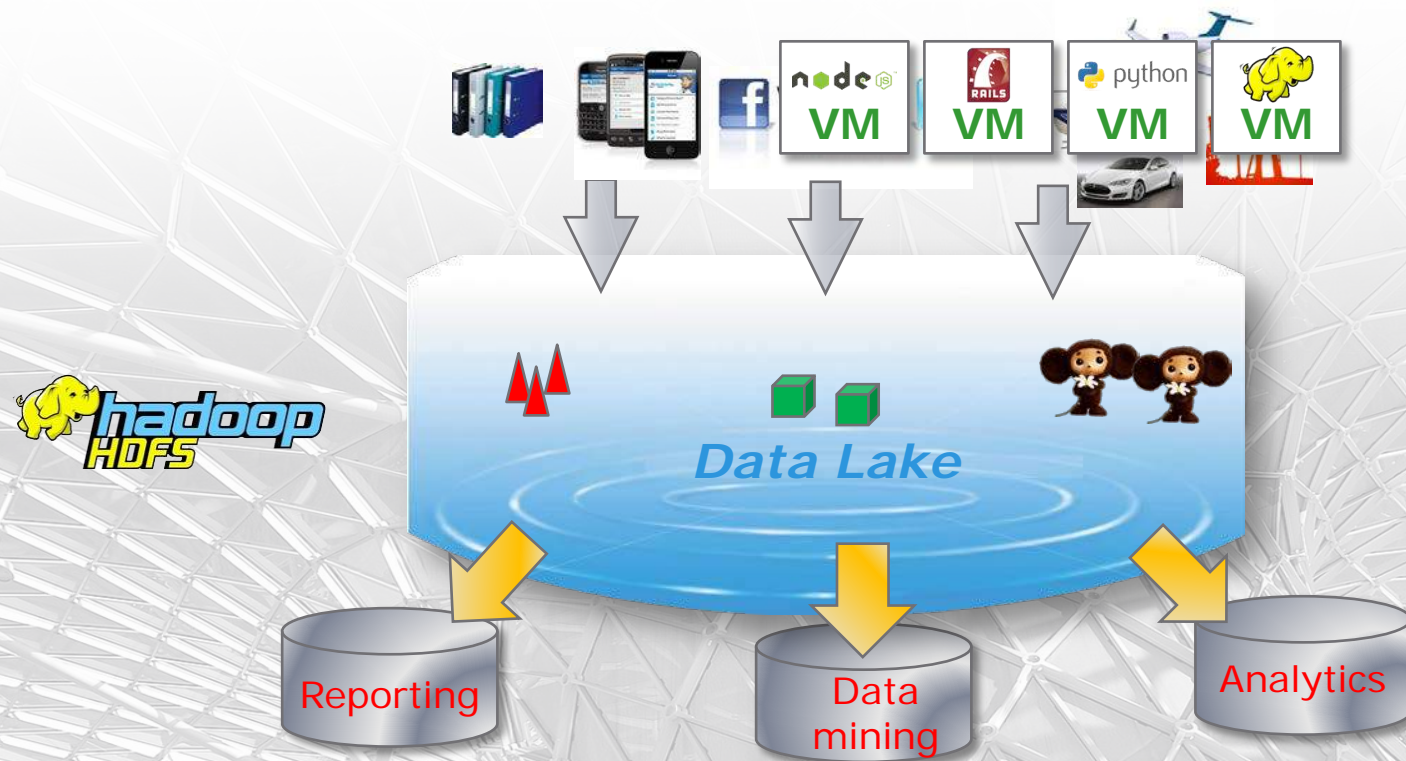
- Object/HDFS
- Software-Defined Storage
- Converged Infrastructure
- Policy-Based Automation
- Data-Driven Security
- On-Premise & Off-Premise



STORAGE SPAN, WIDTH, OR DISTRIBUTION

Data Lake

Data Lake substitutes DataWarehouse

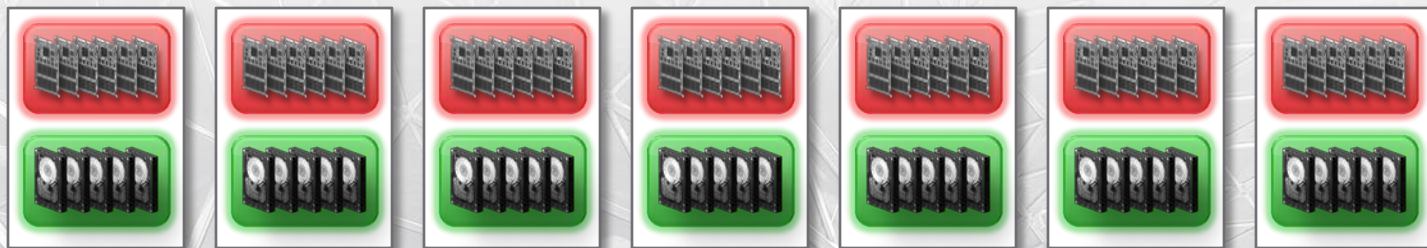


Building Data Lakes

Scale-Out In Memory Data Grids, Backed By Scale-Out HDFS

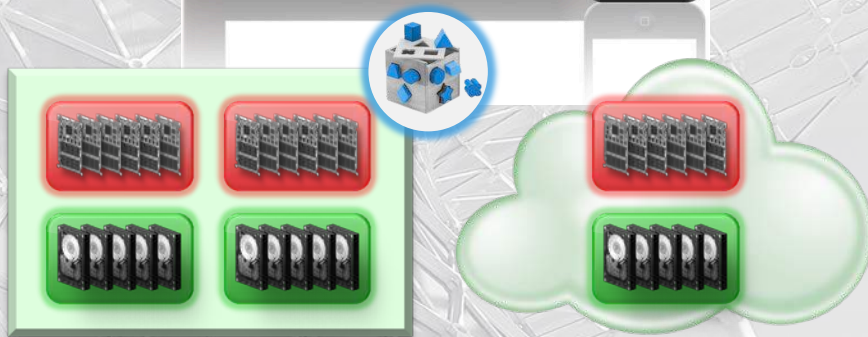
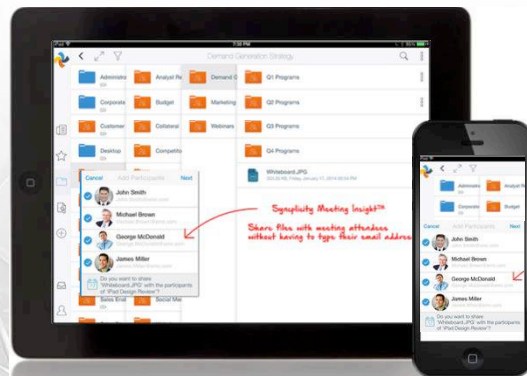
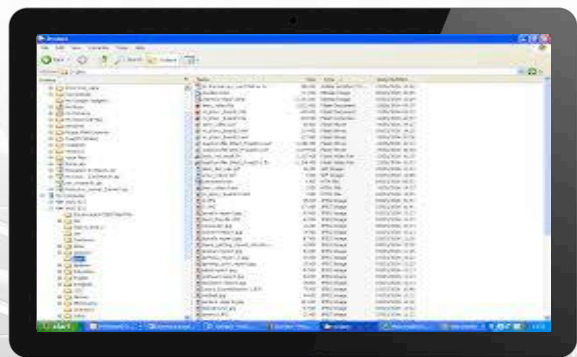


P GemFire XD



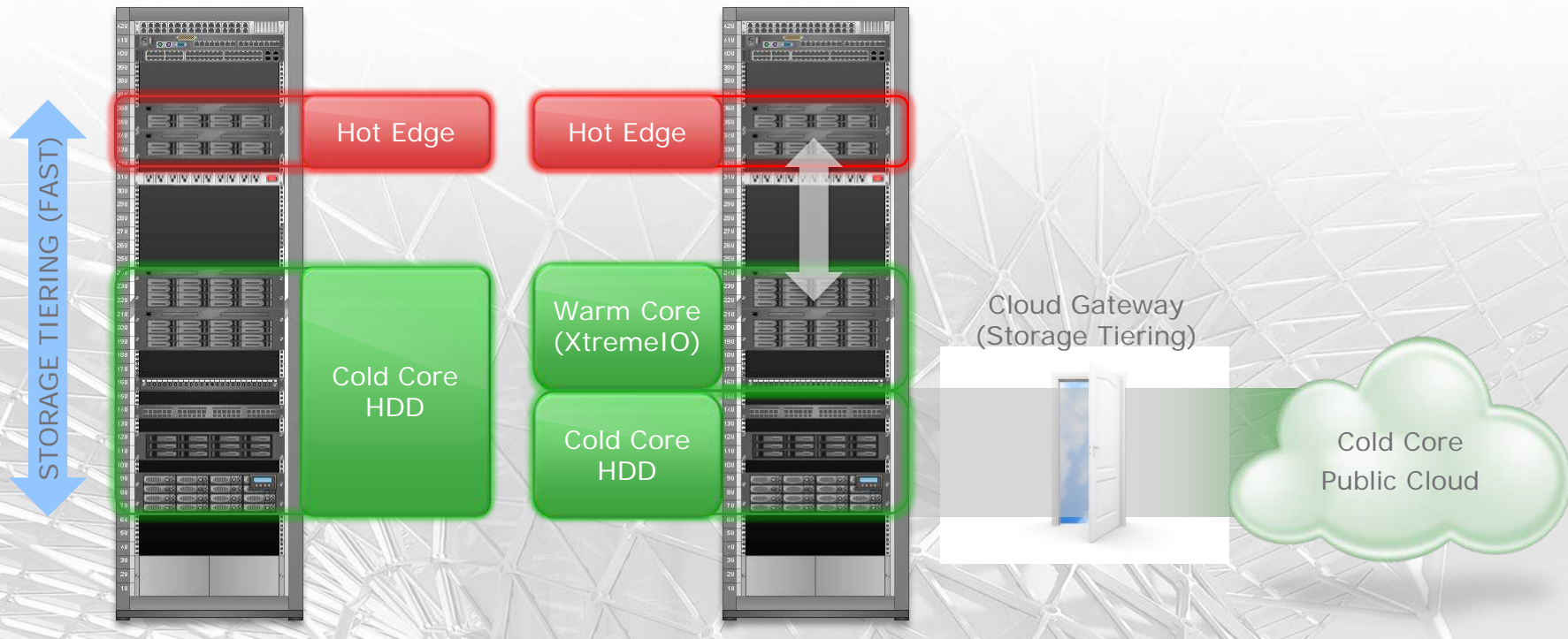
3RD Platform Storage For Mobile

Moving To Object-based Storage Infrastructure



Cold Core Intelligent Tiering

Deployed Within The Data Center, Or To The Public Cloud



Dynamic Deployment Of Block/File/Object/SQL

Storage "VMs" Deployed By SDS

STORAGE CATALOGUE

- SQL
- Block
- File
- Object
- Mobility
- Replication
- Dedup



DEDUP



BACKUP



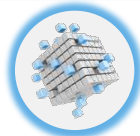
MOBILITY



REPLICATION

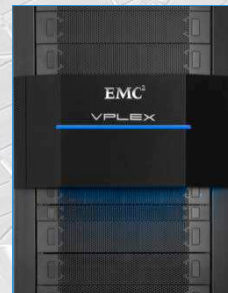
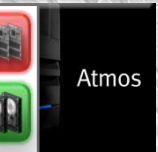
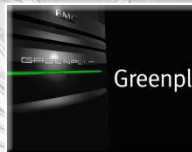


SQL



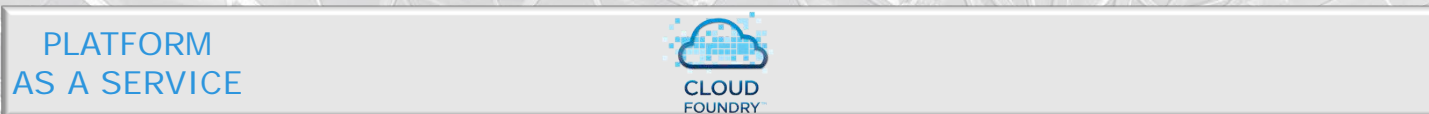
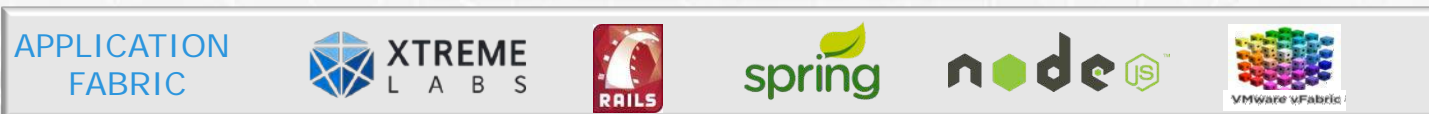
VIPR Data Services

VIPR Controller

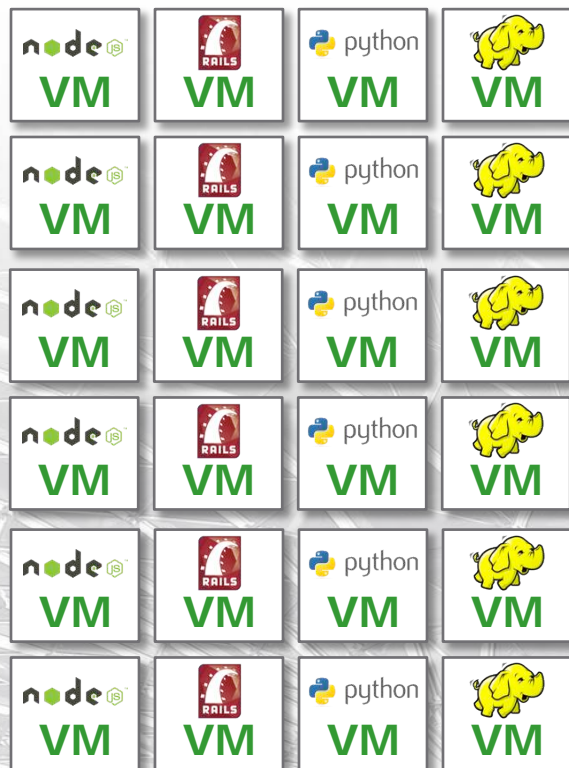


Build/Deploy Apps Faster...

...Leveraging Data Fabric Toolsets

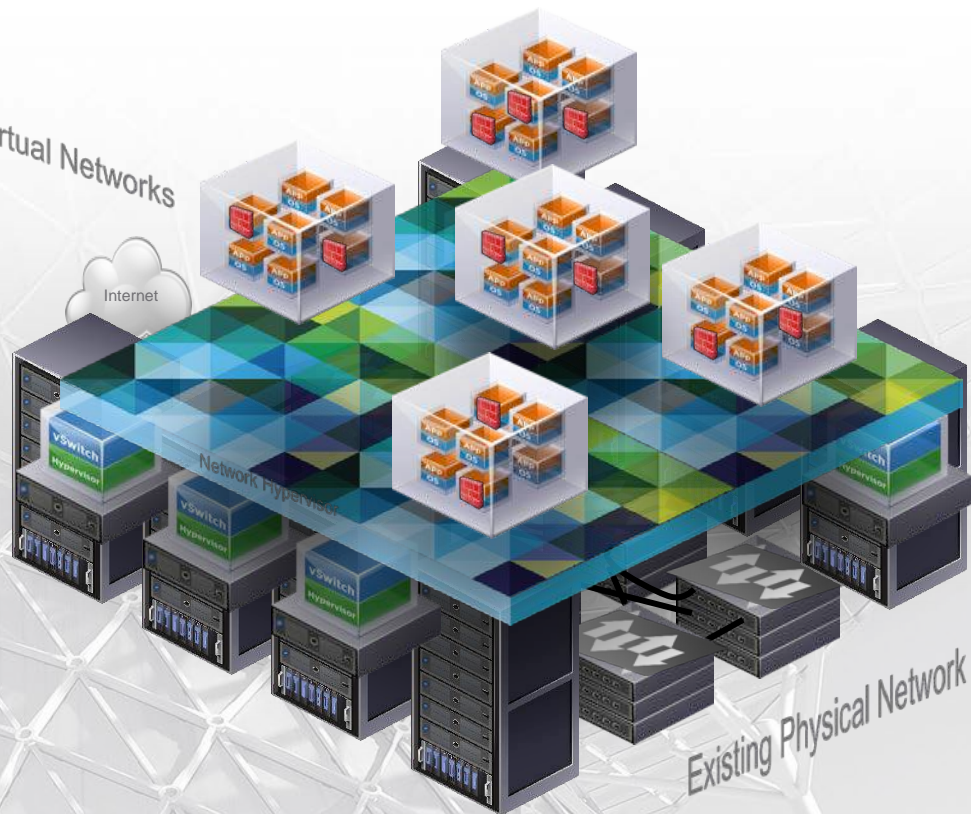


Mathematical Workload M&O



- Performance
- Availability
- Security
- Protection
- Access
- Power

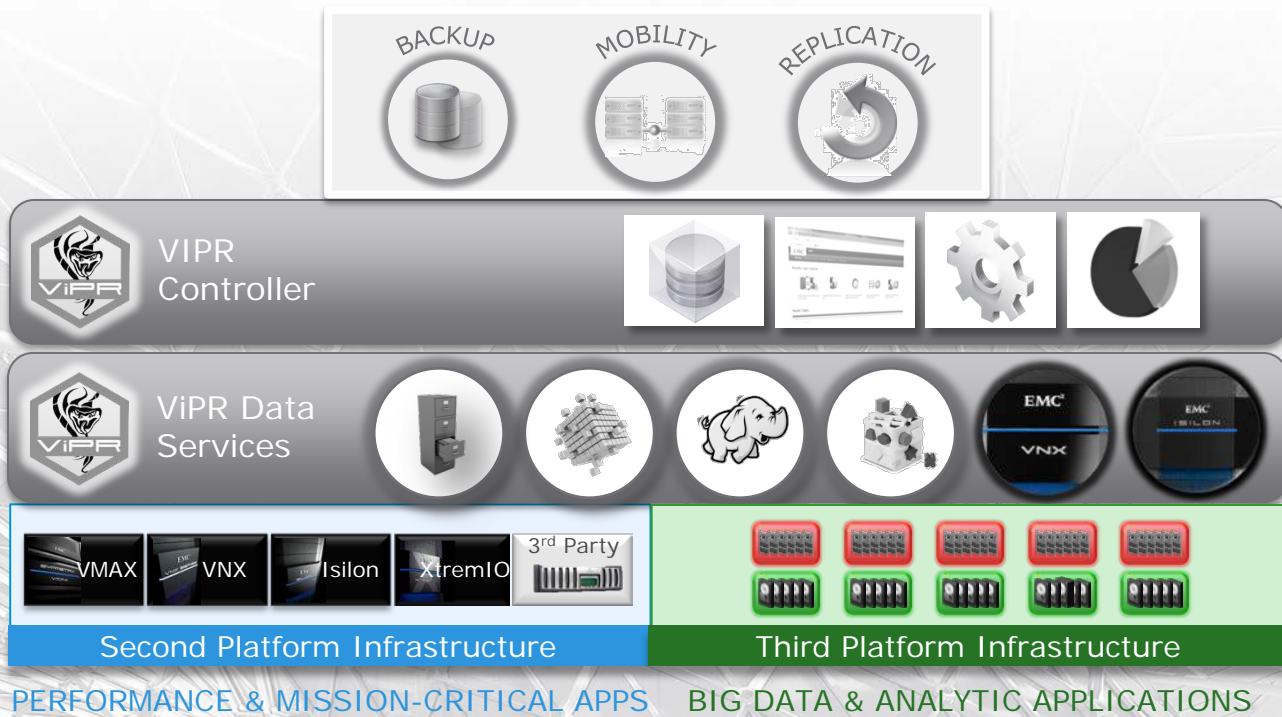
Virtual Networks



Existing Physical Network

Building The Bridge

ViPR: Storage Arbitration For Both Platforms



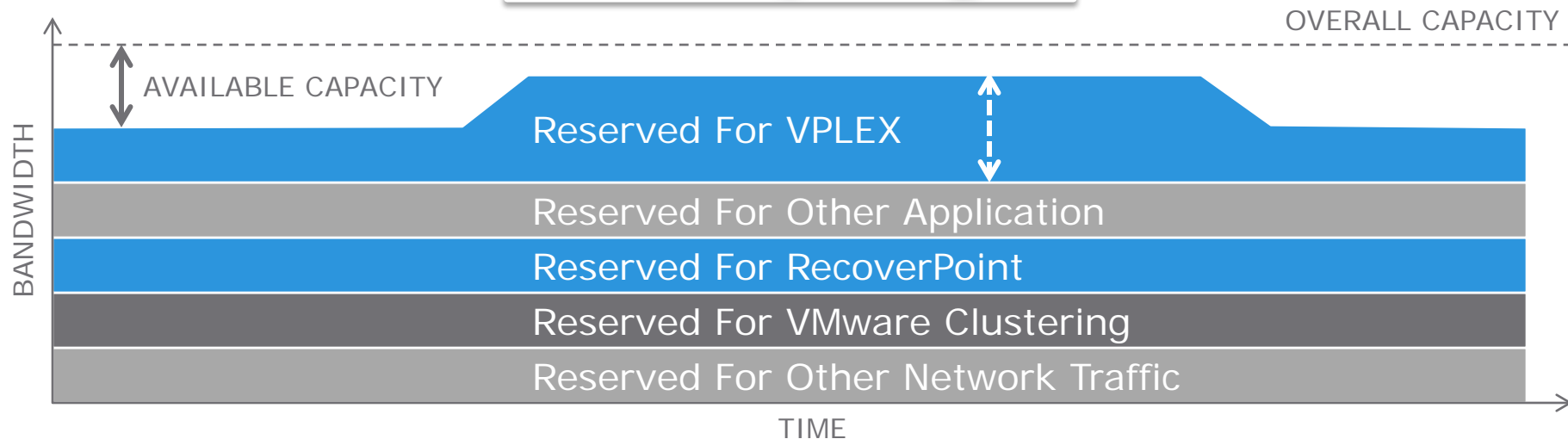
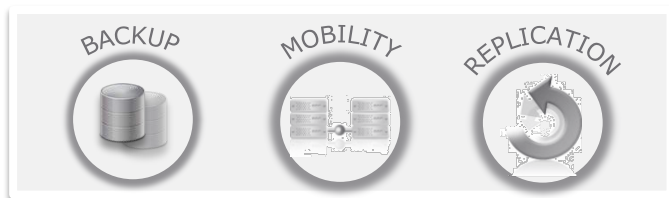
EMC²®

Interoperable With Any Cloud Orchestration Platform



Storage Bandwidth Control With SDN

Dynamic Control Of Backup, Mobility, & Replication Operations

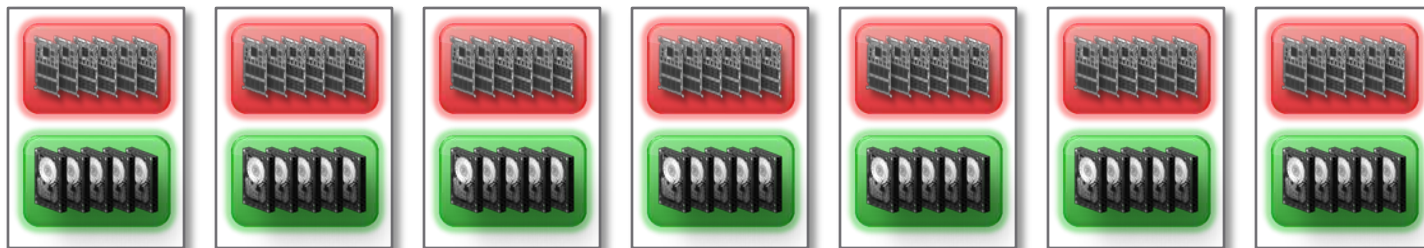


Start Building Data Lakes

Scale-Out In Memory Data Grids, Backed By Scale-Out HDFS



P GemFire XD



Server-Based Persistence

Hot Edge & Horizontal Data Stack/Services

