## SECURING THE HYPERCONVERGED DATACENTER

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#### AGENDA

- 1 New datacenter messaging recap
- 2 Hyperconverged infrastructure (HCI) definition, trends, and use cases
- 3 Who is Nutanix?
- 4 HCI security requirements and how GravityZone uniquely meets them
- 5 Demo
- 6 New assets and resources

## NEW DATACENTER MESSAGING RECAP

## THE EVOLVING VALUE CHAIN BUSINESS-IT-DATACENTER

#### BUSINESS CAUSES A TECTONIC SHIFT IN THE ROLE OF IT





#### CIOS' TOP TECHNOLOGY PRIORITIES\*

• Big data enablement, datacenter transformation (including the cloud), and security are in focus

#### Gartner

Technology areas mentioned by respondents within top three most often	U.S. (n = 892)	All Regions (n = 2,584)
BI / Analytics	37%	38%
Cloud Services / Solutions	28%	27%
Infrastructure and Datacenter	21%	22%
Enterprise Resource Planning	21%	22%
Cyber / Information Security	24%	17%

\*- Based on Gartner's 2017 CIO Agenda Survey

## DATACENTER REVOLUTION

#### DATACENTER TRANSFORMATION TO ENABLE DIGITAL BUSINESS AND AGILE IT

#### SOFTWARE-DEFINED DATACENTER

#### HYPERCONVERGENCE

HYBRID CLOUD

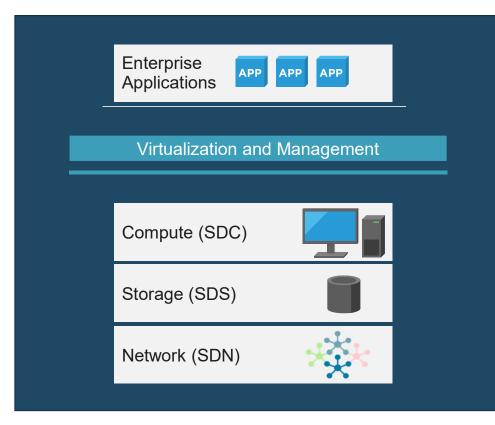








#### WHAT IS SOFTWARE-DEFINED DATACENTER?



#### Software Defined Datacenter (SDDC)

A datacenter automation architecture enabling an agile, flexible and programmable infrastructure based on commodity hardware

#### SECURITY REQUIREMENTS FOR THE SOFTWARE-DEFINED DATACENTER

Automatic security provisioning and deployment

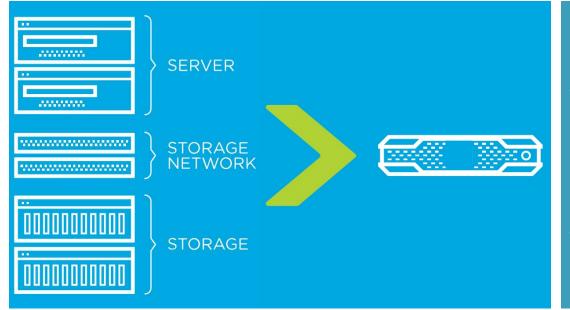
Efficient centralized manageability and visibility across SDDC

Out-of-the-box integration with key SDDC technologies (VMware stack)

Maximum virtualization density, low boot latency and optimal application performance

Continuous security coverage without lapses

#### WHAT IS HYPERCONVERGED INFRASTRUCTURE?



#### Hyperconverged Infrastructure

- Complete software-defined infrastructure stack in one package, combining commodity servers, DAS and a central management console
- HCIS clusters provide additive building blocks enabling streamlined linear scalability

<sup>\* -</sup> Diagram courtesy Nutanix

#### SECURITY REQUIREMENTS FOR HYPERCONVERGED INFRASTRUCTURE

High virtualization density and performance

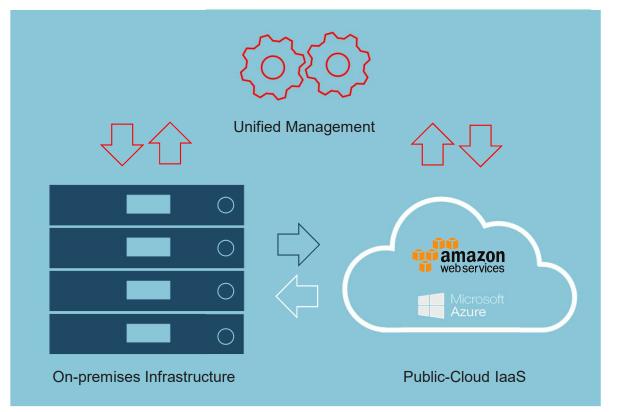
Linear scalability

Out-of-the-box integration with key HCIS technologies

Support of multi-hypervisor environments

Efficient centralized manageability and visibility

#### WHAT IS THE HYBRID CLOUD?



#### **Hybrid Cloud**

A governed, IT-led adoption of public cloud IaaS to complement existing on-premises datacenter capacity

#### SECURITY REQUIREMENTS FOR THE HYBRID CLOUD

Single-pane-of-glass visibility and unified management of security across the hybrid cloud

Consistent cloud-agnostic policy enforcement

Automatic support of VM portability

Support of heterogeneous physical, virtualized and cloud environments

Highly elastic capacity and demand-based pricing models

#### GRAVITYZONE SVE SECURITY TO ENABLE DATACENTER TRANSFORMATION



- Automatic provisioning and deployment
- Out-of-the-box integration with VMware NSX
- Continuous security coverage





- Maximum virtualization density and infrastructure performance
- Unlimited linear scalability
- Out-of-the-box integration with Nutanix





- Single-pane-of-glass visibility and consistent management and policy enforcement
- Simultaneous support of multiple virtualization and cloud environments
- Support of VM portability



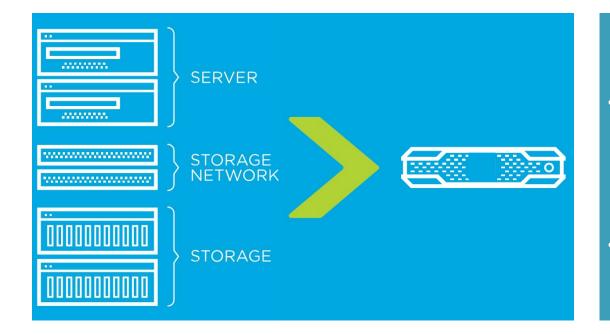
## WHAT IS HYPERCONVERGED INFRASTRUCTURE

#### CHALLENGES OF HARDWARE-CENTRIC APPROACHES

- Intelligence in hardware
- Dedicated, proprietary infrastructure is costly, complex and inflexible
  - Disconnected silos of proprietary computing, storage, and networking components
  - ✓ High acquisition costs
  - Purchased, deployed and maintained in isolation by specialized teams
  - Extensive manual tasks related to configuration and management
  - ✓ Utilization usually suboptimal (overprovisioning is typical)



#### WHAT IS HYPERCONVERGED INFRASTRUCTURE?



#### Hyperconverged Infrastructure

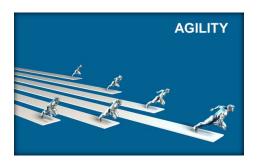
- Complete software-defined infrastructure stack in one package, combining commodity servers, DAS and a central management console
- HCIS clusters provide additive building blocks enabling streamlined linear scalability

<sup>\* -</sup> Diagram courtesy Nutanix

#### BENEFITS OF HYPERCONVERGENCE



- "Private cloud in a box"
- Direct extensibility to the public cloud IaaS, enabling hybrid cloud architectures
- Easier infrastructure scalability and higher utilization with a scaleout architecture



- Fast automatic provisioning...
- Simple centralized manageability...
- And modular singlevendor building blocks create an agile, dynamic, fast-iterating infrastructure



- OpEx reduction from streamlined IT management ("Invisible infrastructure")
- Lower CapEx due to the use of commodity hardware and higher infrastructure utilization

#### POTENTIAL CHALLENGES OF HYPERCONVERGED INFRASTRUCTURE

- Coupled, lock-step scaling of compute and storage
- Inefficient backup (replication)
- Solution lacks the SDN component

#### KEY MARKET SEGMENTS AND HCI PLAYERS

2016 Gartner Magic Quadrant for Integrated Systems

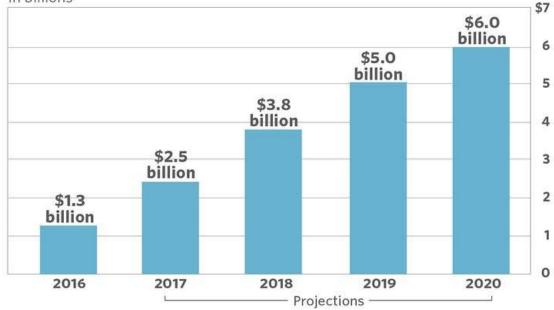
- Covers various classes of converged infrastructure
  - ✓ Integrated Stack Systems (ISS)
  - ✓ HCI (vendors marked with ○)
  - ✓ Integrated Infrastructure Systems (IIS)
  - ✓ Integrated Reference Architectures (IRA)
- GravityZone can integrate with various HCI vendor solutions in hypervisor-agnostic mode



#### HYPERCONVERGENCE MARKET - GARTNER

#### **Growth of hyperconvergence**

In billions



#### Compound annual growth rate

Source: Gartner Inc.

\* - Source: Gartner

<sup>60%+</sup> 

#### **KEY USE CASES FOR HCI**



\* - Source: Nutanix

# WHO IS NUTANIX



Founded	2009	Headquarters	San Jose, CA
Installed Countries	100+	Full Time Employees	2,559
HCIS Market Share	50%+	Worldwide Customers	5,382
Revenue (ttm)	\$603.48M	Quarterly Revenue Growth (YoY)	77.40%
EPS (ttm; diluted)	-\$4.61	Market Cap	\$2.18B

#### NUTANIX SWOT ANALYSIS AND FUN FACTS\*

 473 Global 2000 customers (cumulative)



- ~10% of sales through Dell
- Award winning service (NPS=90)
- Multiple deals over \$500K
  - ✓ While most HCIS deals are <\$200K</p>

<sup>\* -</sup> Source: Gartner SWOT: Nutanix, HCIS, Worldwide Published: 18 July 2016; Nutanix financial reports

Strengths	Weaknesses
<ul> <li>Market Leader in HCIS</li> <li>Successful Relationship With Dell</li> <li>Service and Support Reputation</li> <li>Significant Enterprise Penetration</li> <li>Well-Respected Sales Approaches</li> <li>Generating Larger Deals</li> <li>Successful Recruiting of Another Large Infrastructure Provider (Lenovo)</li> <li>Repeat/Ongoing Business From Existing Installed Base</li> <li>Aggressive Product Development With Expansion Beyond a Single Offering</li> <li>Prism Management Tools</li> <li>Hybrid Cloud Enablement Positioning</li> </ul>	<ul> <li>Lack of Revenue Base From Hardware Relationships Beyond Dell</li> <li>Lower SMB Penetration</li> <li>Lower ROBO Revenue Contribution</li> <li>High Cost of Sales</li> <li>GAAP Losses That May Continue</li> </ul>
Opportunities	Threats
<ul> <li>Grow SMB and ROBO Sales Contributions</li> <li>Partner Marketing Programs to Expand SMB Penetration and Reduce Cost of Sales</li> <li>Broaden OEM Relationship Base to Obviate Potential Reduction From Dell Relationship</li> <li>Grow Asia/Pacific Sales Through Lenovo Relationship</li> <li>Develop a "Serverless Computing" Solution</li> </ul>	<ul> <li>"New Dell" Moving Focus Away From Nutanix</li> <li>Growth and Partnership Expansion Makes Sales Approach Difficult to Scale</li> <li>Perception of Nutanix as an Expensive Solution</li> <li>Strong Focus on Asia/Pacific by Competitors</li> <li>vCenter</li> </ul>

#### THE NUTANIX ENTERPRISE CLOUD PLATFORM



Prism

A comprehensive management solution that brings one-click simplicity.



#### Acropolis

A turnkey platform that converges server, storage, virtualization and networking resources.



#### **Xpress**

The power of the Nutanix Enterprise Cloud, sized for smaller IT organizations.



### BITDEFENDER AND NUTANIX

- Bitdefender is a Nutanix AHV partner
- GravityZone is a Nutanix AHV-Ready solution delivering unmatched automation
  - Unlike other solutions, GravityZone automatically activates VDI agents on non-persistent VMs after a system restart
- Deeper partnership in development including engineering collaboration, joint marketing activities, channel cross-pollination, and sales coordination



## HCI SECURITY REQUIREMENTS

And How GravityZone Uniquely Meets Them

#### SECURITY REQUIREMENTS FOR HCI AND HOW GRAVITYZONE MEETS THEM

High virtualization density and application performance

Unlimited linear scalability



Out-of-the-box integration with key HCIS technologies

) Support of multi-hypervisor environments

Efficient centralized manageability and visibility

#### LEADING HEALTHCARE PROVIDER SECURES HCIS WITH GRAVITYZONE SVE

#### Challenge

A large Western European healthcare organization was looking to deploy new infrastructure to host an Electronic Healthcare Records (EHR) system supporting four hospitals. Project goals:

- · Increased agility and responsiveness of EHR services to business and customer demands
- · Improved EHR system availability (as interruptions could disrupt healthcare services in the entire city)
- · Full compliance and impenetrable security of patient data
- · Cost savings from consolidating individual EHR for four hospitals on one multi-tenant system

#### Solution

The company built its EHR system's VDI infrastructure on Nutanix AHV and Citrix XenDesktop and chose Bitdefender to secure the virtual environment due to the following:

- Best out-of-the-box integration and provisioning automation for both AHV and XenDesktop, including the ability to seamlessly transition from VMware ESXi to AHV with zero downtime
- · Superior manageability, visibility, and protection for all virtual workstations and servers carrying patient data
- · Lowest performance overhead promoting higher virtualization density

#### Results

- Simplified VDI infrastructure and security stack
- Reduced time-to-value from months to weeks
- Shifted focus from maintaining a fragmented datacenter to enabling business-critical applications and supporting customers



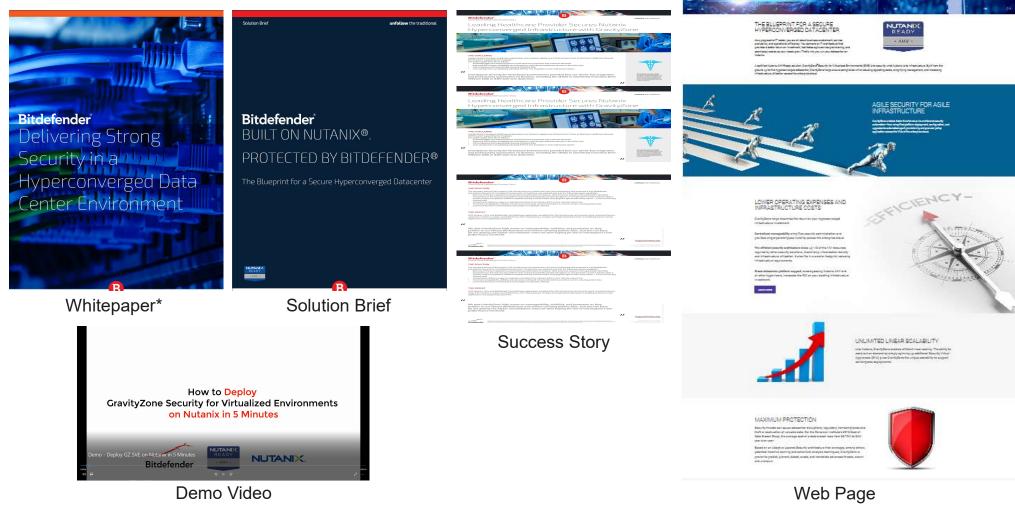


## DEMO

How to Deploy GravityZone Control Center on Nutanix in 5 Minutes

## NEW ASSETS

#### **NEW ASSETS**



BUILT ON NUTANIX PROTECTED BY BITDEFENDER

## BITDEFENDER GRAVITYZONE SVE STAY TUNED

- Datacenter Prospecting Day
- LearningBit Selling into Hybrid Cloud Environments

May 11, 2017 May 17, 2017



## QUESTIONS? COMMENTS?

## THANK YOU!