Hewlett Packard Enterprise

高彈性、穩定可靠且易於管理的VDI 架構 - HPE SIMPLIVITY 380 超融合系統

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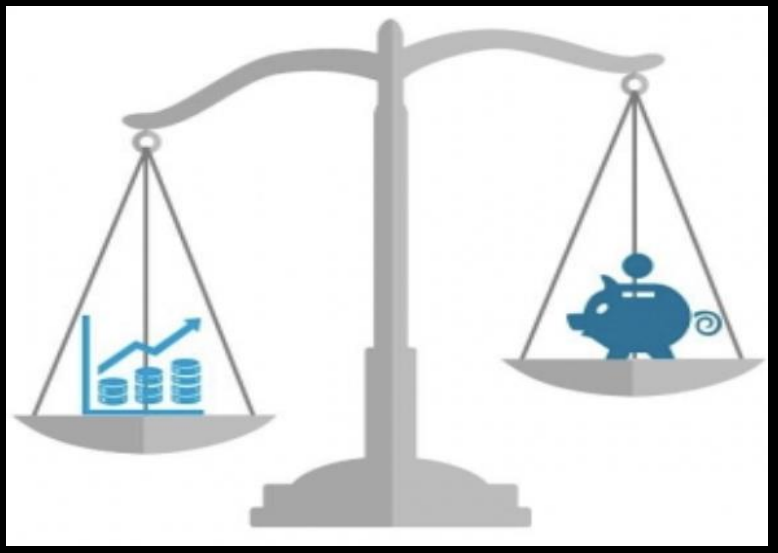
WHY VIRTUAL DESKTOP INFRASTRUCTURE [VDI]?

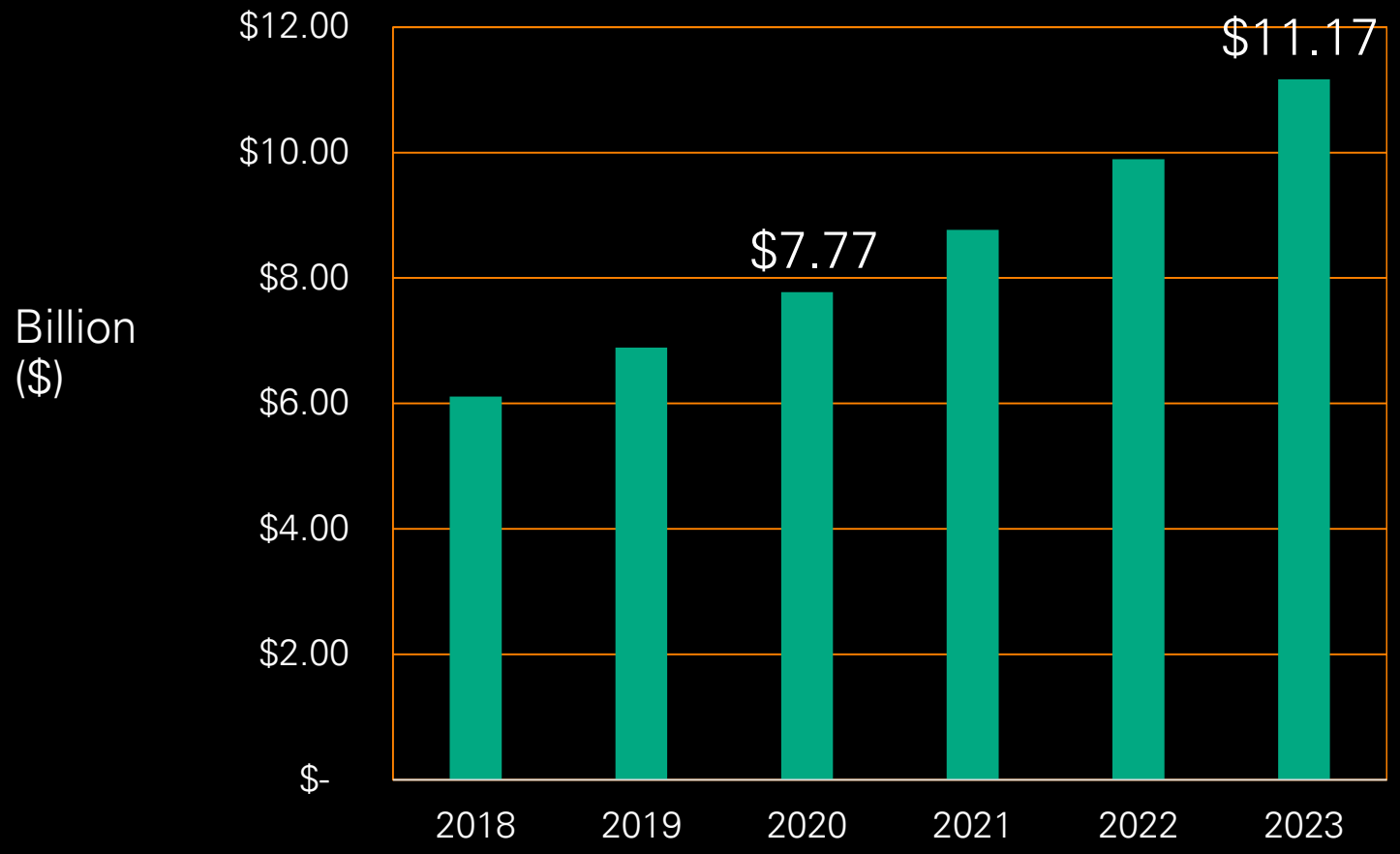
REMOTE WORKERS

COMPLIANCE

EASY TO SCALE & COST



END USER COMPUTING MARKET GROWTH



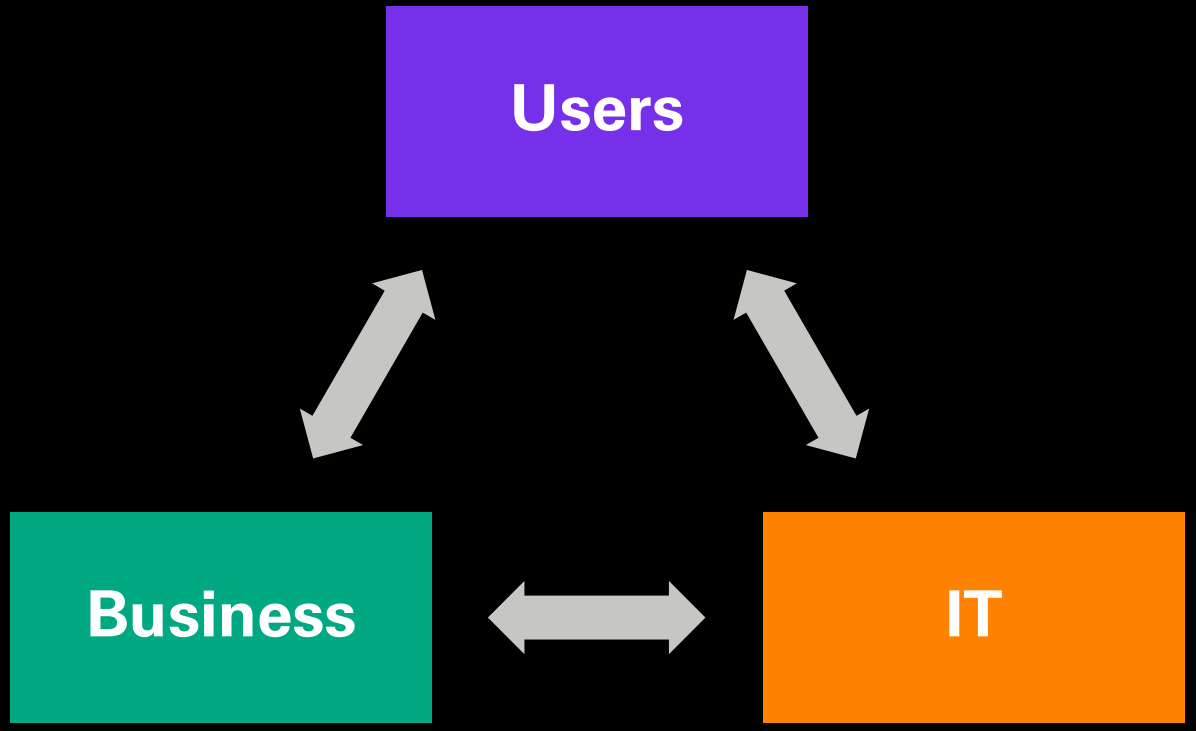
Source: EUC Forecast Report 2020

End user computing is growing at 12.8 % CAGR

Traditional Storage solution had the large share and it is declining

Hyper Converged solution growing rapidly and gaining market share

EACH AREA OF THE BUSINESS FACES DIFFERENT NEEDS AND CHALLENGES



User expectations

1. Reliable, always-on experience
2. Fast, responsive applications
3. My data and apps anywhere

Business imperatives

1. Enable users with security & compliance
2. Minimum total cost
3. Speedy ROI

IT realities

1. Expensive, siloed infrastructure
2. Demand spikes and login storms
3. Difficulty scaling
4. Risk of data loss/downtime

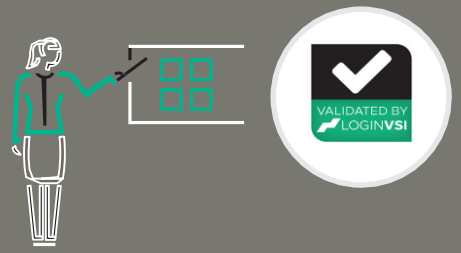
HOW TO CHOOSE THE RIGHT VDI SOLUTION

Identify User Requirements

Define workloads up front, including user requirements

1

Evaluate System Performance



Choose a proven solution, validated by industry-standard VDI tests

2

Size the Infrastructure Correctly

Start with the number of users supported and use cases involved

3

HPE SIMPLIVITY PROVIDES DENSITY, SCALE AND RESILIENCY FOR VDI

Unmatched and independently validated client virtualization performance for a superior user experience

- Defeat login storms with unparalleled performance (1000 logins in 1000 seconds)
- Ultra-fast desktop provisioning (1000 desktops provisioned in 70 minutes)
- Validated and certified by LoginVSI

More desktops on less hardware to reduce capital expenditure (CAPEX) and operational expenditure (OPEX)

- Highest desktop density at 250 desktops per node, without compromising performance or high availability
- Deploy full-clone desktop with the same efficiency and savings of linked clones

Linear scaling in affordable increments – from pilot to production

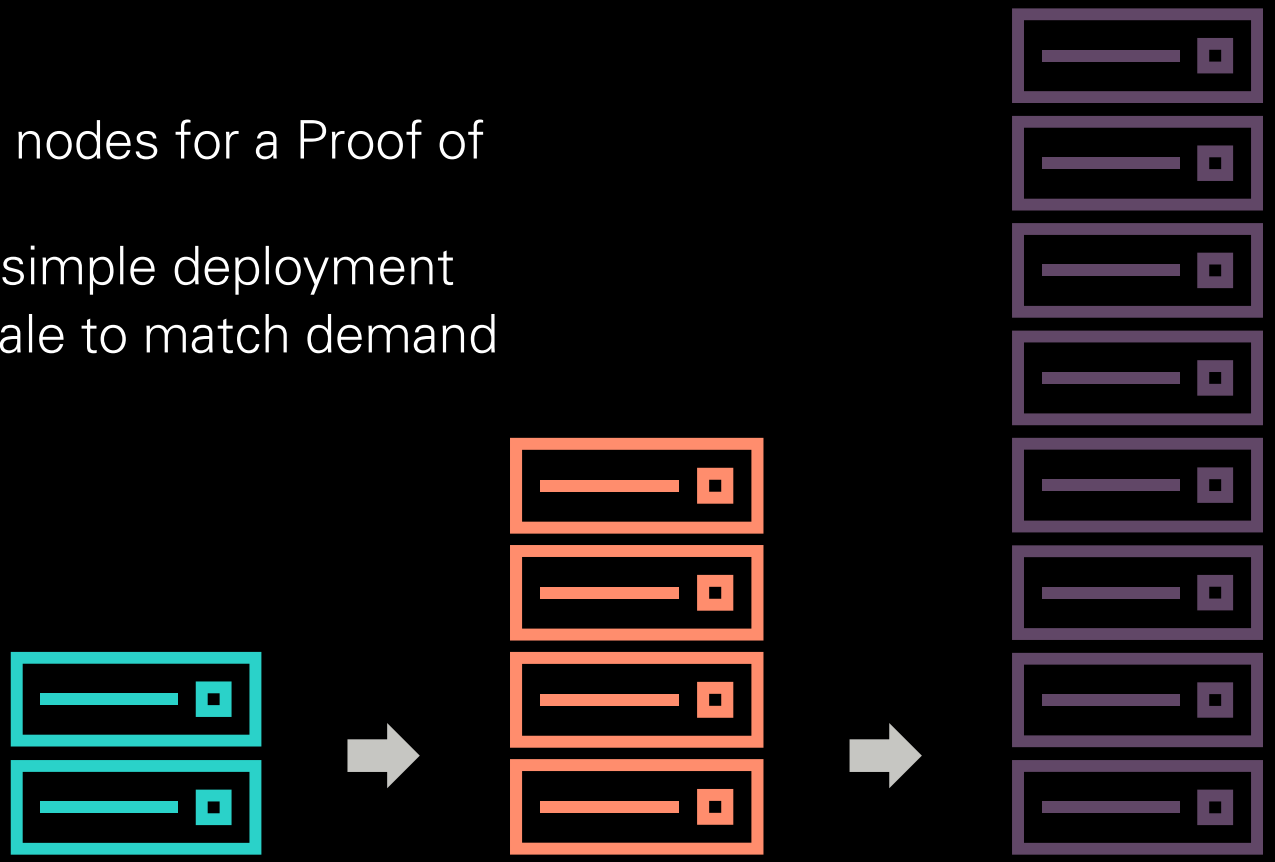
- Start small and scale up in affordable increments, starting at only two nodes
- Leverage your existing infrastructure to scale via compute nodes

Enterprise-class protection and resiliency

- Built-in data protection for all client virtualization workloads
- No single points of failure – resiliency to withstand component failure without VM downtime and node failure with no loss of data

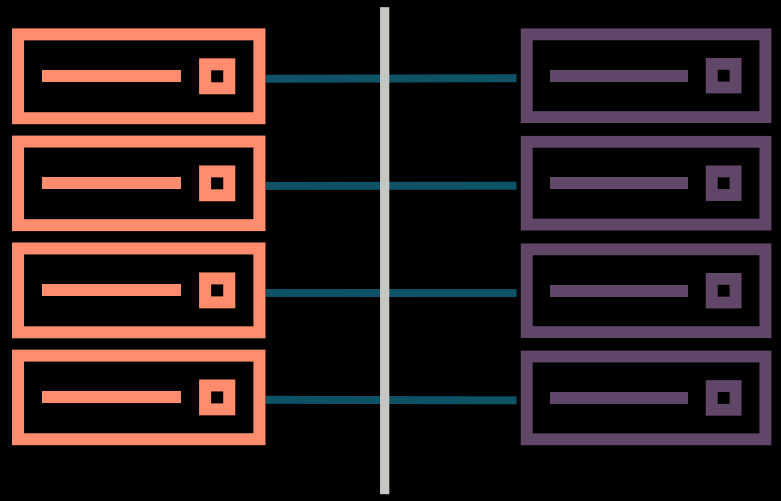
START SMALL AND SCALE OUT – FROM PILOT TO PRODUCTION

- Start at 2 nodes for a Proof of Concept
- Fast and simple deployment
- Linear scale to match demand



INDEPENDENTLY SCALE COMPUTE AND MEMORY

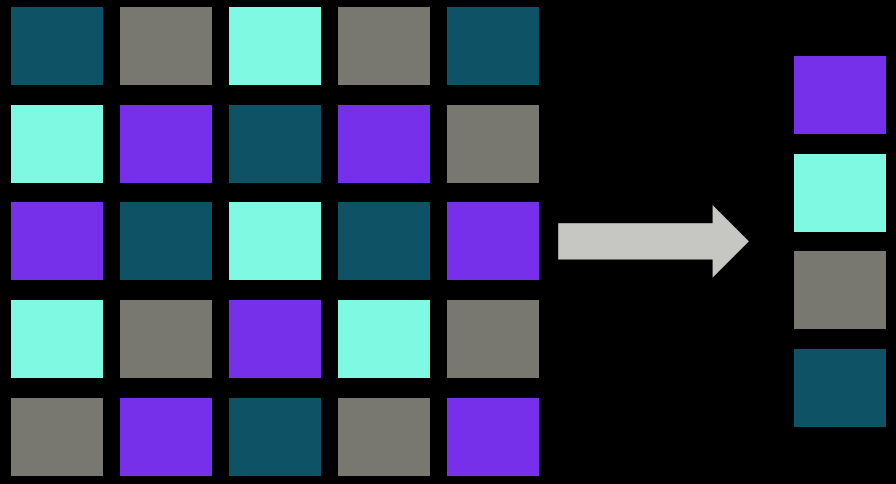
- Add Compute power when needed
- Supports GPUs for graphics users
- Leverage new or existing hardware
- Unique competitive differentiator
- Compute Nodes are supported even when you have just 2 HPE SimpliVity Nodes



HPE SIMPLIVITY ACCELERATES PERFORMANCE

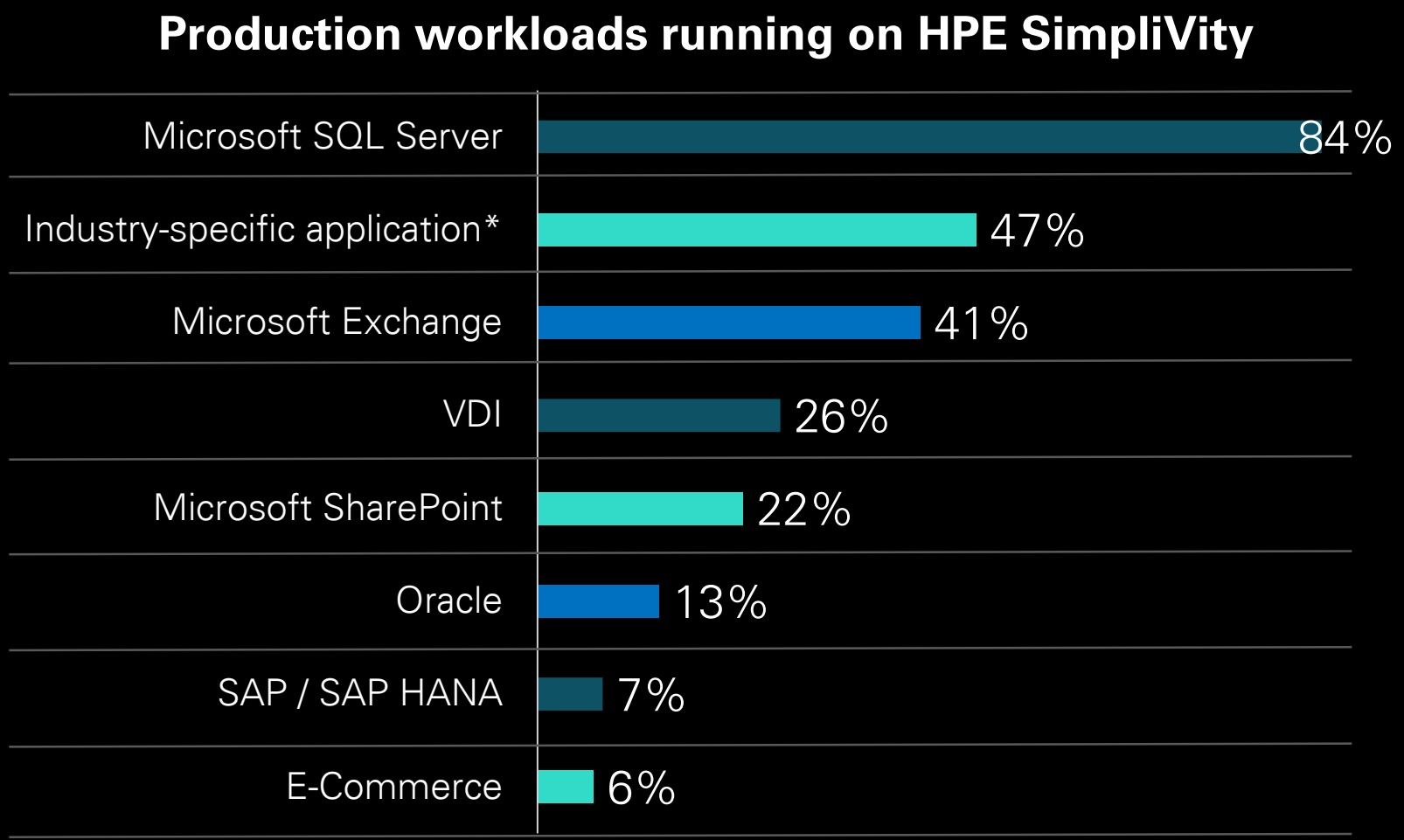
- Increased performance by eliminating IOPS
- Average efficiency of 40:1
- Solves VDI login "boot storms" for 1,000s of users

- In-Line Deduplication



- "The best I/O is the one you don't have to do." —Gene Amdahl

HPE SIMPLIVITY RUNS A VARIETY OF WORKLOADS INCLUDING VDI

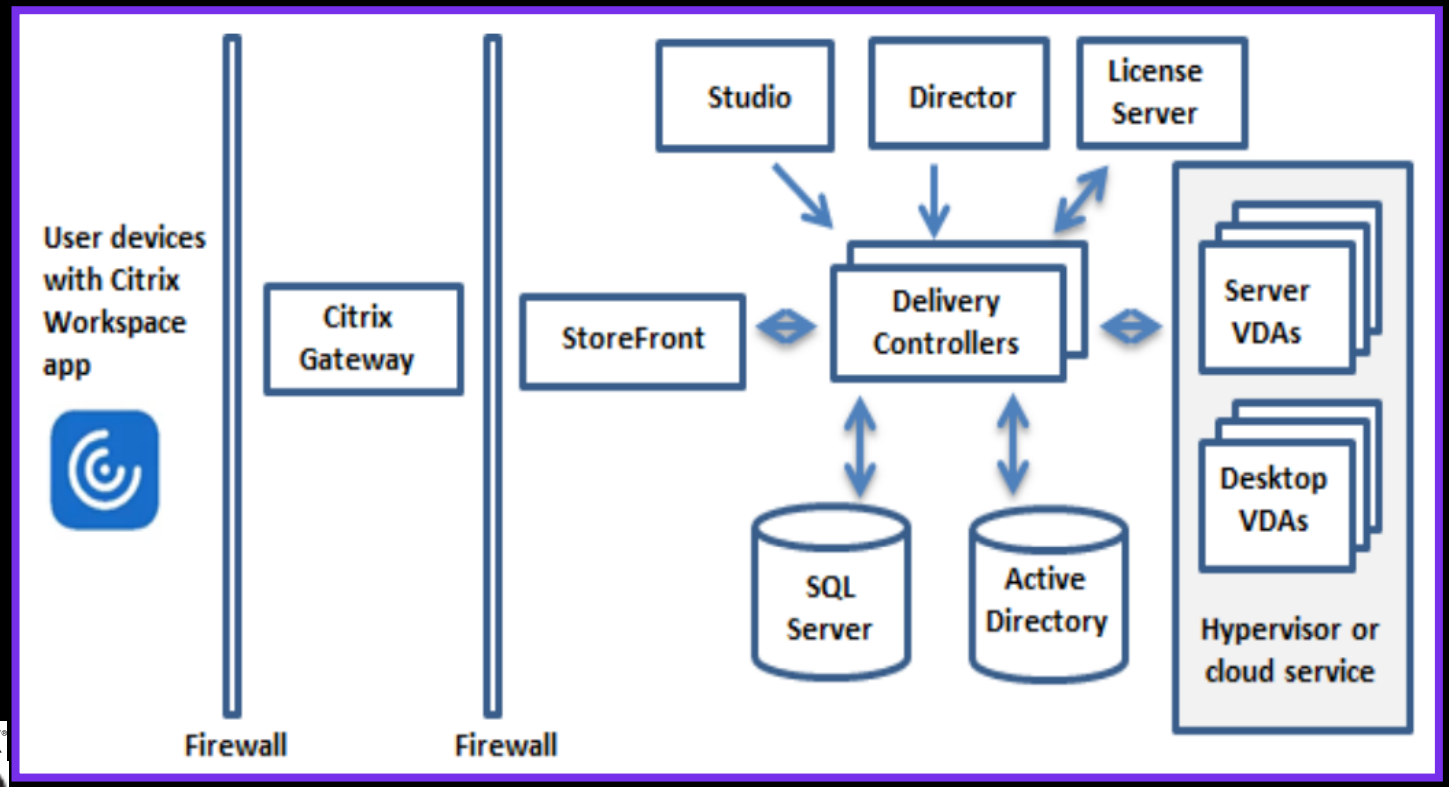


Notes: *e.g. 911 system, healthcare application, legal case management, CAD/CAM, etc.
Source: TechValidate TVID: 232-FC1-EA7, n=626, March 2020

TechValidate

PRIVATE CLOUD / CO-LOCATION WITH CITRIX

1. Jointly built solutions and strong alliance relationship
2. Scales to meet the needs of changing workloads, on your timetable.
3. Support for both MCS and PVS provisioning methodologies
4. Support HSD with Windows servers
5. Efficient and cost-effective BC/DR strategies
6. Validated by LoginVSI



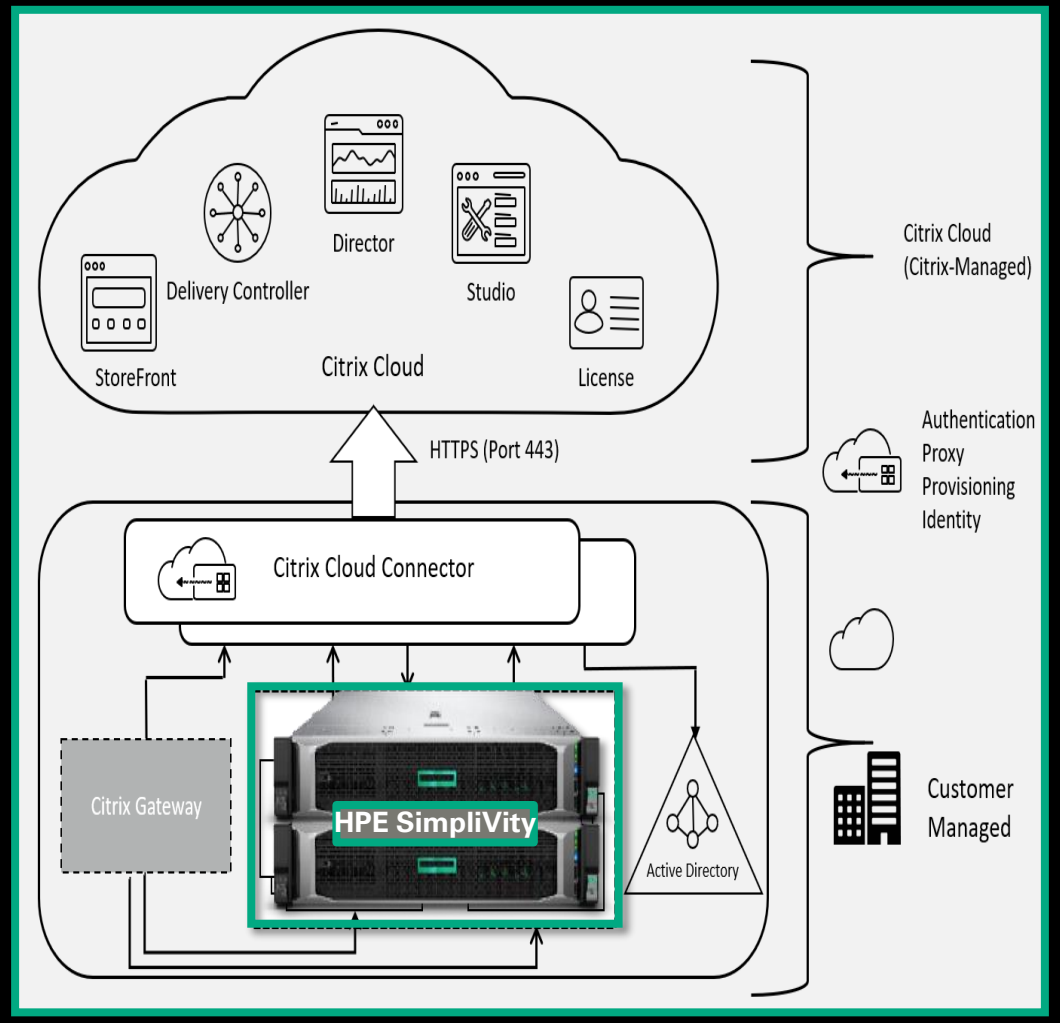
HPE SimpliVity (+ NVIDIA GPU)

HYBRID CLOUD WITH CITRIX CLOUD (CWA)

Hybrid deployment of Citrix Virtual Apps and desktop solution

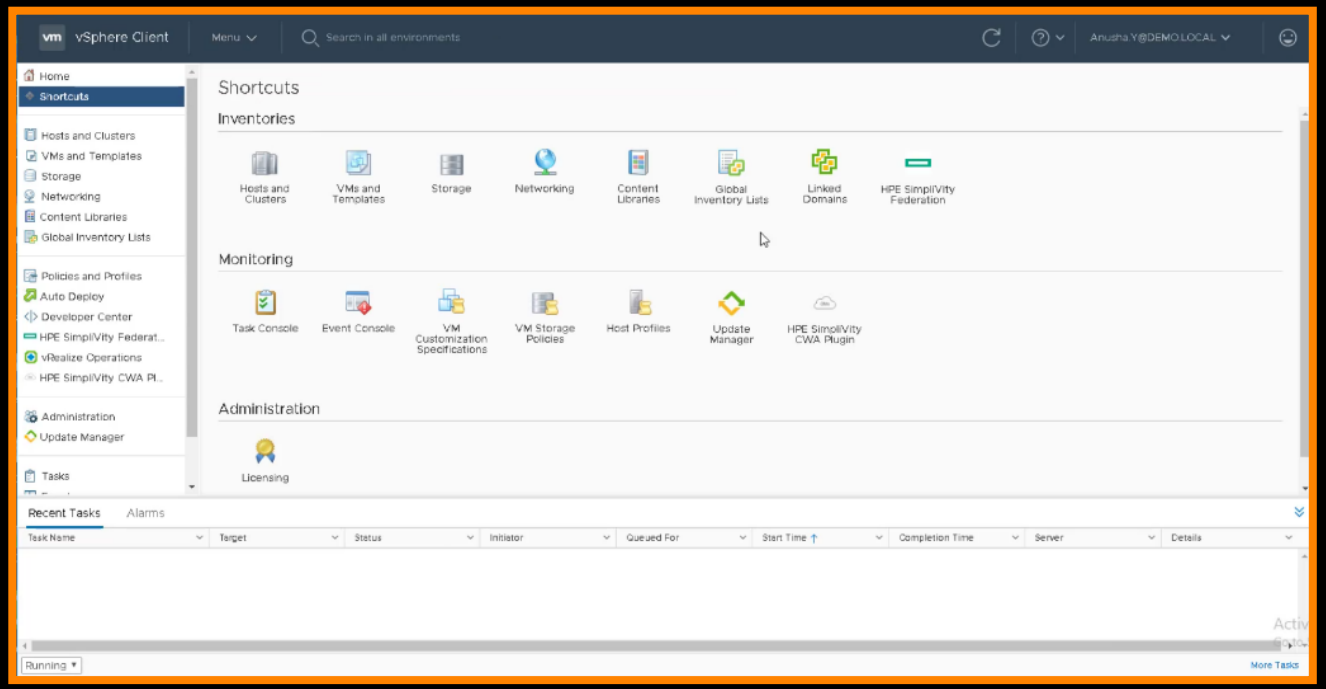
1. Citrix Cloud App and Desktop Service:
   a) Simplify management
   b) Improve security
   c) Faster provisioning

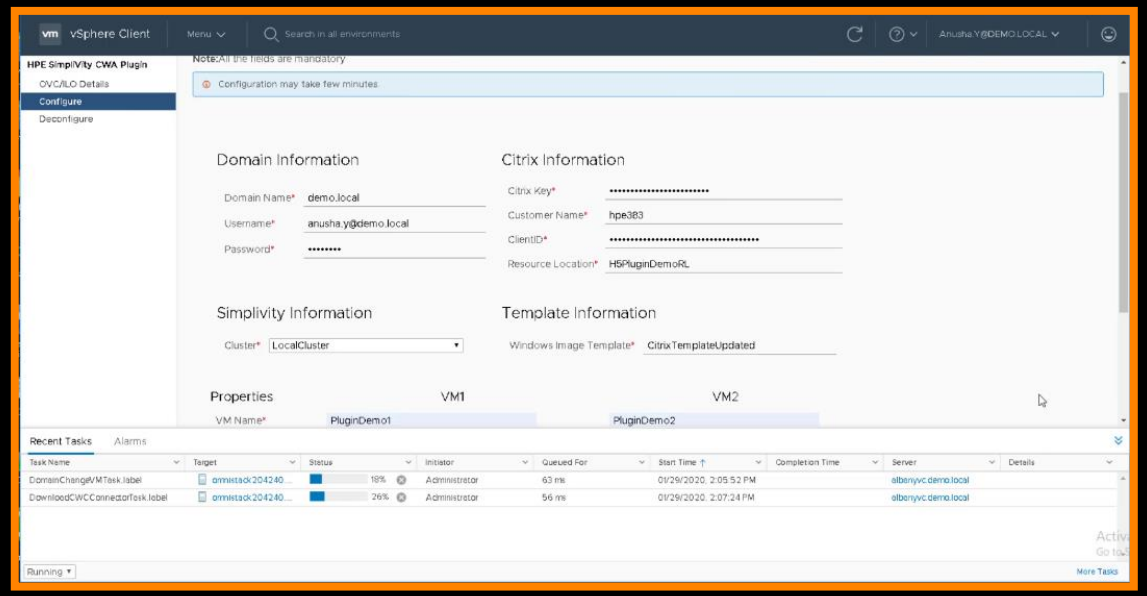
2. HPE SimpliVity integration for Citrix Cloud provides:
   a) Software integration for HPE SimpliVity that automates the deployment of Cloud Connector VMs
   b) Automate HPE SimpliVity connection to Citrix Cloud and registration as a XenDesktop/XenApp resource
   c) Leverages SimpliVity and Citrix Cloud APIs to automate deployment
   d) Executed directly through vSphere Web Client (VMware) plugin for SimpliVity



CITRIX PLUGIN

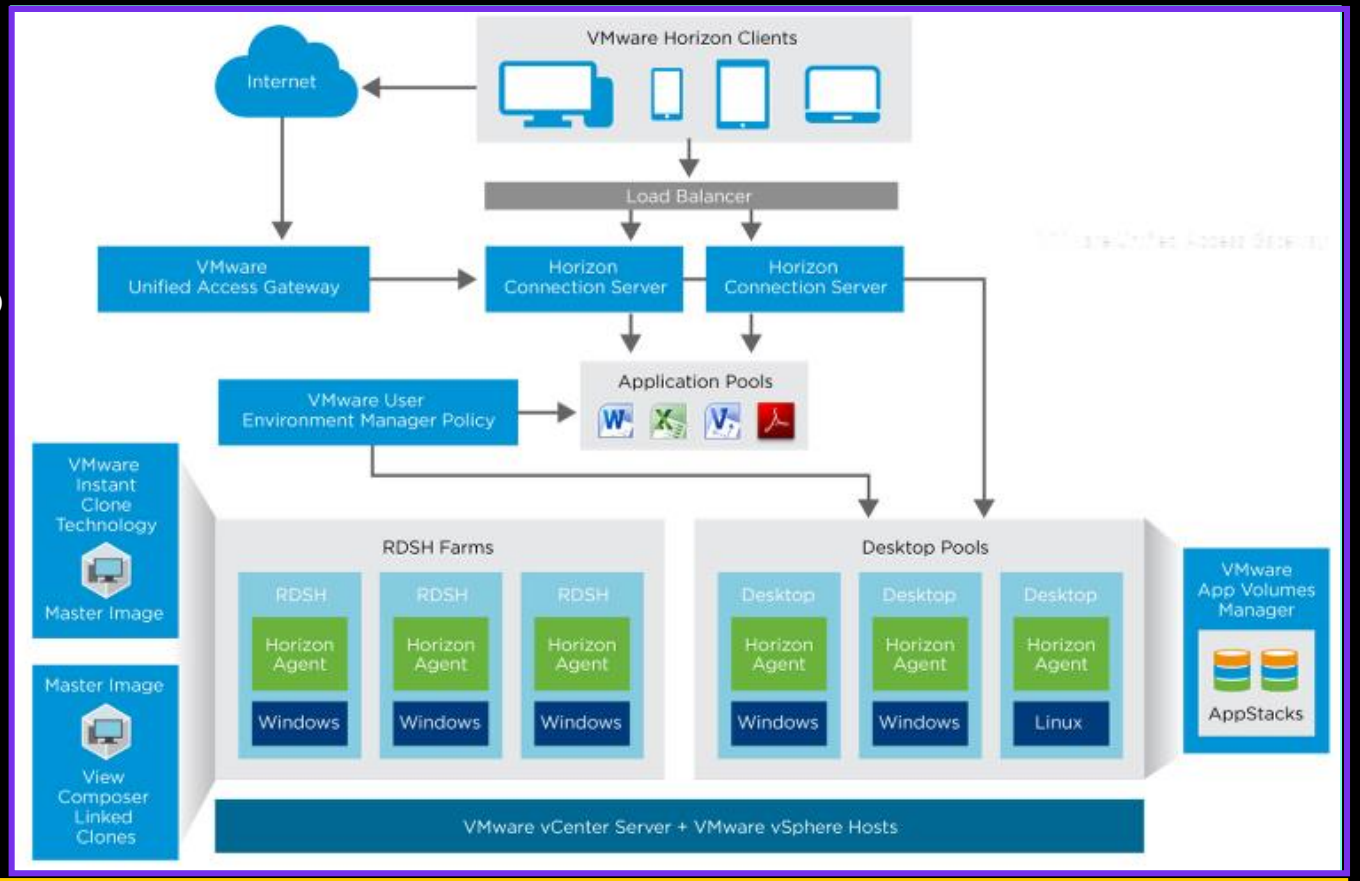
- Hypervisor support:
  - vSphere 6.5/6.7 – Flex and HTML5
- Platform support:
  - All HPE SimpliVity platforms
- Download:
  - Plug-in available for download: https://github.com/HewlettPackard/SimpliVity-Citrix-VCenter-Plugin
- Maintenance:
  - Bugs and enhancement requests tracked via HPE GitHub
  - Plugins maintained directly on GitHub with periodic updates/patches
- Supports newer versions of vCenter, and Citrix as supported by the platform





PRIVATE CLOUD / CO-LOCATION WITH HORIZON VIEW

1. Simplified deployment with hyperconverged building blocks.
2. Ability to start small and scale out in affordable increments—from pilot to production.
3. Support for instant clones (new)
4. Support for App volumes
5. Efficient and cost-effective BC/DR strategies
6. Validated by LoginVSI

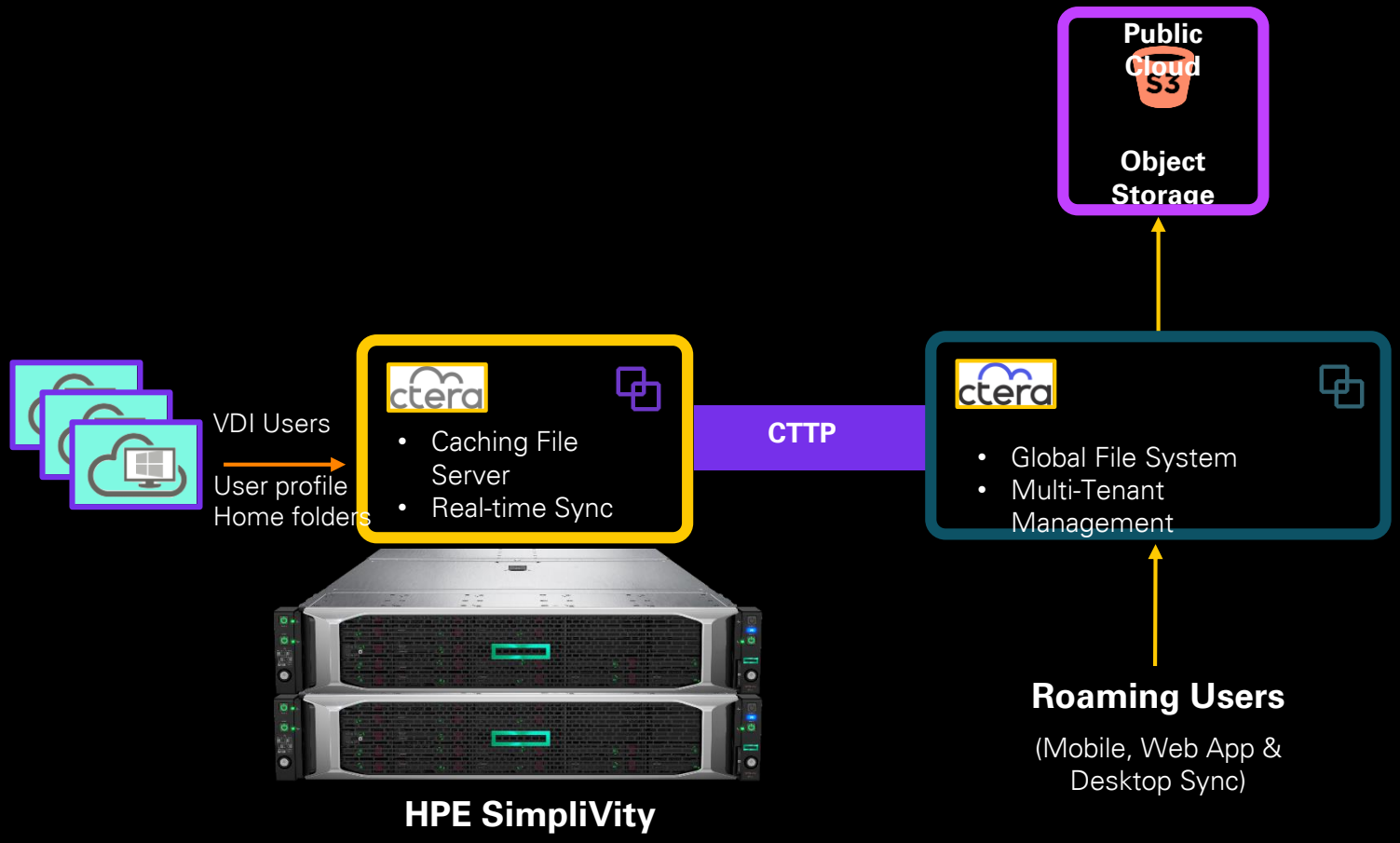


VMware vCenter and VMware vSphere


OR


USER DATA ON GLOBAL FILE SYSTEM WITH CTERA

- ✓ CTERA Enables Mobile Access to VDI Folders & Shares
- ✓ Significant Productivity Boost, Zero Security Compromise
- ✓ Global File System enabling remote productivity from any site
- ✓ Uses Intelligent Caching Technology to save on VDI desktop storage



VALIDATED AND CERTIFIED BY LOGIN VSI

- Login VSI is the industry standard for client virtualization performance testing
- The validation involves in-depth auditing of performance results
- HPE SimpliVity solutions have completed validation more than any other vendor for both Citrix and VMware
- Consistently publishing the results for the past 5 years
- All new SimpliVity platforms are validated
- Performance data is available for public access
  - Unmatched desktop density
  - Over 67% or the results are HPE SimpliVity
  - Linear Scale with node addition

Validated by Login VSI

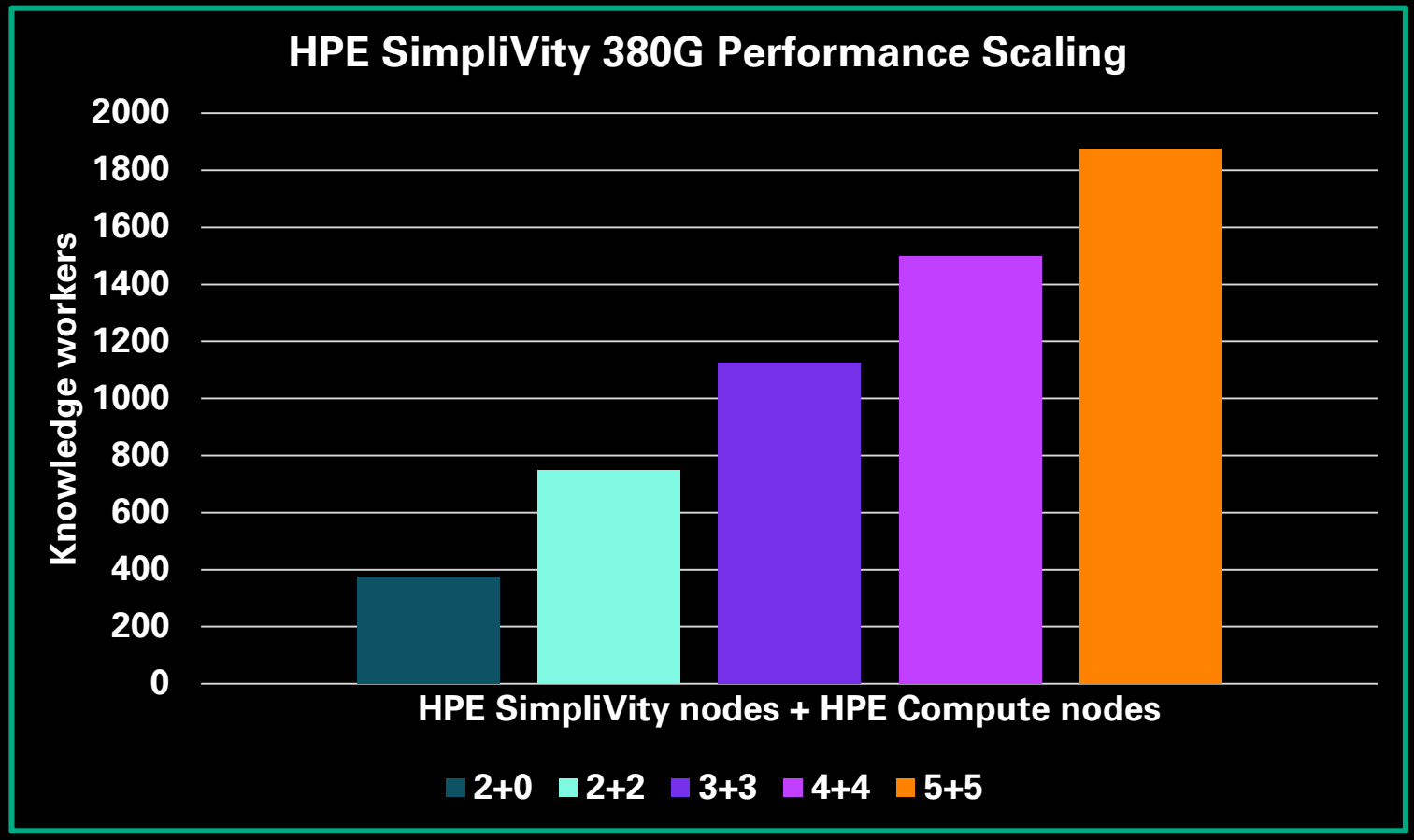
Published by:	Title:	Date:
HPE Simplivity	**HPE Reference Architecture for Citrix Virtual Apps and Desktops 7 on HPE SimpliVity 380 Gen10 G**	March 2020
VMware	**VMware Horizon 7.7 on VMware vSAN 6.7 using VMware Cloud Foundation**	Oct 2019
HPE SimpliVity	**Citrix Virtual Apps and Desktops 7 1808 on HPE SimpliVity 380 Gen10**	June 2019
Pivot3	**Pivot3 Acuity with Citrix Virtual Desktops and Microsoft Windows 10**	March 2019
HPE SimpliVity	VMware Horizon 7.4 on HPE SimpliVity 2600 **Blog** | **Reference Architecture**	June 2018
HPE SimpliVity	Citrix XenDesktop 7.13 on HPE SimpliVity 380 **Whitepaper** | **Reference Architecture**	June 2017
Nutanix	**Citrix on Nutanix AHV** | **Webinar**	May 2017
SimpliVity	**VDI Without Compromise with SimpliVity OmniStack and Citrix XenDesktop**	May 2016
SimpliVity	**VDI Without Compromise with SimpliVity OmniStack and VMware Horizon View**	Oct 2015

SUPPORT MULTIPLE NVIDIA TESLA GPUS FOR HPE SIMPLIVITY

	Tesla P40	Tesla M10	T4 NEW
Use case	VIDIA® Quadro® vDWS (mid to high)	User-density optimized	Entry to mid-range Quadro workstations
Number of GPUs	1 NVIDIA Pascal™ GP102	4 NVIDIA Maxwell™ GPUs	1 NVIDIA Turing® GPU
Total NVIDIA CUDA® cores	3840	2560 (640 per GPU)	2560
Total memory size	24 GB GDDR5	32 GB GDDR5 (8 GB GPU)	16 GB GDDR6
Max power	250W	225W	70W
Form factor	PCIe 3.0 dual slot	PCIe 3.0 dual slot	PCIe 3.0 single slot (rack servers)
Cooling solution	Passive	Passive	Passive

LINEAR SCALING

- Proven linear Scale performance
- HPE SimpliVity is the only HCI architecture that can add compute node with 2 node configuration
- Superior Storage performance when addition compute nodes provide linear scaling
- Significant cost reduction by adding compute nodes



工研院機械所 以HPE SIMPLIVITY 380 作為研發系統基礎 打造智慧車輛研發搖籃

工研院機械所以 HPE SimpliVity 380 作為研發系統基礎打造智慧車輛研發搖籃

工業技術研究院機械與機電系統研究所導入 HPE SimpliVity 380 超融合系統作為通用研發環境的基礎架構，提供高彈性、穩定可靠且易於管理的運算資源供各項分析運算迅速完成

台灣的工業技術實力全球有目共睹，提供豐沛研發能量的工業技術研究院扮演著重要的推手，自 1973 年成立以來，工研院透過科技研發帶動產業發展，進而為台灣創造經濟價值，累積超過三萬件專利，創新育成多達 280 家企業，隨著物聯網與人工智慧興起，工研院也積極投入耕耘，擘劃「2030 技術策略與藍圖」，致力於智慧產業的發展，為台灣經濟發展帶來更好的未來。

進入智慧產業的時代，工研院機械所亦有投身電動車與自駕車等領域研發，智慧車輛技術組經理王詠辰指出，智慧車輛研發需執行到許多領域的研究分析工作，像是動力研究、電力設計、流體力學...等等，這些工作需要仰賴大

https://www.ithome.com.tw/pr/137151

Q&A