

Christoph Hesse Senior Manager \$\cdot +49 89 4208 - 3150 Christoph.Hesse@ingrammicro.com

#### **Dell Technologies Sales Team**



Thomas Mack Supervisor Sales \$\(\chi\_{+49}\) 89 4208 - 2537 ☐ Thomas.Mack@ingrammicro.com



# IN RAM

Dell Technologies Business Management Team

Senior Business Development Manager

Martina.Kern@ingrammicro.com

Martina Kern

Wir unterstützen Sie kompetent und persönlich!

#### Dell Technologies Pre-Sales Team

Nikola Grujicic

System Engineer

Dell Technologies Außendienst

Manfred Honsdorf

Key Account Manager

C +49 172 - 102 9012

\$ +49 89 4208 - 1035



Michael Fischhold System Engineer \$\cdot +49 89 4208 - 2797 Michael.Fischhold@ingrammicro.com

Nikola, Grujicic@ingrammicro.com



Özhan Bakar Technical Sales Consultant \$\cdot +49 89 4208 - 2728 ○ Oezhan.Bakar@ingrammicro.com

Technical Sales Consultant

C +49 89 4208 - 3351

Katrin Klose



Martina Geßl Senior Sales Consultant \$\cdot +49 89 4208 - 1470 Martina.Gessl@ingrammicro.com



Atilla Kumbaraci Sales Consultant \$\cdot +49 89 4208 - 3055 Atilla.Kumbaraci@ingrammicro.com

Jutta Obermeier

Michael Stalmach

Sales Consultant C +49 89 4208 - 3234



Thorsten Lieser Business Development Manager \$\cup +49 89 4208 - 2136 Thorsten, Lieser@ingrammicro.com

Rouven Scharrenberg

\$\chi\_+49 89 4208 - 2071

Ludwig Steffel

Business Development Manager

Rouven.Scharrenberg@ingrammicro.com

\$\cdot +49 89 4208 - 1306





Max Riedel Senior Sales Consultant C +49 89 4208 - 1684 Max.Riedel@ingrammicro.com

Natasa Stojanovic

C +49 89 4208 - 3285

Sales Consultant



Technical Sales Consultant \$ +49 89 4208 - 1035 



Felix Schüler Sales Consultant C +49 89 4208 - 3171 Felix.Schueler@ingrammicro.com

Michael.Stalmach@ingrammicro.com





Product Manager Marketing \$\cdot +49 89 4208 - 1785 Ludwig.Steffel@ingrammicro.com



Ramona Klix Marketing Manager \$\cup +49 89 4208 - 3386 Ramona.Klix@ingrammicro.com



Martin Schnelldorfer Senior Key Account Manager + 49 152 - 288 88301 Martin.Schnelldorfer@ingrammicro.com

Manfred.Honsdorf@ingrammicro.com



Hristiana Staenova Sales Consultant \$ +49 89 4208 - 3747 Hristiana, Staenova@ingrammicro.com

Natasa.Stojanovic@ingrammicro.com





Markus Ungnadner Sales Consultant \$ +49 89 4208 - 34611 Markus.Ungnader@ingrammicro.com





## The Way We Work Has Changed

The workforce is evolving









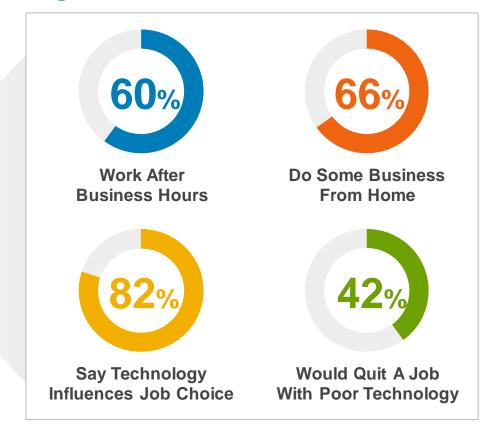
The work happens anytime, anywhere















# The Real Challenges that IT Faces Today





Virtualizing Desktops and Applications Solves Many

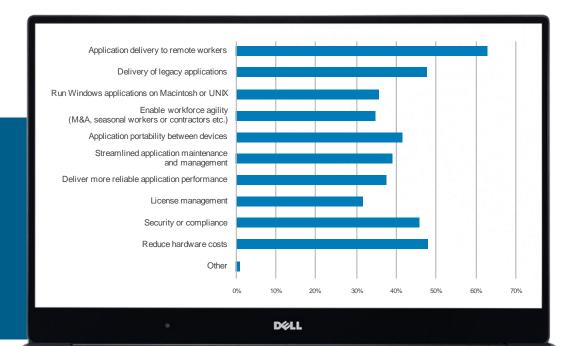
**Business Challenges** 

Access and flexibility

Simplified Management

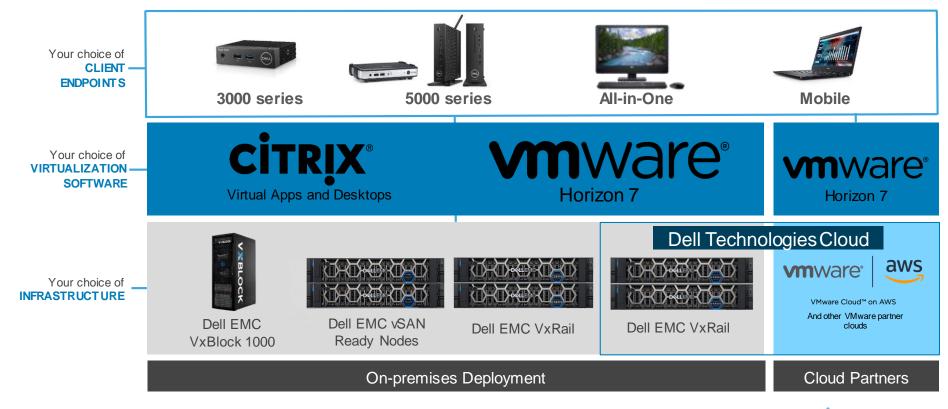
Security

Cost reduction



## Ready Solutions for VDI

VDI simplified for every use case





## Industry-leading thin clients from Dell Wyse

### **Wyse 3040 Thin Client**

Quad-core performance on a budget



- Dell's smallest and lightest thin client with flexible mounting options for space constrained environments
- Great multimedia capabilities, and essential protocol and peripheral support
- Easy to manage through Wyse Device Manager and Wyse Management Suite; administration easily scales from just a few to tens of thousands of thin clients

### **Wyse 5070 Thin Client**

Most versatile, scalable and capable thin client



- Simplify standardization across the enterprise with a single platform with extraordinary scale on performance, configurability and deployment
- Great performance today and in the future across a variety of use cases
- True 4K graphics boldly takes thin clients' visual experience into the big time

Dell offers the most extensive selection of secure, easy-to-manage thin clients to suit your budget, application, and performance needs



## Dell Wyse thin clients: choice of OS and firmware



- ThinOS is the most virus and malw are resistant thin/zero client firmw are
- Unified Communications Skype for business
- Bio-metric fingerprint authentication
- Low to no management overhead
- Easy to deploy & w orks out of the box
- Instant ON with rich multimedia
- Improved authentication with EAP-FAST
- No local application support



#### **ThinLinux & Linux**

- Supports unified communications platform such as Skype for Business & VXMF
- Supports local Linux applications
- · Good peripheral support
- Flexible management options via Wyse WDM & INI file management
- · Based on open source
- Supports x86



#### Windows Embedded

- Supports unified communications platform such as Lync
- · Supports local Windows applications
- Robust peripheral support
- Robust security features. Enhanced protection with DDP | Threat Defense
- Flexible management options via Wyse WDM & WCM and support for SCCM
- · Based on Microsoft Windows OS
- · Supports x86 architecture only

easier to manage / more secure

more flexible / more peripherals

## Dell Wyse thin clients: key benefits

## **SECURITY**



- Significantly reduced attack surfaces at the client
- All data stored on server for security and redundancy
- Addresses logging and tracking requirements
- Meets Compliance and audit requirements
- · Data center or cloud based

## **MANAGEABILITY**



- Devices can be managed in cloud or data center
- Higher reliability and less complexity
- Fault tolerance for data and apps
- Less IT staff required to manage

## **TOTAL COST**



- Lower cost devices
- Significant power savings vs. PCs
- Significantly less IT staff required to manage vs. traditional PCs
- Longer lifespan vs. PCs
   (4 year → 7 Years)





# Why partners choose Dell Technologies for VDI

Flexible solutions tailored to your organization's goals







Only end-to-end provider



Easiest to plan, deploy and run



Most secure, reliable and manageable



Global experience partner











# Why Dell EMC?

The combination of Dell and EMC brings together two industry-leading companies with strong reputations for **value and innovation**. Dell EMC holds leadership positions in:



- **#1** converged infrastructure<sup>3</sup>
- #1 in traditional and all-flash storage4
- #1 virtualized data center infrastructure5
- (#1) cloud IT infrastructure<sup>6</sup>

- server virtualization and cloud systems management software (VMware)<sup>7</sup>
- #1 in data protection8
- #1 in software-defined storage9

3 IDC WW Quarterly Converged Systems Tracker, June 2016, Vendor Revenue — EMC FY 2015; 4 IDC WW Quarterly Enterprise Storage Systems Tracker, June 2016, Vendor Revenue — EMC FY 2015; 5 Dell EMC Annual Report, 2015; 6 IDC WW Quarterly Cloud IT Infrastructure Tracker, Q1 June 2016, Vendor Revenue — EMC FY 2015; 7 IDC WW Virtual Machine and Cloud SystemMarket Shares 2015, July 2016; 8 Dell EMC Pulse, Gartner Recognizes EMC as a Leader in the 2016 Data Center Backup and Recovery Software Magic Quadrant, June 2016; 9 IDC white paper, "Software Defined Storage: A Pervasive Approach to IT Transformation Driven by the 3rd Platform," November 2015.





# Dell EMC Ready Architectures for VDI - Positioning

HCI Designs	Converged Designs	Ready Node Designs		
VxRail Appliance	VxBlock System 1000	v SAN Ready Nodes		
vmware citrix	<b>vm</b> ware <b>citrix</b>	vmware citrix		
Turn-key VDI appliance	For customers requiring a solution for multiple high-value workloads and VDI at enterprise-scale	Tight integration of VMw are softw are and choice of hardw are, reconfigurable over lifecycle		
ESXi on vSAN	ESXi	ESXi on vSAN		
Horizon & Citrix Virtual Apps and Desktop	Horizon & Citrix Virtual Apps and Desktop	Horizon & Citrix Virtual Apps and Desktop		
<ul> <li>VxRail V &amp; E Series</li> <li>V series based on R740xd 14<sup>th</sup> Gen PowerEdge</li> <li>Hybrid, All Flash</li> <li>GPU M10/M60/T4</li> <li>3-64 nodes/cluster</li> <li>~400 seats with a 3 node minimum</li> <li>Deduplication and data compression</li> </ul>	<ul> <li>Xtremio X2 all-flash storage (PowerMax and Unity also)</li> <li>Isilon for file storage</li> <li>Cisco compute and networking</li> <li>GPU M10/P40 (T4 coming soon)</li> <li>3-64 nodes/cluster</li> <li>Deduplication and data compression</li> </ul>	<ul> <li>R640, R740xd-3.5"</li> <li>Hybrid, All Flash</li> <li>GPU M10/M60</li> <li>3-64 nodes/cluster</li> <li>Deduplication and data compression</li> </ul>		
Automated deployment     Integrated Lifecycle Management     Rapid deployment	Fully engineered system from the factory     Granular scalability of compute and storage     Management simplicity through AMP and     VxBlock Central 2.0	Control over the system build     Reduce cost and complexity     Use existing management tools		



## Dell EMC Ready Architectures for VDI

Dell EMC Ready Architectures for VDI on vSAN-based appliances provide a quick and easy way to simplify and extend your VMware environment. Since Ready Architectures for VDI combine compute, storage, virtualization, and management, these solutions are ideal for VDI.

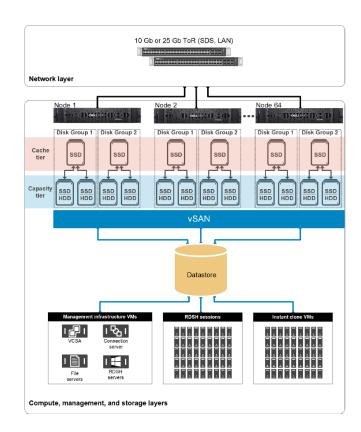
The Ready Architectures for VDI are built on industry-leading Dell EMC VxRail appliances or vSAN Ready Nodes appliances. These true hyper-converged infrastructure (HCI) platforms provide performance, flexibility, and scale for VDI environments.

- Dell EMC recommends VxRail appliances for an enhanced VDI solution that leverages a wide range of software, tools, and resources co-developed by Dell EMC and VMware. The VMware hyper-converged software is vSphere-ready and based on vSAN Software-Defined Storage (SDS). The Dell EMC deployment and support tools integrate the software management within VxRail Manager. Data protection and replication are included and can support either hybrid or all-flash storage configurations.
- Dell EMC vSAN Ready Nodes do not include the full automation suite that is available in VxRail
  appliances, but they provide more flexibility in platform choices. vSAN Ready Nodes offer the
  confidence that your pre-validated configuration will work with vSAN technology as well as the
  VMware Horizon 7 suite.

Installing VMware Horizon 7 with its VDI components on VxRail appliances or vSAN Ready Nodes enables organizations to quickly deliver Microsoft Windows virtual desktops or server-based hosted shared sessions on a wide variety of endpoint devices.

Dell EMC Ready Architectures for VDI

<u>Designs for VMware Horizon on VxRail</u> <u>and vSAN ReadyNodes</u>







# Dell EMC VxRail delivers efficient business expansion





ACCELERATES
TRANSFORMATION



SEAMLESS INTEGRATION

#### ONE

SINGLE END-TO-END LIFECYCLE SUPPORT



FULLY LOADED SERVICES



HIGHLY CONFIGURABLE









# VxRail on latest generation Dell EMC servers

E665/F/N & E560/F/N	P570/F & P580N	V570/F	D560/F	<b>S</b> 570	G560/F
Our everything platform	Performance focused	Optimized for VDI	Durable & rugged	Storage dense	Compute dense
Single socket 2 <sup>nd</sup> Gen AMD EYPC™ 8 to 64 cores Or Single or dual Intel® Xeon® Scalable Gen 1 and Gen 2 4 to 56 cores  * Up to 3TB of Optane Persistent Memory	Single, dual, and quad Intel® Xeon® Scalable Gen 1 and Gen 2 processors, with up to 112 cores Up to 6TB of Optane Persistent Memory	Dual Intel® Xeon® Scalable Gen 1 & 2 only Up to six GPUs with five different NIVIDA Tesla and Quadro GPU options	MIL-STD 810G certified to withstand extreme heat, sand, dust and vibration  Short depth only 20"  Certified cold start down to -15C & to run at up to 45C	Only series with 3.5" HDD Hybrid only	Eight Intel® Xeon® Scalable Gen 1 or Gen 2 processors in 2U
R6515 10 x 2.5" all NVMe or 8 x 2.5" all flash / hybrid R640 10 x 2.5" drives	R740XD/R840 24 x 2.5" drives	R740XD 24 x 2.5" drives	XR2 8 x 2.5" drives	R740XD 12 x 3.5" plus 2 x 2.5" drives	C6400 with C6420 node 24 x 2.5" drives
10GbE or 25GbE Optane/NVMe/SAS cache All NVMe capacity FC HBA * NVIDIA T4 GPU * 48V DC PSU option	10GbE or 25GbE Optane/NVMe/SAS cache All NVMe capacity FC HBA 48V DC PSU option	10GbE or 25GbE SAS cache only FC HBA 220V – 240V AC only	10GbE or 25GbE Optane/NVMe/SAS cache	10GbE or 25GbE SAS cache only FC HBA 48V DC PSU option	10GbE Optane/NVMe/SAS cache 220V – 240V AC only

<sup>\*</sup> E560 only, not available on E665

## Dell EMC Ready Architectures on VxRail

#### VDI on HCI for customers wanting fully integrated solutions on native VMware

#### Solution benefits

- Predictable per-seat cost & performance, and linear scale to support a growing workforce
- Ideal for rapid deployments
- Scale rapidly with workload specific configurations per platform
- 16x Lower install and upgrade costs
- 30% TCO advantage over DIY HCI
- 42% Lower total cost of serviceability

#### Differentiation

- Single point of contact for deployment and support
- Integrated Lifecycle Management with a full suite of management software
- Deduplication and data compression
- Optimized Dell EMC hardware powered by VMware software

Available exclusively with VMware ESXi hypervisor

VMware Horizon or Citrix Virtual Apps and Desktop





VxRail V570: 2U, based on PowerEdge 740xd with optional

NVIDIA GRID M10 or T4 GPUs

Up to 3 double slot M10 or 6 single slotT4 GPU

VxRail E560: 1U, no GPU, for small or remote office

Choice of Hybrid or All Flash storage configurations

Available from 3 to 64 nodes per cluster

Services: Deployment, Integration, Support





# VxRail V570/570F VDI Optimized Systems

Based on Dell EMC PowerEdge R740xd

#### **GPU**

Minimum 1 and up to 3 PCle GPUs NVIDIA only (M10, P40, V100)

For VDI or AI up to 6 single slot NVIDIA T4

Note: Customers obtain and configure GPU SW and drivers vGPU requires vSphere Enterprise



FORM FACTOR Single system 2U	DISK CONFIGURATION 24x 12G SAS drive slots (2.5") Up to 4 disk groups with up to 5 capacity drives each
PROCESSORS Dual socket, Up to 28 cores/CPU	MAX CAPACITY 76.8TB SSD or 48TB HDD
MEMORY Up to 3,072 GB RAM (1,536 GB per processor)	POWER SUPPLIES 2000W 200-240V AC
ADDITIONAL NETWORK OPTIONS Up to 4 (reduces GPU card slots) 2x10GbE SFP+, 2x10GbE RJ45, 4x10GbE RJ45, 4x10GbE SFP+, 2x25GbE SFP28	BOOT BOSS with 2 x 240GB SATA M.2



## Dell EMC Ready Architectures on VMware vSAN Ready Node for VDI

Enable simplified client virtualization on VMware Horizon or Citrix Virtual Apps and Desktop

#### Highlights and benefits

- Predictable performance from the first to the last user
- Control over the system build and components
- Reduce cost and complexity
- Improved performance and user experience
- Use existing management tools and hardware platforms
- High-end virtualized graphics with 3x NVIDIA GRID GPU with M10 and M60

Setup in less than 15 minutes

Differentiation & Use cases

- For customers who value easiness and predictable scalability
- VDI deployments on VMware vSAN SDS technology and vSphere
- VMware Horizon and Citrix XenDesktop customers wanting simplified virtualized storage
- IT resources that do not necessarily include storage specialists

VMware vSphere, vCenter, ESXi, and vSAN

VMware Horizon or Citrix Virtual Apps and Desktop



PowerEdge R640, R740 and R740xd

NVIDIA GRID M10 or T4 GPUs

Choice of Hybrid or All Flash storage configurations

End-to-end reference architectures including end points





## Dell EMC Ready Architectures on VxBlock System 1000

#### A single platform for your mission critical workloads

#### Highlights and benefits

- Engineered system with low time-to-value
- Advanced Xtre melO storage features (including rich data compression and deduplication capabilities)
- Integrated file storage capabilities through optional inclusion of Isilon
- High-end virtualized graphics with NVIDIA M10 and P40 support (T4 coming soon)
- Ease of management through AMP hardware environment and VxBlock Central management software solution

#### Differentiation & Use cases

- Single, consolidated platform for multiple workloads where customer does not want HCI
- High user-count use cases with granular scalability of compute/storage
- Single, consolidated platform for multiple workloads which cannot be virtualized (bare metal requirements)
- Supports larger configuration maxima than HCI (more hosts per cluster)

#### **ESXi**

VMware Horizon or Citrix Virtual Apps and Desktop





Cisco USC rack and blade mounted server

NVIDIA GRID M10 and P40 (T4 coming soon)

Choice of Rich Data Services (Ytramol O. RowerMay

Choice of Rich Data Services (XtremelO, PowerMax, Unity, Isilon)

End-to-end reference architectures including end points





# NVIDIA GRID GPU's

Solutions for growing demand for graphics resources



## Growing demand for graphics resources

















2x

Number of applications that require graphics doubled since 2012\*



Over 60% of enterprise users access at least one graphics accelerated app\*

32%

Windows 10 requires a 32% increase in CPU consumption, compared to Windows 7\*\*

Source:









## Windows 10 and Modern Apps

Highest graphics requirement from any operating system to date

















Increase in graphics usage Windows 7 vs Windows 10





# NVIDIA Virtual GPU solutions deliver rich immersive user experiences





































#### GRID vPC and GRID vApps

Powered by the NVIDIA Tesla M10 and T4

- Deliver native user experiences across multiple devices
- Support rising graphics requirements of productivity apps and Windows 10
- Enhance user experience quality by 34%\*\*



# Quadro Virtual Data Center Workstation (vDWS)

Powered by the NVIDIA Tesla T4

- Meet the demanding performance needs of professional visualization users
- Enable broad workflow collaboration while securing data in the data center
- Quadro driver optimizations and capability





<sup>\*\*</sup>Based on User Experience testing by NVIDIA

<sup>\*</sup>NVIDIA virtual GPU software sold separately through Dell S&P and supported by NVIDIA directly

## How it works

#### NVIDIA Virtual GPU Products deliver a GPU Experience to every Virtual Desktop



## **NVIDIA** Whitepaper

- Entry Level Engineer / Design Reviewer
   (Small Objects / Assemblies / Approximately 10% of Users)
  - 4 GB RAM
  - 2 vCPUs (2.6 GHz)
  - 2-4 GB video RAM
  - Two 2560x1600 displays
- Mid-Level Engineer
   (Avg to Large Objects / All App Features / Approximately 80% of Users)
  - 8 GB RAM
  - 4 vCPUs (2.6 GHz)
  - 4-8 GB video RAM
  - Four 2560x1600 displays and/or One 3840 x 2160
- Advanced Engineer
   (Extremely Large objects / All App Features / Approximately 10% of Users)
  - 16 GB RAM
  - 8 vCPUs (3.2 GHz)
  - 8-16 GB video RAM
  - Four 2560x1600 displays and/or Two 3840 x 2160

- NVIDIA Virtual GPU Technology
  - https://www.nvidia.com/en-us/design-visualization/technologies/virtual-gpu/
- Purchasing Guide for NVIDIA vGPU Solutions https://www.nvidia.com/en-us/design-visualization/buy-grid/
- NVIDIA Tesla GPU Datasheets http://www.nvidia.com/object/grid-enterprise-resources.html#datasheet
- ► Application Deployment Guides and Solution Overviews

  http://www.nvidia.com/object/grid-enterprise-resources.html#guides
- Customer Success Stories
   http://www.nvidia.com/object/grid-enterprise-resources.html#case
- White Papers http://www.nvidia.com/object/grid-enterprise-resources.html#whitepapers
- ▶ Videos http://www.nvidia.com/object/grid-enterprise-resources.html#videos

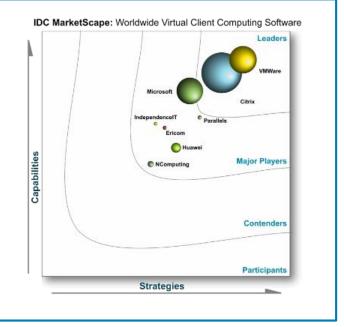




# VMware Horizon streamlines desktop and app delivery

# Horizon is the leading choice





Source: IDC, 2016 IDC MarketScape: Worldwide Virtual Client Computing Software 2016 Vendor Assessment, Nov 2016



## The VDI Stack

## **Technology Component**

**Thin Client** 

**User Personalization** 

**Application Delivery** 

**OS Image Delivery** 

Broker

Hypervisor

Compute

Storage

Network



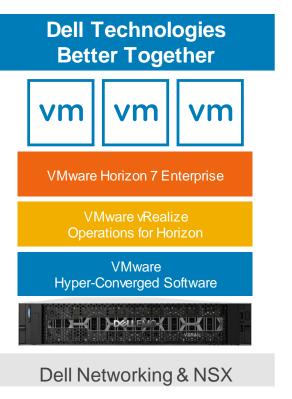
# Many Choices

Traditional	Technology Component		
HP / Dell EMC	Thin Client		
AppSense / RES	User Personalization		
Unidesk/App-V/SCCM	Application Delivery		
Image Management Tools	OS Image Delivery		
Citrix / Horizon	Broker		
VMware	Hypervisor		
Cisco / HP / Dell	Compute		
Dell EMC / Pure / HP / Nimble	Storage		
Cisco / Brocade / Juniper	Network		



# How Dell Technologies Simplifies VDI

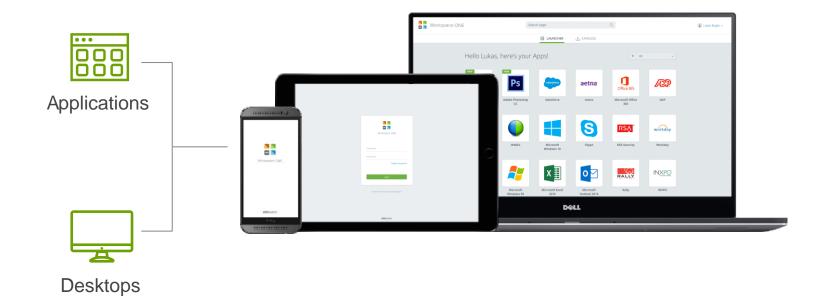
Traditional	Technology Component
HP / Dell EMC	Thin Client
AppSense / RES	User Personalization
Unidesk / App-V / SCCM	Application Delivery
Image Management Tools	OS Image Delivery
Citrix / Horizon	Broker
VMware	Hypervisor
Cisco / HP / Dell	Compute
Dell EMC / Pure / HP / Nimble	Storage
Cisco / Brocade / Juniper	Network





## Horizon Powers the Modern Digital Workspace

#### Delivers Windows and Business Critical Apps to any device, anywhere





## Horizon 7 – portfolio overview

#### **Horizon Standard**

Simple powerful VDI with great user experience

#### **Horizon Advanced**

Low-cost, high performance desktops and applications for physical and virtual machines

## **Horizon Enterprise**

Highest level of automation and management for private cloud delivery



## Horizon Apps – portfolio overview

## Horizon Apps Standard

Simple powerful app virtualization with a great user experience

## Horizon Apps Advanced

Powerful app virtualization with Just-in-Time management



## VMware Horizon 7 and Horizon Apps

### Comparison table

FEATURE	SUB-COMPONENT/ PRODUCT	HORIZON FOR LINUX	HORIZON STANDARD	HORIZON ADVANCED	HORIZON ENTERPRISE	HORIZON APPS STANDARD	HORIZON APPS ADVANCED
License Entitlement							
Concurrent User (CCU)		•	•	•	•	•	•
Named User				•	•	•	•
Desktop and Applications							•
Windows virtual desktops	VMware Horizon		•	•	•		
Linux desktops	VMware Horizon for Linux	•			•		
Unified workspace – XA, RDSH, SaaS, VMware ThinApp*	VMware Workspace ONE® Access™			•	•	•	•
Published applications (RDSH) and session-based desktops	RDS published apps			•	•	•	•
Packaged applications	VMware ThinApp		•	•	•	•	•
Blast Extreme protocol	VMware Horizon	•	•	•	•	•	•
Session collaboration	VMware Horizon				•		
Virtualization Pack for Skype for Business	VMware Horizon			•	•		•
Application and desktop access with single sign-on	VMware Workspace ONE Access			•	•	•	•
WORKSPACE ENVIRONMENT MA	NAGEMENT						
Desktop and Application Managem	nent						
Real-time application delivery	VMware App Volumes™				•		•
Just-in-Time delivery with Instant Clone Technology	VMware Horizon				•		•
Linked Clone technology	VMware Horizon		•	•	•		
User Environment Management							
User, profile, and policy management	VMware Dynamic Environment Manager™				•	•	•

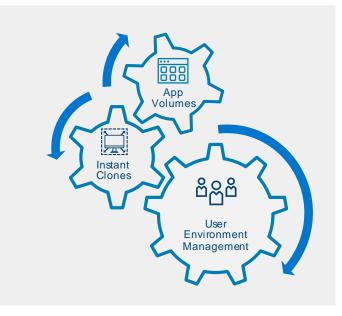


**D¢LL**Technologies

VMware JMP Technology

# Simplified management with JMP Technologies

Just-In-Time Management Platform - Eliminates Cost and Complexity



#### Step 1: Identify User



#### CEO Bob Smith

- 5 GB RAM
- 3 CPU
- Windows 10
- Office 365
- · Skype for Business



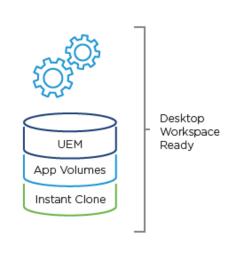
#### VP of HR Steve Higgins

- 4 GB RAM
- 5 CPU
- Windows 7
- Skype for Business

Step 2: Define Desktop Workspace

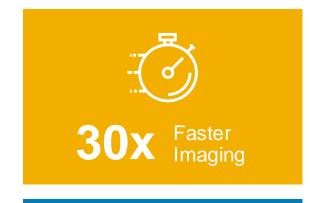


Step 3: JMP Dynamically Builds





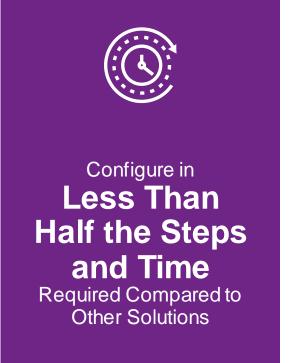
# Key Benefits of JMP Technologies







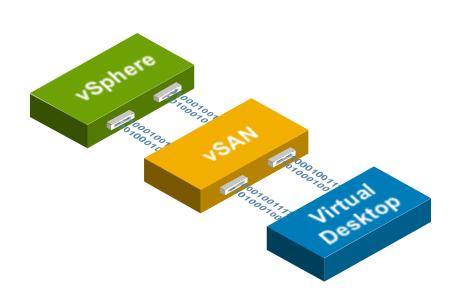






## Horizon on HCI: Industry Leading Performance

Best-in-class performance unmatched by any other hyper-converged solution





Kernel-level integration = **5X** better performance

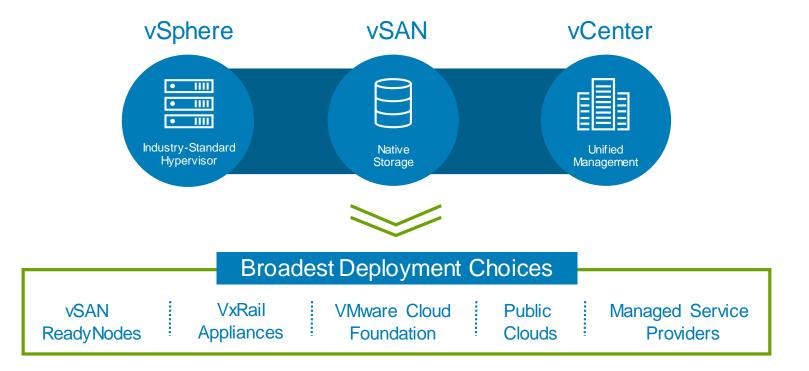
2X better CPU efficiency,3X better memory efficiency

Unbeatable desktop and app performance with all-flash and over one hundred thousand IOPS per node and sub-millisecond latency

**Best solution** for desktop and app workloads



## HCI Powered by VMware vSAN





## VxRail appliance V-Series VDI-optimized configurations

- The A3 configuration is perfect for small scale, POC or low density, cost-conscience environments.
- The B5 configuration is geared toward larger scale general purpose workloads, balancing performance and cost-effectiveness.
- The C7 is the premium configuration offering an abundance of high-performance features and tiered capacity that maximizes user density.



## A3

· CPU:

2 x 10-Core (4114)

RAM:
 192GB

(12 x 16GB @ 2400MHz)

· Disk:

4TB+ (Capacity\*)

GPU (Optional\*\*):
 Up to 3 x FLDW

**B**5

· CPU:

2 x 14-Core (5120)

RAM:

384GB

(12 x 32GB @ 2400MHz)

· Disk:

6TB+ (Capacity\*)

GPU (Optional\*\*):
 Up to 3 x FLDW

**C7** 

· CPU:

2 x 20-Core (6138)

RAM:

768GB

(24 x 32GB @ 2667MHz)

· Disk:

8TB+ (Capacity\*)

GPU (Optional\*\*):
 Up to 3 x FLDW

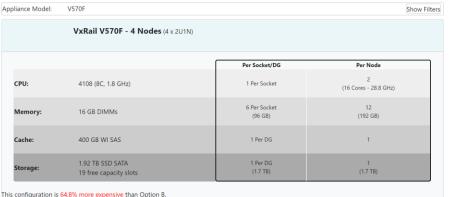
40 of 59

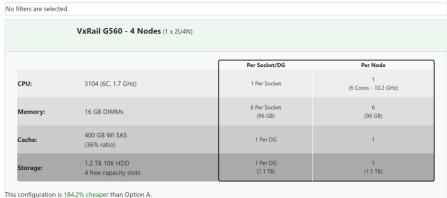
User Profile	vCPUs	ESXi Memory Configured	ESXi Memory Reservation	Screen Resolution	Operating System
Task Worker	1	2GB	1GB	1280 X 720	Windows 10 Enterprise 64-bit
Knowledge Worker	2	3GB	1.5GB	1920 X 1080	Windows 10 Enterprise 64-bit
Power Worker	2	4GB	2GB	1920 X 1080	Windows 10 Enterprise 64-bit
Graphics LVSI Power + ProLibrary	2	4 GB	4GB	1920 X 1080	Windows 10 Enterprise 64-bit
Graphics LVSI Custom – Density	2	4 GB	4GB	1920 X 1080	Windows 10 Enterprise 64-bit
Graphics LVSI Custom - Performance	4	8GB	8GB	1920 X 1080	Windows 10 Enterprise 64-bit

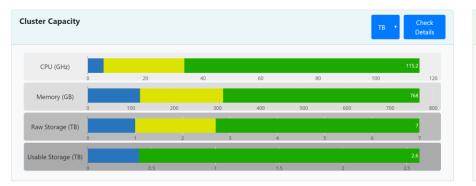


# VxRail Sizing for VDI Windows Desktops https://vxrailsizing.emc.com











Client virtualization customer success stories





Manufacturing

Hospitality Food Svcs.

Pharma and Medical Svcs. **Transportation** Shipping

ICT / XSP

Retail **Business Svcs**  Government Services

Government

Education







































































































Yale



































































































































# ?

# D&LLTechnologies PARTNER PROGRAM

?





Christoph Hesse Senior Manager \$\cdot +49 89 4208 - 3150 Christoph.Hesse@ingrammicro.com

#### **Dell Technologies Sales Team**



Thomas Mack Supervisor Sales \$\(\chi\_{+49}\) 89 4208 - 2537 ☐ Thomas.Mack@ingrammicro.com



# IN RAM

Wir unterstützen Sie kompetent und persönlich!

Dell Technologies Pre-Sales Team



Michael Fischhold System Engineer \$\cdot +49 89 4208 - 2797 Michael.Fischhold@ingrammicro.com



Özhan Bakar Technical Sales Consultant \$\cdot +49 89 4208 - 2728 ○ Oezhan.Bakar@ingrammicro.com

Technical Sales Consultant

Max.Riedel@ingrammicro.com

C +49 89 4208 - 3351

Senior Sales Consultant

C +49 89 4208 - 1684

Natasa Stojanovic

C +49 89 4208 - 3285

Sales Consultant

Katrin Klose

Max Riedel



Martina Geßl Senior Sales Consultant \$\cdot +49 89 4208 - 1470 Martina.Gessl@ingrammicro.com



Atilla Kumbaraci Sales Consultant \$\cdot +49 89 4208 - 3055 Atilla.Kumbaraci@ingrammicro.com



Technical Sales Consultant \$ +49 89 4208 - 1035 



Felix Schüler Sales Consultant C +49 89 4208 - 3171 Felix.Schueler@ingrammicro.com



Michael Stalmach Sales Consultant C +49 89 4208 - 3234 Michael.Stalmach@ingrammicro.com



Markus Ungnadner Sales Consultant \$ +49 89 4208 - 34611 Markus.Ungnader@ingrammicro.com

Dell Technologies Business Management Team



Martina Kern Senior Business Development Manager \$\cdot +49 89 4208 - 1306 Martina.Kern@ingrammicro.com



Thorsten Lieser Business Development Manager \$\cup +49 89 4208 - 2136 Thorsten, Lieser@ingrammicro.com

Rouven Scharrenberg



Business Development Manager \$\cdot +49 89 4208 - 2071 Rouven.Scharrenberg@ingrammicro.com



Ludwig Steffel Product Manager Marketing \$\cdot +49 89 4208 - 1785 Ludwig.Steffel@ingrammicro.com



Ramona Klix Marketing Manager \$\cup +49 89 4208 - 3386



Ramona.Klix@ingrammicro.com



DellEMC@ingrammicro.com 089 4208 - 2020



\$ +49 89 4208 - 1035





Philipp Lehnart System Engineer \$\cdot +49 172 - 285 9691 Philipp.Lehnart@ingrammicro.com

#### Dell Technologies Außendienst



Manfred Honsdorf Key Account Manager \$\colon +49 172 - 102 9012 Manfred.Honsdorf@ingrammicro.com



Gabriele Yordanova Sales Consultant \$\sum\_+49 89 4208 - 3755





Gabriele.Yordanova@ingrammicro.com

## Dell Wyse thin clients: choice of OS and firmware



#### ThinOS

- ThinOS is the most virus and malw are resistant thin/zero client firmw are
- Unified Communications Skype for business
- Bio-metric fingerprint authentication
- Low to no management overhead
- Easy to deploy & w orks out of the box
- Instant ON with rich multimedia
- Improved authentication with EAP-FAST
- No local application support



#### **ThinLinux & Linux**

- Supports unified communications platform such as Skype for Business & VXMF
- Supports local Linux applications
- Good peripheral support
- Flexible management options via Wyse WDM & INI file management
- Based on open source
- Supports x86



#### Windows Embedded

- Supports unified communications platform such as Lync
- · Supports local Windows applications
- Robust peripheral support
- Robust security features. Enhanced protection with DDP | Threat Defense
- Flexible management options via Wyse WDM & WCM and support for SCCM
- · Based on Microsoft Windows OS
- Supports x86 architecture only

easier to manage / more secure

more flexible / more peripherals



## Dell Wyse thin clients: key benefits

## **SECURITY**



- Significantly reduced attack surfaces at the client
- All data stored on server for security and redundancy
- Addresses logging and tracking requirements
- Meets Compliance and audit requirements
- Data center or cloud based

## **MANAGEABILITY**

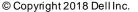


- Devices can be managed in cloud or data center
- Higher reliability and less complexity
- Fault tolerance for data and apps
- Less IT staff required to manage

## **TOTAL COST**



- Lower cost devices
- Significant power savings vs. PCs
- Significantly less IT staff required to manage vs. traditional PCs
- Longer lifespan vs. PCs
   (4 year → 7 Years)

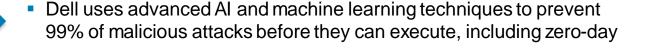


# Al-based anti-malware protection for virtual desktops and all end-points

## With Dell Endpoint Security Suite Enterprise and Threat Defense

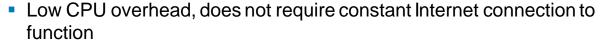


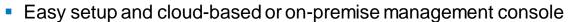
Prevents 99% of malware





Light weight and easy to manage







**Protection from** server to endpoint

- Prevent VDI threats at the server, in virtual desktops, before they can spread
- Protects data at rest and data in flight



Threat prevention for all endpoints

- Windows embedded thin clients, Windows PCs, Mac OC X systems
- Windows Servers