

WELCOME TO

**AVD**   
**DISCUSSION**  
**SERIES**

SESSION 4 - NERDIO AUTOMATION



# TODAY'S DISCUSSION FORMAT



The discussion is being recorded.



Please use the chat window to ask your questions.



We have our experts on hand to answer your questions.



The video and content will be sent via email post event.






## AGENDA

1. Introduction / cubesys
2. What is Nerdio for Enterprise?
3. Product Demo
4. Nerdio Pipeline

# TODAY'S PRESENTERS



**Paul Heaton**  
CEO & Co-founder  
cubesys

 paulmichaelheaton




**George Zajakovski**  
Senior Cloud Consultant  
cubesys

 gzajakovski



**Jarred Foley**  
Regional Sales Manager ANZ  
Nerdio

 jarredfoley



SESSION 4 - NERDIO AUTOMATION



**Manager**  
for Enterprise

# Nerdio Manager for Enterprise Single-Tenant Architecture



DEPLOY



## AZURE AD TENANT

**nerdio Manager for Enterprise**

- APP SERVICE
- KEY VAULT
- AZURE SQL
- AUTOMATION
- LOG ANALYTICS
- APP INSIGHTS

GRAPH API

**AAD IDENTITIES**

**API PERMISSIONS**

Directory.Read.All	User.Read.All
Group.Read.All	Group.Member.Read.All

**SUBSCRIPTION A**

**API PERMISSIONS**

Subscription Reader	VNET Contributor
Backup Reader	Resource Group Contributor

**SUBSCRIPTION B**

**API PERMISSIONS**

Subscription Reader	VNET Contributor
Backup Reader	Resource Group Contributor

LICENSE USAGE REPORTING



NO ACCESS

# AVD vs. Nerdio Auto-Scale

## Features



Azure  
Virtual Desktop



nerdio  
Manager  
for Enterprise

### COMPUTE

- Start VM on Connect
- Pre-stage (ramp-up) hosts on a schedule
- Drain under-utilized hosts when scaling in
- Scale based on available sessions
- Scale in (ramp-down) on a schedule
- Scale in anytime on demand
- Scale personal host pools
- User driven scaling (host shuts down after last user logs off)
- Scale by creating and removing hosts just-in-time
- Scale based on usage of CPU, RAM, and average active sessions per host
- Multi-trigger scaling on CPU, RAM, and sessions
- Multiple pre-stage schedules
- Adjustable scale in aggressiveness
- Automatically re-image hosts on user log off or schedule
- Auto-heal broken hosts
- Reserved Instance analytics for auto-scale
- Deallocate hosts shut down by user

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### STORAGE

- Host OS disk scaling (HDD when stopped, SSD when running)
- Ephemeral OS disk support for host scaling
- Host OS disk shrinking from default 128 GB
- FSLogix profile compression
- Azure Files and Azure NetApp Files storage scaling
- Storage performance scaling based on latency and schedule
- Storage size scaling based on free space

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# Nerdio Manager for Enterprise extends native AVD admin experience



### Simplify & Automate

- 2 Hour Deployment & Classic to ARM Migration
- 3-Click Complete UI
- User Session Management
- FSLogix Storage Deployment & Management
- Image Creation & Deployment
- MSIX Packaging & AppAttach Delivery
- REST API for ITSM Integration
- Proactive Health Monitoring

### Scale & Optimize








- Robust Auto-Scale
- Auto-Provisioning & Storage Scaling
- Save up to 75% on Compute & Storage
- Customize & Optimize Thousands of VMs
- Auto-Heal
- Measure & Report Costs & Utilization
- Cost & Performance Optimization Advice
- Performance Monitoring & Alerting

### Secure & Protect









- No 3rd Party Access
- Data Residency Controls
- RBAC Admin Roles
- End-User Self Service Portal
- Resilience with Availability Zones
- Multi-Tenant and Multi-Region Deployments
- Desktop Image Versioning
- PaaS App

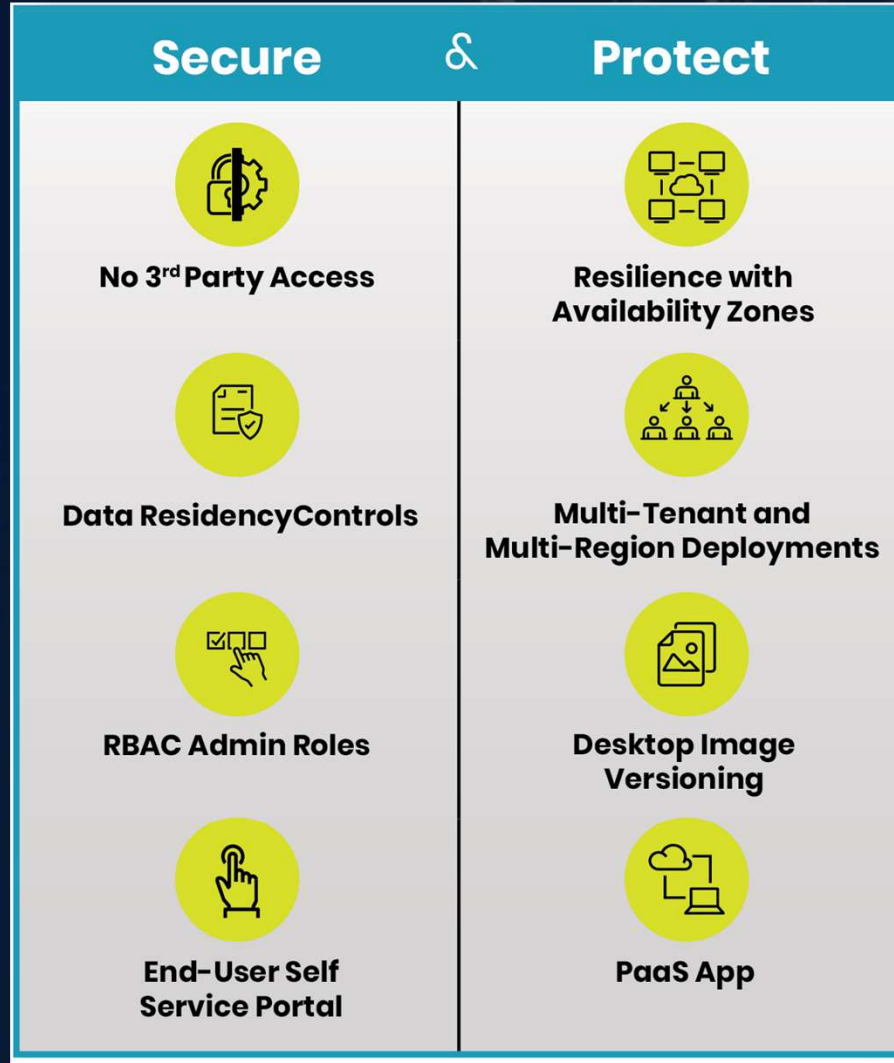




Simplify	&	Automate
 <b>2 Hour Deployment &amp; Classic to ARM Migration</b>		 <b>Image Creation &amp; Deployment</b>
 <b>3-Click Complete UI</b>		 <b>MSIX Packaging &amp; AppAttach Delivery</b>
 <b>User Session Management</b>		 <b>REST API for ITSM Integration</b>
 <b>FSLogix Storage Deployment &amp; Management</b>		 <b>Proactive Health Monitoring</b>



Scale	&	Optimize
 <b>Robust Auto-Scale</b>		 <b>Auto-Heal</b>
 <b>Auto-Provisioning &amp; Storage Scaling</b>		 <b>Measure &amp; Report Costs &amp; Utilization</b>
 <b>Save up to 75% on Compute &amp; Storage</b>		 <b>Cost &amp; Performance Optimization Advice</b>
 <b>Customize &amp; Optimize Thousands of VMs</b>		 <b>Performance Monitoring &amp; Alerting</b>



Home

SUMMARY DASHBOARD - ALL WORKSPACES

TIME RANGE

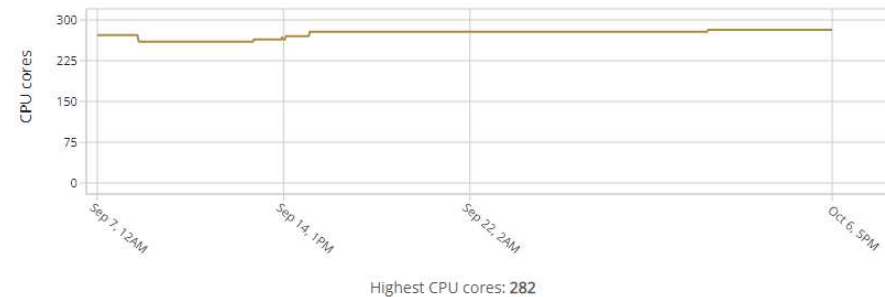
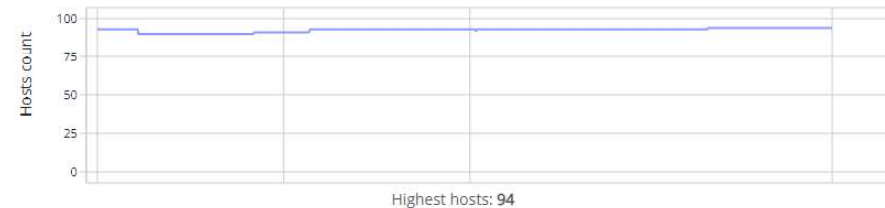
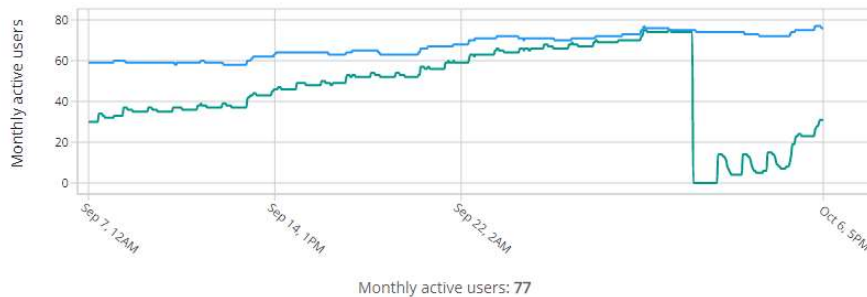
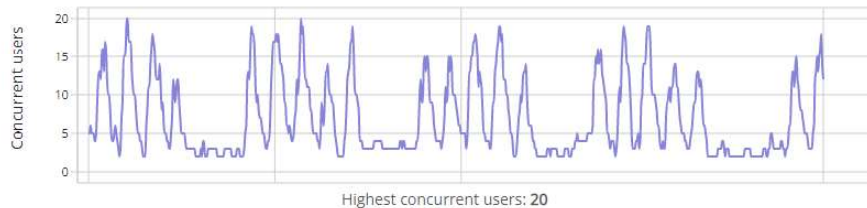
- Today
- Last 30 days
- This week
- This month
- Last week
- Last month
- Custom 09/07/2021 - 10/06/2021

AUTO-SCALE SAVINGS ⓘ

Savings: **\$824.10 (46.59%)** ⓘ  
 Named user cost: **\$4.52/month** ⓘ  
 Concurrent user cost: **\$41.07/month** ⓘ  
 Monthly active user cost: **\$16.01/month** ⓘ

CURRENT HOST POOLS COUNTS

Multi user desktop (pooled): **14 (21 hosts)**  
 Multi user RemoteApp (pooled): **1 (1 hosts)**  
 Single user desktop (pooled): **0 (0 hosts)**  
 Single user desktop (personal): **2 (72 hosts)**



Select export



Admin-Geo

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pools count

- DASHBOARD
- WORKSPACES
- Dynamic host pools**
- Static host pools
- User sessions
- DESKTOP IMAGES
- MSIX APP ATTACH
- SCRIPTED ACTIONS
- MONITORING
- STORAGE
- USERS AND ROLES
- LOGS
- SETTINGS
- UPDATES ⚠

## DYNAMIC HOST POOLS (DESKTOPS) +

**SEARCH**

**FILTER BY TYPE**

Multi user desktop (pooled) (12)

Multi user RemoteApp (pooled) (0)

Single user desktop (pooled) (0)

Single user desktop (personal) (1)

**FILTER BY RESOURCE GROUP**

NAME	FRIENDLY NAME	DESKTOP EXPERIENCE	STATUS	AUTO-SCALE	IMAGE	MONTHLY SAVINGS & COSTS
Hostpool 1 – IT Staff		Multi user desktop (pooled) Breadth first load balancing Max session limit: Unlimited (999,999)	User sessions: 0 Assigned users: 5 Assigned groups: 0 Hosts: 0 ON / 1 (CPUs: 4)	OFF	WVDGoldPool1 D4s_v4 (4C/16GB/Standard) 128 GB (P10/Premium SSD) Aug 4, 2021 05:44 PM	Insufficient data
Hostpool 2 - Finance		Multi user desktop (pooled) Breadth first load balancing Max session limit: 12	User sessions: 0 Assigned users: 0 Assigned groups: 2 Hosts: 1 ON / 4 (CPUs: 16)	Min: 1, Capacity: 4, Burst: 0 Scale out trigger: CPU (65%) for 5 mins Scale in trigger: CPU (40%) for 15 mins	WVDGoldPool1 D4s_v3 (4C/16GB/Standard) 128 GB (E10/Standard SSD) Aug 4, 2021 05:44 PM	Monthly savings: <b>\$122.68 (34.36%)</b> Named user cost: \$2.60/month Concurrent user cost: \$78.13/month
Hostpool 3 - HR		Multi user desktop (pooled) Breadth first load balancing Max session limit: Unlimited (999,999)	User sessions: 0 Assigned users: 5 Assigned groups: 0 Hosts: 0 ON / 0 (CPUs: 0)	OFF	Microsoft/Win10OfficePooled/1 D2s_v3 (2C/8GB/Standard) 512 GB (S20/Standard HDD) Dec 22, 2020 12:23 PM	Insufficient data
Hostpool 4 – Testing		Multi user desktop (pooled) Breadth first load balancing Max session limit: Unlimited (999,999)	User sessions: 0 Assigned users: 5 Assigned groups: 0 Hosts: 0 ON / 0 (CPUs: 0)	OFF	Microsoft/Win10OfficePooled/1 D2s_v3 (2C/8GB/Standard) 512 GB (S20/Standard HDD) Dec 22, 2020 12:23 PM	Insufficient data
Hostpool 5		Multi user desktop (pooled) Breadth first load balancing Max session limit: Unlimited (999,999)	User sessions: 0 Assigned users: 5 Assigned groups: 0 Hosts: 0 ON / 0 (CPUs: 0)	OFF	Microsoft/Win10OfficePooled/1 D2s_v3 (2C/8GB/Standard) 512 GB (S20/Standard HDD) Dec 22, 2020 12:23 PM	Insufficient data
Hostpool 6		Multi user desktop (pooled) Breadth first load balancing Max session limit: 2	User sessions: 0 Assigned users: 3 Assigned groups: 1 Hosts: 0 ON / 2 (CPUs: 12)	Min: 0, Capacity: 2, Burst: 2 Scale out trigger: Active sessions exceeds 2 Scale in trigger: Active sessions below 1 Pre-stage 1 hosts @ 8am	WVDGoldGPU1 NV6_Promo (6C/56GB/Standard) 128 GB (E10/Standard SSD) Aug 27, 2021 03:20 PM	Insufficient data
Hostpool 7		Single user desktop (personal) Assignment Type: Automatic	User sessions: 3 Assigned users: 12 Assigned groups: 0 Hosts: 5 ON / 9 (CPUs: 54)	OFF	WVDGoldGPU1 NC6_Promo (6C/56GB/Standard) 128 GB (E10/Standard SSD) Aug 27, 2021 03:20 PM	Insufficient data
Hostpool 8		Multi user desktop (pooled) Breadth first load balancing Max session limit: 8	User sessions: 2 Assigned users: 3 Assigned groups: 1 Hosts: 1 ON / 3 (CPUs: 12)	Min: 1, Capacity: 3, Burst: 0 Scale trigger: up to 2 available sessions	WVDGoldSec1 D4s_v3 (4C/16GB/Standard) 128 GB (P10/Premium SSD) Aug 5, 2021 02:05 PM	Monthly savings: <b>\$77.82 (24.18%)</b> Named user cost: \$9.76/month Concurrent user cost: \$34.86/month
Hostpool 9		Multi user desktop (pooled) Breadth first load balancing Max session limit: 8	User sessions: 0 Assigned users: 3 Assigned groups: 1 Hosts: 1 ON / 5 (CPUs: 20)	Min: 1, Capacity: 5, Burst: 2 Scale out trigger: CPU (65%) for 5 mins Scale in trigger: CPU (40%) for 15 mins Pre-stage 2 hosts @ 8am	WVDGoldSDK D4s_v3 (4C/16GB/Standard) 128 GB (P10/Premium SSD) Aug 25, 2021 07:34 PM	Monthly savings: <b>\$125.43 (27.4%)</b> Named user cost: \$5.83/month Concurrent user cost: \$110.76/month
Hostpool 10		Multi user desktop (pooled)	User sessions: 0 Assigned users: 3	Min: 0, Capacity: 2, Burst: 0 Scale out trigger: Active sessions exceeds	WVDGoldSOE2a D4s_v3 (4C/16GB/Standard)	Monthly savings: <b>\$265.71 (76.01%)</b>

# SESSION 4 - NERDIO AUTOMATION



DESKTOP EXPERIENCE ⓘ ⓘ	STATUS ⓘ	AUTO-SCALE ⓘ	IMAGE ⓘ	MONTHLY SAVINGS & COSTS ⓘ
Multi user desktop (pooled) Breadth first load balancing Max session limit: Unlimited (999,999)	User sessions: 0 Assigned users: 5 Assigned groups: 0 Hosts: 0 ON / 1 (CPUs: 4)	OFF	WVDGoldPoo1 D4s_v4 (4C/16GB/Standard) 128 GB (P10/Premium SSD) Aug 4, 2021 05:44 PM	Insufficient data ⓘ <a href="#">Manage Hosts</a>
Multi user desktop (pooled) Breadth first load balancing Max session limit: 12	User sessions: 0 Assigned users: 0 Assigned groups: 2 Hosts: 1 ON / 4 (CPUs: 16)	Min: 1, Capacity: 4, Burst: 0 Scale out trigger: CPU (65%) for 5 mins Scale in trigger: CPU (40%) for 15 mins	WVDGoldPoo1 D4s_v3 (4C/16GB/Standard) 128 GB (E10/Standard SSD) Aug 4, 2021 05:44 PM	Monthly savings: <b>\$122.68 (34.36%)</b> ⓘ Named user cost: \$2.60/month ⓘ Concurrent user cost: \$78.13/month ⓘ <a href="#">Manage Hosts</a>
Multi user desktop (pooled) Breadth first load balancing Max session limit: Unlimited (999,999)	User sessions: 0 Assigned users: 5 Assigned groups: 0 Hosts: 0 ON / 0 (CPUs: 0)	OFF	Microsoft/Win10OfficePooled/1 D2s_v3 (2C/8GB/Standard) 512 GB (S20/Standard HDD) Dec 22, 2020 12:23 PM	Insufficient data ⓘ <a href="#">Manage Hosts</a>



## Demos

- Image management
- Scripted Actions
- Host pool Autoscaling
- Storage Autoscaling
- Sepago





# Pipeline

# Meet Our **New Partner**



**Manager  
for WVD**



**CUBESYS**

# UPCOMING SESSIONS



- ✓ **Session 5:** AppAttach & MSIX | **TUESDAY 31 MAY 2022**
- ✓ **Session 6:** Economic Assessment - building a business case | **TUESDAY 14 JUNE 2022**
- ✓ **Session 7:** AVD Cost Analysis & Charge backs | **TUESDAY 28 JUNE 2022**
- ✓ **Session 8:** Series Finale - AVD best Practices | **TUESDAY 12 JULY 2022**



# Questions?



# AVD DISCUSSION SERIES

SESSION 4 - NERDIO AUTOMATION

*Thank you*