



CUBESYS DISCUSSION SERIES

OPTIMISING AVD FOR EFFICIENCY & COST SAVINGS

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.

Panel of Speakers



Jarred Foley
Regional Sales Manager AU
Nerdio



George Zajakowski
Senior Cloud Consultant
cubesys



Paul Heaton
Chief Executive Officer
cubesys



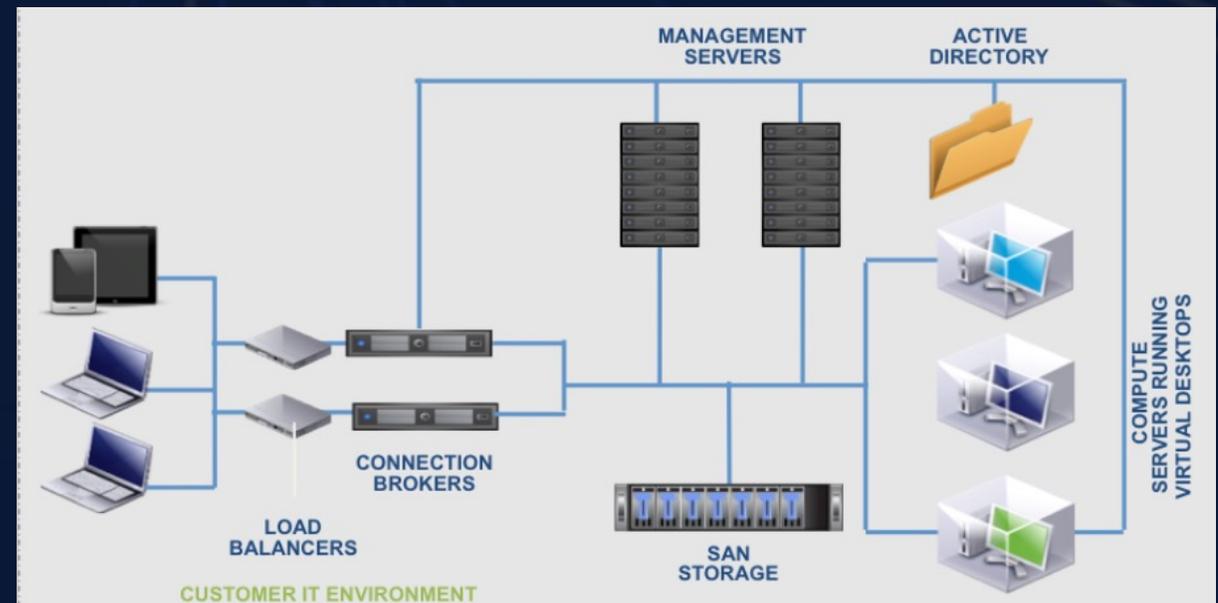
On-Prem VDI

- Capital Expenditure (CapEx)
- Licensing
- Physical Limits
- Underlying infrastructure and management



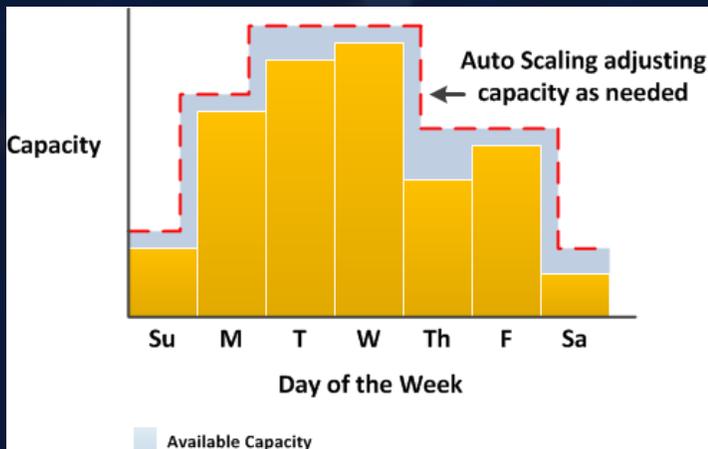
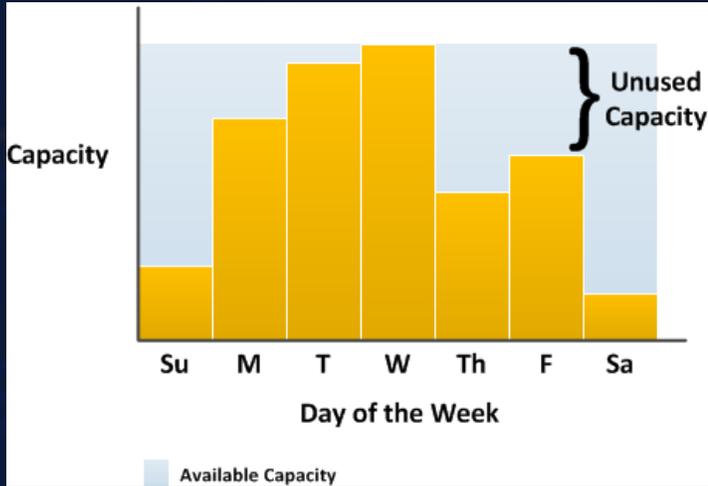
OPTIMISING AVD FOR EFFICIENCY & COST SAVINGS

Traditional VDI/RDS	Azure Virtual Desktop
Entitlement	Entitlement
Brokering	Image Management
Image Management	Brokering
Licensing	Licensing
Maintenance	Maintenance
Network	Network
Servers/Storage	Servers/Storage
Hosting	Hosting



AVD Cost Savings

Auto Scaling is the first logical step...



If you are using or considering AVD, scaling and **reviewing** how it performs **regularly**



Native AVD provides some capability including:

- Time of day
- Specific days of the week
- Session limits per session host



Toolsets and customisation and help build upon this and help



Don't just focus on the scale out, you also need to focus on the **scale in**

AVD Cost Optimisation

... it is not just Auto Scaling Azure Compute...



- **Just-in-time Provisioning**

- Avoid overprovisioning where possible

- **Profile Optimisation**

- Optimise what is captured in profiles, this avoids bloat in the first place.
- Regularly shrink and optimise what is captured.
- Clear out stale and archive profiles regularly.

- **Storage Optimisation**

- Consider reducing the base disk size if 128GB is not required, this can add up in a large environment.
- Premium SSD is recommended, but look to optimise its use, or use automation or a toolset to optimise disk type selection.
- Profile storage is often a hidden cost in AVD, monitor and manage your storage usage, and if possible, implement automation or a toolset to manage and optimise file storage



AVD Cost Optimisation

... it is not just Auto Scaling Azure Compute...



- **Personal VDIs**

- While a valid persona / delivery method, avoid giving everyone a Personal VDI if possible
- Don't over provision, have an agreed provisioning process and SLA for new VDIs
- If possible, use Start VM on Connect
- Reclaim unused machines where possible

- **Log Analytics Optimisation**

- While not as big as storage, this can be another hidden cost in AVD
- Look to reduce retention and reduce frequency / fidelity if it isn't required
- Use automation or a toolset to continue to monitor and optimise

- **Reserved Instances / Azure Savings Plans**

- Both are worth investigating if you have a good handle on usage patterns
- It is best to start off with PAYG if possible, and then optimise later



Cost Reduction Strategies For Azure Virtual Desktop

	AZURE COMPONENT COSTS			Monthly Total	Per-User Cost	% Savings
	Compute (VMs)	OS Disks (Storage)	FSLogix (Storage)			
Unoptimized	\$4,038	\$215	\$737	\$4,991	\$25.99	N/A
#1: VM Power Management	\$1,202	\$215	\$737	\$2,154	\$11.22	57%
#2: Just-in-time Provisioning (50% Burst)	\$1,202	\$140	\$737	\$2,079	\$10.83	58%
#3: 3-year Reserved Instances	\$457	\$140	\$737	\$1,333	\$6.94	73%
#4: OS Disks Auto-scale	\$457	\$89	\$737	\$1,283	\$6.68	74%
#5: OS Disks Shrink to 64 GB	\$457	\$46	\$737	\$1,240	\$6.46	75%
#6: FSLogix Shrink by 50%	\$457	\$46	\$369	\$871	\$4.54	83%

Assumptions

- Number of users: **192**
- User type: **Heavy** (2 users per vCPU)
- Session host VM size: **D8s_v4**
- OS disk: **P10** (128 GB Premium SSD)

- FSLogix profile size: **20 GB**
- FSLogix storage: **Azure Files Premium**
- Hours in work week: **50**
- Azure list pricing: **South Central US**

TOTAL SAVINGS

83%

AVD Cost Reporting



OPTIMISING AVD FOR EFFICIENCY & COST SAVINGS



Look for the home button to return to this page! 

Report Navigation

Click on any tile to take a look at that report!

CloudClarity for AVD

Cost Summary (Nerdio) 

Per-Month summary of key Infrastructure Costs and Session Details.

User Summary 

Per-Month summary of User Costs and User Session details with a focus of VMs/Sessions.

3 Month Trend 

Summary of changes in Cost, Users, Sessions, and Session hours across the past 3 months.

Cost Breakdown 

More visual focused breakdown of AVD costs across Bucket, VM Types, Resource Groups and more.

VMs and VM Types 

Breakdown of Costs and Usage based on VMs, VMTypes, and Personal/Pool VM Hosting

Logons and Sessions 

Overview of when people are logging on, and how long they're logging on for.

Department (Demo) 

Overview of costs across your different departments (demo only).

Location (Demo) 

Overview of costs across your different sites and locations (demo only).

Other

FAQ 

Our FAQ page

Welcome 

Our 'Welcome page' with instructions on how to use our PowerBi connector



Look for the home button to return to this page! 

Cost Breakdown

Reporting Period: 2023-01 (Jan)
User: All

Total Cost

\$74.63K

Cost Per Minute

\$0.0038

Session Cost

\$7.37K

Session Hours

144.30K

Cost by Meter

Cost by Assignment

Cost by Bucket

Minutes and Cost by Month

Cost by Resource Group and Month

ResourceGroup	2022-11 (Nov)	2022-12 (Dec)	2023-01 (Jan)
cc-avd4000-nsw-prd	\$9,673.800399999997	\$12,325.7187	\$8,009.1654000
cc-avd4001-nsw-prd	\$6,007.7584000000031	\$3,477.035299999997	\$1,895.8439999
cc-avd4002-nsw-prd	\$4,866.5975000000016	\$3,144.3987000000012	\$2,818.113200
cc-avd4003-nsw-prd	\$841.53560000000007	\$597.6347000000005	\$440.46120000
cc-avd4004-nsw-prd	\$1,814.2763000000002	\$1,303.2351	\$884.65029999
cc-avd4005-nsw-prd	\$998.5727000000015	\$792.7890000000003	\$514.97740000
cc-avd4006-nsw-prd	\$300.6173999999997	\$107.232	\$
cc-avd4007-nsw-prd	\$1,593.770299999997	\$1,142.549699999997	\$922.60279999
cc-avd4008-nsw-prd	\$1,186.014399999999	\$1,513.754700000002	\$2,38

AVD Partners ...



<https://getnerdio.com/>

Manager
for Enterprise



<https://cloudclarity.app>



OPTIMISING AVD FOR EFFICIENCY & COST SAVINGS



GOT MORE QUESTIONS?

Paul Heaton

paul.heaton@cubesys.com.au

 paulmichaelheaton

George Zajakovski

george.zajakovski@cubesys.com.au

 gzajakovski

CUBESYS DISCUSSION SERIES

OPTIMISING AVD FOR EFFICIENCY & COST SAVINGS

Thank you