



NerdioCon

2025
— PALM SPRINGS



BRS15 – Citrix to Cloud

A tax firm's modern cloud transformation story



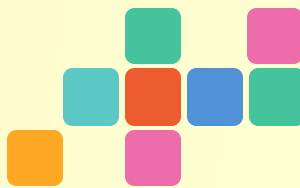
Agenda

Current mode of operations

Transformation journey

Azure virtual desktop & NME

Summary



Matthias Schlimm

Principal Architect



Business



Current mode of operations

IT in 2023

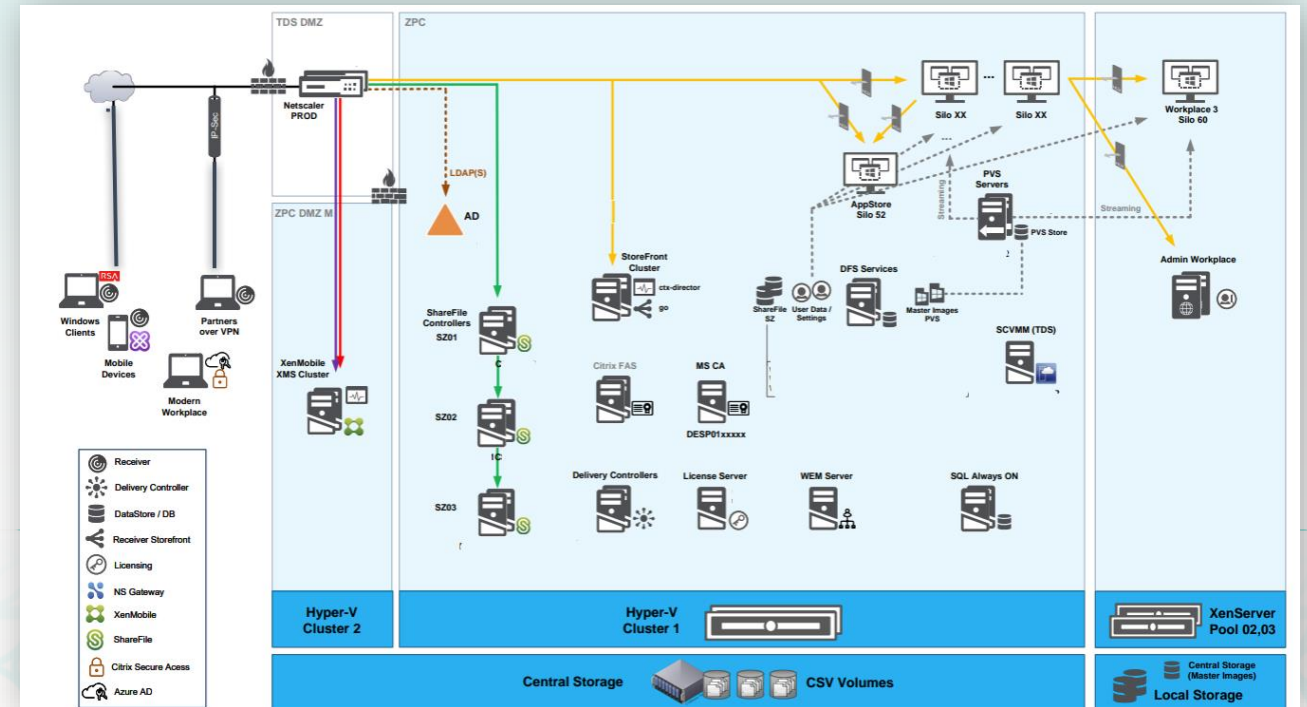
- Datacenter hosting
 - 18 locations
 - Est. 400 applications
 - Citrix Published Desktop and Apps, ShareFile and XenMobile
-
- Office 2016
 - McAfee Anti-Virus
 - Application deployment through GPO



Citrix environment

The Business Desktop for the End-User

- 1700 citrix users
- 144 worker – server 2019
- 6 admin desktops
- 30 server for published applications
- 200% redundancy
- 2x Tesla T4 for each XenServer
- ControlUp
- Citrix license renewal end of January 2024



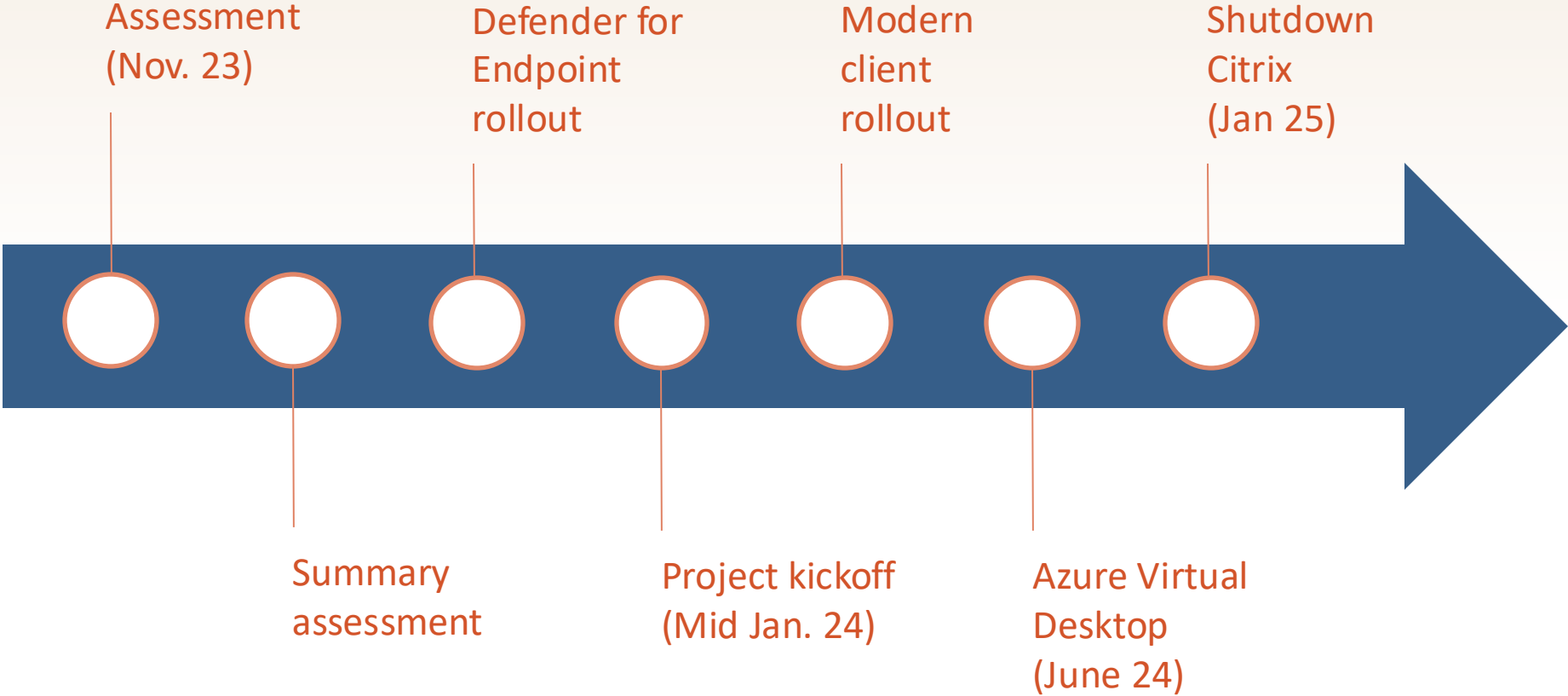
Transformation journey

TheProjects

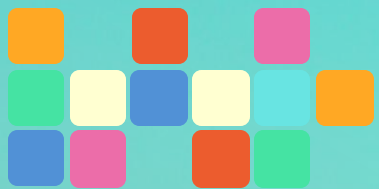
1. Microsoft 365
2. Azure Virtual Desktop
3. Hosting
4. Legacy apps



Timeline

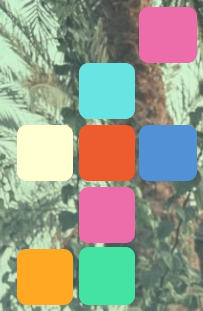


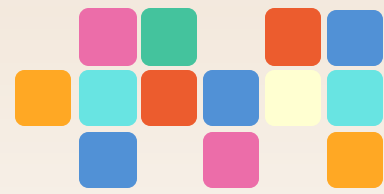
Shutdown



Azure Virtual Desktop

Nerdio Manager for Enterprise





Azure Virtual Desktop

Nerdio Hostpools

Modern desktop

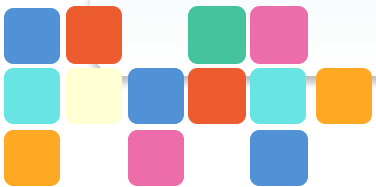
- 13 VMs
- Windows 11 multi-user
- FSLogix
- D8ds_v5
 - 8 Cores
 - 32GB RAM
- Session Limit 8

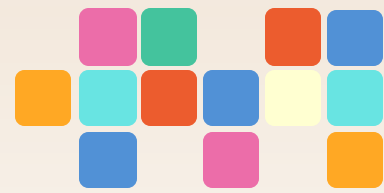
Remote apps

- 3 VMs
- Windows 11 multi-user
- FSLogix
- D8ds_v5
 - 8 Cores
 - 32GB RAM
- Session Limit 20

Developer desktop

- 53 VMs
- Windows 11 single user
- D8ls_v5
 - 8 Cores
 - 16 GB RAM
- Nerdio Self-Service Portal





Azure Virtual Desktop

Nerdio Hostpools

Lift and shift

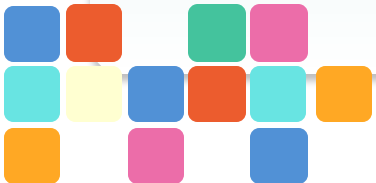
- 5 VMs
- Server 2016 multi-user
- D48ls_v5
 - 48 Cores
 - 96 GB RAM
- Session Limit 25

Financial edsktop

- 1 VM
- Windows 11
- D8ls_v5
 - 8 Cores
 - 32GB RAM

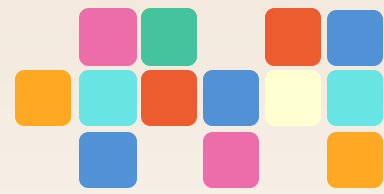
FFM Desktop

- 2 VMs
- Windows 11 multi-user
- D2ls_v5
 - 2 Cores
 - 4 GB RAM



Azure Virtual Desktop

Nerdio Hostpools

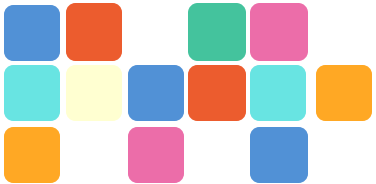


VPN modern desktop

- 1 VM
- Windows 11 multi-user
- D8ds_v5
 - 8 Cores
 - 32 GB RAM
- Session Limit 8

Special modern desktop

- 1 VM
- Windows 11 multi-user
- D8ds_v5
 - 8 Cores
 - 32 GB RAM
- Session Limit 8



Azure Virtual Desktop

Summary

- 16 Host Pools
- 90 VMs
- 1 master image for 3 Host Pools



Developer desktop

Use case description

Self-Service Portal used with Scripted Actions

Personal desktops

User Self-Service Portal:

For Personal Desktop only: You can Power Off, ON, Restart the Virtual Machine.

Note: Re-Image - all Data will be lost on your Personal Desktop

**Developer Desktop - Evaluation**
Workspace: WTS-AVD-WS - Development
Host name: DEAD11DV003

Session status: Active
View VM performance 

Run Task

Re-image

Message

Disconnect

Log-off

Restart

Power off

Application versioning

Application Management

Versioning for Shell Apps

Applications ⓘ

1. 📄 Install Adobe Acrobat Reader DC (64-bit) [24.005.2... ×
2. 📄 Install PDF-XChange PRO [10.5.1.394] (WTS-AVD-W... ×
3. 📄 Install WinSCP [6.3.7] (WTS-AVD-WINGET) ×
4. 📄 Install Google Chrome [133.0.6943.127] (WTS-AVD-... ×
5. 📄 Install CleanUp MD NONPROD [latest] (ShellApps) ×
6. Add new application... ×

Deploy to... ⓘ

1. AVD Pooled (1 host pool) ×
2. Add new target... ×

☒ Install app

☐ Uninstall app

☐ Install group

☐ Uninstall group

CleanUp MD NONPROD [latest] ▼

CleanUp MD NONPROD [latest]

CleanUp MD NONPROD [25.02.002]

CleanUp MD NONPROD [25.02.001]

CleanUp MD PROD (ShellApps)

CleanUp MD PROD [latest]

CleanUp MD PROD [25.02.001]

Desktop Reader Manager (WTS-AVD-WINGET)

Applications & Limits

Application Management

Applications ⓘ		
17.	👍 EGSnet [1.0] (ShellApps)	^
18.	👍 SAP GUI [7.70 Compilation 1] (WTS-AVD-WINGET)	×
19.	👍 SwyxIt! [10.40.2694.0] (WTS-AVD-WINGET)	×
20.	👍 TeamViewer [15.62.4] (WTS-AVD-WINGET)	×
21.	👍 ShareFile For Windows [24.5.3.0] (WTS-AVD-WIN...	×
22.	👍 Microsoft SQL Server Management Studio [20.2.3...	×
23.	👍 Sicherheitspaket compact - DATEV [7.86] (WTS-AV...	×
24.	👍 CleanUp MD Master [1.0] (ShellApps)	×
25.	Add new application...	×

Default: AppGroup Limitations is set to 20

Nerdio Support

“It is possible that this limitation is in place for a reason, it could be that more than 20 apps may risk the deployment process slowing down significantly.”

Workaround: Numeric app groups

01 Basic

02 Core-Apps

03 ADM-Apps

04 Finalize

Applications & Limits

Application Management

Applications ⓘ		
17.	EGSnets [1.0] (ShellApps)	^
18.	SAP GUI [7.70 Compilation 1] (WTS-AVD-WINGET)	×
19.	Swyxit! [10.40.2694.0] (WTS-AVD-WINGET)	×
20.	TeamViewer [15.62.4] (WTS-AVD-WINGET)	×
21.	ShareFile For Windows [24.5.3.0] (WTS-AVD-WIN...	×
22.	Microsoft SQL Server Management Studio [20.2.3...	×
23.	Sicherheitspaket compact - DATEV [7.86] (WTS-AV...	×
24.	CleanUp MD Master [1.0] (ShellApps)	×
25.	Add new application...	×

Default: AppGroup Limitations is set to 20

Since 6.6.1

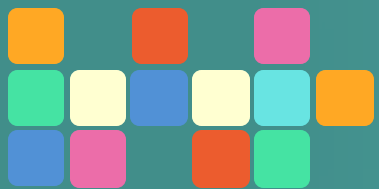
Resolved Issues-UAM: Deployment limits

The 20 application and 20 application group limits for UAM policies may now be individually adjusted via the new app service settings

AppManagement: GroupAppLimit and
AppManagement: PolicyAppLimit

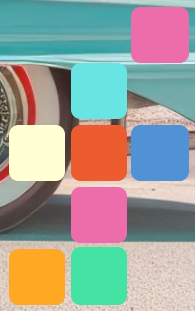


**Link for "Advanced
App Service
Configurations"**



Cost analysis

A real world example



Costs analysis

A real word example

SUMMARY DASHBOARD - ALL WORKSPACES



TIME RANGE

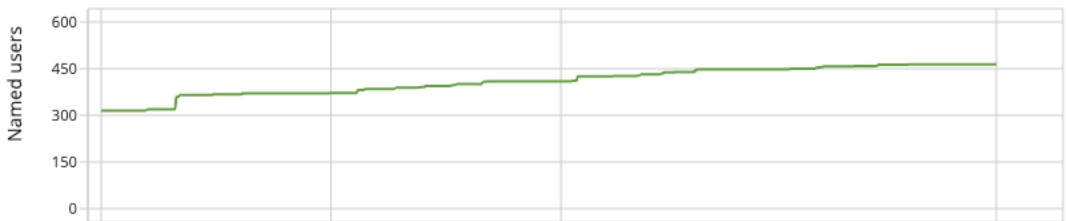
- ☐ Today ☒ Last 30 days
☐ This week ☐ This Month
☐ Last week ☐ Last Month
☐ Custom 01/26/2025 - 02/24/2025

AUTO-SCALE SAVINGS

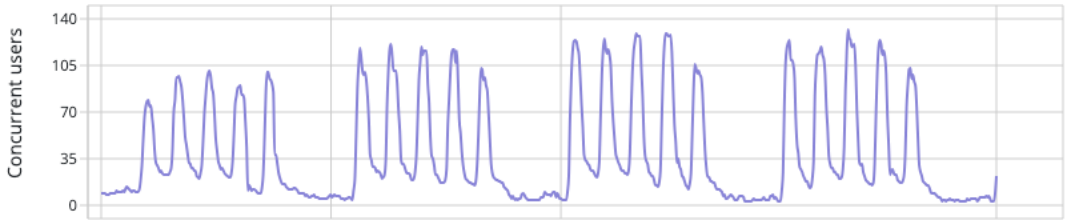
Savings: €12,538.17 (68.16%)
Named user cost: €10.58/month
Concurrent user cost: €37.90/month
Monthly active user cost: €16.23/month

CURRENT HOST POOLS COUNTS

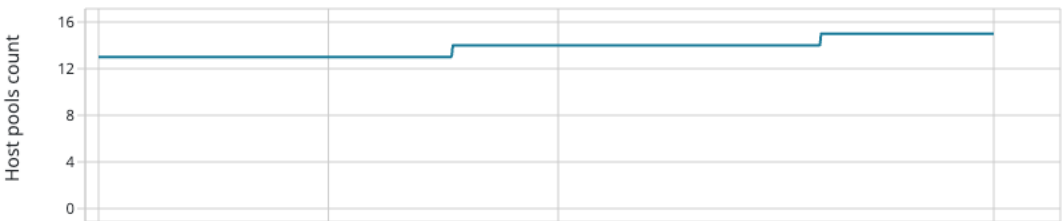
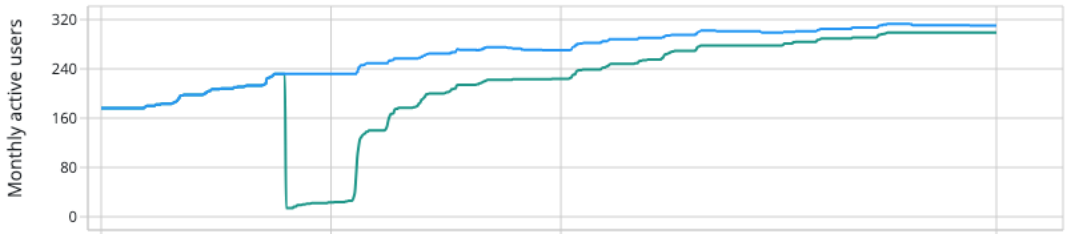
Multi user desktop (pooled): 10 (21 hosts)
Multi user RemoteApp (pooled): 2 (5 hosts)
Single user desktop (pooled): 1 (2 hosts)
Single user desktop (personal): 2 (54 hosts)



Highest named users: 464



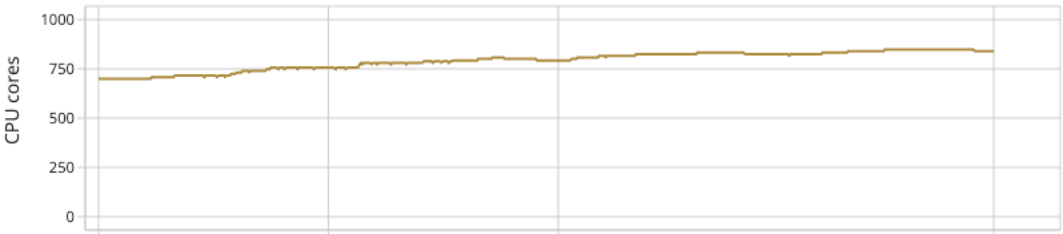
Highest concurrent users: 132



Highest host pools: 15



Highest hosts: 83



Costs analysis

A real word example

Modern desktop

- Monthly saving: 2.590,21 €
- Peak costs: 3.937, 98 €
- Actual costs: 1.347,77 €
- Named users: 266
- Concurrent users: 73
- Monthly active users: 165
- Named user cost: 5,07 €
- MAU costs: 8,17 €
- Savings: 65.78%

Remote apps

- Monthly saving: 938,86 €
- Peak costs: 1.598,82 €
- Actual costs: 653,96 €
- Named users: 193
- Concurrent users: 43
- Monthly active users: 124
- Named user cost: 3,391 €
- MAU costs: 70,81 €
- Savings: 58,94 %

Developer desktop

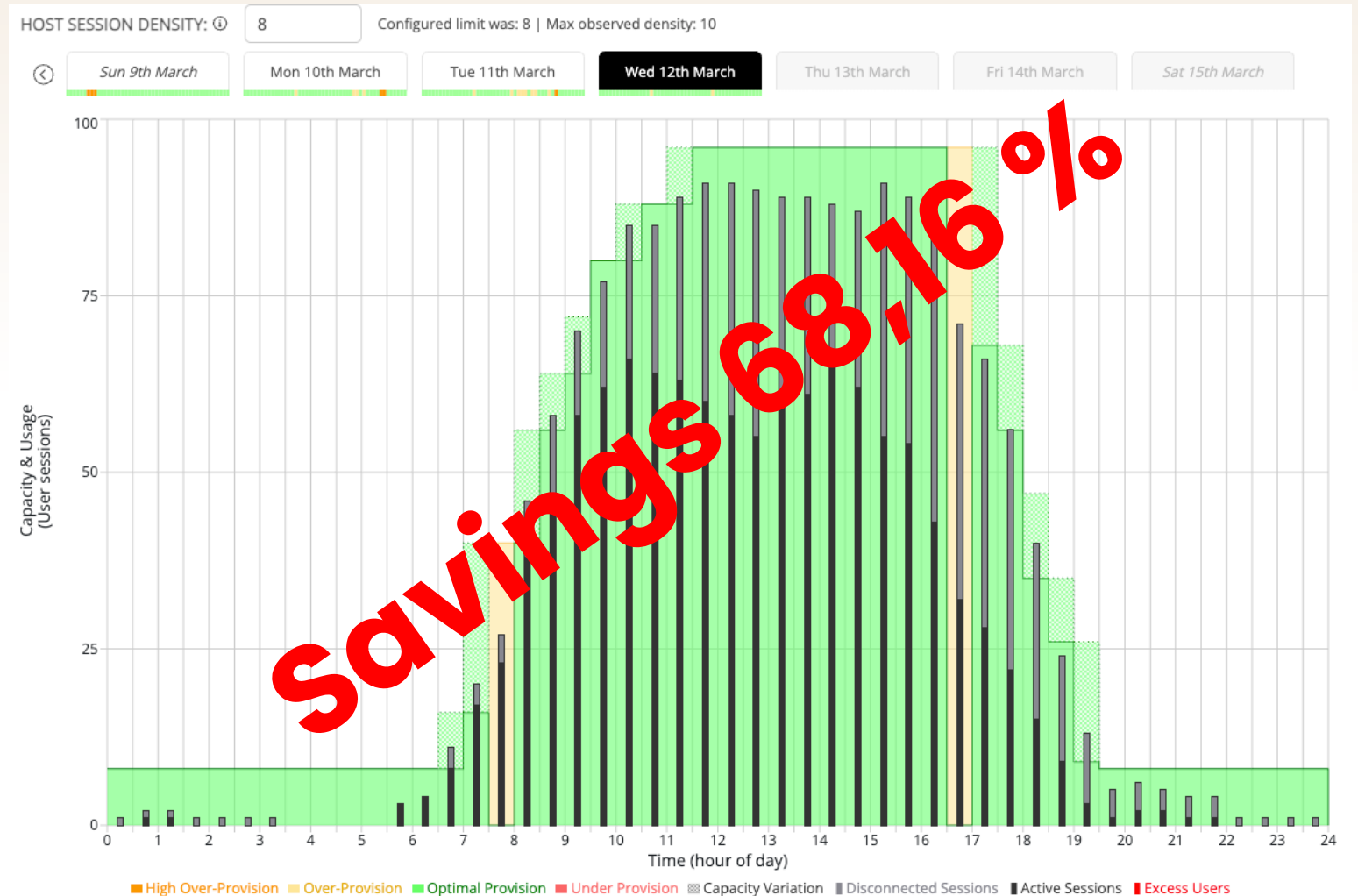
- Monthly saving: 8.579,00 €
- Peak costs: 11.978,03 €
- Actual costs: 3.399,03 €
- Named users: 59
- Concurrent users: 24
- Monthly active users: 48
- Named user cost: 57,61 €
- MAU costs: 5, 27 €
- Savings: 71,62 %

Costs analysis

A real word example

Summary

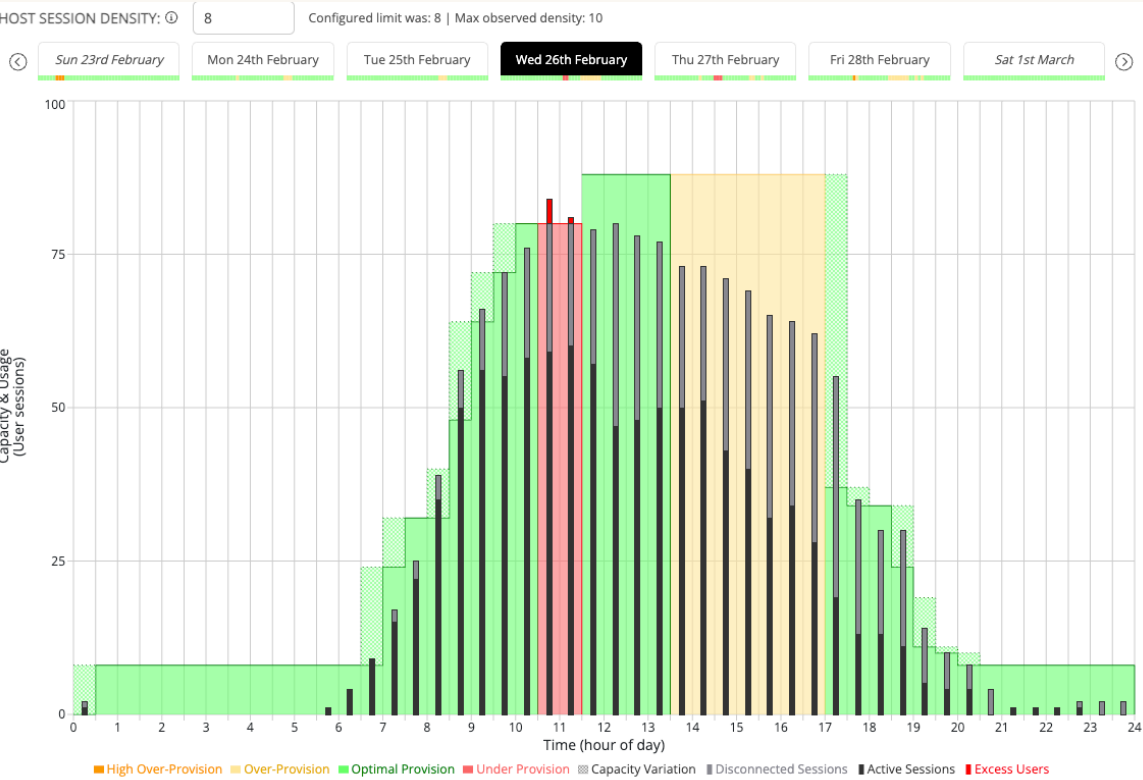
- Savings: 12.538,17 €
- Peak cost: 18.184,85 €
- Actual cost: 5.647,08 €
- Named users: 534
- Concurrent users: 149
- Monthly active users: 348
- Named user cost: 10,58 €
- Concurrent user cost: 37,90 €
- MAU cost: 16,23 €



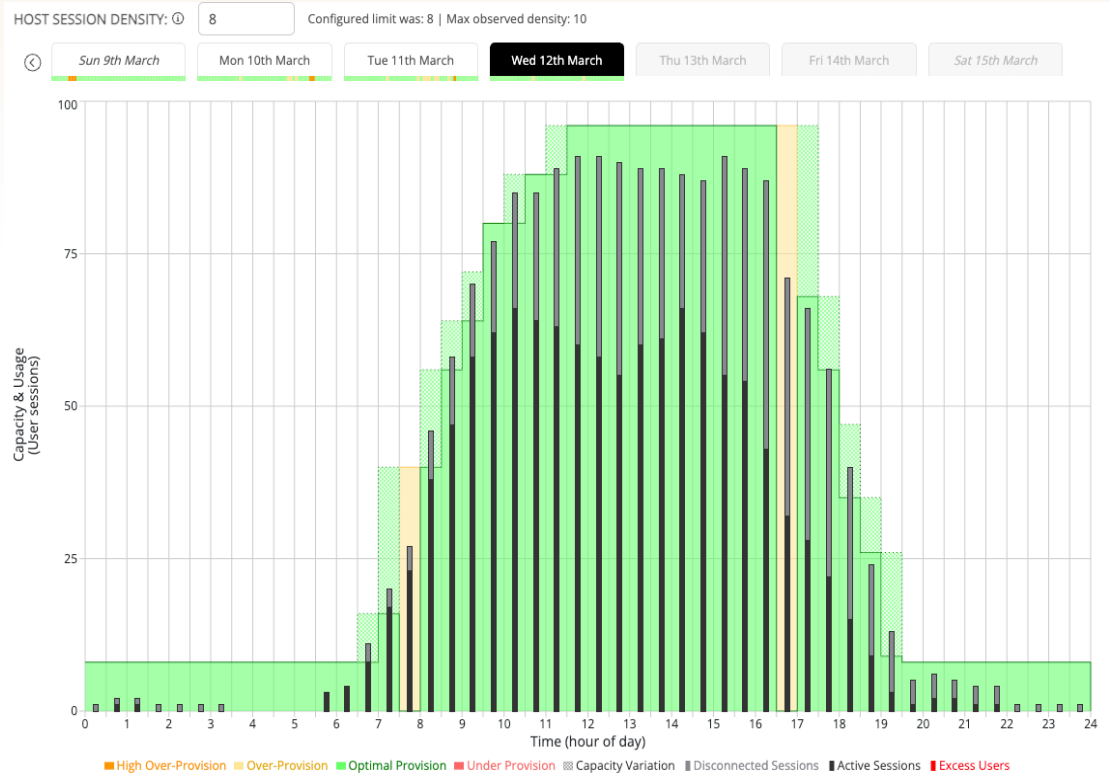
Auto-Scale at a glance

Cost saving up to 15-20 % with the right Auto-Scale optimizations

Before



After



AVD Azure costs vs. Citrix per month

A real word example

Named Users: 534

AVD Azure subscription costs:

PROD: 15.934,09 €

TEST: 1.255,16 €

Citrix environment:

Hypervisor Hosting: 15.300,00 €

Citrix License Renewal: 2.270,00 €

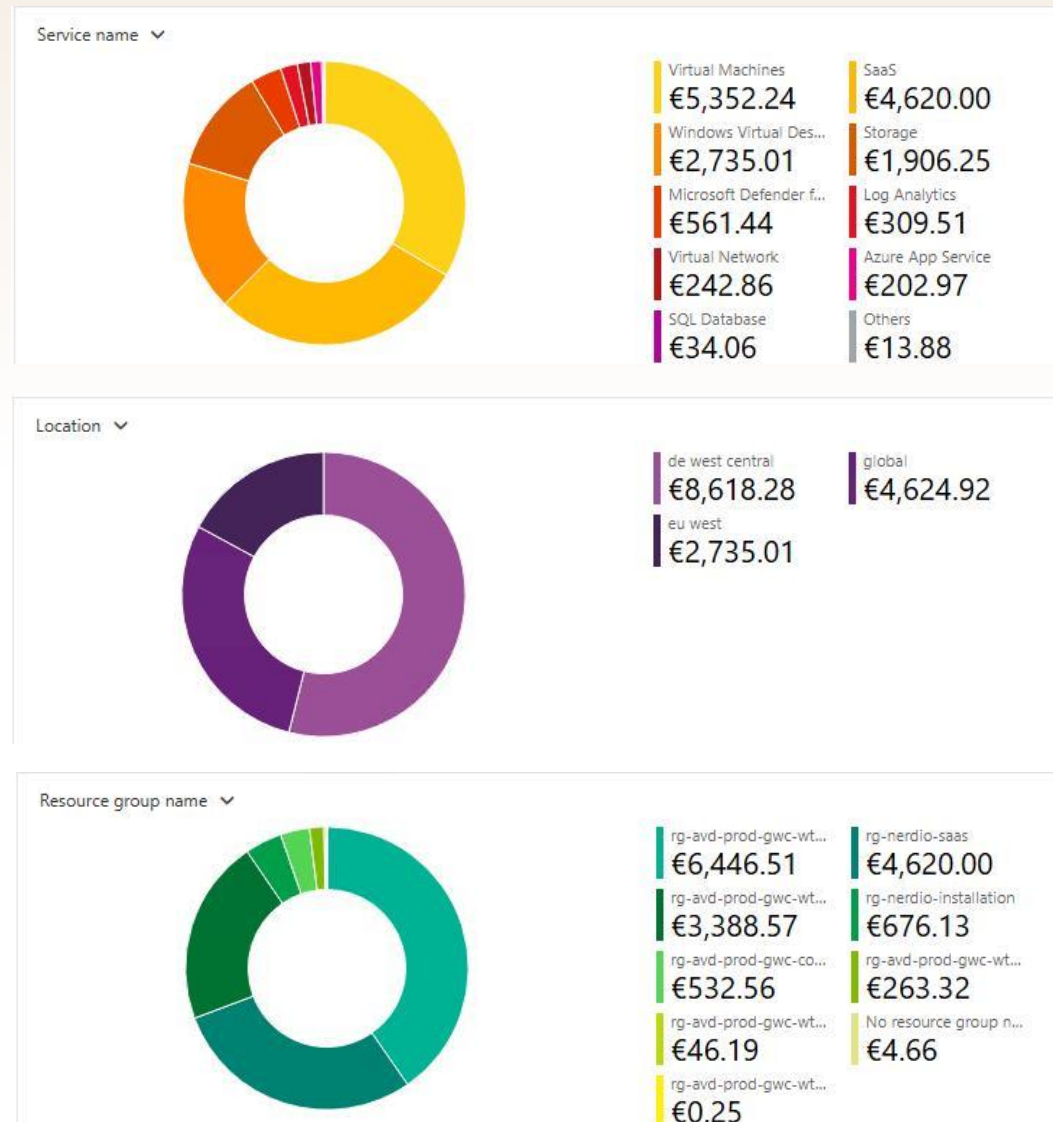
Citrix Netscaler: 1.755,0 €

+ RDS CAL

+ Storage

+ BackEnd VM's

+ ...



AVD Azure costs

A real word example

AVD Azure Subscription Costs:

PROD: 15.934,09 €

TEST: 1.255,16 €

Summary: 17.189,25 €

Nerdio Costs:

Installation: 676,13 €

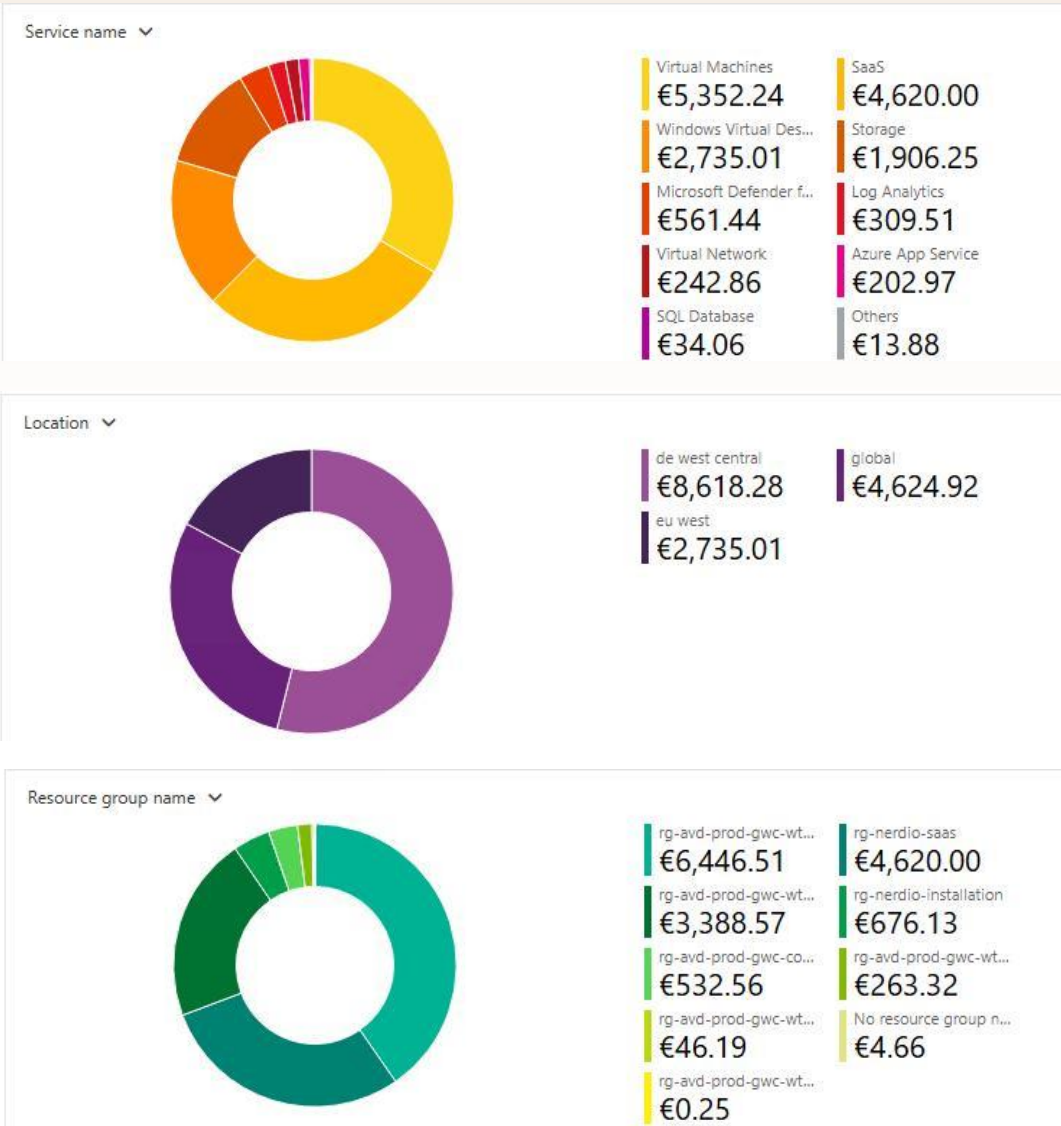
SQL DB: 34,06 €

Licenses: 4.620,00 €

Summary: 5.330,19 €

Savings:

Auto-Scale: 12.538,17 €



AVD Azure costs

A real word example

AVD Azure subscription costs:

Prod: 15.934,09 €

Test: 1.255,16 €

Summary: 17.189,25 €

Nerdio costs:

Installation: 676,13 €

SQL DB: 34,06 €

Licenses: 4.620,00 €

Summary: 5.330,19 €

Savings:

Auto-Scale: 12.538,17 €

Nerio costs are included in the Azure subscription!!

**AVD monthly
costs without
Nerdio**



17.189,25 €

- 5.330,19 €

+ 12.538,17 €

24.396,52 €

**Real monthly
cost savings**



12.538,17 €

- 5.330,19 €

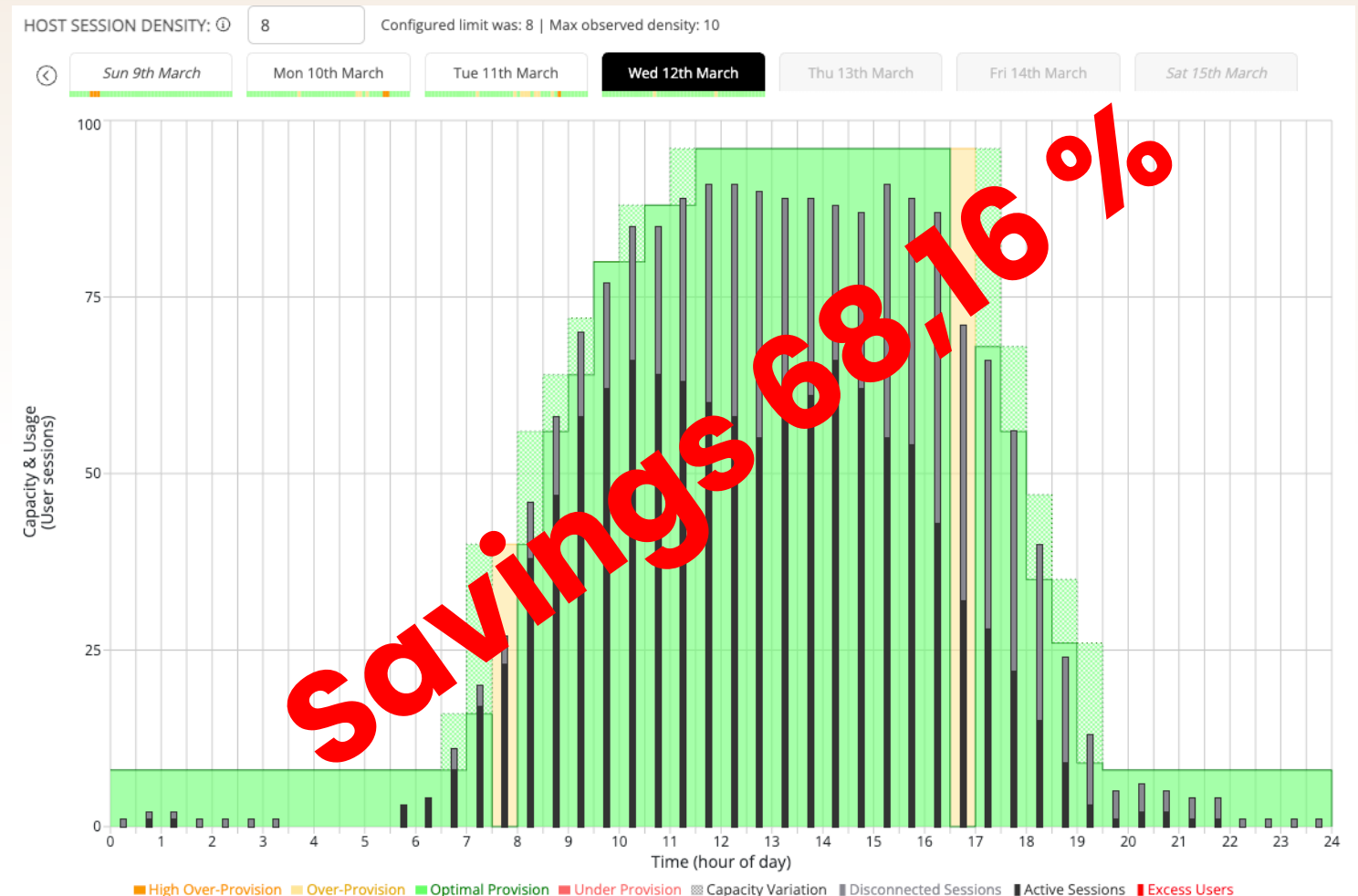
7207,98 €

Costs analysis

A real word example

Summary

- Savings: 12.538,17 €
- Peak cost: 18.184,85 €
- Actual cost: 5.647,08 €
- Named users: 534
- Concurrent users: 149
- Monthly active users: 348
- Named user cost: 10,58 €
- Concurrent user cost: 37,90 €
- MAU cost: 16,23 €



Costs Analysis

A real word Example

Summary (date range Jan 26–Feb 24)

- Savings: 12.538,17 €
- Peak cost: 18.184,85 €
- Actual cost: 5.647,08 €
- Named users: 534
- Concurrent users: 149
- Monthly active users: 348
- Named user cost: 10,58 €
- Concurrent user cost: 37,90 €
- MAU cost: 16,23 €

Savings 68,16%

Summary (date range: Feb 23–March 24)

- Savings: 15.924,53 €
- Peak cost: 21.533,12 €
- Actual cost: 5.608,90 €
- Named users: 628
- Concurrent users: 164
- Monthly active users: 392
- Named user cost: 8,93 €
- Concurrent user cost: 34,20 €
- MAU cost: 14,31 €

Savings 72,78%

Costs analysis

A real word Example

Summary (Date range Jan 26 – Feb 24)

AVD monthly costs without Nerdio

AVD Azure subscription costs	17.189,25 €
- Nerdio costs	- 5.330,19 €
+ Savings	+ 12.538,17 €
	24.396,52 €

Real montly cost savings

Savings	12.538,17 €
- Nerdio costs	- 5.330,19 €
	7.207,98 €

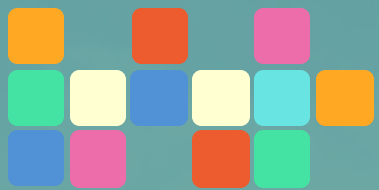
Summary (Date range Feb 23 – Mar 24)

AVD monthly costs without Nerdio

AVD Azure subscription costs	14.768,86 €
- Nerdio costs	- 5.322,21 €
+ Savings	+ 15.924,53 €
	25.371,18 €

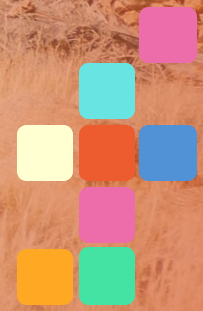
Real monthly cost savings

Savings	15.924,53 €
- Nerdio costs	- 5.322,21 €
	10.602,32 €



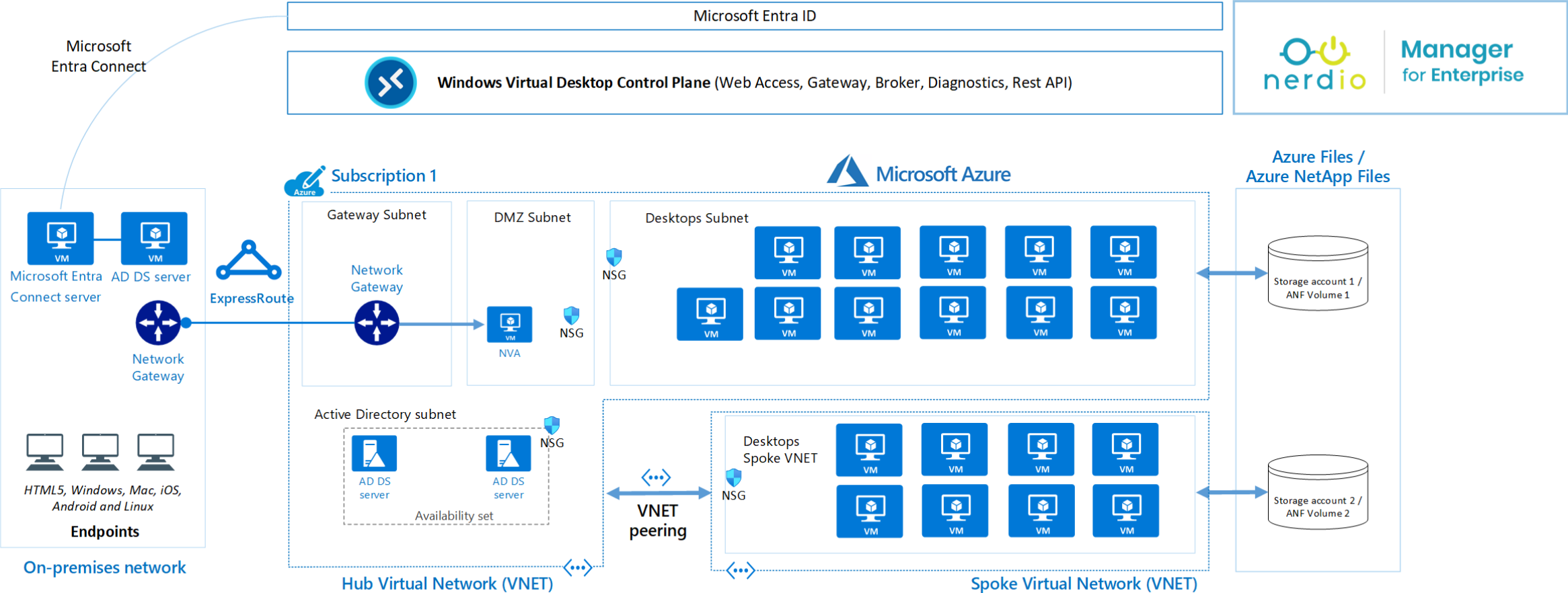
★ *NerdioCon* ★
2025
PALM SPRINGS

Wrap up



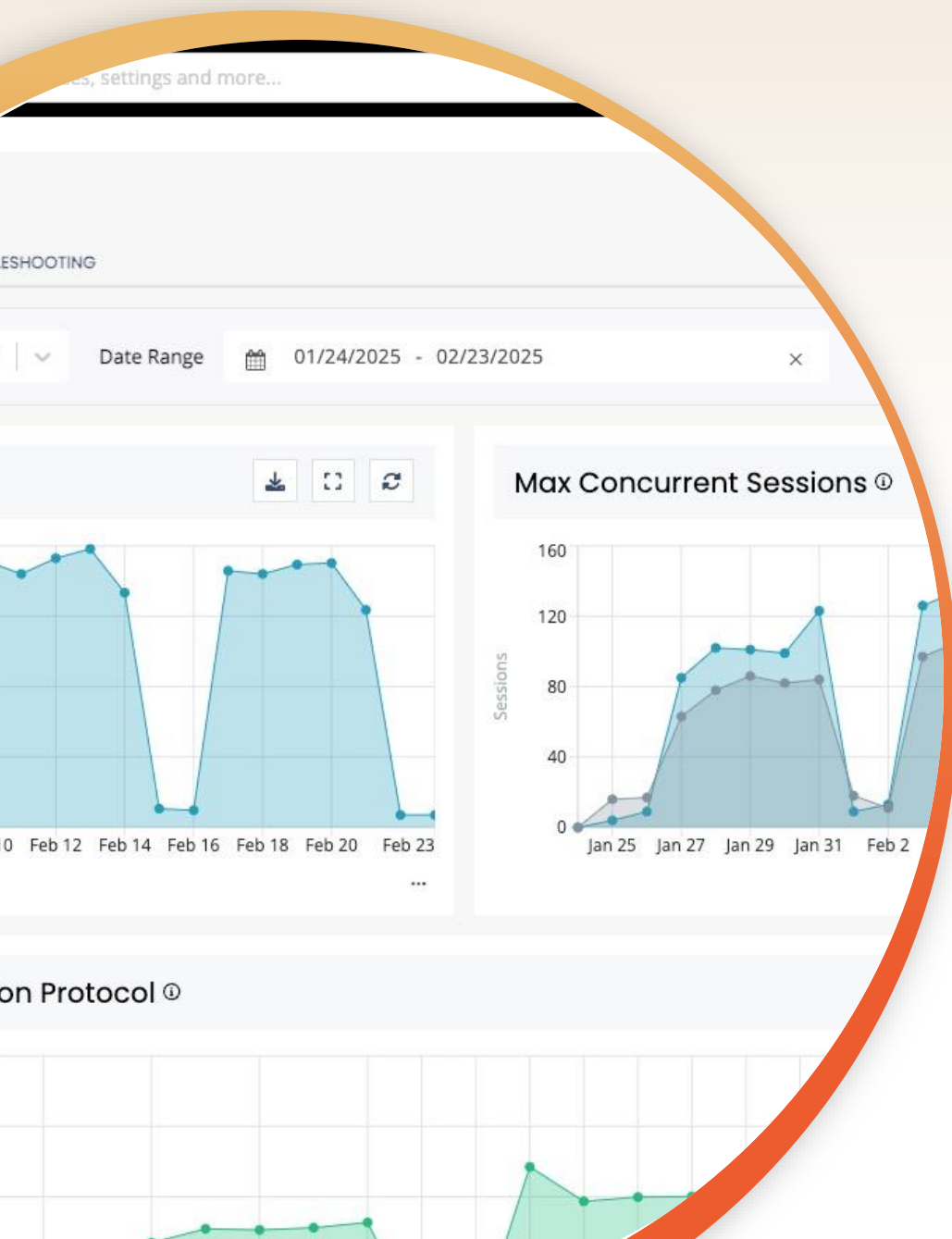
Current Mode of Operation (CMO)

A real word example



Summary

- ControlUp monitoring
 - Managed Service for AVD/Nerdio
 - More use cases came up to AVD
-
- Save time and money
 - Automation at a glance



A low-angle photograph looking up at several palm trees. The fronds of the palm trees are dark green and fan-shaped, filling the corners of the frame. The sky is a mix of teal and light yellow, with some wispy white clouds. The text 'Thank you' is centered in the middle of the image in a white, sans-serif font.

Thank you

Matthias Schlimm

Principal Architect



Business



Contact Details:

E-Mail: m.schlimm@login-orange.de

