



AZURE VIRTUAL DESKTOP

Customer: Contoso



Assessment Deliverables



“Insights Report”, Executive summary highlighting data and insights gathered by the assessment tool. This includes key insights, pricing options, program overviews and recommendations.



“Pilot Recommendations”, Executive summary highlighting data and insights gathered by the assessment tool. This includes key insights, pricing options, program overviews and recommendations.



“Access to Assessment Data” During the assessment, access to the data collected by Lakeside Systrack and the subsequent reports has been available to help with your strategic planning.

1

Management Summary

Scope of Assessment:

Collection & Assessment across Contoso infrastructure to identify key optimization potentials, and to generate a dataset to support a migration strategy for Contoso Datacenter.

Data collection Start: 2021-04-30
Data collection End:

Used tool(s): Lakeside Systrack
Datacenter: 1

Solution Specialist: -
Technical Support: -
Analysis: -

138

Total Users

138

Reference Users

298

Applications

13 msec

Avg Basic
Application Latency

216 msec

Max Basic
Application Latency

80 GB

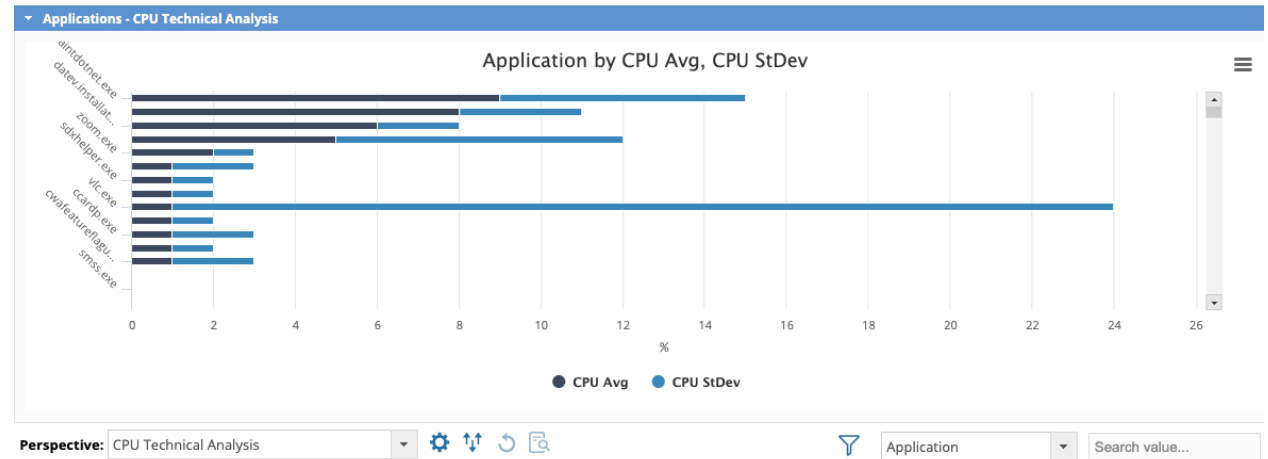
Avg User
File Storage

“Azure Virtual Desktop”, also known as “AVD” assessment aims to identify the suitability of “AVD” within the customer’s environment and provide specific, sized guidance on the next steps.

The assessment is based on data extracted using **Lakeside Systrack** and customer's input.

Assessment | Concurrent usage

- The measurement was done on Citrix Serverfarm
- Concurrency helps us to understand your user behavior. This shows the demand for resources within your environment so you can ensure resources are available.
- Using burstable servers is only possible where their servers would experience periods of lower utilization.
- Concurrency runs at around 138 active users only during working hour.
- The most commonly used applications by these users are shown opposite.
- Business hours are between 6am and 6pm



Application	CPU Avg (%)	CPU StDev (%)	CPU Min (%)	CPU Max (%)	Active Ratio (%)	Kernel to User Ratio	CF
pain	9% (3.258)	6% (2.162)	2% (584)	15% (5.679)	39,2	0	0
upd	8% (3.115)	3% (1.220)	0% (0)	22% (8.030)	79,2	0,4	0,4
date	6% (2.316)	2% (876)	1% (567)	8% (2.910)	82,1	0,1	0,1
tiwo	5% (1.773)	7% (2.406)	0% (0)	18% (6.654)	25,9	0,3	0,3
zoor	2% (772)	1% (398)	0% (0)	3% (997)	47,8	0,7	0,7
nger	1% (315)	2% (784)	0% (0)	8% (2.920)	57,8	1,7	1,7
sdxh	1% (532)	1% (355)	0% (0)	5% (1.837)	54,1	1,9	1,9
jp2la	1% (293)	1% (537)	0% (0)	10% (3.716)	17,8	0,5	0,5
vic.e	1% (218)	23% (8.182)	0% (42)	64% (23.097)	33,4	0	0
ihkg	1% (217)	1% (413)	0% (50)	4% (1.534)	29,7	0,5	0,5
ccar	1% (380)	2% (622)	0% (0)	7% (2.577)	42,8	0,1	0,1
diam	1% (246)	1% (380)	0% (1)	4% (1.556)	37,3	0,2	0,2
cwar	1% (267)	2% (858)	0% (0)	14% (5.331)	8,9	0,3	0,3
system	0% (37)	0% (41)	0% (0)	1% (240)	7,7	449.646.140,3	449.646.140,3
smss.exe	0% (0)	0% (0)	0% (0)	0% (0)	0	11,3	11,3

Assessment | Concurrent usage

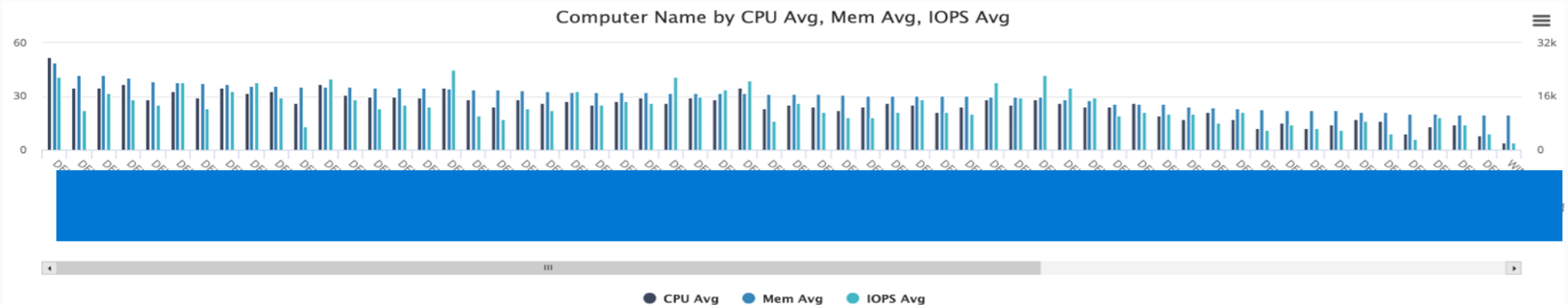
- Sizing recommendations are key to determining Azure target profiles.

Category	User Count	Average CPU (MIPS)	Average Memory (MB)	Average IOPS	Average Network (Mb)
Low	4	31.1	124.5	29.1	1.1
Medium	72	50.2	242.8	119.4	0.1
High	55	91.1	387.9	216.5	0.1

Server Performance (88 rows)

Computer Name	Status	CPU Avg (%)	Mem Avg (MB)	IOPS Avg (iops)	Net Avg (Mb/sec)
DE	Red	52% (19.229)		25.973	41 (27%)
DE	Green	35% (13.104)		22.349	22 (15%)
DE	Green	35% (12.918)		22.313	32 (21%)
DE	Yellow	37% (13.457)		21.419	28 (19%)
DE	Green	28% (10.494)		20.444	25 (17%)
DE	Yellow	33% (12.659)		20.149	38 (25%)
DE	Green	29% (10.866)		19.861	23 (15%)
DE	Red	35% (13.109)		19.697	33 (22%)
DE	Yellow	32% (11.755)		19.045	38 (25%)

Server Performance - Basic



Assessment | AVD Proposed Setup



Type1	Users	Sized Instance	3Y RI's (14h)	Storage Size	Storage Price	Total	Price per User
Low	-	-	-	-	-	-	-
Normal	76	5x D16s_V4	628€	17x P20 (512GB)	340€	968€	13€
Performance	55	6x D16s_V4	733€	5x P20 (512GB)	407€	1,140€	21€
Total			1,361€		747€	2,108€	

Bring your own license model. Compute Cost only

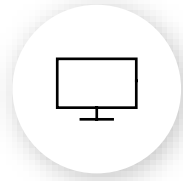
Note: This is a summary estimate, not a quote.

Figures are based on **EURO - €**. For up-to-date pricing information please visit <https://azure.microsoft.com/pricing/calculator/>



[More Details](#)

Azure Virtual Desktop Licensing



Client

Customers are eligible to access a Windows 10 Single- and Multi-Session on Azure Virtual Desktop (AVD) if they have one of the following licenses:

- Microsoft 365 E3/E5
- Microsoft 365 A3/A5/Student Use Benefits
- Microsoft 365 F3
- Microsoft 365 Business
- Windows 10 Enterprise E3/E5
- Windows 10 Education A3/A5
- Windows 10 VDA per user



Server

Customers are eligible to access with a Azure Virtual Desktop session to server workloads, if they have one of the following user- or device licenses:

RDS CAL-Lizenz with active Software Assurance (SA)

Misc. | Optimized end-user experience

The platform of your choice



- Connect from all devices of your choice (Windows, MacOS / iOS, HTML5, Android, Linux*)

* Coming soon

Differentiator Windows



- Windows experience on-site
- Comprehensive support for your devices

Advanced protocols



- Support for Windows Hello for Business
- Dynamically adjusted bandwidth usage

Containerized User Profiles



- Containerized User Profiles (FSLogix) with fast VHD (Virtual Hard Disk) loading times

Native O365 Power



- Uncompromising O365 email and calendar performance, real-time Outlook search
- Persistent and non-persistent environments

Teams Improvements



- Best conference and media experience
- Multimedia redirection, high performance, low latency for audio and video calls

Misc. | Integrated security components

Azure AD Security Services



State-of-the-art security services easily configurable by Azure AD (e.g. MFA, CA, etc.)

Reduced attack surface



Reverse connect technology eliminates the need to open incoming ports for VMs

Granular access control



Multiple administrators can be assigned role-based access control

Isolated user sessions






Isolated user sessions in single and multi-session environments

3

Next Steps

Recommendation | Findings

	Topic	Observation	Recommendation	Action
	General	To start with testing of Azure Virtual Desktop in a real environment, the must be done some tasks upfront.	Prepare a landing zone in Azure, connect your current infrastructure with Azure. Implement governance across your environments	Select partner to prepare the Azure environment.
	Azure Virtual Desktop	Identify all business-critical applications and applications not needed on AVD.	Create a AVD environment on Azure, test all applications on functionality and accessibility like latency etc.	Customer to identify the applications. Partner to prepare the environment. Customer to test the AVD pilot
	Recommended AVD pilot setup	Identify all users for the pilot, track all parameter with a 3 rd party tool like Lakeside to identify issues	Pilot with 17 „Normal“ Users and 10 „Performance“ Users. 1 server: D16s_v4, 1 server: D16s_v4, 2x P20 Disk. Total compute cost: 430€/month Total storage cost: 136€/month	Partner should investigate if the customer has an existing „Azure Landing Zone“. Confirm cost for moving these workloads. Start with this step in the first workshop as part of the roadmap

Total cost – optimized:
Pilot cost:

Note: This is a summary estimate, not a quote. Azure cost for landing zone, network and any labor cost etc. are not included. Figures are based on **EURO - €**. For up-to-date pricing information please visit <https://azure.microsoft.com/pricing/calculator/>



Thank you