GRÜßE AUS LEIPZIG!

AZURE MIGRATE

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- Seit 2019 bei SoftwareONE / COMPAREX
- Erst als Solutions Architect Future Datacenter im Solution Sales Team
- Jetzt als Principal Consultant & Architect im Azure Consulting Team
- Vorher IT-Leiter im Mittelstand
- Microsoft MVP und Speaker in diversen Communities

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AGENDA

1. Azure Migrate Overview
2. Azure Migrate Assessment & Migration
3. Azure Migrate Demo
4. Azure Migrate Lessons-learned

AZURE MIGRATE OVERVIEW

AZURE MIGRATE OVERVIEW

- Unified Migration Plattform
- Wide range of tools (Microsoft and 3rd Party)
  - Movere
  - Cloudamize
  - …
- Assessment of existing systems
- Replication & Migration
  - VMs / Servers
  - Databases
  - Web Applications
  - Data

AZURE MIGRATE OVERVIEW

- Using Azure Migrate is free in the first place
- When using 3rd Party offerings or Movere, you need to get a license!
- Some of them have free trials as well
- Azure Migrate and Azure Migrate tools (Microsoft-provided) are free of charge, but you will pay for
  - ISV / 3rd-Party-Tools if used
  - Used Storage during replication
  - Storage Transactions during replication
  - Data Transfer during replication
  - Compute / VMs during Testmigration and after final Migration

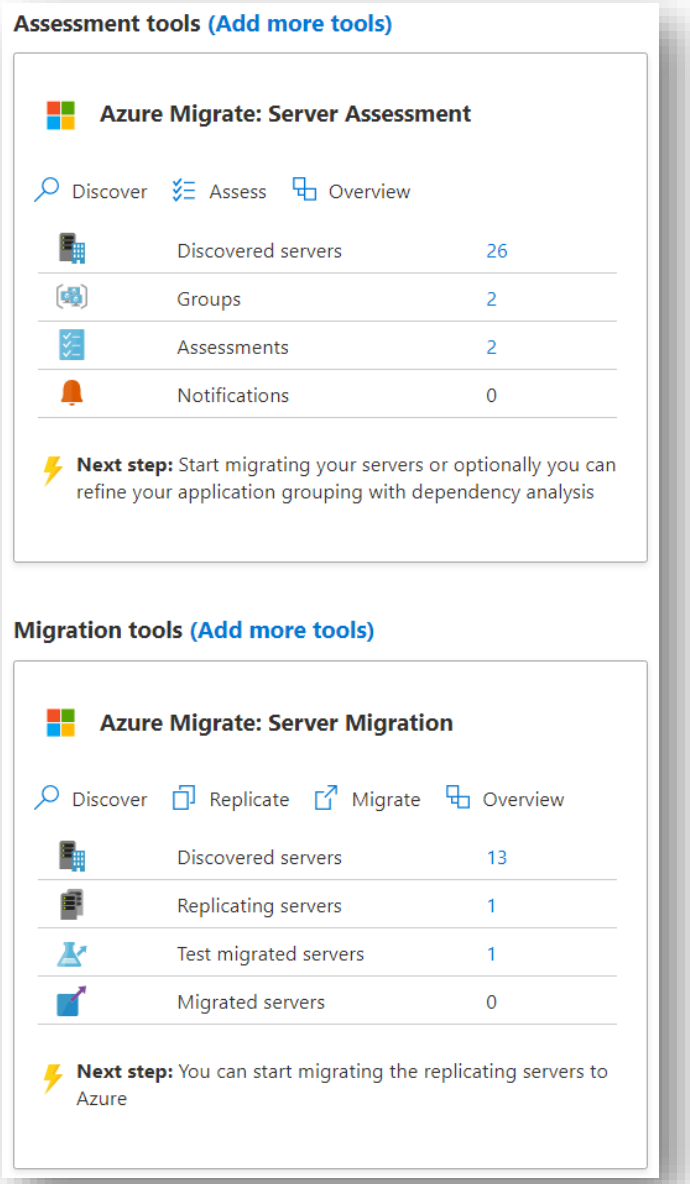
AZURE MIGRATE OVERVIEW

- When using Dependency Visualisation for Server Assessment, it is free for the first 180 days; after this, Log Analytics charges will apply
- When replicating a VM for more then 180 days, you will pay ~21€/month/instance
- As Azure Migrate is free, there is no SLA on it!

ASSESSMENT AND MIGRATION

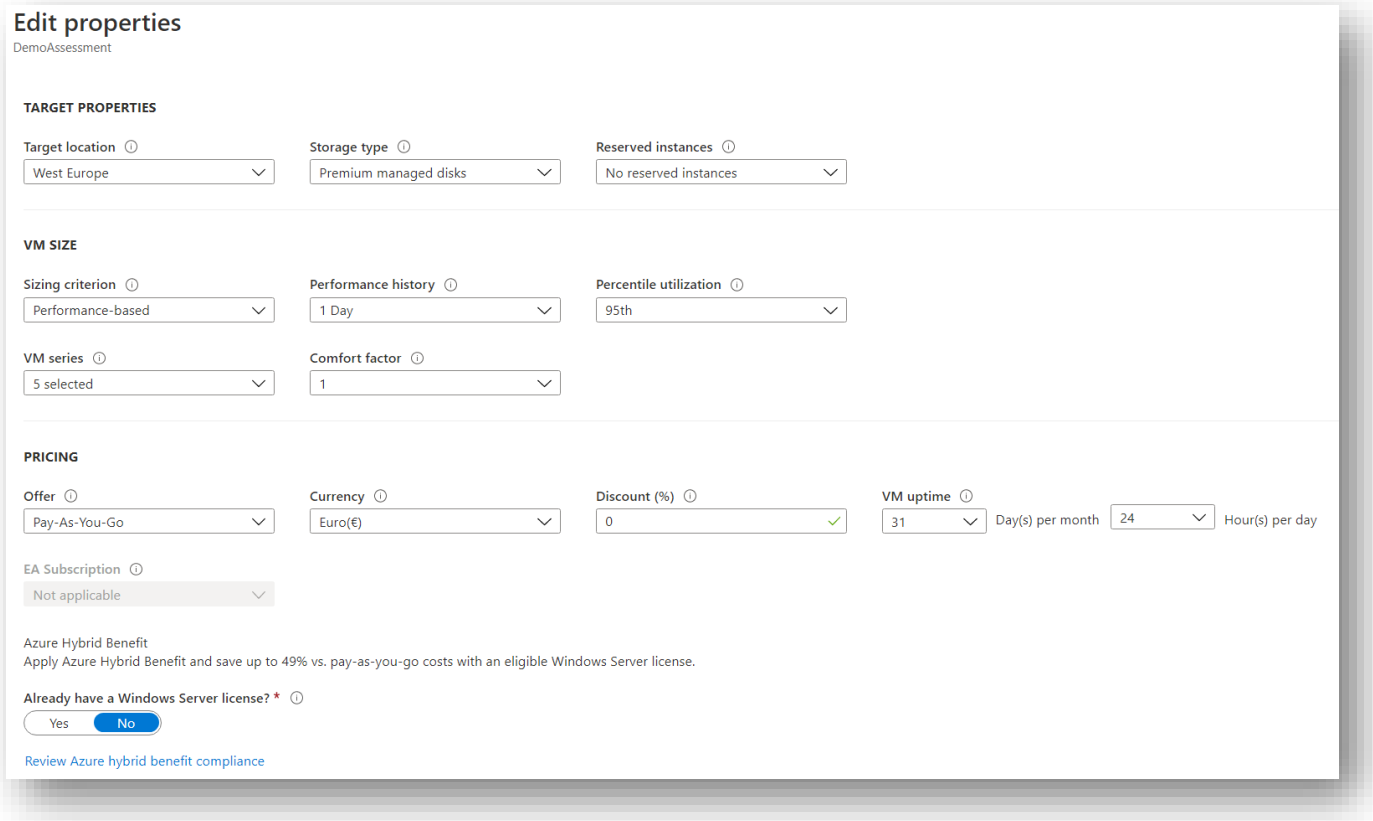
ASSESSMENT & MIGRATION

- Azure Migrate usually consists of two phases:
  - Assessment
  - Migration
- Both could use different tools



ASSESSMENT

- Assessment consists of these steps
  - Discovery / Inventory
  - Grouping
  - Assessment (with defined assumptions)
- Discovery can be done in two ways:
  - Using Appliance
  - Using CSV import

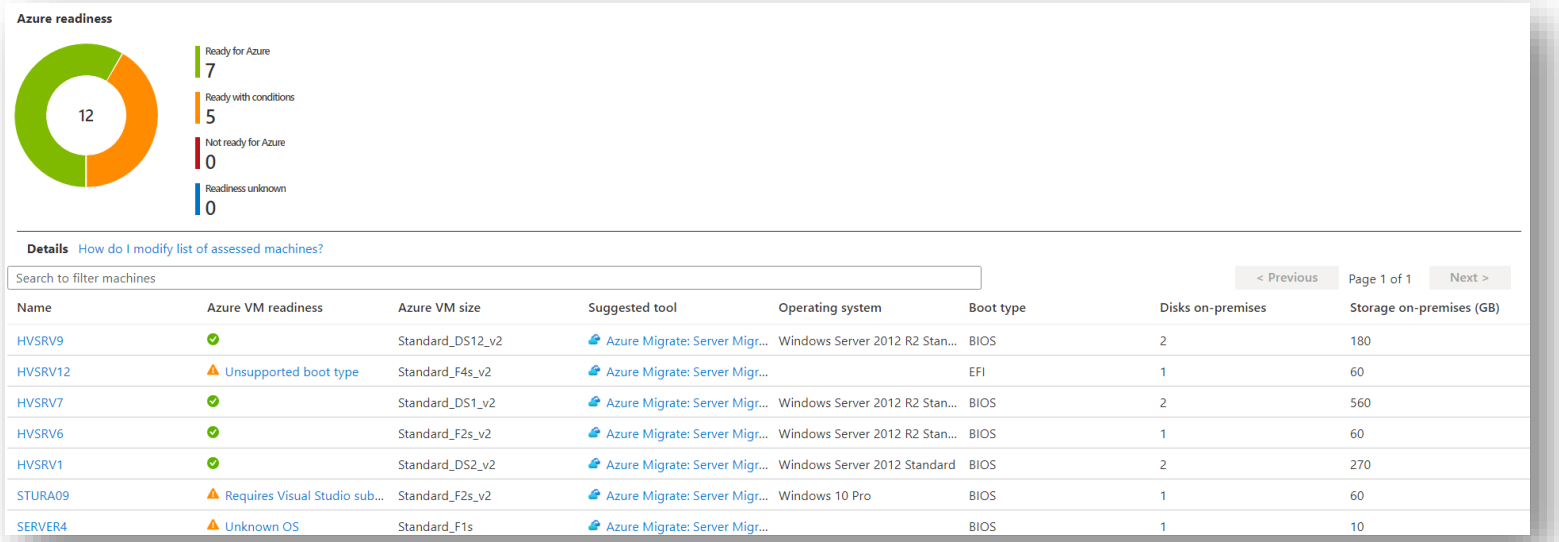


ASSESSMENT

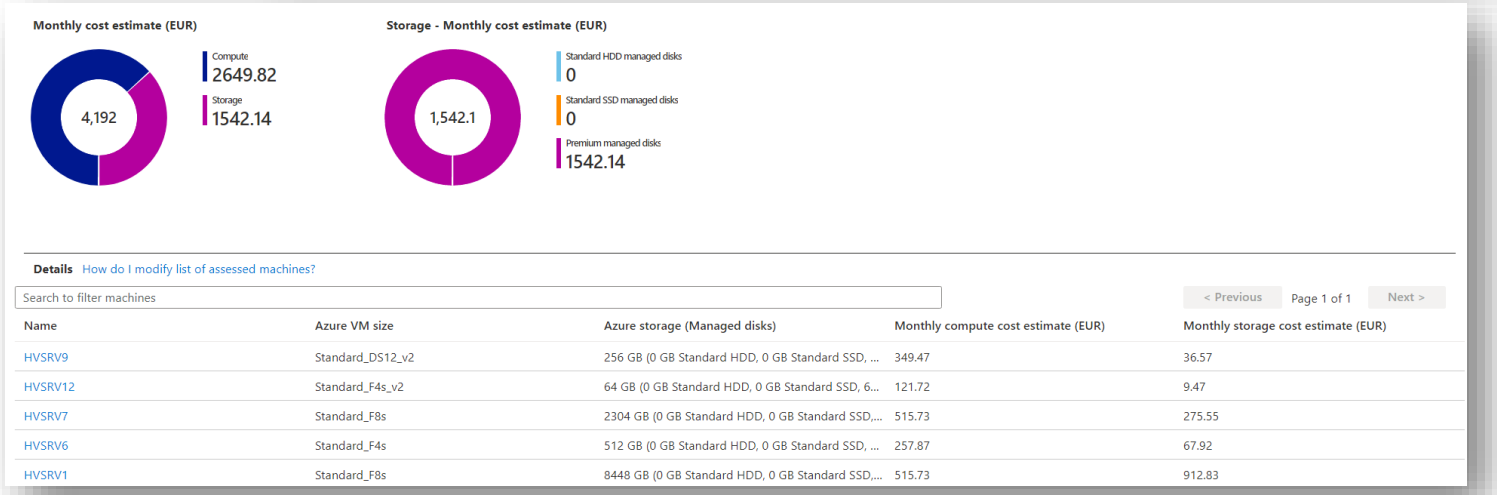
- Using the Appliance is recommended
- It will not only collect a full list of the VMs but also monitor the resource usage
- This can be used for sizing later
- When using CSV, you can only size „as on-premises“ / as given in the CSV
- Appliance needs to run some time (at least 7 days, better 14 days) to get proper data for resource utilization

ASSESSMENT

- Assessment will provide two types of results:
  - Azure readiness



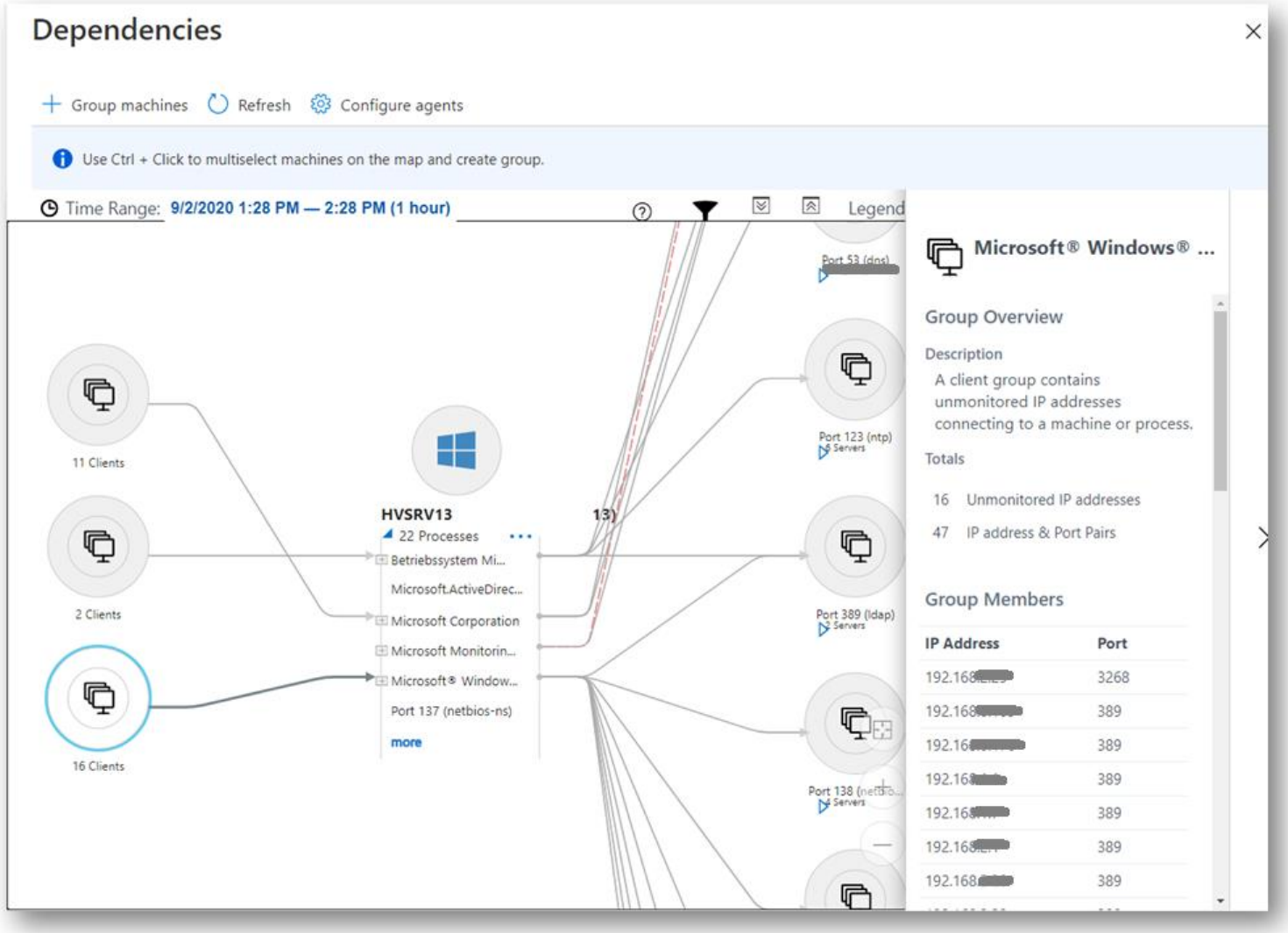
  - Cost details



ASSESSMENT

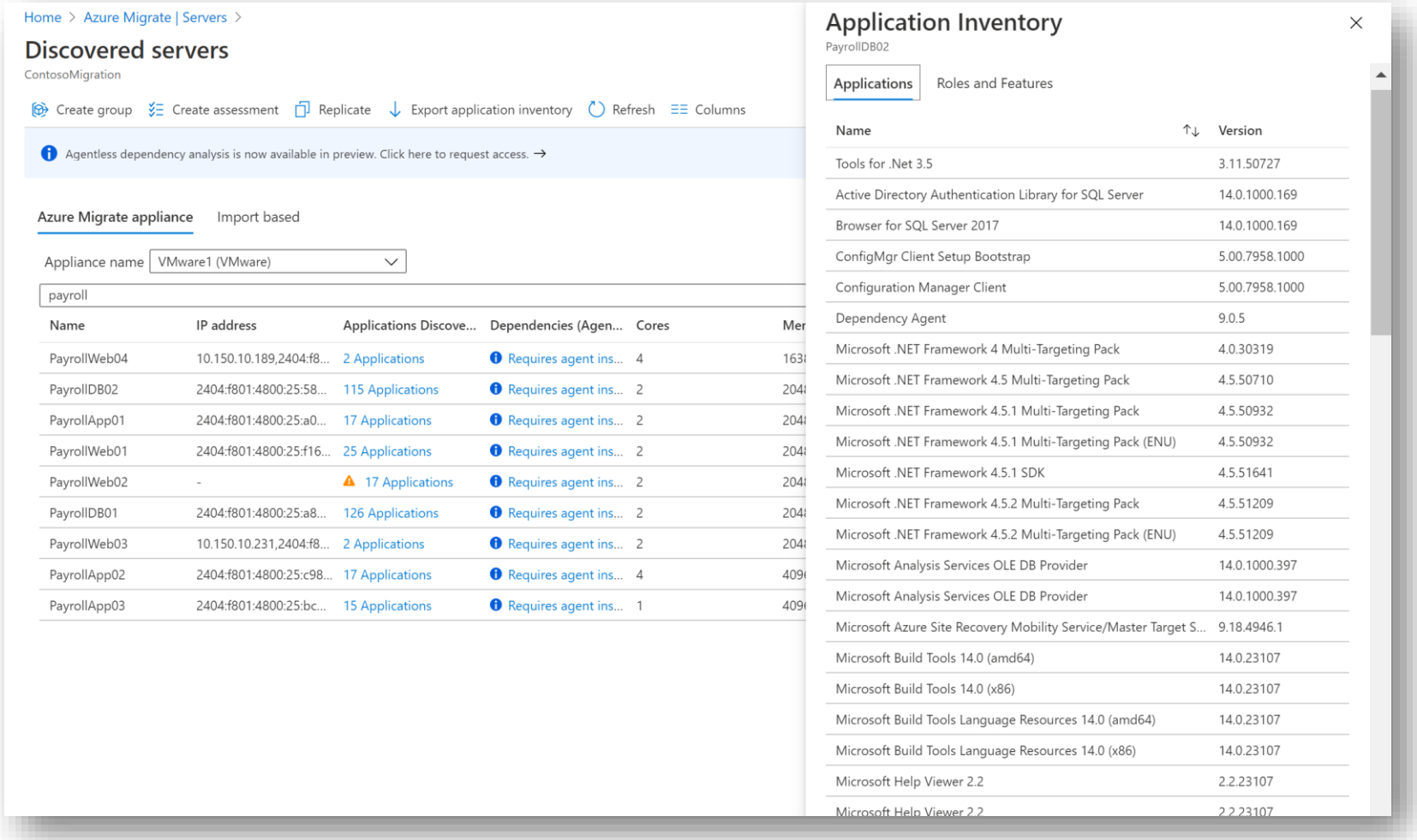
- Optionally, you can set up „Dependency Analysis“ (needs Agent on Hyper-V)

- This will allow further investigation of dependencies and allows better grouping of servers for the migration



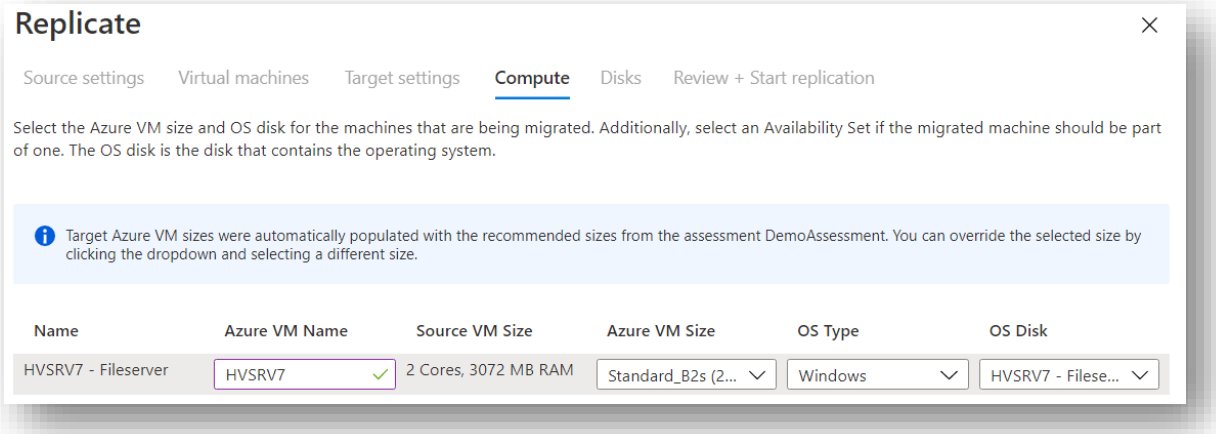
ASSESSMENT

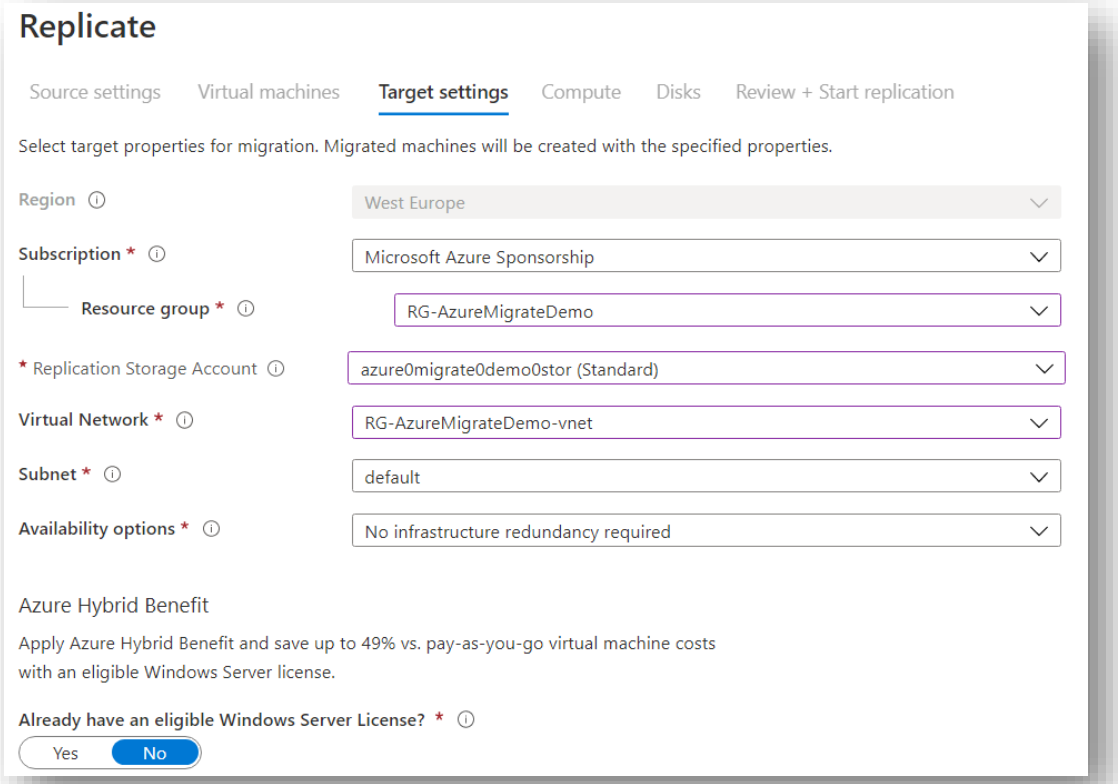
- For VMWare environments, Application Inventory is in Public Preview



MIGRATION

- Once a VM is at least discovered, it can be replicated
- Replication = The blocks / bytes of the on-prem or copied to the cloud and kept in sync between on-prem and cloud then
- From that moment on, you are paying for storage / transactions
- You need to specifiy the future VNET and VM-Size allready



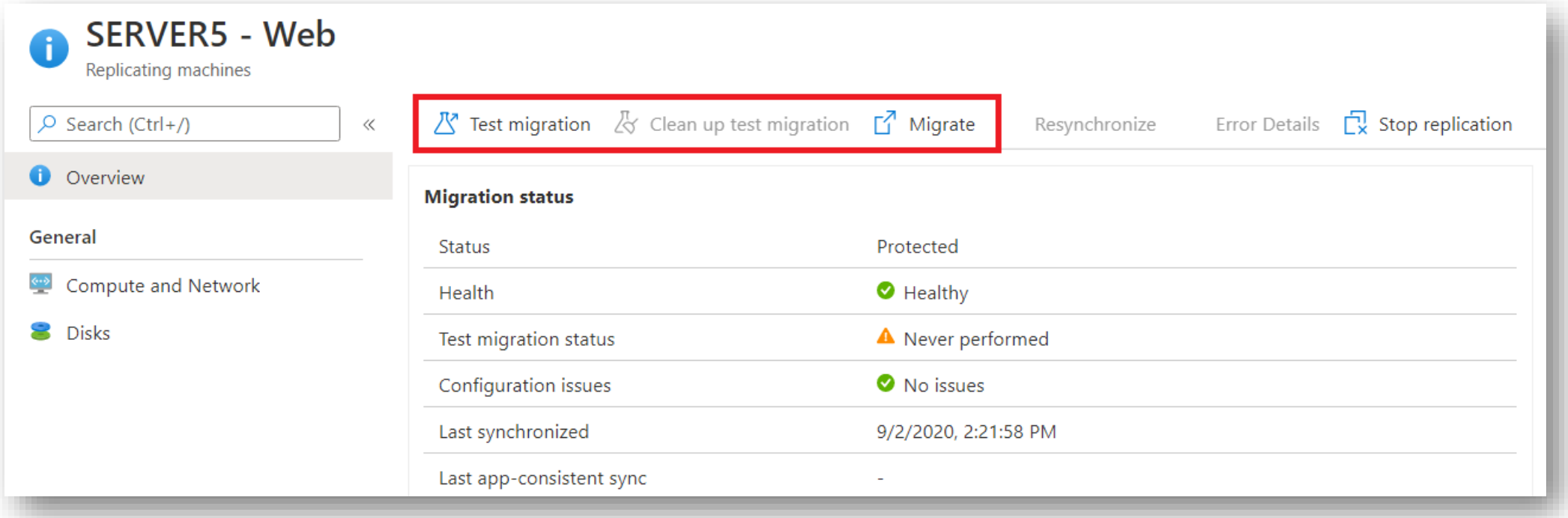


MIGRATION

- Either before starting the replication or at least while it is running, the on-prem VM usually needs some preparation:
  - RDP needs to be reachable
  - IP needs to be dynamic
  - Drive Letters might be in the need of making them „static“
  - Some on-prem-based agents should be removed (like VMWare Agent, Backup Agent, …)
  - There should be no pending updates

MIGRATION

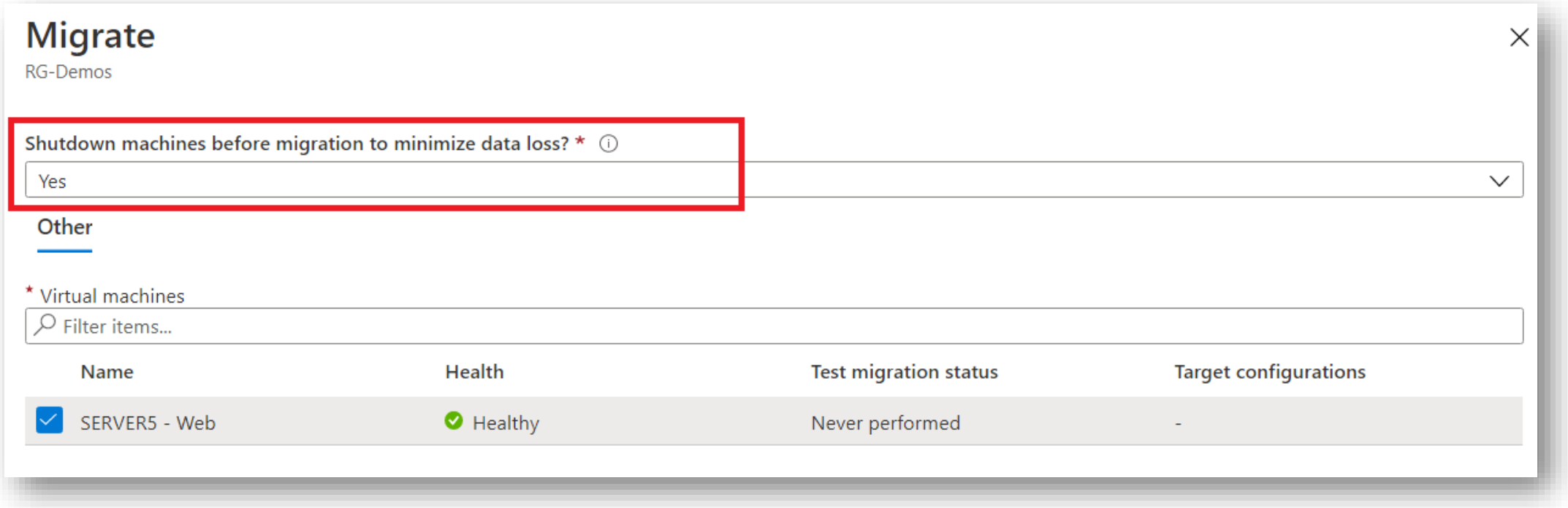
- Once the VM is replicated, it can then be Migrated or Test-Migrated

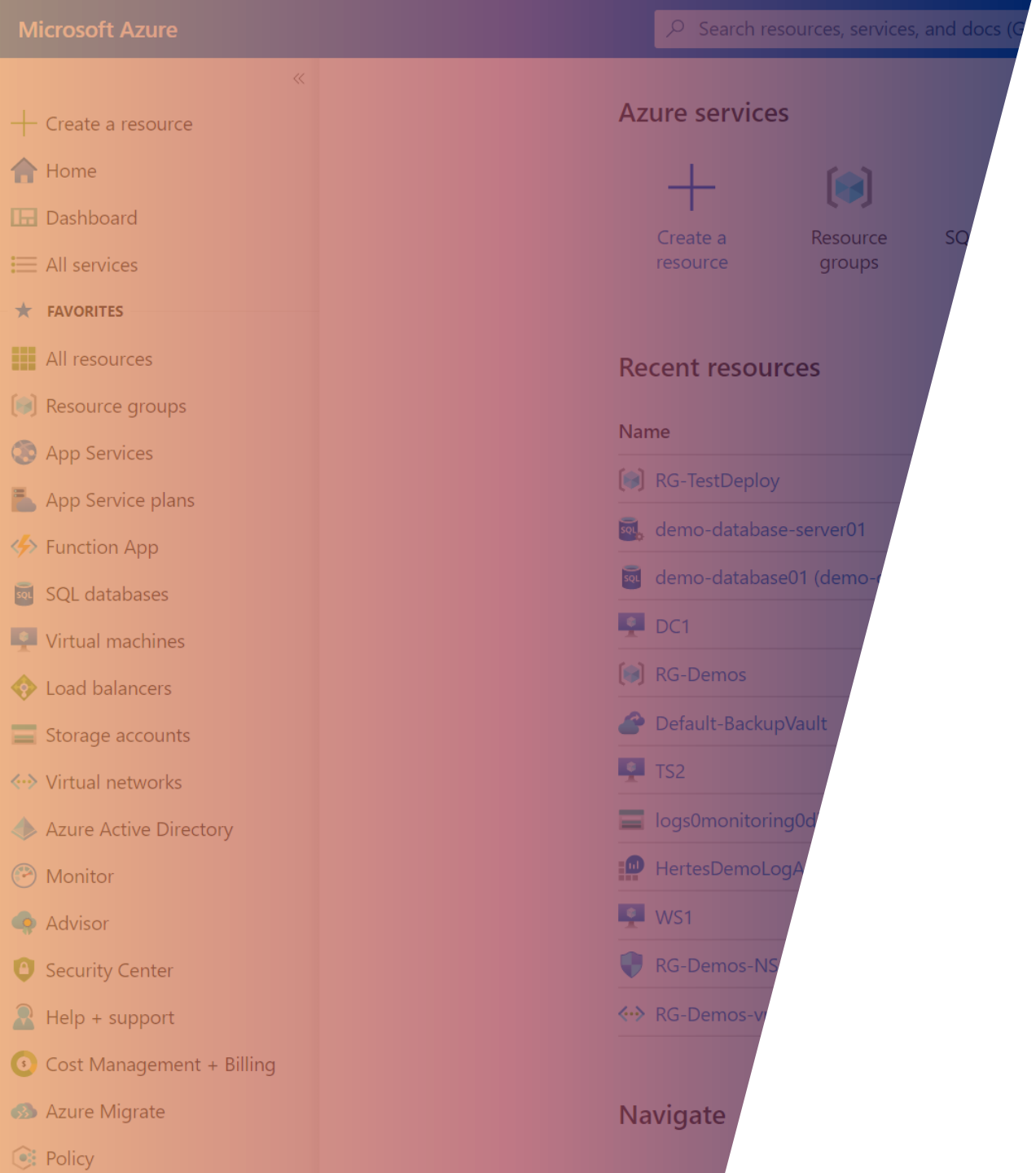


- Testmigration is highly redommended first and makes sure VM is working without affecting the (still productive) on-prem VM

MIGRATION

- The real and final Migration will usually shutdown the on-prem VM, replicate last deltas and then spin-up the VM on Azure

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Azure Migrate

Microsoft

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Overview

Migration goals

Servers
Databases
VDI
Web Apps
Data Box

Manage

Discovered items

Support + troubleshooting

New support request

Get started | Explore more

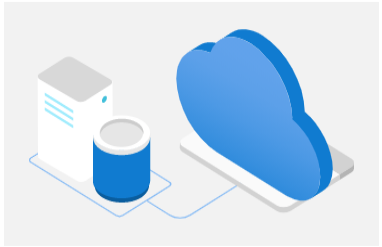
Migrate your on-premises datacenter to Azure

Discover, assess and migrate your on-premises applications using Microsoft or third-party tools, or find an expert to help with your migration. Learn more

Windows and Linux servers

Discover, assess and migrate your on-premises VMware and Hyper-V virtual machines or Physical servers to Azure.

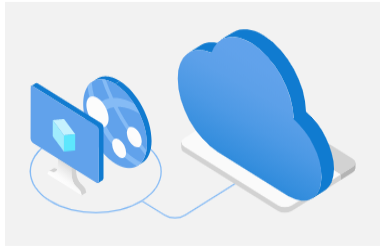
Assess and migrate servers



SQL and other databases

Assess and migrate your on-premises databases to Azure SQL Database Managed Instance or Azure SQL Database.

Assess and migrate databases



Explore more scenarios

Assess and migrate web apps, migrate data and assess virtual desktop infrastructure (VDI). Find giudence on various migration activites

Explore more

LESSONS LEARNED

LESSONS LEARNED

- Make sure, customer knows and understands the requirements for Azure Migrate
- …and is able to provide / implement them!
  - This affects network / firewalling / proxy topics
  - This affects virtualization environment (Hyper-V / VMWare)
  - A lot of access rights are needed on several systems (vCenter, Azure Subscription, Azure AD, …)

LESSONS LEARNED

- When using VMWare,
  - Make sure there is sufficient rights on vCenter
  - Make sure Appliance can talk to vCenter AND Hosts
  - Make sure to have a VMWare Customer Connect login to download VDDK

LESSONS LEARNED

- Never customize the Migrate Appliance VM (beside VDDK)
  - No domain join
  - No antimalware agent
  - Nothing!
- Appliance is non activated Windows Server – needs re-arm after 180 days

LESSONS LEARNED

- QoS / Traffic Shaping sometimes can be tricky…

LESSONS LEARNED

- Plan for the unforseen!
  - Setting up Azure Migrate can be done within a single days…
  - …or could take a whole week!


QUESTIONS?

THANK YOU!

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