

Guten Morgen!



Microsoft Networking and Server Essentials

Berlin → Heidelberg
Physik

NT 4.0
2000 AD

Cloud vs. On Premises
Hybrid

2016
2022

Thomas Jäkel

brainymotion

Lead Trainer Cloud Infrastructure

Microsoft Certified Trainer since 1999



Hello! Student Introductions

Your name

Company affiliation

Title/function

Microsoft Azure experience

Your expectations for the course

New
Bicep

Lang

HELLO

Windows PowerShell 5.1

Open Source PowerShell 7

+ Azure CLI

Tool az um list

Template

Azure
Resource

json

API

Azure

Manage
ARM

Fortran 77
95

PowerShell
Get-VM
Set-VM

Agenda:

1. Azure Architecture Fundamentals
2. Administration Fundamentals
3. Virtualization Fundamentals
4. Network Infrastructure Fundamentals
5. Storage Management Fundamentals
6. Identity Services Fundamentals

Cloud

prakt. Übungen Skillable

Hyper-V

On
Prem

AD
Domain

Cloud

Entra ID
(Azure AD)
sync. → Tenant



1. Azure Architecture Fundamentals

- ✓ Inside Azure Datacenters
- ✓ Regions
- ✓ Availability Options
- ✓ Azure Resources
- ✓ Resource groups
- ✓ Azure Subscriptions
- ✓ Management Groups
- ✓ Azure compute services
- ✓ Azure networking services
- ✓ Azure storage services

2. Administration Fundamentals

- ✓ Administration in Windows Server
- ✓ Administration in Azure

GUI — Server Manager
Admin Center
MMC

(Windows-) PowerShell Script
Cmdlets



3. Virtualization Fundamentals

- ✓ Configure and manage Hyper-V
- ✓ Configuring VMs
- ✓ Virtual machines in Azure
- ✓ Container
Docker



4. Network Infrastructure Fundamentals

TCP / IP

- ✓ IPv4 Fundamentals
- ✓ IPv6 Fundamentals
- ✓ Dynamic host configuration Protocol (DHCP)
- ✓ Domain Name Service (DNS)
- ✓ Azure network Fundamentals
- ✓ Configure Network Security Groups
- ✓ Configure Azure DNS
- ✓ Configure VNet Peering
- ✓ Configure Network Routing
- ✓ Configure Azure Load Balancer

5. Storage Management Fundamentals

- ✓ Volumes and file systems in Windows Server
- ✓ Implementing sharing in Windows Server
- ✓ Configure Storage Accounts
- ✓ Configure Blob Storage
- ✓ Configure ~~Azure~~ Files
- ✓ Configure Azure Storage with Tools

FAT

NTFS

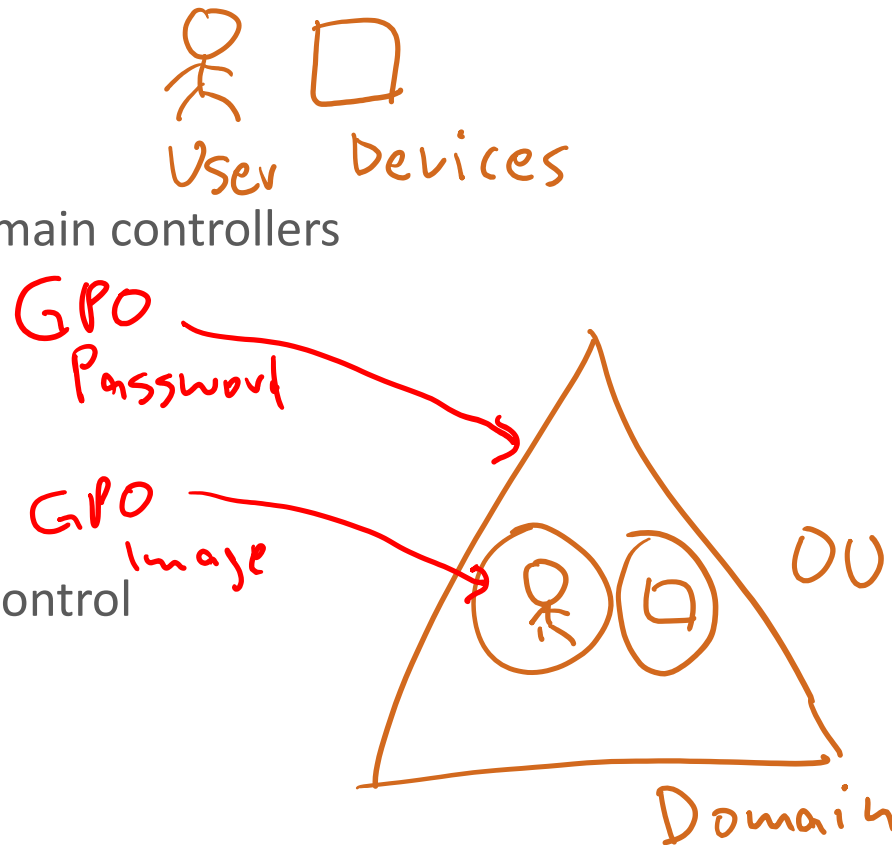
Share



SMB

6. Identity Services Fundamentals

- ✓ Overview of AD DS
- ✓ Deploying Windows Server domain controllers
- ✓ Implementing Group Policy
- ✓ Azure Active Directory
- ✓ Configure Azure Policy
- ✓ Configure Role-Based Access Control



Authentication
Authorization
Accounting

aka.ms/Learn



Docs

Documentation

Learn

Certifications

Q&A

Code Samples

Shows

Events

Search



Learn

Products ▾

Roles ▾

Educator Center ▾

Student Hub ▾

Learn TV

Browse Courses

FAQ & Help

LEVEL 11



23125 / 71899 XP

Welcome back, Thomas Jäkel

Some items for you since your last visit:



CERTIFICATION

Microsoft Certified: Azure Fundamentals

Next module: Describe cloud computing

Dismiss

Start



COLLECTION

Build 2022 Intro to Tech Skills Collection

Next module: [Develop a growth mindset](#)

Dismiss

Start



EXAM

Managing Microsoft Teams

Next module: [Explore Microsoft Teams](#)

Dismiss

Start

[Help us customize your path](#)

[See all activity](#)

We think you might like these



LEARNING PATH

AZ-204: Create Azure App Service web apps



LEARNING PATH

AZ-204: Integrate caching and content delivery within



LEARNING PATH

AZ-204: Implement user authentication and authorization

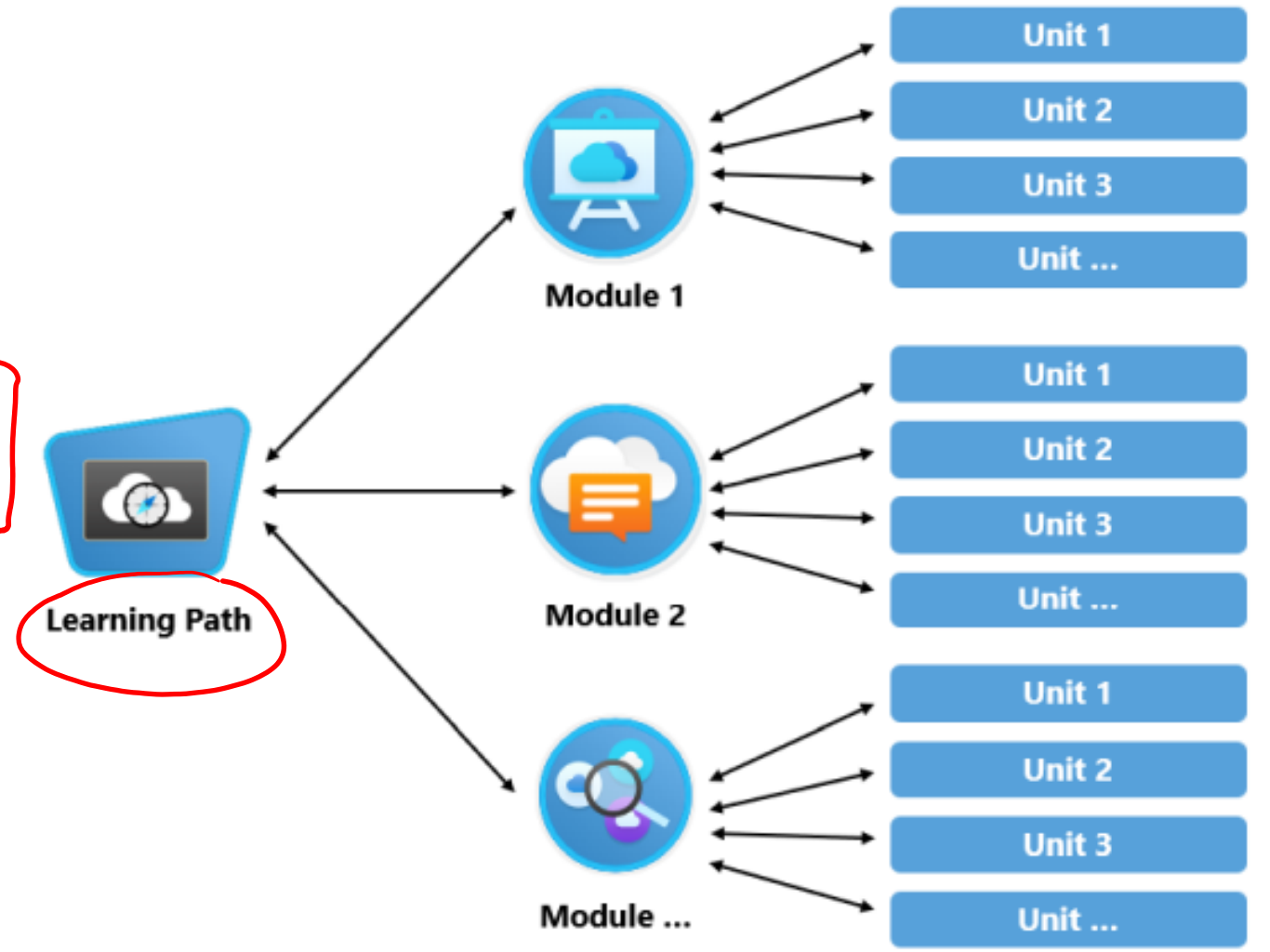
Microsoft Learn

Anonymous

- All Learning Paths

With Learn Account !

- Sandboxes
- Exam Registration
- Transcript
- Collections
- Badges
- Level
- Renew Certifications



9⁰⁰

15min Pause

12³⁰ - 13³⁰

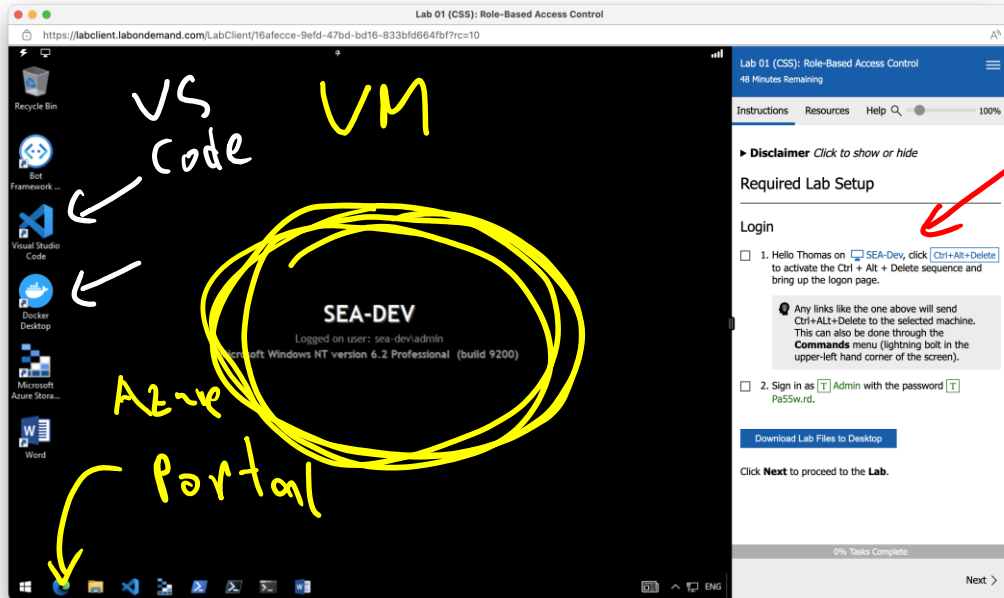
15min Pause

17⁰⁰

AZ-800 Labs

- Login with Training Key
- Azure Subscription paid by Skillable
- SEA-DEV + Instructions
- 180 Days 10 x

Account



Step by Step

Skillable ← LODS

The End

(