

# A practical guide to AVD Landing Zone Accelerator

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Azure User Group Norway

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# Today's menu

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- What it is
- What it is not
- What's in the box?
- Repo structure
- Bicep code structure
- Key decisions and customization
- Prerequisites
- Gotchas, hidden gems, and future



# AboutMe

```
var myHandle = 'pazdedav'

output twitter string =
'https://twitter.com/${myHandle}'

output linkedIn string =
'https://no.linkedin.com/in/${myHandle}'

output github string =
'https://github.com/${myHandle}'

output sessionize string =
'https://sessionize.com/${myHandle}'

output speakerDeck string =
'https://speakerdeck.com/${myHandle}'
```



**David Pazdera**

pazdedav

Cloud & DevOps Architect, working daily with Azure, primarily focusing on automation and "everything as code"

Edit profile

pazdedav / README.md

## Hello there, I'm

I work as a Principal Cloud Architect at Microsoft. I'm an [Azure Heroes badger](#), and a [Microsoft Certified Azure Solutions Architect Expert](#).

I am particularly passionate about Cloud & DevOps.



I am also a public speaker at various events.

A bit more about me:

- 🔭 I'm currently working on a new project.
- 🌱 I'm learning C# and .NET.
- 👥 I'm looking to collaborate with others.
- 💬 Ask me about anything related to (Azure) DevOps.

# TLDW;

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**Azure Academy**

<https://www.youtube.com/watch?v=yTbFkQqLGqM>



What it is

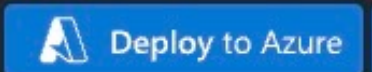


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# What it is

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- **deployment automation** - simplify AVD setup - best practices
- architectural approach and **reference implementation**
- **customer scenarios** helping to accelerate the development and deployment of AVD that conforms with Enterprise-Scale
- supports **greenfield** and **brownfield** scenarios (Alerts, Scaling, Start on Connect, AzMon workbooks)
- **Scenarios** available today: baseline + custom image build
- deployment options:
  - portal/GUI, Bicep, Terraform, JSON ARM

Deployment Type	Link
Azure portal UI	
Command line (Bicep/ARM)	
Terraform	



# What it is not

- end-to-end VDI management
- GitOps- based AVD management

## Getting Started

This guide is designed to help you get started with deploying AVD using the provided Bicep template(s) within this repository. Before you deploy, it is recommended to review the template(s) to understand the resources that will be deployed and the associated costs.

This accelerator is to be used as starter kit and you can expand its functionality by developing your own deployments. It is meant for creating a new AVD workload, so **it cannot be used to maintain, modify or add resources to an existing or already deployed AVD workload from this accelerator.** You can however, destroy the existing workload and use this accelerator to create a new AVD workloads.

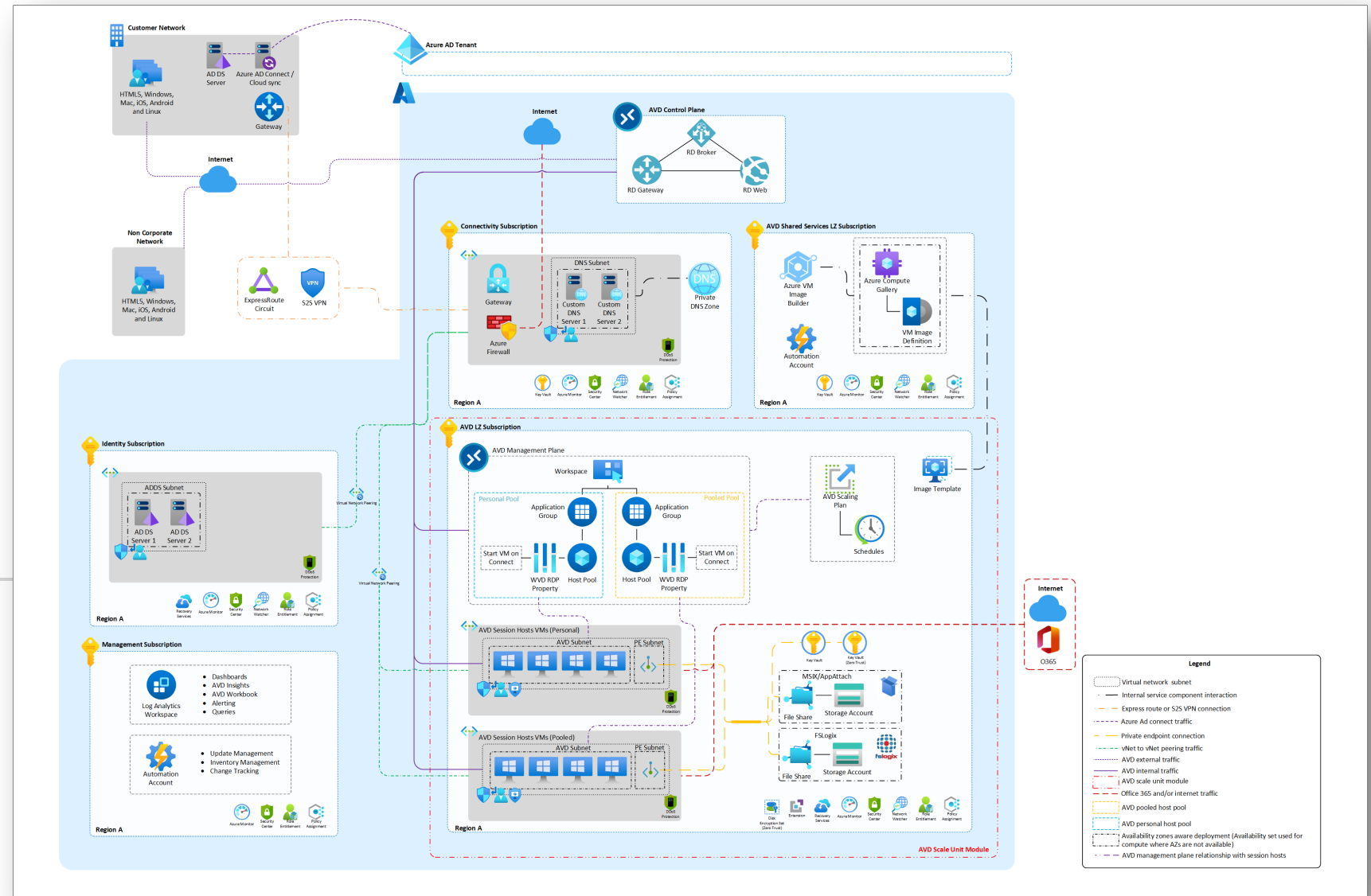
There are two solutions in the AVD Accelerator. Be sure to follow the guidance below for the appropriate solution:

- **Baseline** - Azure Virtual Desktop
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## Redeployment Considerations

We redeploying the baseline automation with the same deployment prefix value, **clean up of previously created resource groups or at least their contained resources will need to be removed before the new deployment is executed,** this will prevent the duplication of resources (key vaults and storage accounts) and conflicts of IP range overlap when creating the AVD virtual network.

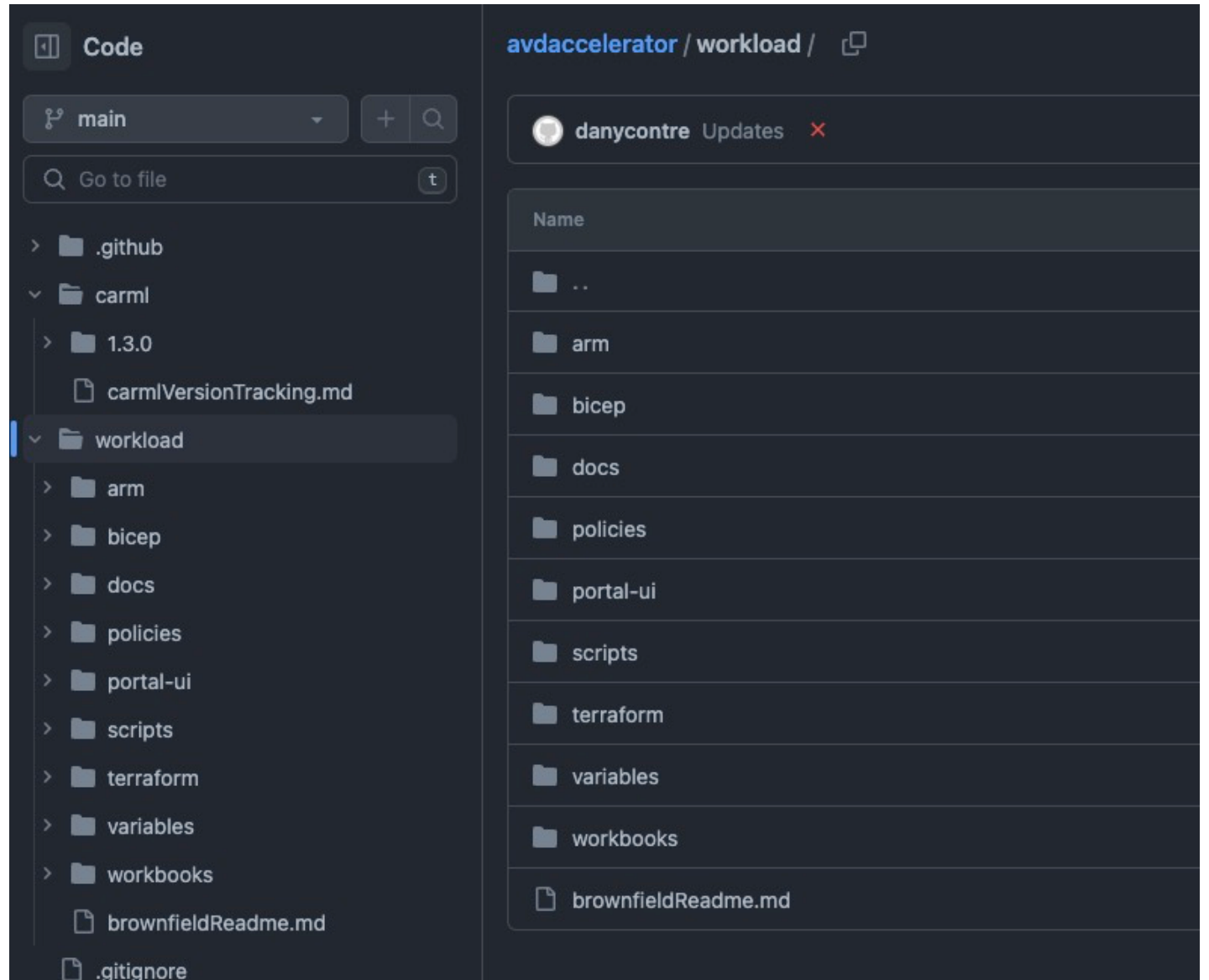
# What's in the box?





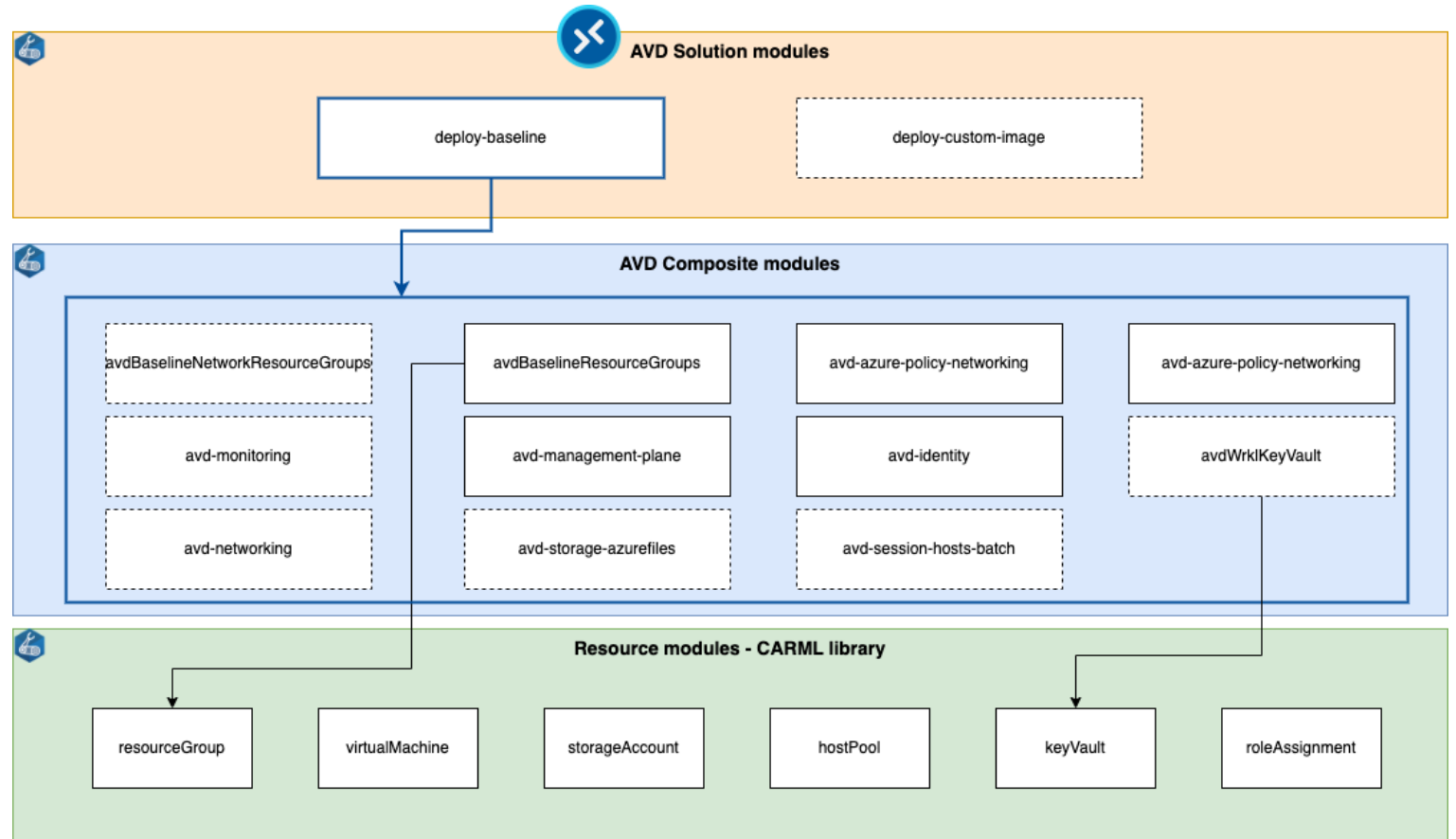
# Repo structure

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# Bicep code structure

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# Key decisions and customizations

- exposed parameters
  - [deploymentPrefix](#), avdSessionHostLocation, avdManagementPlaneLocation
  - avdHostPoolType, avdHostPoolLoadBalancerType, avhHostPoolMaxSessions
  - avdHostPoolRdpProperties, [avdDeploySessionHosts](#)
- IdP - [avdIdentityServiceProvider](#)
- Bring your own VNet – [createAvdVnet](#), existingVNet\*\*
- FSLogix storage add-on - [createAvdFslogixDeployment](#)
- Monitoring add-on – [avdDeployMonitoring](#), deployAlaWorkspace + deploy monitoring policies (sub)
- Scaling plan add-on - avdDeployScalingPlan
- Custom names – [avdUseCustomNaming](#)
  - resource naming: [avdaccelerator/resource-naming.md at main · Azure/avdaccelerator · GitHub](#)

# Prerequisites

- Azure subscription with Owner permissions and `Microsoft.DesktopVirtualization` RP registered
- Chosen IdP and dependencies must exist, e.g., AAD Connect
- Access from AVD subnet to writeable DCs
- Contributor in existing Hub VNet (for peering) when creating new spoke VNet
- Existing Spoke VNet - disable 'private endpoint network policies'
- Subnet for session hosts needs to allow egress to a list of URLs to AVD service and the accelerator repo
- Private DNS zones for Azure Files and Key Vault PE resolution (linked to AVD subnet when not using custom DNS servers)
- Deployment identity + AD Join accounts cannot have MFA enabled
- UI-based deployment: deployment identity needs 'query AAD tenant' permissions (e.g., not guest accounts)
- ALZ (recommended)
- Licenses in AAD
- ObjectID for AVD (WVD) enterprise application (for Start VM on Connect or Scaling Plans)

# Gotchas, hidden gems, and future [1/3]

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Experience from deploying the accelerator on ALZ Contoso reference implementation:

- <https://pazdedav.blog/2023/04/21/avd-accelerator-lessons-learned/>
- product feedback - <https://github.com/Azure/avdaccelerator/issues/352>
- Public network access should be disabled for PaaS services – **fixed** (enabled for Private Endpoint configuration)
- Storage-Azure-Files deployment failing due to missing firewall openings: needed for NuGet packages and PowerShell Gallery access



# Gotchas, hidden gems, and future [2/3]

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- VM naming convention – CORP LZ and domain join
- Management VM and least privilege access (missing local Admin rights)
- Custom Image Build and workload identity permission (LAW)
- AIB / Packer and custom VM (name, PIP)
- Manual cleanup required for Management VM and Deployment Script resources

# Gotchas, hidden gems, and future [3/3]

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- Cost estimate (using Infracost) -  
<https://github.com/Azure/avdaccelerator/blob/main/workload/docs/cost-estimate.md>
- Releases and roadmap
  - Missing versioning / tagging
  - Missing product roadmap (GitHub Project or similar)

Thank  
you