

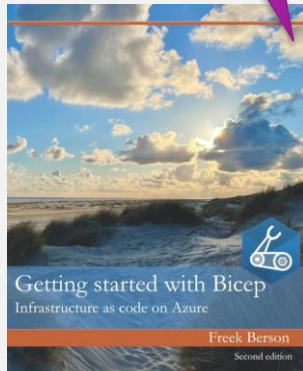


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November 13-15, Oslo Spektrum

Post a picture on X  
or LinkedIn and win  
the book!

# Optimize Azure Infrastructure as Code Deployments with VS Code



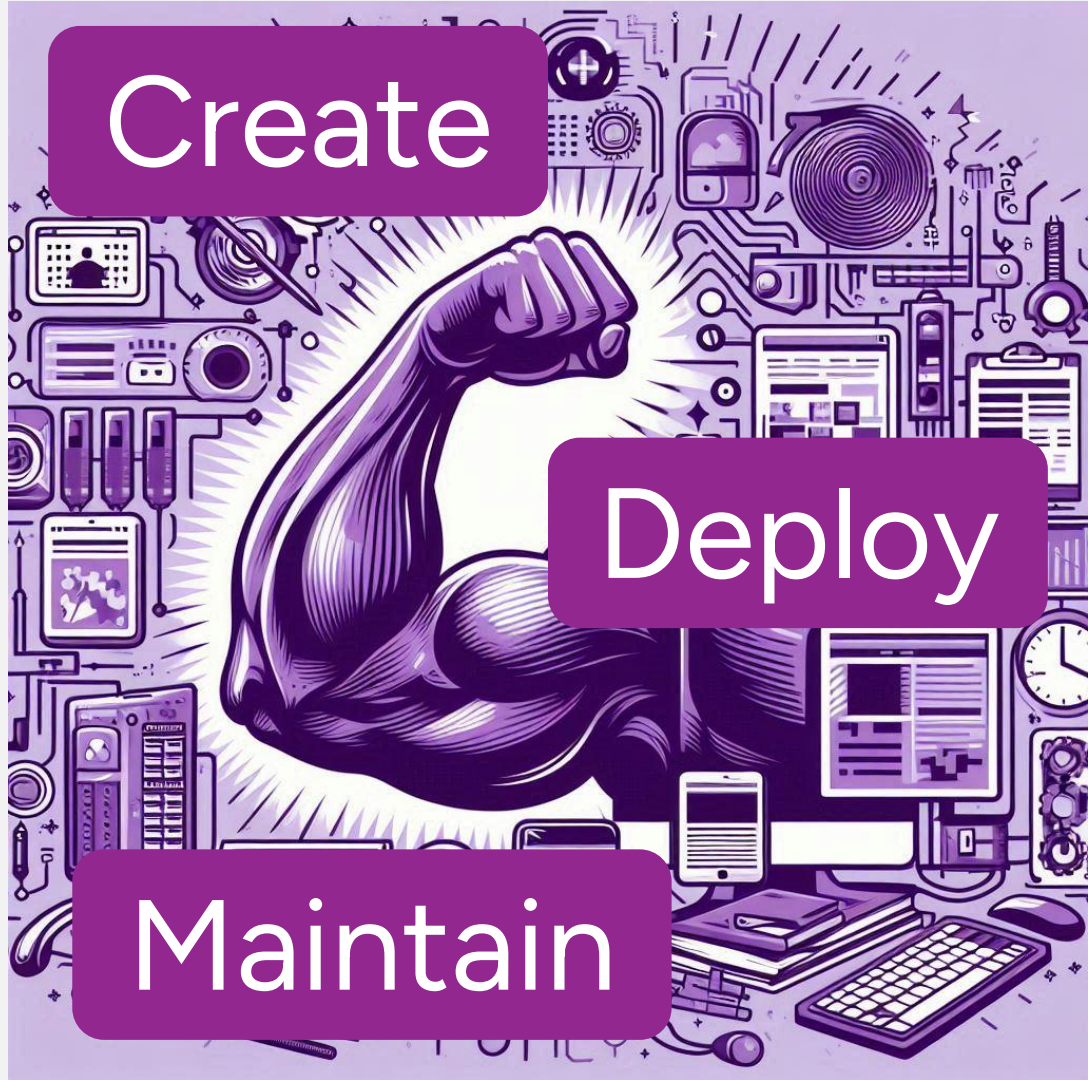
NIC  
EMPOWER

FREEK BERSON (@fberson)

Create

Deploy

Maintain



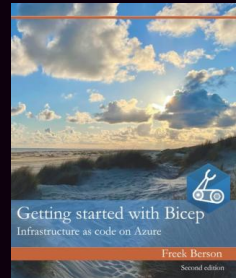
# Freek Berson

Optimize Azure Infrastructure as Code Deployments with VS Code

NIC  
EMPOWER



*Principal Product Manager*  
*@fberson*  
*Microsoft MVP (AVD & Azure)*  
*Published Author*








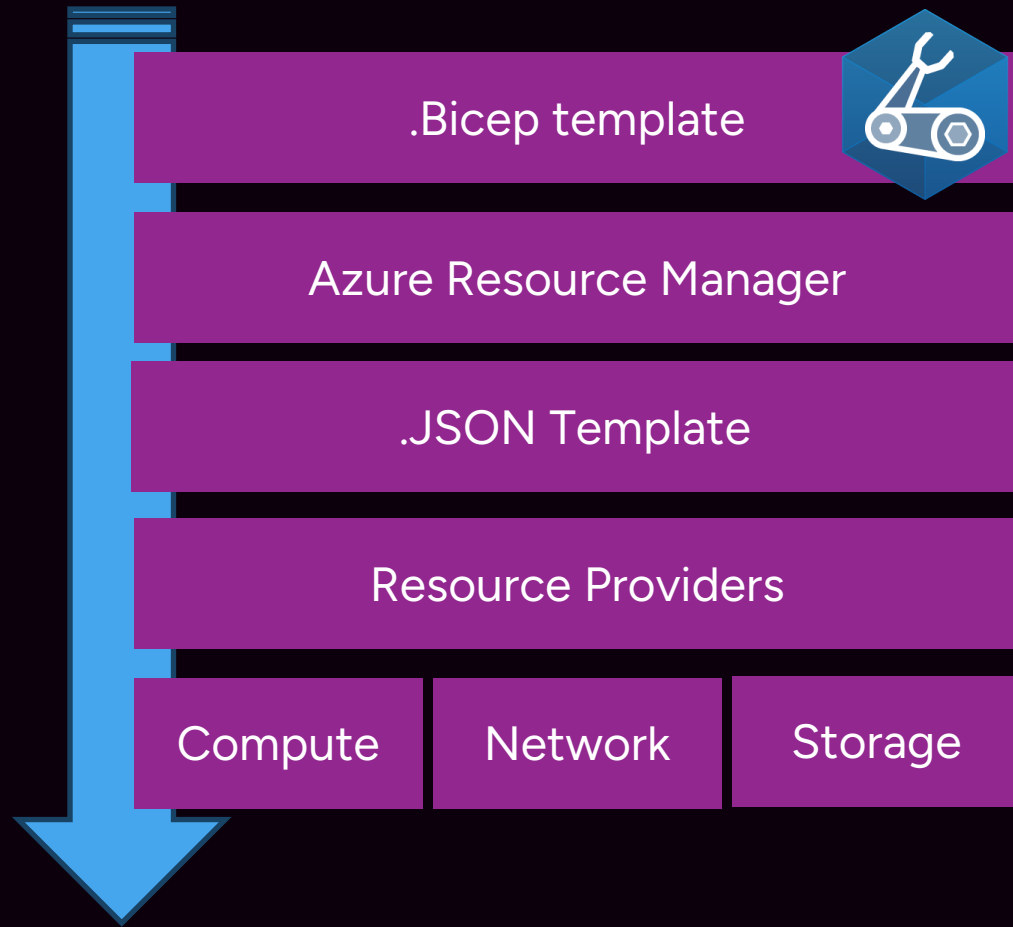
# Infrastructure as Code

The background of the slide is a purple-tinted image of a city skyline, likely Chicago, with several prominent skyscrapers. Overlaid on the image are various digital elements, including a grid of lines, floating squares and hexagons, and vertical streams of small, illegible text or code, creating a high-tech, digital atmosphere.

The practice of managing & provisioning computing infrastructure through declarative configuration files.

# What is Bicep

-  Declarative
-  Idempotent
-  Fast



# 1. Create

Optimize the coding experience with the Bicep VSCode Extension

## 2. Deploy

Take advantage of the Bicep Deployment Pane

# 3. Maintain

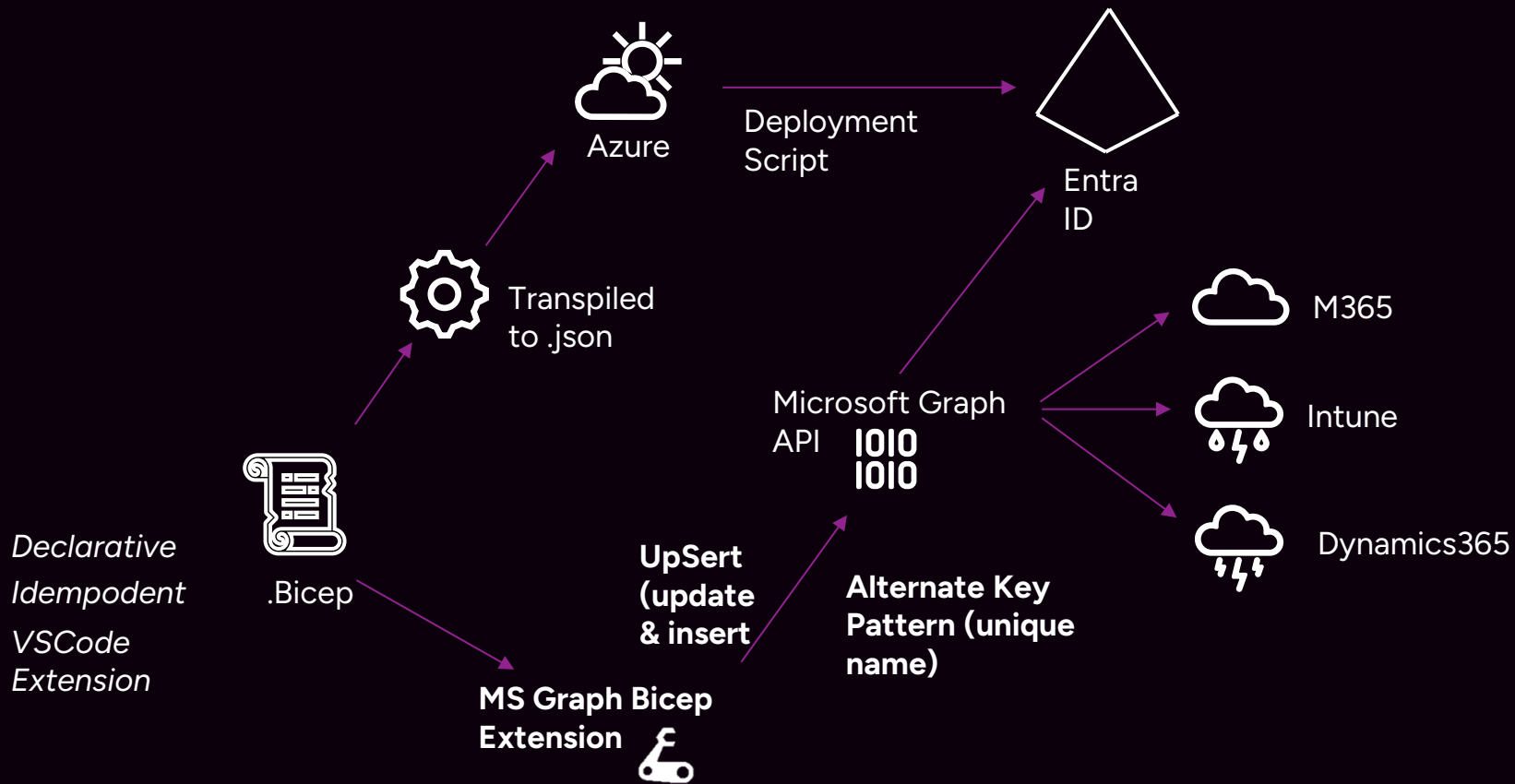
Embracing Deployment Stacks



## 4. Advanced topics

Graph API

# Graph API & Bicep



# Entra ID Resources using Bicep?

**In v1.0, only these services are supported:**

- Applications
- App role assignments
- Federated identity credentials
- Groups
- OAuth2 permission grants (delegated permission grants)
- Service principals

**Members of groups are Implemented as non-destructive**

**Owners of groups are limited to 100**

**!! Update to owners & members requires breaking change  
(released via dynamic types)**

**Sensitive GA ETA is end of this year or early next year**



## Limitations

# Thank you and call to Action!

**Bicep MS Docs:**  
**[Aka.ms/bicep](https://aka.ms/bicep)**

**Bicep Monthly Community call**  
**[surveymonkey.com/r/ARMnews](https://surveymonkey.com/r/ARMnews)**

**Bicep GitHub location**  
**[github.com/Azure/bicep](https://github.com/Azure/bicep)**

**Bicep Learning path**  
**[docs.microsoft.com/en-us/azure/azure-resource-manager/bicep/learn-bicep](https://docs.microsoft.com/en-us/azure/azure-resource-manager/bicep/learn-bicep)**

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