

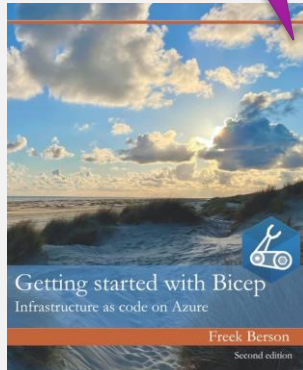


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November 13-15, Oslo Spektrum

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

## Optimize Azure Infrastructure as Code Deployments with VS Code



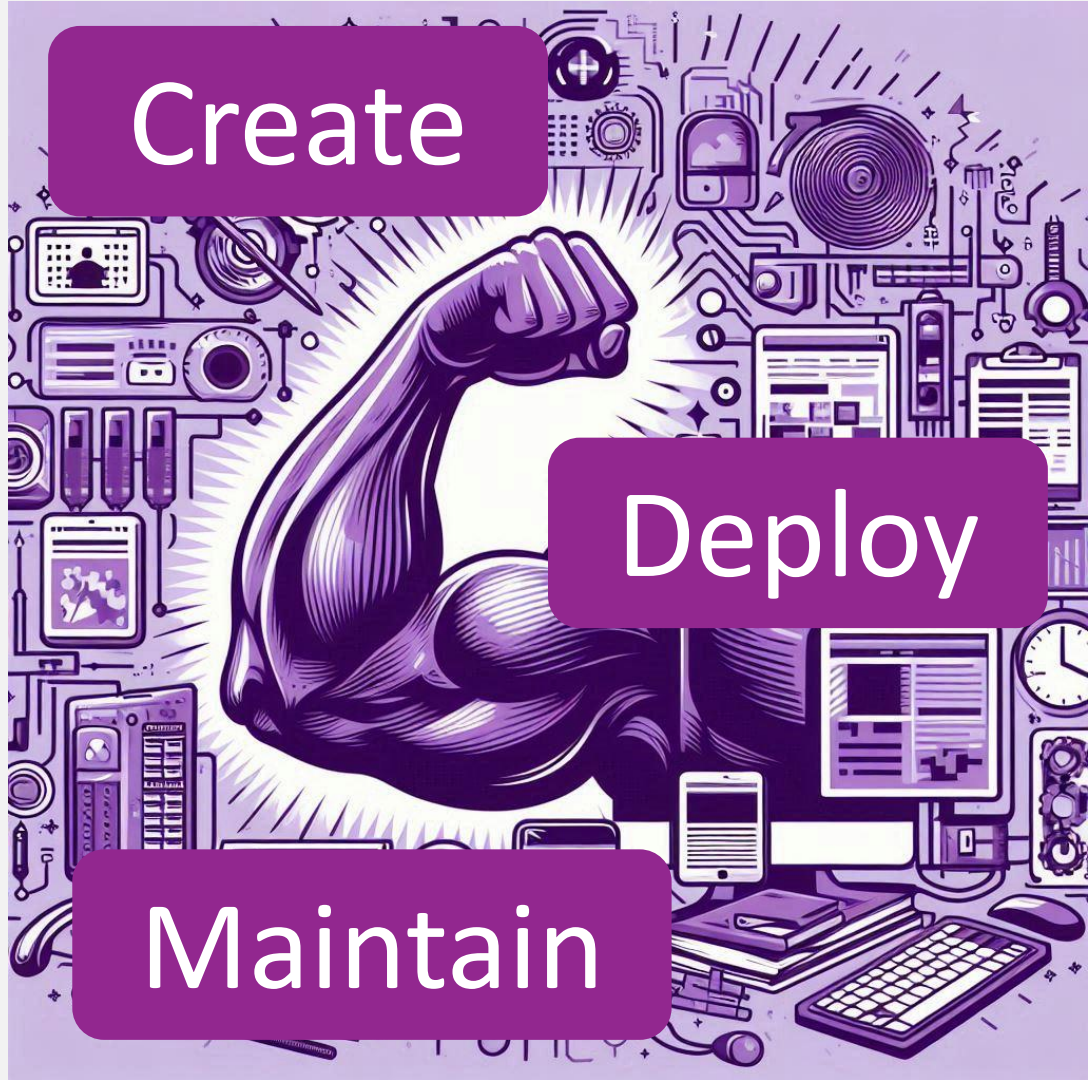
NIC  
EMPOWER

FREEK BERSON (@fberson)

Create

Deploy

Maintain



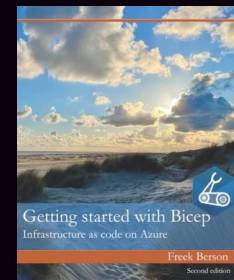
# Freek Berson

Optimize Azure Infrastructure as Code Deployments with VS Code

NIC  
EMPOWER



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






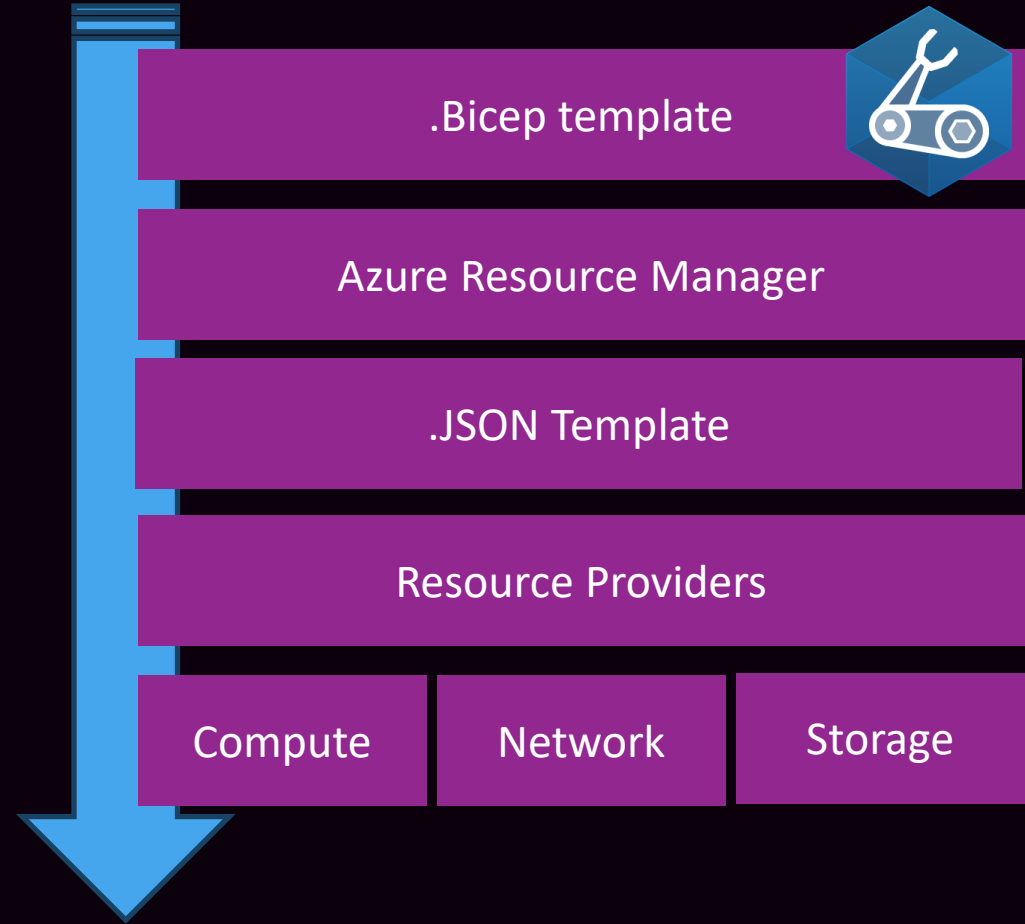
The background of the slide is a purple-tinted image of a city skyline, likely Chicago, with several prominent skyscrapers. Overlaid on the image are various digital elements: a grid of thin white lines, numerous small white squares and rectangles of varying sizes, and some faint, larger geometric shapes like hexagons. These elements suggest a digital or data-driven environment.

# Infrastructure as Code

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

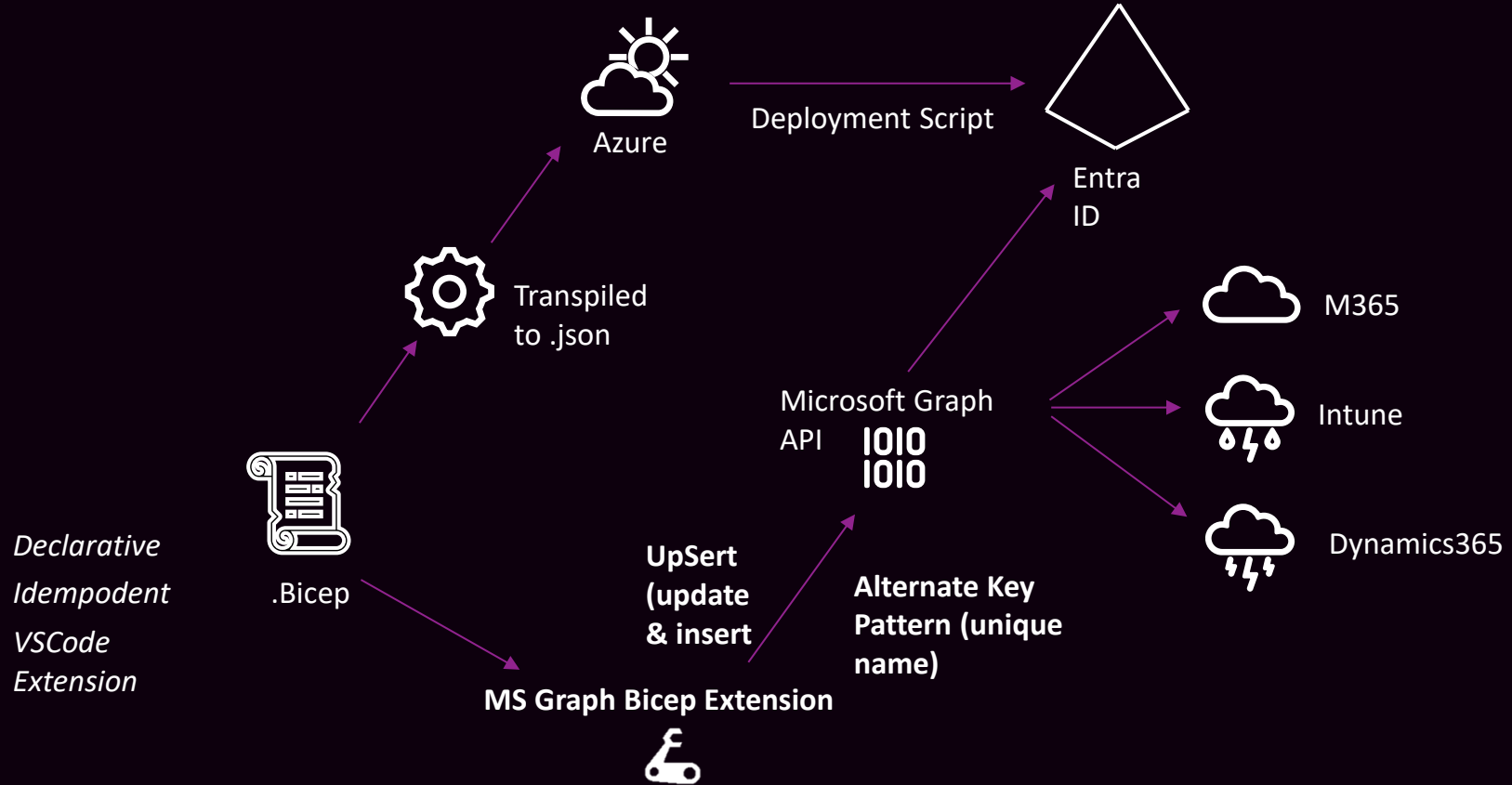
Embracing Deployment Stacks



## 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**

**Bicep Monthly Community call**

**surveymonkey.com/r/ARMnews**

**Bicep GitHub location**

**github.com/Azure/bicep**

**Bicep Learning path**

**docs.microsoft.com/en-us/azure/azure-resource-manager/bicep/learn-bicep**

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