6ª Edición Gira Online Speakers Latam

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MVP Microsoft Azure

Microsoft Azure

Ponencia:

Productivity tips for setting infrastructure-as-code with Azure Bicep

Fecha Evento Online: 02-08-2022

12:00 PM Europa GMT+1

Digital Live Event:

YouTube

Organizan: Community Group Azure LatinoAmérica y Cloud Lunch & Learn

cloud lunch & learn

Elkhan Yusubov
Speaker | Author | Cloud Architect
Founder at #cloudmarathoner

Microsoft® MVP Most Valuable Professional

@ElYusubov

Elkhan is a Cloud Architect Manager, Microsoft Azure MVP and 15+ MCT with experience in cloud solutions, enterprise healthcare systems and healthcare data, and API standards (HL7 FHIR, EDI X12).

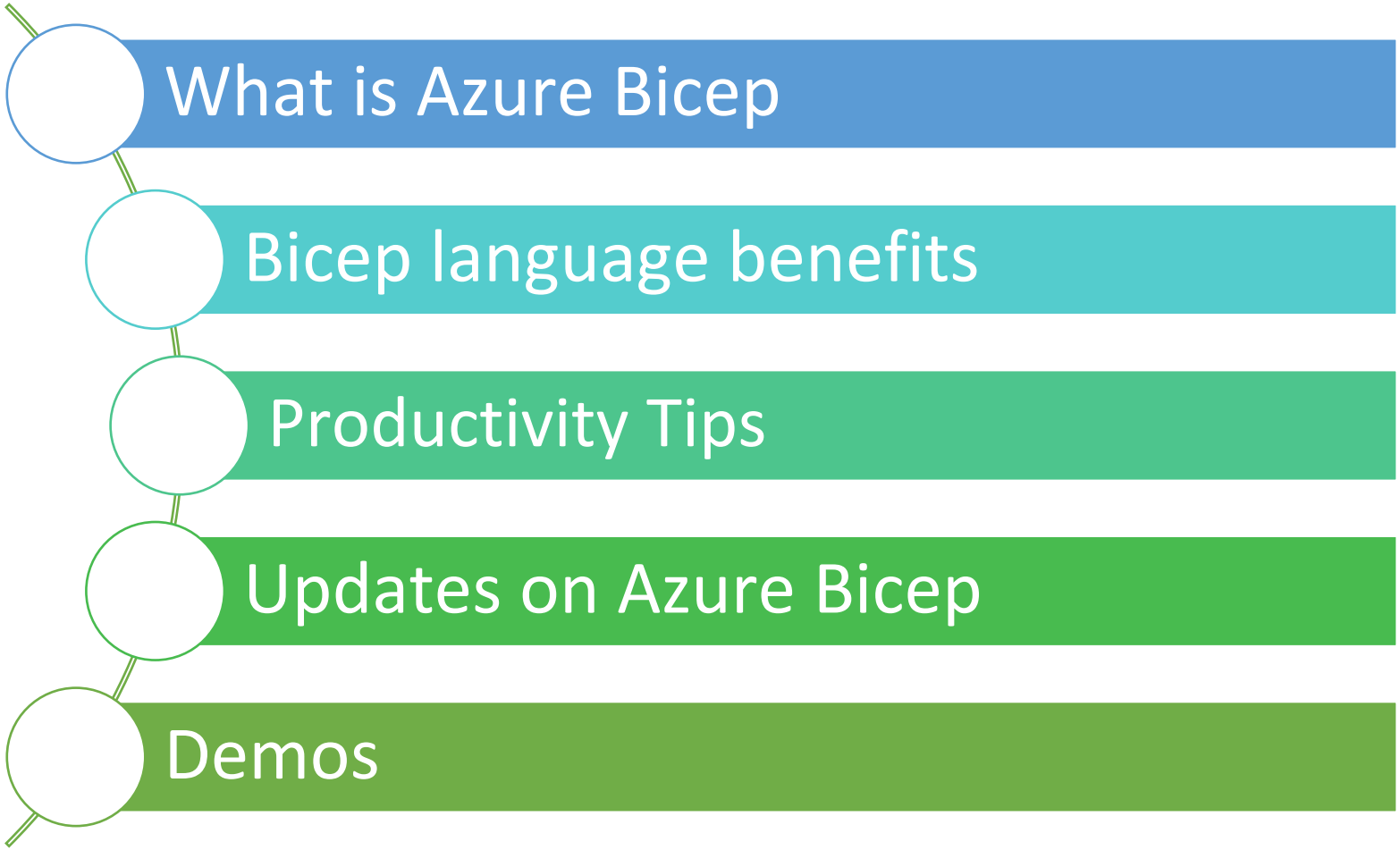
He is an active Microsoft Tech Community Contributor, Cloud Lunch and Learn Speaker and Co-Organizer, and LinkedIn instructor with interests in Architecture, DevOps & Security.

He is a frequent speaker at tech meetups and has volunteered for Give Camps, Azure Data Fest, SQL Saturdays and Microsoft community events, like this one.

And please, checkout his blog posts at Cloud Marathoner site below.

https://theCloudMarathoner.com

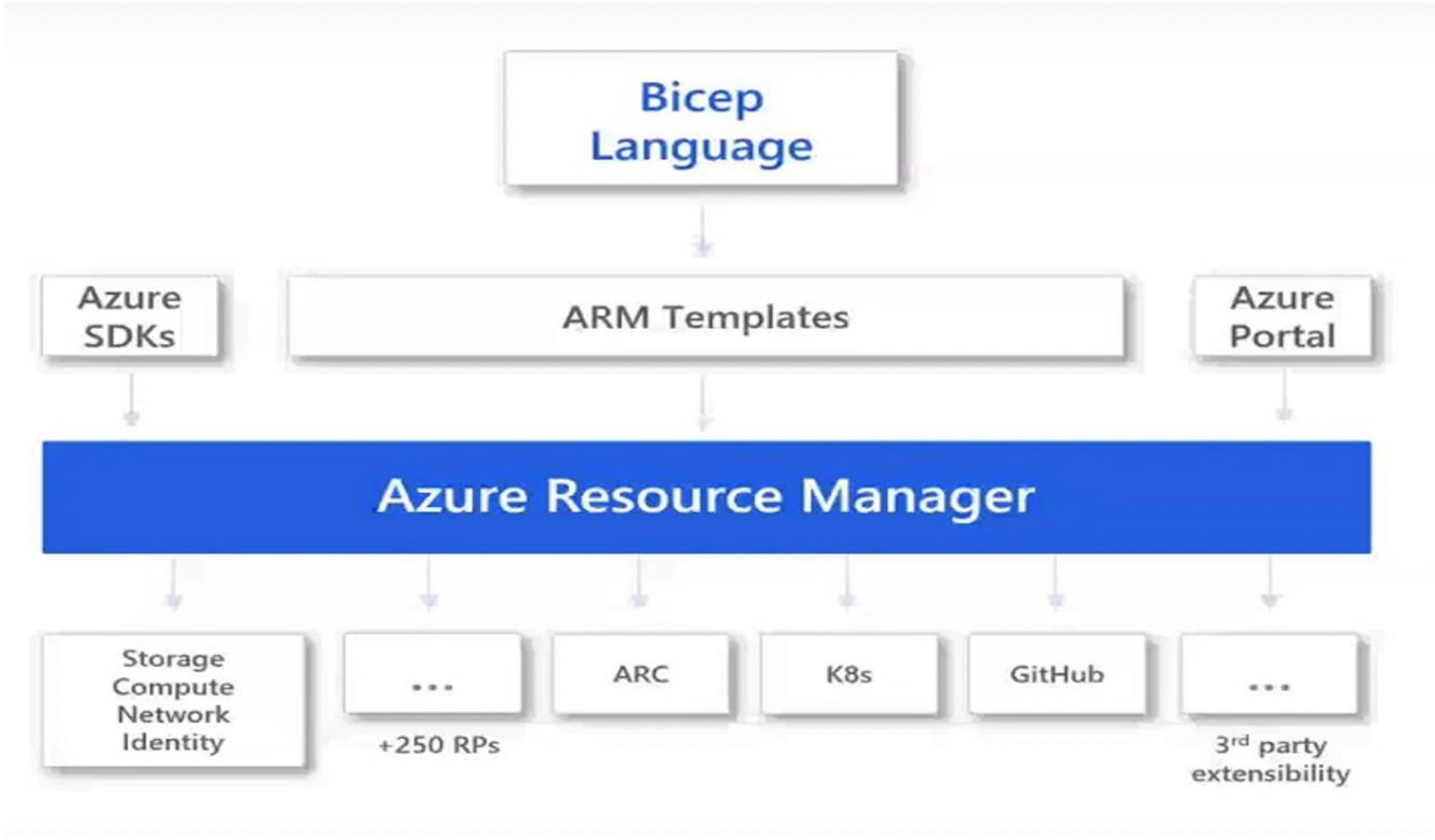
What we will cover



What is Azure Bicep?

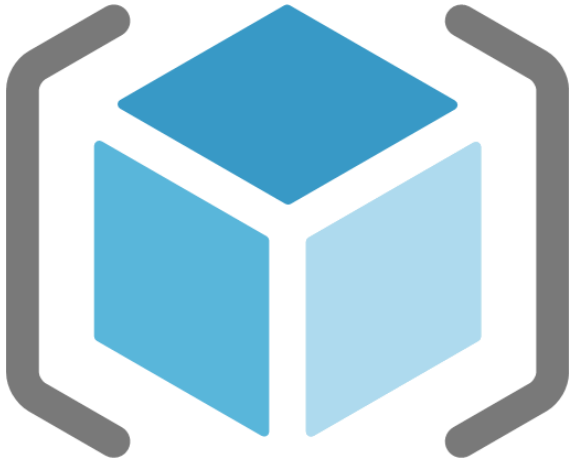
- DSL for managing Azure resources
- Transparent abstraction over ARM
- Simple way to author Azure resources
- Transpiles into ARM Templates

Relationship between Bicep and ARM templates



Bicep language benefits

- Easy to understand and maintain
- Day Zero support
- Transparent abstraction
- Awesome tooling in VS Code
- Clean code syntax
- Code re-use and modularity
- Deep integration with Azure
- Preflight validation
- No state management
- Production support



Azure Bicep evolution from 2020

- Started as alpha version in 2020
- Supported version: v0.3.1
- Latest version: v0.8.9
- Expected version v1.0 TBD ☺

```
PS C:\Work\Learn-Bicep> az bicep list-versions
[
  "v0.8.9",
  "v0.8.2",
  "v0.7.4",
  "v0.6.18",
  "v0.6.11",
  "v0.6.1",
  "v0.5.6",
  "v0.4.1318",
  "v0.4.1272",
  "v0.4.1124",
  "v0.4.1008",
  "v0.4.613",
  "v0.4.451",
  "v0.4.412",
  "v0.4.63",
  "v0.4.1",
  "v0.3.539",
  "v0.3.255",
  "v0.3.126",
  "v0.3.1",
  "v0.2.328",
  "v0.2.317",
  "v0.2.212",
  "v0.2.59",
  "v0.2.14",
  "v0.2.3",
  "v0.1.226-alpha",
  "v0.1.223-alpha",
  "v0.1.37-alpha",
  "v0.1.1-alpha"
```

How to start with Azure Bicep?

README.md

AWESOME Azure Bicep 💪

awesome | Markdown Link Checker passing

A curated list of AWESOME blogs, videos, tips-and-tricks, codes, tools, scripts... Hand-picked tips and tricks to help you learn Azure Bicep and get you ready to start deploying Azure resources to your favorite environment(s).

> Community contributions are very welcome! Check out the contribution guide and submit a **Pull Request** with your adds/removes/changes to the content!

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Contributors 4

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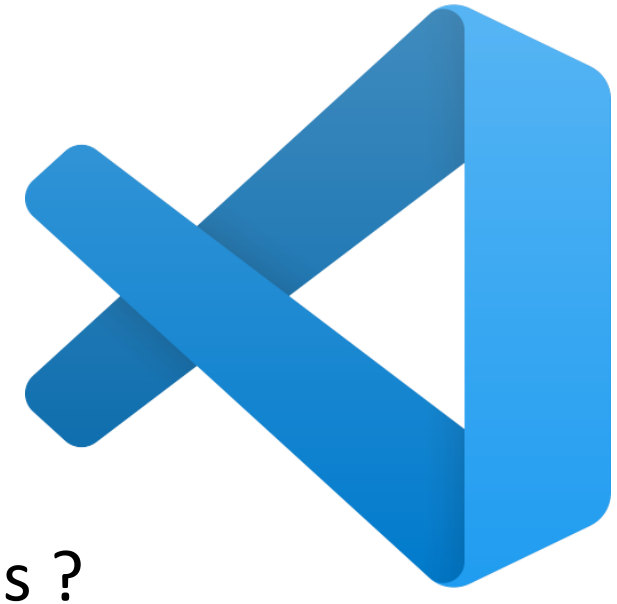
lukemurraynz Luke Murray
willsonmatt82

Azure Bicep First Look video course

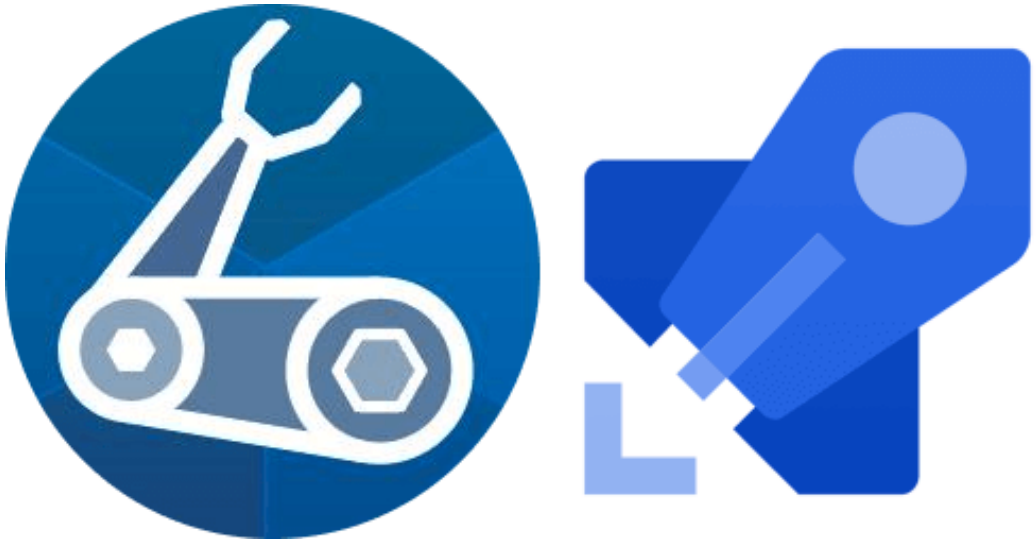
VS Code & Bicep configuration file

- What is Bicep config file ?
- Why you need one ?
- How is it organized (analyzer) ?
- What are the default configurations ?

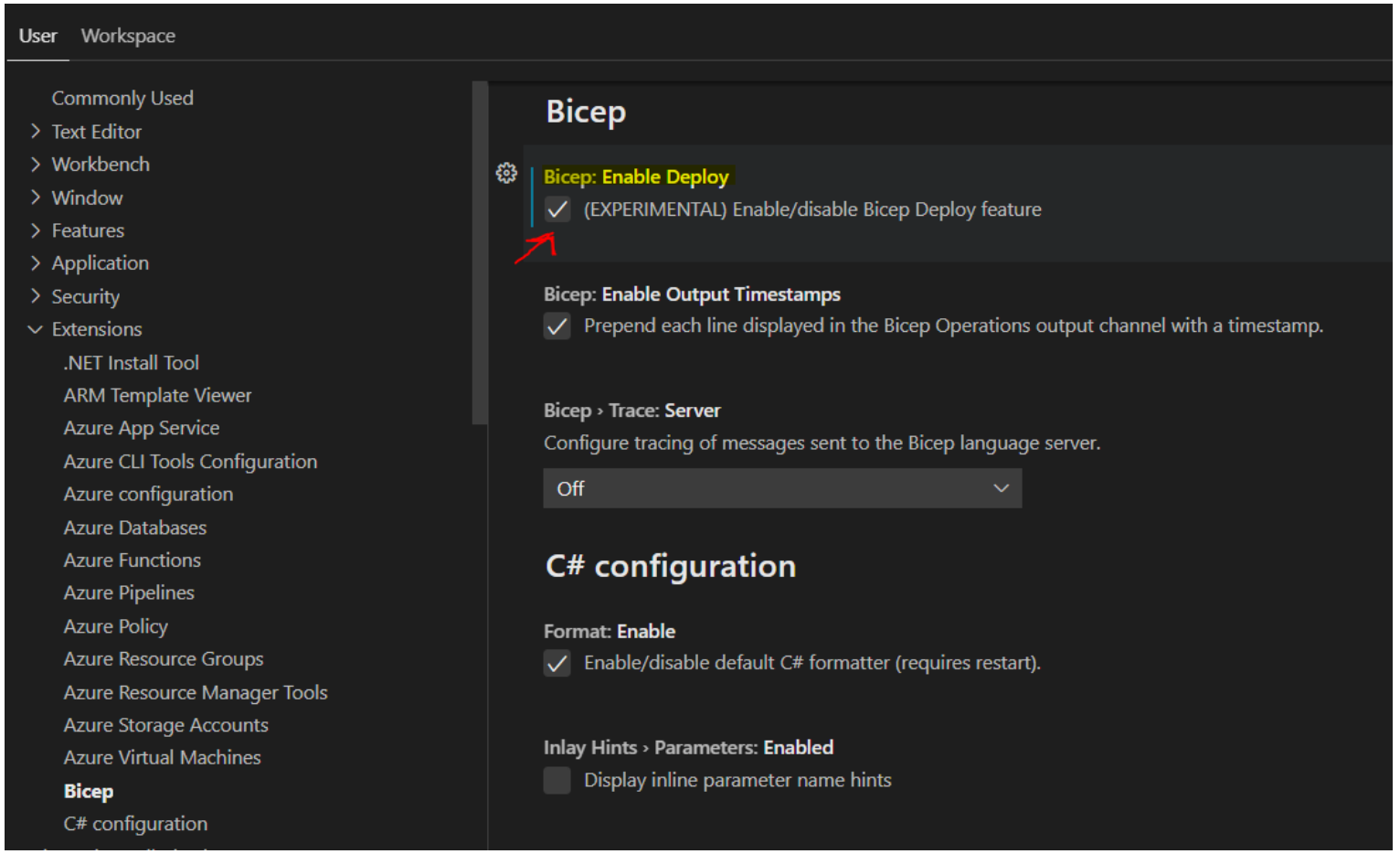


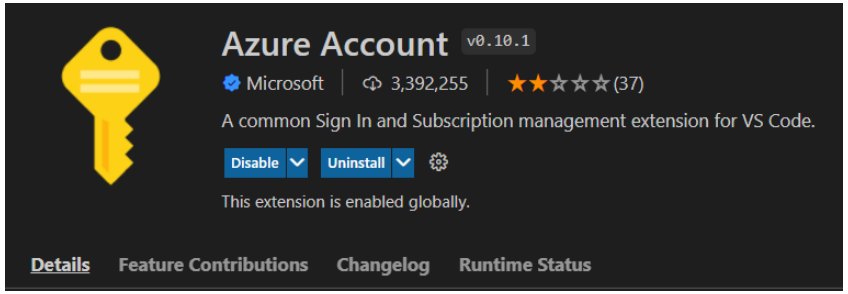
Productivity Tips

- Bicep Public & Private Registry
- Deploy a Bicep file from VS Code
- Bicep Visualizer
- Code snippets
- Auto generated parameters in VS Code



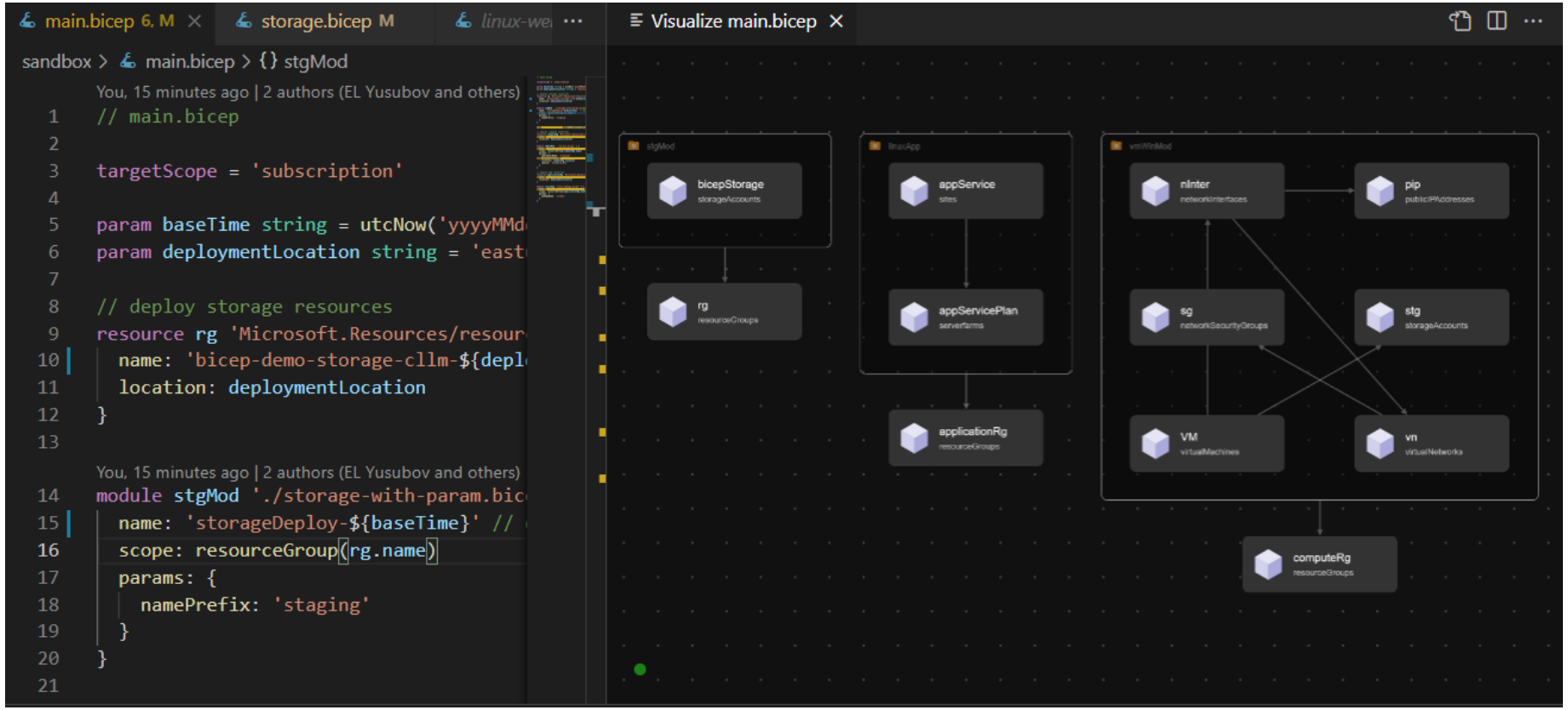
Deploy a Bicep file from VS Code



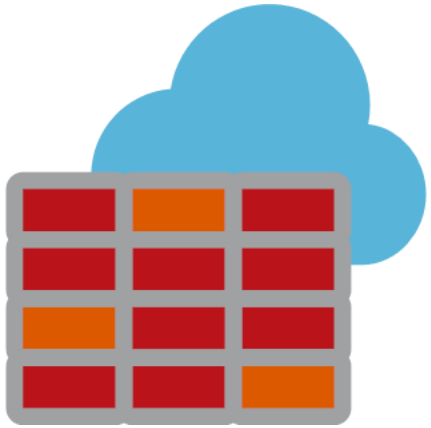


Bicep file visualizer

Visualized Bicep file resources



Azure Bicep IaC best practices



Demos

2-deploy-param-storage.bicep 1, M | bicepconfig.json

{} bicepconfig.json > {} analyzers > {} core > {} rules > {} secure-parameter-default

You, 3 weeks ago | 1 author (You)

```
{
  "analyzers": {
    "core": {
      "enabled": true,
      "verbose": true,
      "rules": {
        "no-hardcoded-env-urls": {
          "level": "warning"
        },
        "no-unused-params": {
          "level": "warning"
        },
        "no-unused-vars": {
          "level": "error"
        },
        "prefer-interpolation": {
          "level": "warning"
        },
        "secure-parameter-default": {
          "level": "error"
        },      You, a month ago • add bicepconfig file
        "simplify-interpolation": {
          "level": "warning"
        }
      }
    }
  }
}
```

TERMINAL DEBUG CONSOLE PROBLEMS 3 OUTPUT

```
@description('Azure region to deploy all resources')
@allowed([
  'eastus'
  'eastus2'
  'westus'
  'wes
])
param
```

Parameter "environment" is declared but never used. bicep core(

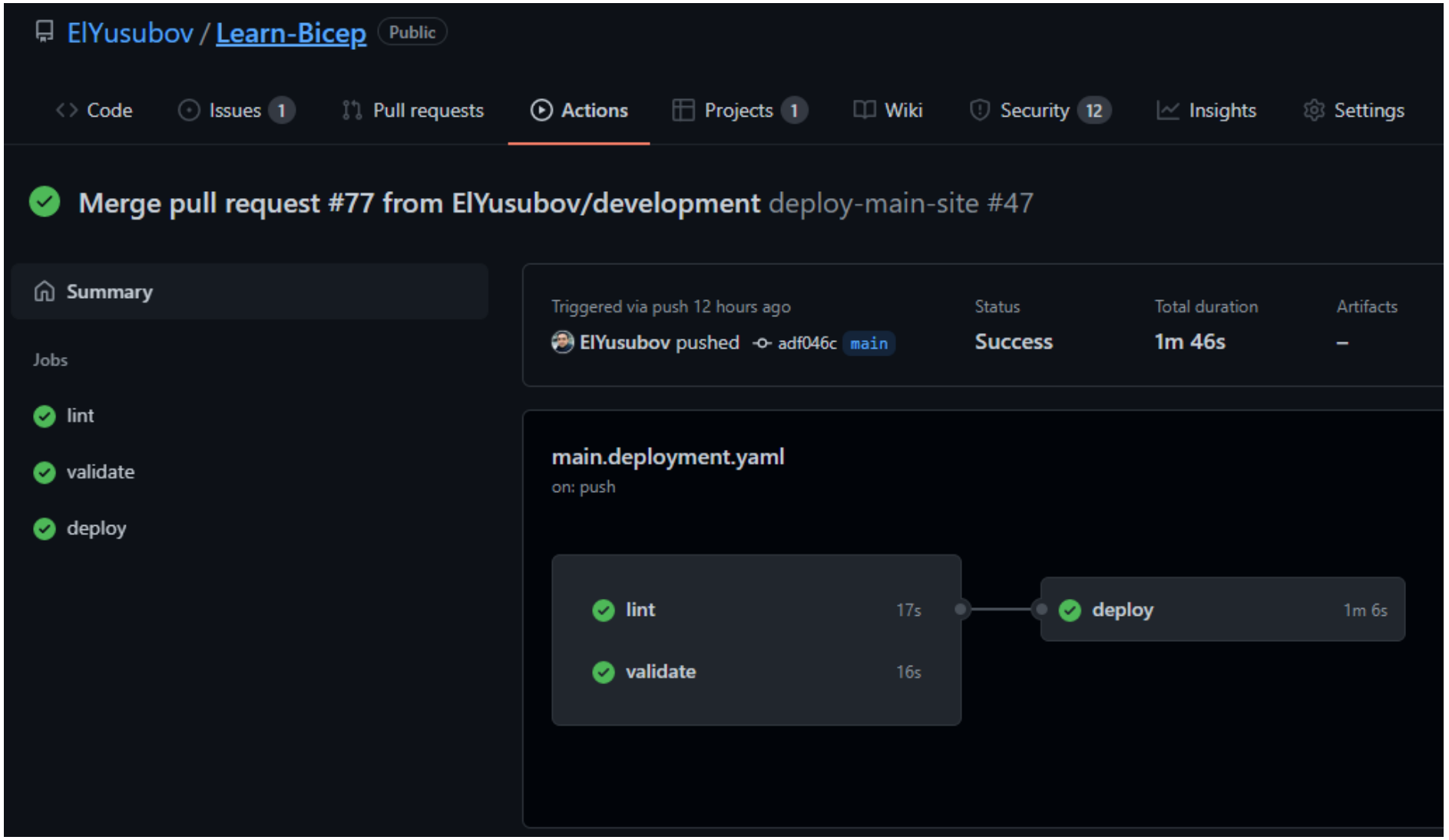
param environment: string

View Problem No quick fixes available

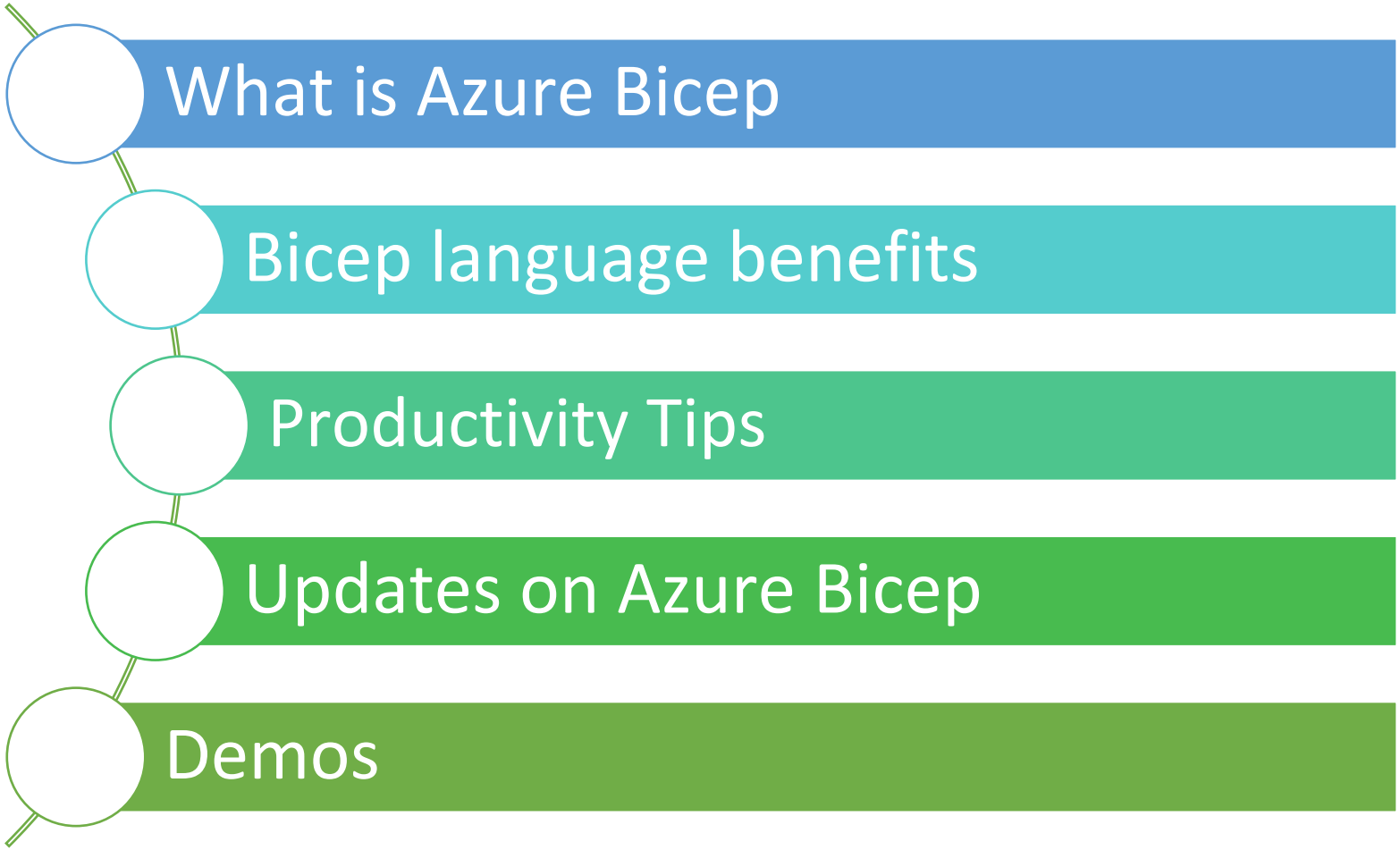
```
param environment string      You, a minute ago • Uncommitted changes

resource myResourceGroup 'Microsoft.Resources/resourceGroups@2021-04-0
```

https://theCloudMarathoner.com

Automating with GitHub workflow



What we have covered



What is next?

Learn Bicep – GitHub

Azure Bicep – First Look course 📽

Bicep Project - GitHub

AWESOME Azure Bicep 💪 **- GitHub**

Thank you !

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Speaker | Author | Cloud Architect
Founder at #cloudmarathoner

https://giraspeakerslatam-us.azurewebsites.net/

https://theCloudMarathoner.com