

Flex your muscles with Bicep

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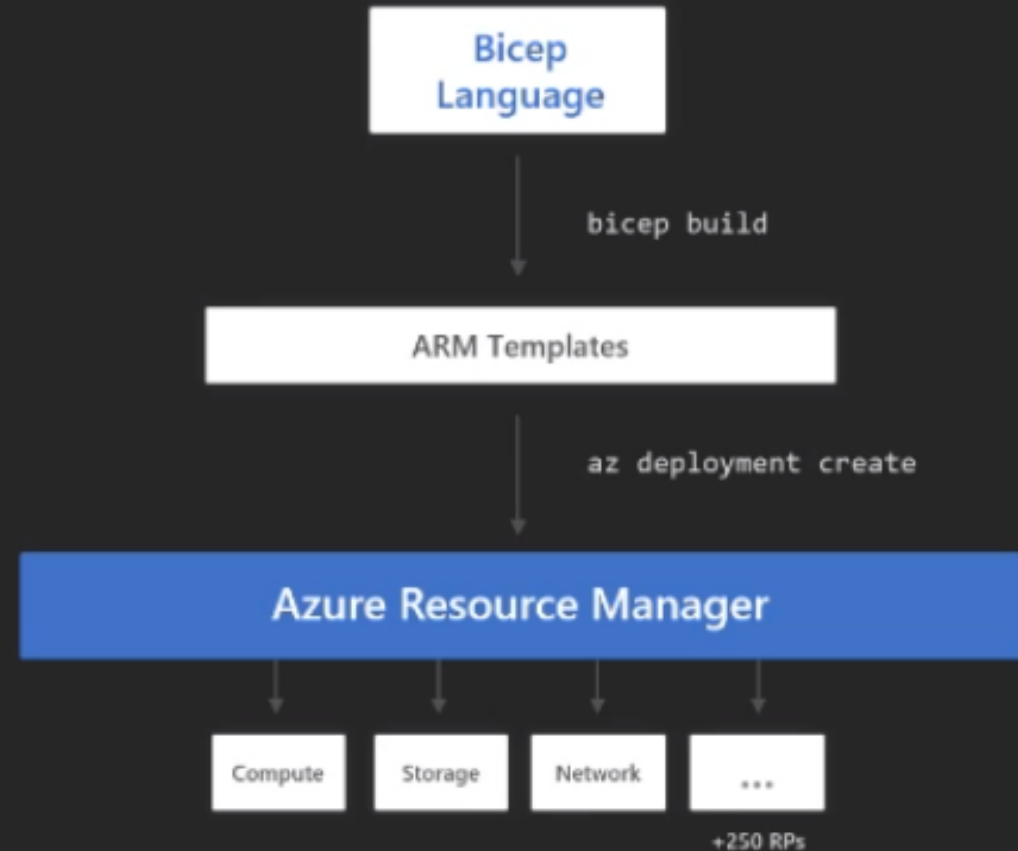
Cloud Solution Architect



What is Project Bicep?

Declarative language for describing and deploying Azure resources.

Abstraction layer, compiles into an ARM Template.



Goals

Reduce current pain

Lower the barrier to entry

Transparent Abstraction – Leverage all the benefits of the platform

Modular – Abstract common blocks of config into reusable elements

Non-Goals

One language to rule them all

General purpose language to meet any need

Invent new technology

v0.1

Support for basic ARM
Template primitives

Simpler syntax

- No more [...] for expressions
- No quotes on property names
- Easy resource references

Auto dependsOn

TODAY!

v0.2

Validation of all Azure
resource types

IntelliSense

Modules

Code formatting

Scopes

Limitations

copy (loops)

condition (property)

single-line objects and
arrays

Azure support plans

Experimental language, not ready for
production yet!

Demo

Bicep Playground

<https://aka.ms/bicepdemo>



Your PC ran into a problem that it couldn't handle, and now it needs to restart.

Demo

Azure Cloud Shell

<https://shell.azure.com>



Your PC ran into a problem that it couldn't handle, and now it needs to restart.

Demo

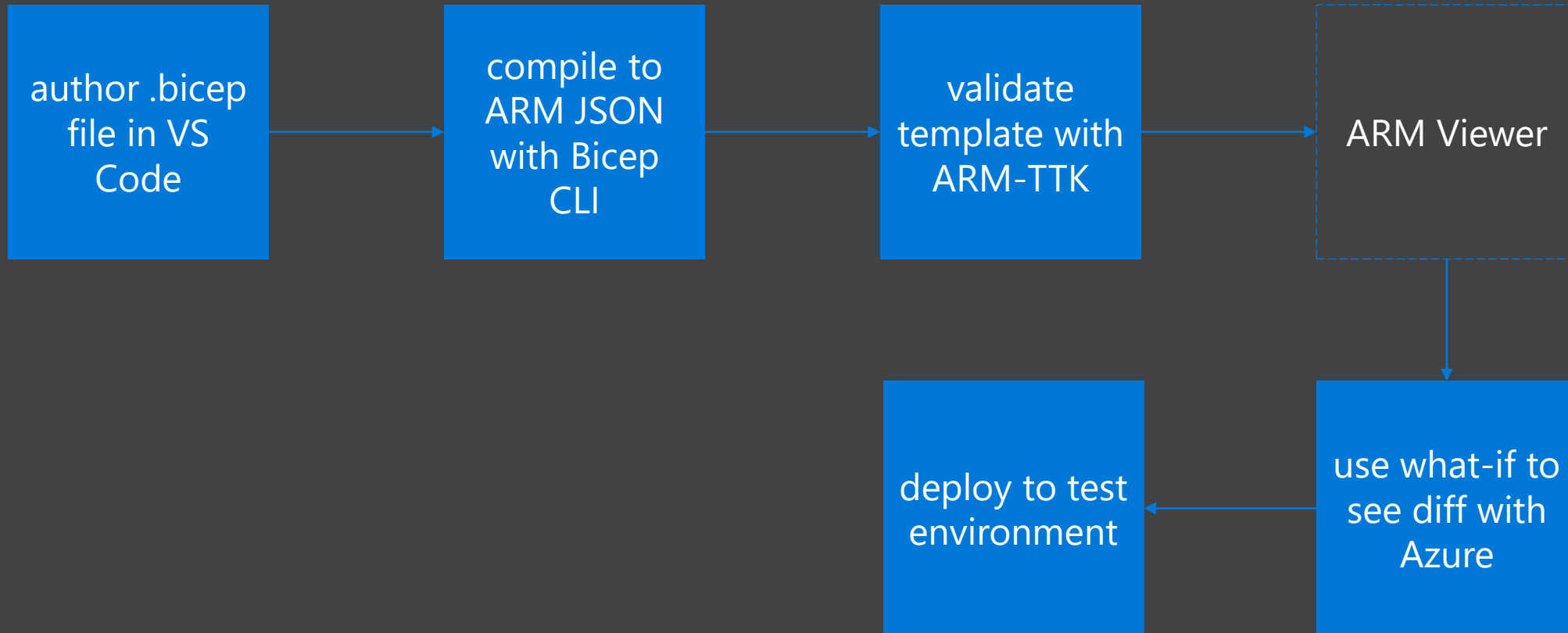
Setup your dev environment



Your PC ran into a problem that it couldn't handle, and now it needs to restart.

<https://github.com/Azure/bicep/blob/main/docs/installing.md>

Workflow



Demo

Inner loop



Your PC ran into a problem that it couldn't handle, and now it needs to restart.

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/test-toolkit>

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/template-deploy-what-if>

Demo

Code reuse



Your PC ran into a problem that it couldn't handle, and now it needs to restart.

<https://github.com/Azure/bicep/blob/main/docs/spec/modules.md>

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/template-specs>

Demo

Deployment using GitHub workflows



Your PC ran into a problem that it couldn't handle, and now it needs to restart.

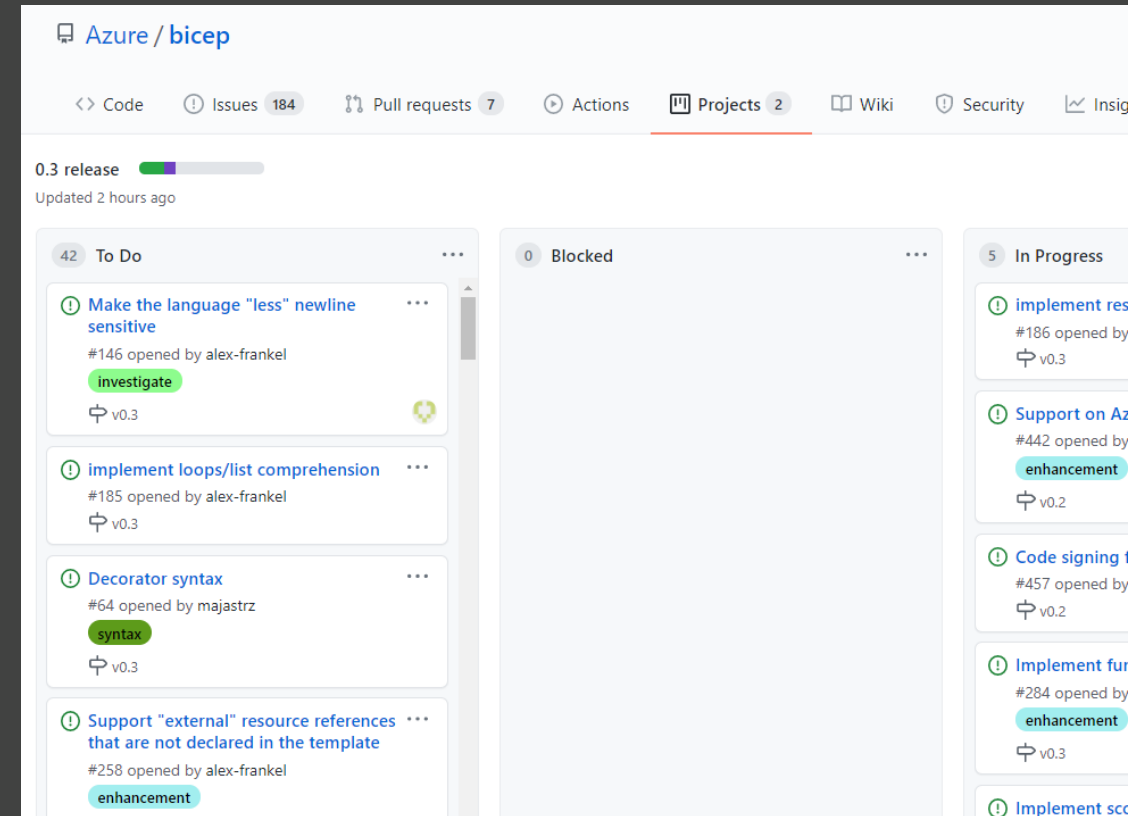
<https://azurecloudai.blog/2020/09/03/github-action-for-project-bicep-arm-dsl/>

Credit: Sebastian Gräf, @segraef

Roadmap

v0.3 and beyond (Jan/Feb 2021)

- parity with ARM templates
- loops & conditional resources
- deploy .bicep files from Az CLI and Az PowerShell
- supported by CSS



Resources

[github.com/azure/bicep](https://github.com/Azure/bicep)

follow @biceplang on Twitter for updates
and info about community sessions

