

The background features a dark blue gradient with large, overlapping, semi-transparent shapes in shades of purple, pink, and orange, creating a modern, abstract design.

AWS re:Invent

NOV. 27 – DEC. 1, 2023 | LAS VEGAS, NV

OPN313

Shifting left & preventing misconfigurations using open source tooling

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What is shifting left?

Preventative controls

Controls that are designed to prevent an event from occurring

Detective controls

Controls that are designed to detect, log, and alert after an event has occurred



Proactive controls

Controls that are designed to prevent resource mutation from occurring

Infrastructure as code landscape

NONEXHAUSTIVE LIST OF IAC TOOLS



ANSIBLE



AWS CDK



cdk8s



AWS CloudFormation



Crossplane



Pulumi



HashiCorp
Terraform

Open source IaC scanning tools

	cfn-guard	cfn-nag	checkov	regula	tfsec	Terrascan
IaC frameworks supported	AWS SAM, CDK, CDKTF, CloudFormation, K8s, Terraform	AWS SAM, CDK, CloudFormation	AWS SAM, Bicep, CDK, CDKTF, CloudFormation, Dockerfile, Helm, K8s, Kustomize, OpenAPI, Terraform	AWS SAM, CDK, CDKTF, CloudFormation, K8s, Kustomize, Terraform	Terraform, CDKTF	AWS SAM, CDK, CDKTF, CloudFormation, Dockerfile, Helm, K8s, Kustomize, Terraform
Rules/policy language	Guard	Ruby	Python	Rego	YAML	Rego
Built-in rules/policies	<u>130</u>	<u>169</u>	<u>1,000+</u>	<u>275</u>	<u>156</u>	<u>500+</u>
Output formats	JSON, text, YAML	JSON, SARIF, text	GitHub Markdown, JSON, JUnit, text, XML	JSON	CSV, Checkstyle, JSON, SARIF, JUnit, text	JSON, XML, JUnit, SARIF, text, YAML
VS Code extension	No	No		No		
CI/CD integration						

Start your security journey today

1

Plan for where to
implement controls

2

Pick tool(s) and
operate them in a
nonblocking mode

3

Gate commits/PRs

Resources

Get started

- github.com/aws-cloudformation/cloudformation-guard
- github.com/stelligent/cfn_nag
- checkov.io
- regula.dev
- github.com/aquasecurity/tfsec
- runterrascan.io

AWS Modern Applications and Open Source Zone

BOOTH #1390

Located in the Developer Solutions Zone

Stop by and network with AWS experts, ask questions, watch demos, collect SWAG, play games, whiteboard out architecture diagrams, and relax with good food and drinks

Welcome reception

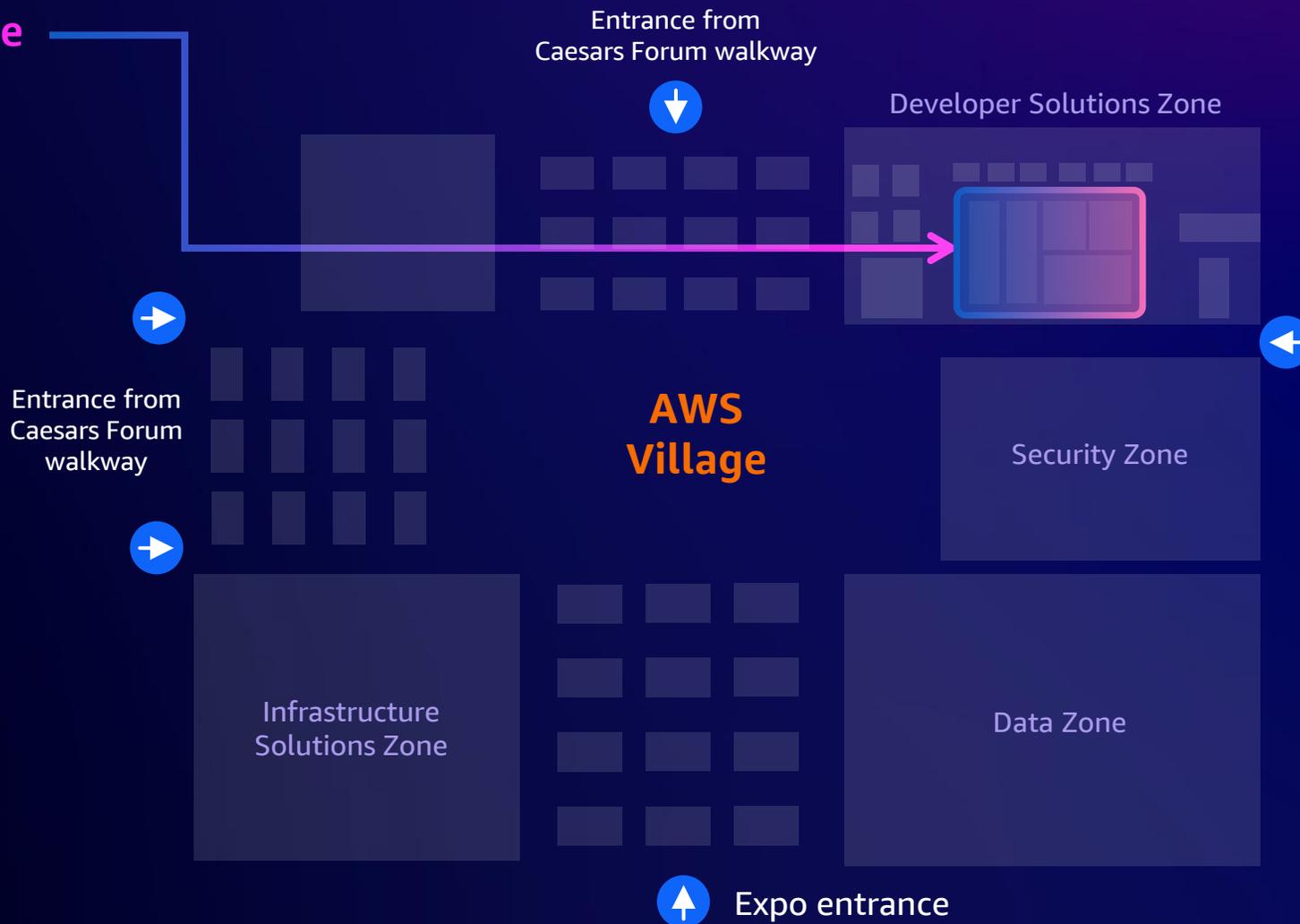
Monday, November 27
4:00 PM – 7:00 PM

Expo hours

Tuesday, November 28
10:00 AM – 6:00 PM

Wednesday, November 29
10:00 AM – 6:00 PM

Thursday, November 30
10:00 AM – 4:00 PM



Thank you!



Please complete the session survey in the mobile app

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