

# DevSecOps containers, vulnerabilities and SCA

OWASP Ottawa  
November 2023



Hi, I'm Greg.  
DevSecOps chap at Rewind.

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[github.com/gregsienkiewicz](https://github.com/gregsienkiewicz)

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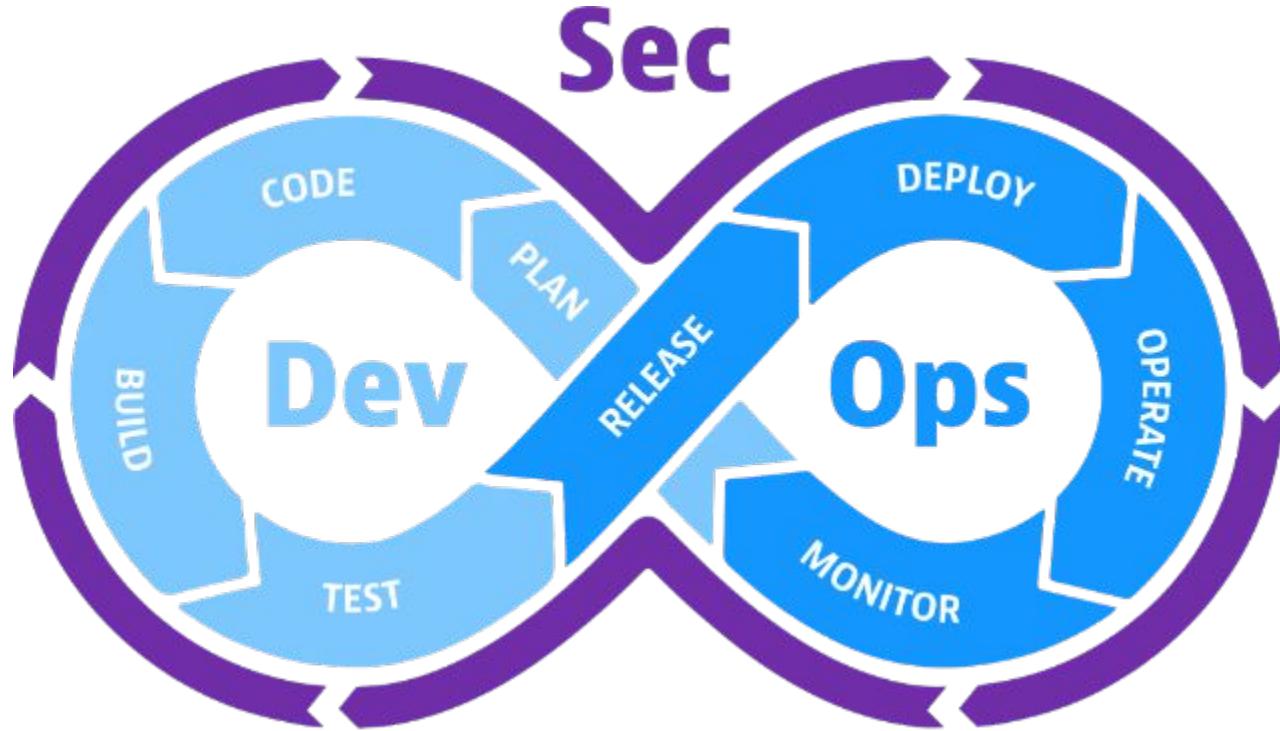
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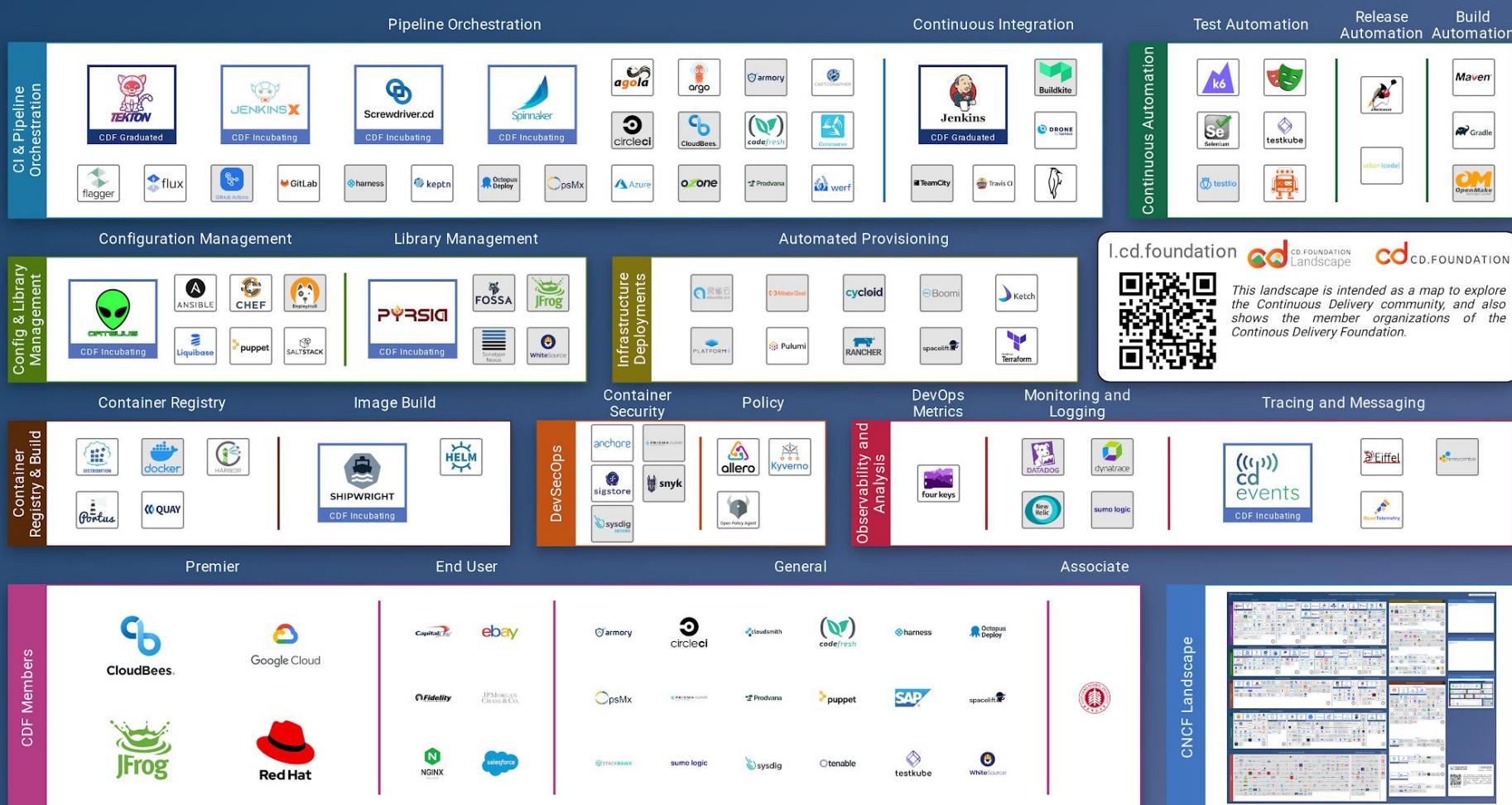
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# DevSecOps?



SANS



“It's not the Destination. It's the journey.”

Ralph Waldo Emerson

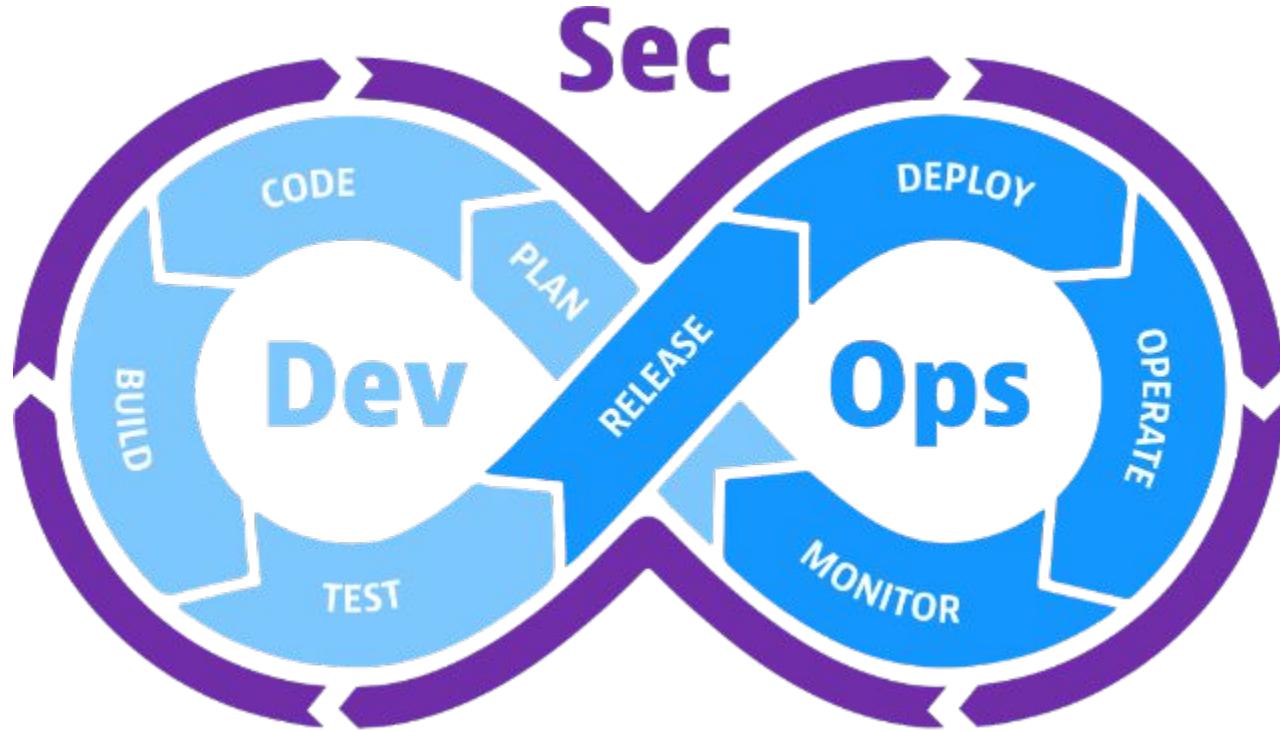
(disputed but works in this context)

# CNCF Technical Advisory Group (TAG) for Security

“Methodology for securing a software supply chain in five stages:

- Securing the Source Code: securing code produced by software producers (the internal or first party code)
- Securing the Materials: hardening the “raw materials” of second and third party code incorporated in builds
- Securing the Build Pipelines: securing the build and infrastructure
- Securing the Artefacts: attesting the security and trustworthiness of artefacts produced by these build pipelines
- Securing Deployments: verifying the attestations during the deployment stage”





SANS

# Top 10 CI/CD Security Risks

- CICD-SEC-1 **Insufficient Flow Control Mechanisms**
- CICD-SEC-2 **Inadequate Identity and Access Management**
- CICD-SEC-3 **Dependency Chain Abuse**
- CICD-SEC-4 **Poisoned Pipeline Execution (PPE)**
- CICD-SEC-5 **Insufficient PBAC (Pipeline-Based Access Controls)**
- CICD-SEC-6 **Insufficient Credential Hygiene**
- CICD-SEC-7 **Insecure System Configuration**
- CICD-SEC-8 **Ungoverned Usage of 3rd Party Services**
- CICD-SEC-9 **Improper Artifact Integrity Validation**
- CICD-SEC-10 **Insufficient Logging and Visibility**

# GitHub

Protect the source code.



Branch protections.



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## General

### Access

### Collaborators

### Moderation options

### Code and automation

#### Branches

##### Tags

##### Rules

##### Actions

##### Webhooks

##### Environments

##### Codespaces

##### Pages

### Security

#### Code security and analysis

#### Deploy keys

#### Secrets and variables

### Integrations

#### GitHub Apps

#### Email notifications

#### Autolink references

## Branch protection rule

### Branch name pattern \*

main

### Applies to 1 branch

main

### Protect matching branches

#### Require a pull request before merging

When enabled, all commits must be made to a non-protected branch and submitted via a pull request before they can be merged into a branch that matches this rule.

#### Require approvals

When enabled, pull requests targeting a matching branch require a number of approvals and no changes requested before they can be merged.

Required number of approvals before merging: 1 ▾

#### Dismiss stale pull request approvals when new commits are pushed

New reviewable commits pushed to a matching branch will dismiss pull request review approvals.

#### Require review from Code Owners

Require an approved review in pull requests including files with a designated code owner.

#### Require approval of the most recent reviewable push

Whether the most recent reviewable push must be approved by someone other than the person who pushed it.

#### Require status checks to pass before merging

Choose which [status checks](#) must pass before branches can be merged into a branch that matches this rule. When enabled, commits must first be pushed to another branch, then merged or pushed directly to a branch that matches this rule after status checks have passed.

#### Require conversation resolution before merging

When enabled, all conversations on code must be resolved before a pull request can be merged into a branch that matches

- Require status checks to pass before merging**  
Choose which [status checks](#) must pass before branches can be merged into a branch that matches this rule. When enabled, commits must first be pushed to another branch, then merged or pushed directly to a branch that matches this rule after status checks have passed.
- Require conversation resolution before merging**  
When enabled, all conversations on code must be resolved before a pull request can be merged into a branch that matches this rule. [Learn more about requiring conversation completion before merging.](#)
- Require signed commits**  
Commits pushed to matching branches must have verified signatures.
- Require linear history**  
Prevent merge commits from being pushed to matching branches.
- Require deployments to succeed before merging**  
Choose which environments must be successfully deployed to before branches can be merged into a branch that matches this rule.
- Lock branch**  
Branch is read-only. Users cannot push to the branch.
- Do not allow bypassing the above settings**  
The above settings will apply to administrators and custom roles with the "bypass branch protections" permission.

#### Rules applied to everyone including administrators

- Allow force pushes**  
Permit force pushes for all users with push access.
- Allow deletions**  
Allow users with push access to delete matching branches.

[Save changes](#)



# Secret scanning as a push protection

 Codespaces

 Pages

Security

 **Code security and analysis**

 Deploy keys

 Secrets and variables



Integrations

 GitHub Apps

 Email notifications

 Autolink references

### Dependabot alerts

Receive alerts for vulnerabilities that affect your dependencies and manually generate Dependabot pull requests to resolve these vulnerabilities. [Configure alert notifications](#).

[Disable](#)

### Dependabot rules

Create your own custom rules and manage alert presets.

1 rule enabled



### Dependabot security updates

Enabling this option will result in Dependabot automatically attempting to open pull requests to resolve every open Dependabot alert with an available patch. If you would like more specific configuration options, leave this disabled and use [Dependabot rules](#).

[Disable](#)

### Dependabot version updates

Allow Dependabot to open pull requests automatically to keep your dependencies up-to-date when new versions are available. [Learn more about configuring a dependabot.yml file](#).

[Configure](#)

## Code scanning

Automatically detect common vulnerabilities and coding errors.

### Tools

#### CodeQL analysis (Not supported)

Languages on this repository are not compatible with this feature. Learn more about [supported languages and frameworks](#).

### Other tools

Add any third-party code scanning tool.

[Explore workflows](#)

### Protection rules

#### Pull request check failure

Define which code scanning alert severity should cause a pull request check to fail. This also applies to analysis results uploaded via the API.

[High or higher / Only errors](#) ▾

## Secret scanning

Receive alerts on GitHub for detected secrets, keys, or other tokens.

[Disable](#)

GitHub will always send alerts to partners for detected secrets in public repositories. [Learn more about partner patterns](#).

### Push protection

Block commits that contain [supported secrets](#).

[Disable](#)



SOURCE CONTROL



VI.E.md

dependabot.yml

terrascan.yml

action.yml

tf-plan.yml

provider.tf M X



oops. aws keys?

Commit &amp; Push



Staged Changes 1



provider.tf M



Changes 0



provider.tf

```
1 terraform {  
2   required_providers {  
3     aws = {  
4       source  = "hashicorp/aws"  
5       version = "5.25.0"  
6     }  
7   }  
8  
9   backend "s3" {  
10    encrypt           = true  
11    workspace_key_prefix = "tf-workspace"  
12  }  
13}  
14  
15 provider "aws" {  
16   region = "us-east-1"  
17  
18   access_key = "AKIASJRLZOCXRUOAMD7E"  
19   secret_key = "AYzCLEHH0YPiEeXAeUlS36CpcQ1xs+7LK5r5plm"  
20  
21   default_tags {  
22     tags = {  
23       github = "reimagined-broccoli"  
24     }  
25   }  
26 }  
27
```

✖ Unable to commit.



Source: Remote Repositories (Extension)



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## Secret scanning alerts

 is:open  2 Open  0 Closed

Validity Secret type Provider Sort

**Amazon AWS Secret Access Key** AYzCLEHH0YPiEe5Xa...  
#2 opened 5 minutes ago • Detected secret in provider.tf:19

**Amazon AWS Access Key ID** AKIASJRLZOCXRUO...  
#1 opened 5 minutes ago • Detected secret in provider.tf:18

# Security hardening for GitHub Actions

# Using OpenID Connect to access cloud resources



Files



main



.github

workflows

checkov.yml

tf-apply.yml

tf-plan.yml

dependabot.yml

task-definitions

tfvars

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LICENSE

README.md

alb.tf

backend.tf

cloudwatch.tf

ecr.tf

ecr\_lifecycle\_policy.json

ecs.tf

github\_oidc.tf

iam.tf

inspector.tf

outputs.tf

Code

Blame 109 lines (86 loc) · 3.27 KB

Raw

```
10  # These permissions are needed to interact with GitHub's OIDC Token endpoint.
11  permissions:
12    id-token: write
13    contents: read
14    pull-requests: write
15
16  jobs:
17    plan:
18      name: "Plan"
19      runs-on: ubuntu-latest
20
21    strategy:
22      fail-fast: false
23      matrix:
24        workspace: [backend]
25        backend-tfvars: [tfvars/backend.tfvars]
26
27    env:
28      TF_WORKSPACE: ${{ matrix.workspace }}
29
30    steps:
31      - name: Checkout
32        uses: actions/checkout@b4ffd65f46336ab88eb53be808477a3936bae11 # v4
33
34      - name: Configure AWS credentials via Role to assume
35        id: configure-aws-credentials
36        uses: aws-actions/configure-aws-credentials@010d0da01d0b5a38af31e9c3470dbfdabdecca3a # v4.0.1
37        continue-on-error: true
38        with:
39          role-to-assume: ${{ secrets.AWS_ROLE_TO_ASSUME }}
40          aws-region: us-east-1
41
42      - name: Configure AWS credentials via access keys
43        if: steps.configure-aws-credentials.outcome != 'success'
44        uses: aws-actions/configure-aws-credentials@010d0da01d0b5a38af31e9c3470dbfdabdecca3a # v4.0.1
45        with:
46          aws-access-key-id: ${{ secrets.AWS_ACCESS_KEY_ID }}
47          aws-secret-access-key: ${{ secrets.AWS_SECRET_ACCESS_KEY }}
48          aws-region: us-east-1
```



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Type ⌘ to search

[Code](#) [Issues](#) [Pull requests 2](#) [Actions](#) [Wiki](#) [Security](#) [Insights](#) [Settings](#)[← Terraform Apply](#)

## ✓ feature: GitHub actions (#1) #1

[Re-run all jobs](#)[Summary](#)[Jobs](#)[✓ Apply \(backend, tfvars/backen...](#)[Run details](#)[Usage](#)[Workflow file](#)

### Apply (backend, tfvars/backend.tfvars)

succeeded yesterday in 26s

[Search logs](#)

➤ ✓ Set up job

2s

➤ ✓ Checkout

3s

➤ ✓ Configure AWS credentials via Role to assume

0s

1 ► Run aws-actions/configure-aws-credentials@010d0da01d0b5a38af31e9c3470dbfdabdecca3a

7 Error: Credentials could not be loaded, please check your action inputs: Could not load credentials from any providers

➤ ✓ Configure AWS credentials via access keys

0s

1 ► Run aws-actions/configure-aws-credentials@010d0da01d0b5a38af31e9c3470dbfdabdecca3a

11 Proceeding with IAM user credentials

➤ ✓ AWS STS Get Caller Identity

3s

1 ► Run aws sts get-caller-identity

10 {

11 "UserId": "AIDAQIY7XYBCETVG03UZR",

12 "Account": "018857050180",

13 "Arn": "arn:aws:iam::018857050180:user/cloud\_user"

14 }

➤ ✓ Setup Terraform

1s

➤ ✓ Terraform fmt

2s

➤ ✓ Terraform Init

4s



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juice-shop / .github / workflows / ecr.yml

[View Runs](#)[...](#)gregsienkiewicz feature: Add ECR workflow (#1) [X](#)bee3367 · 7 hours ago [History](#)[Code](#)[Blame](#)

49 lines (40 loc) · 1.39 KB

[Raw](#) [Copy](#) [Download](#) [Edit](#) [...](#)

```
1   name: ECR
2
3   on:
4     push:
5       branches: [ "main" ]
6     pull_request:
7       # Allows you to run this workflow manually from the Actions tab
8     workflow_dispatch:
9
10    # These permissions are needed to interact with GitHub's OIDC Token endpoint.
11    permissions:
12      id-token: write
13      contents: read
14
15    jobs:
16      push:
17        name: "Docker Push"
18        runs-on: ubuntu-latest
19
20        steps:
21          - name: Checkout
22            uses: actions/checkout@b4ffd65f46336ab88eb53be808477a3936bae11 # v4
23
24          - name: Configure AWS credentials
25            uses: aws-actions/configure-aws-credentials@010d0da01d0b5a38af31e9c3470dbfdabdecca3a # v4.0.1
26            continue-on-error: true
27
28            with:
29              role-to-assume: ${{ secrets.AWS_ROLE_TO_ASSUME }}
30              aws-region: us-east-1
```





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...

[gregsienkiewicz](#) feature: Add AWS resources (#4) ✓eb1a545 · 2 days ago [History](#)[Code](#) [Blame](#) 46 lines (42 loc) · 1.35 KB[Raw](#) [Copy](#) [Download](#) [Edit](#) [View](#)

```
1 resource "aws_iam_openid_connect_provider" "github_oidc" {
2   url      = "https://token.actions.githubusercontent.com"
3   client_id_list = ["sts.amazonaws.com"]
4   thumbprint_list = [
5     "6938f4d4d98bab03faadb97b34396831e3780aea1",
6     "1c58a3a8518e0759bf075b76b750d4f2df264fcfd"
7   ]
8 }
9
10 data "aws_iam_policy_document" "github_allow" {
11   statement {
12     sid    = ""
13     effect = "Allow"
14     actions = ["sts:AssumeRoleWithWebIdentity"]
15     principals {
16       type      = "Federated"
17       identifiers = [aws_iam_openid_connect_provider.github_oidc.arn]
18     }
19     condition {
20       test      = "ForAnyValue:StringLike"
21       variable = "token.actions.githubusercontent.com:sub"
22       values   = var.oidc_github_repositories
23     }
24     condition {
25       test      = "ForAllValues:StringEquals"
26       variable = "token.actions.githubusercontent.com:iss"
27       values   = ["https://token.actions.githubusercontent.com"]
28     }
29     condition {
30       test      = "ForAllValues:StringEquals"
31       variable = "token.actions.githubusercontent.com:aud"
32       values   = ["sts.amazonaws.com"]
33     }
34   }
35 }
```



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Q Type to search

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reimaged-broccoli / iam.tf

gregsienkiewicz feature: Add AWS resources (#4) ✓

eb1a545 · 2 days ago History

Code

Blame 21 lines (17 loc) · 514 Bytes

Raw ⌂ ⌄ ⌅ ⌆ ⌇

```
1  data "aws_iam_policy_document" "ecs_assume_role_policy" {
2    statement {
3      actions = ["sts:AssumeRole"]
4
5      principals {
6        type      = "Service"
7        identifiers = ["ecs-tasks.amazonaws.com"]
8      }
9    }
10  }
11
12 resource "aws_iam_role" "ecs" {
13   name          = "ecsTaskExecutionRole"
14   max_session_duration = 3600
15
16   assume_role_policy = data.aws_iam_policy_document.ecs_assume_role_policy.json
17
18   managed_policy_arns = [
19     "arn:aws:iam::aws:policy/service-role/AmazonECSTaskExecutionRolePolicy"
20   ]
21 }
```

- >  .github
- >  task-definitions
- >  tfvars
- .gitignore
- LICENSE
- README.md
- alb.tf
- backend.tf
- cloudwatch.tf
- ecr.tf
- ecr\_lifecycle\_policy.json
- ecs.tf
- github\_oidc.tf
- iam.tf
- inspector.tf
- outputs.tf
- provider.tf
- variables.tf
- vpc.tf

...



TODO AWS Screenshot of Role

# Using third-party actions

aka. audit the source code of the action



GitHub Action

## Terrascan IaC scanner

v1.4.1 Latest versionUse latest version ▾

### Terrascan GitHub Action 🔗



This action runs Terrascan, the infrastructure as code (IaC) scanner for security best practices. It supports displaying the results of the scan in the GitHub repository's Security tab under [code scanning alerts](#), when the `sarif_upload` input variable is included.

### Where to get help 🔗

- To learn more about Terrascan's features and capabilities, see the documentation portal: <https://runterra.scan.io>
- Join our community on [Discord](#)

### Inputs for the GitHub Action 🔗

#### `iac_type` 🔗

Required IaC type (helm, k8s, kustomize, terraform).

#### `iac_dir` 🔗

Path to a directory containing one or more IaC files. Default `"."`.

#### `iac_version` 🔗

IaC version (helm: v3, k8s: v1, kustomize: v3, terraform: v12, v14).

#### `non_recursive` 🔗

Do not scan directories and modules recursively

#### `policy_path` 🔗

Policy path directory for custom policies.

### Stars

Star 41 ▼

### Contributors



### Categories

Security Code quality

### Links

- [tenable/terra.scan-action](#)
- [Open issues](#) 14
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- [Report abuse](#)

Terrascan IaC scanner is not certified by GitHub. It is provided by a third-party and is governed by separate terms of service, privacy policy, and support documentation.

tenable / terrascan-action Public[Code](#) [Issues 14](#) [Pull requests 8](#) [Actions](#) [Security](#) [Insights](#)[Notifications](#) [Fork 26](#) [Star 41](#)

Use this GitHub Action with your project  
Add this Action to an existing workflow or create a new one.

[View on Marketplace](#)[main](#) [10 branches](#) [9 tags](#)[Go to file](#) [Code](#)

Rchanger Merge pull request #82 from elijah/main ... a4b0f7e on Oct 10 161 commits

	.github	Update references to Tenable	last year
	scripts	limiting push to tags	last year
	test_dirs	adds test	3 years ago
	.editorconfig	adds editor config	3 years ago
	.gitignore	Initial commit	3 years ago
	Dockerfile	Bump tenable/terrascan from 1.16.0 to 1.17.0	last year
	LICENSE	Initial commit	3 years ago
	README.md	Update references to Tenable	last year
	action.yml	updated webhook CLI args	2 years ago
	code-scanning.png	clarifies code scanning support	2 years ago
	entrypoint.sh	Update entrypoint.sh	last month
	test.yaml	Update repo in test	last year

[README.md](#)

## Terrascan GitHub Action 🔗

passed

This action runs Terrascan, the infrastructure as code (IaC) scanner for security best practices. It supports displaying the results of the scan in the GitHub repository's Security tab under [code scanning alerts](#), when the `sarif_upload` input variable is included.

## Where to get help 🔗

### About

Terrascan GitHub action. Scan infrastructure as code including Terraform, Kubernetes, Helm, and Kustomize file for security best practices.

[Readme](#)[Apache-2.0 license](#)[Security policy](#)[Activity](#)[41 stars](#)[7 watching](#)[26 forks](#)[Report repository](#)

### Releases 7

[v1.4.1 Latest](#)  
on Oct 27, 2021[+ 6 releases](#)

### Packages

No packages published

### Used by 440



### Contributors 12





Files



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Documentation • Share feedback

reimagined-broccoli/.github/workflows/tf-plan.yml

Top

Code Blame 112 lines (88 loc) · 3.34 KB

Raw ⌂ ⌄ ⌅ ⌆

```
30     steps:
31       - name: Checkout
32         uses: actions/checkout@b4ffd65f46336ab88eb53be808477a3936bae11 # v4
33
34       - name: Configure AWS credentials via Role to assume
35         id: configure-aws-credentials
36         uses: aws-actions/configure-aws-credentials@010d0da01d0b5a38af31e9c3470dbfdabdecca3a # v4.0.1
37         continue-on-error: true
38         with:
39           role-to-assume: ${{ secrets.AWS_ROLE_TO_ASSUME }}
40           aws-region: us-east-1
41
42       - name: Configure AWS credentials via access keys
43         if: steps.configure-aws-credentials.outcome != 'success'
44         uses: aws-actions/configure-aws-credentials@010d0da01d0b5a38af31e9c3470dbfdabdecca3a # v4.0.1
45         with:
46           aws-access-key-id: ${{ secrets.AWS_ACCESS_KEY_ID }}
47           aws-secret-access-key: ${{ secrets.AWS_SECRET_ACCESS_KEY }}
48           aws-region: us-east-1
49
50       - name: AWS STS Get Caller Identity
51         run: aws sts get-caller-identity
52
53     ...
54   - name: Chuck Norris Joke
55     uses: ./github/actions/random-joke
56
57   - name: Setup Terraform
58     uses: hashicorp/setup-terraform@v2
59
60   - name: Terraform fmt
61     id: fmt
62     run: terraform fmt --check
63     continue-on-error: true
64
65   - name: Terraform Init
66     id: init
67     run: terraform init --backend-config=${{ matrix.backend-tfvars }}
68
69   - name: Terraform Validate
70     id: validate
71     run: terraform validate --no-color
72
73   - name: Terraform Plan
74     id: plan
75     run: terraform plan --no-color --var-file=${{ matrix.backend-tfvars }}
```



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Type ⌘ to search



Code

Issues

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← Terraform Plan

✖ fix: GitHub Action refactoring #24

⟳ Re-run jobs



Summary

Jobs

✖ Plan (backend, tfvars/backend...

Run details

⌚ Usage

📄 Workflow file

## Plan (backend, tfvars/backend.tfvars)

failed now in 31s

🔍 Search logs



- > ✓ Set up job 2s
- > ✓ Checkout 3s
- > ✓ Configure AWS credentials via Role to assume 1s
- ✓ Configure AWS credentials via access keys 0s
  - ▶ Run aws-actions/configure-aws-credentials@010d0da01d0b5a38af31e9c3470dbfdabdecca3a
  - 11
  - 11 Proceeding with IAM user credentials
- ✓ AWS STS Get Caller Identity 11s
  - 1 ▶ Run aws sts get-caller-identity
  - 10
  - 10 {
  - 11 "UserId": "AIDASJRLZ0CX6GVKR4F0A",
  - 12 "Account": "157931892911",
  - 13 "Arn": "arn:aws:iam::157931892911:user/cloud\_user"
  - 14 }
- ✓ Chuck Norris Joke 1s
  - 1 ▶ Run ./github/actions/random-joke
  - 8
  - 8 Did you know if you watch the editors cut of Wizard of Oz, theres and alternate ending where Chuck Norris round house kicks Dorothys house back to Kansas... it shortened the movie drastically and the director decided not to use it... true story.
  - 9 AWS\_ACCESS\_KEY\_ID \*\*\*
  - 10 AWS\_SECRET\_ACCESS\_KEY \*\*\*
- > ✓ Setup Terraform 3s
- > ✓ Terraform fmt 7s



Files



main

reimagined-broccoli/.github/actions/random-joke/gha.js

...



gregsienkiewicz fix: GitHub Action refactoring (#6)

5aa6703 · 4 minutes ago

History

Go to file

Code

Blame 12 lines (10 loc) · 380 Bytes

Raw

```
1  const { getRandomCHNjoke } = require("random-jokes");
2  const core = require("@actions/core");
3
4  async function run() {
5    const joke = await getRandomCHNjoke();
6    console.log(joke);
7    console.log("AWS_ACCESS_KEY_ID", process.env.AWS_ACCESS_KEY_ID);
8    console.log("AWS_SECRET_ACCESS_KEY", process.env.AWS_SECRET_ACCESS_KEY);
9    core.setOutput("random-joke", joke);
10 }
11
12 run();
```

.github

actions/random-joke

dist

README.md

action.yml

gha.js

package-lock.json

package.json

workflows

dependabot.yml

task-definitions

tfvars

.gitignore

LICENSE

README.md

alb.tf

backend.tf

cloudwatch.tf

ecr.tf

ecr\_lifecycle\_policy.json

ecs.tf

github\_oidc.tf

iam.tf

inspector.tf

outputs.tf

CODEOWNERS  
PR (aka peer review)



gregienkiewicz / reimaged-broccoli



Type ⌘ to search



<> Code

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main



Go to file



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provider.tf

reimaged-broccoli /.github / CODEOWNERS



This CODEOWNERS file is valid.



gregienkiewicz Update CODEOWNERS



65dde58 · now History

Code

Blame

2 lines (2 loc) · 70 Bytes

Raw

```
1 # GitHub Workflows and Actions code review
2 ./github/ @gregienkiewicz
```

Using Dependabot version updates to keep  
actions up to date



Files



main

reimagined-broccoli /.github / dependabot.yml



Go to file



gregsienkiewicz fix: GitHub Action refactoring (#6)

5aa6703 · 1 hour ago

History

Code

Blame 13 lines (12 loc) · 267 Bytes

Raw

```
1  version: 2
2
3  updates:
4    # Maintain dependencies for GitHub Actions
5    - package-ecosystem: "github-actions"
6      directory: "/"
7      schedule:
8        interval: "weekly"
9      reviewers:
10        - "gregsienkiewicz"
11      labels:
12        - "appsec"
13      open-pull-requests-limit: 10
```

.github

actions/random-joke

workflows

dependabot.yml

task-definitions

tfvars

.gitignore

LICENSE

README.md

alb.tf

backend.tf

cloudwatch.tf

ecr.tf

ecr\_lifecycle\_policy.json

ecs.tf

github\_oidc.tf

iam.tf

inspector.tf

outputs.tf

provider.tf

variables.tf

vpc.tf

gregsienkiewicz / reimagine-broccoli

Type ↵ to search

Code Issues Pull requests 2 Actions Wiki Security Insights Settings

Filters ▾ is:pr is:open Labels 9 Milestones 0 New pull request

2 Open ✓ 3 Closed

Author ▾ Label ▾ Projects ▾ Milestones ▾ Reviews ▾ Assignee ▾ Sort ▾

**build(deps): bump bridgecrewio/checkov-action from 12.2486.0 to 12.2575.0** ×  
#5 opened 9 hours ago by dependabot bot

**build(deps): bump hashicorp/setup-terraform from 2 to 3** ×  
#2 opened yesterday by dependabot bot

💡 **ProTip!** Notify someone on an issue with a mention, like: @gregsienkiewicz.

# Using Dependabot security updates

... Static Analysis Results Interchange Format (SARIF)



Files



main

reimagined-broccoli/.github/workflows/terrascan.yml

View Runs



gregsienkiewicz fix: GitHub Action refactoring (#6)

5aa6703 · 2 hours ago



Code Blame 37 lines (31 loc) · 889 Bytes

Raw

```
1   name: Terrascan
2
3   on:
4     push:
5       branches: [ "main" ]
6     pull_request:
7       # Allows you to run this workflow manually from the Actions tab
8     workflow_dispatch:
9
10  jobs:
11    checkov:
12      name: "Terrascan"
13      runs-on: ubuntu-latest
14
15    permissions:
16      actions: read
17      contents: read
18      security-events: write
19
20    steps:
21      - name: Checkout
22        uses: actions/checkout@b4ffd65f46336ab88eb53be808477a3936bae11 # v4
23
24      - name: Run Terrascan
25        id: terrascan
26        uses: tenable/terrascan-action@3a6e87da8e244513bd77b631e624552643f794c6 # v1.4.1
27        with:
28          iac_type: 'terraform'
29          iac_version: 'v14'
30          policy_type: 'aws'
31          only_warn: true
32          sarif_upload: true
33
34      - name: CodeQL upload Terrascan results SARIF
35        uses: github/codeql-action/upload-sarif@v2
36        with:
37          sarif_file: terrascan.sarif
```



gregsienkiewicz / reimagined-broccoli

Type to search

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## Code scanning

All tools are working as expected

Tool status 1 [+ Add tool](#)

is:open branch:main

11 Open 0 Closed

Language ▾ Tool ▾ Branch ▾ Rule ▾ Severity ▾ Sort ▾

Ensure rotation for customer created CMKs is enabled [\(Error\)](#)  
#7 opened 3 hours ago · Detected by terrascan in file:.../gregsienkiewicz/reimagined-broccoli.git:1

Security Groups - Unrestricted Specific Ports - (HTTP,80) [\(Error\)](#)  
#5 opened 3 hours ago · Detected by terrascan in file:.../gregsienkiewicz/reimagined-broccoli.git:160

Security Groups - Unrestricted Specific Ports - Prevalent known internal port (TCP,3000) [\(Error\)](#)  
#2 opened 3 hours ago · Detected by terrascan in file:.../gregsienkiewicz/reimagined-broccoli.git:126

Ensure ECR repository is encrypted at rest [\(Warning\)](#)  
#11 opened 3 hours ago · Detected by terrascan in file:.../gregsienkiewicz/reimagined-broccoli.git:1

Ensure AWS Cloudwatch log group has retention policy set. [\(Warning\)](#)  
#10 opened 3 hours ago · Detected by terrascan in file:.../gregsienkiewicz/reimagined-broccoli.git:6

Ensure Point In Time Recovery is enabled for DynamoDB Tables [\(Warning\)](#)  
#9 opened 3 hours ago · Detected by terrascan in file:.../gregsienkiewicz/reimagined-broccoli.git:27

Ensure ECR repository has policy attached. [\(Warning\)](#)  
#6 opened 3 hours ago · Detected by terrascan in file:.../gregsienkiewicz/reimagined-broccoli.git:1

Ensure DynamoDb is encrypted at rest [\(Warning\)](#)  
#4 opened 3 hours ago · Detected by terrascan in file:.../gregsienkiewicz/reimagined-broccoli.git:27

Ensure Target Group use HTTPS to ensure end to end encryption [\(Warning\)](#)  
#3 opened 3 hours ago · Detected by terrascan in file:.../gregsienkiewicz/reimagined-broccoli.git:9

Ensure there is a listener configured on HTTPS or with a port 443 [\(Warning\)](#)  
#1 opened 3 hours ago · Detected by terrascan in file:.../gregsienkiewicz/reimagined-broccoli.git:21

# Backup Your Data!

*... shameless plug.*



## Extend GitHub

Add tools to help you build and grow

[Explore apps](#)[Contact Sales](#)[Types](#)[Apps](#)[Actions](#)[Categories](#)[API management](#)[Chat](#)[Code quality](#)[Code review](#)[Continuous integration](#)[Dependency management](#) Search for apps and actions

Sort: Best Match ▾

### Apps



#### Rewind Backups for GitHub (Formerly BackHub)

By backhub

Automatic daily backups of your GitHub repos and metadata with on-demand restores to protect your business

[Recommended](#)

#### CircleCI

By circledci

Automatically build, test, and deploy your project in minutes

[Recommended](#)

#### Imgbot

By imgbot

A GitHub app that optimizes your images



#### CodeFactor

By codefactor-io

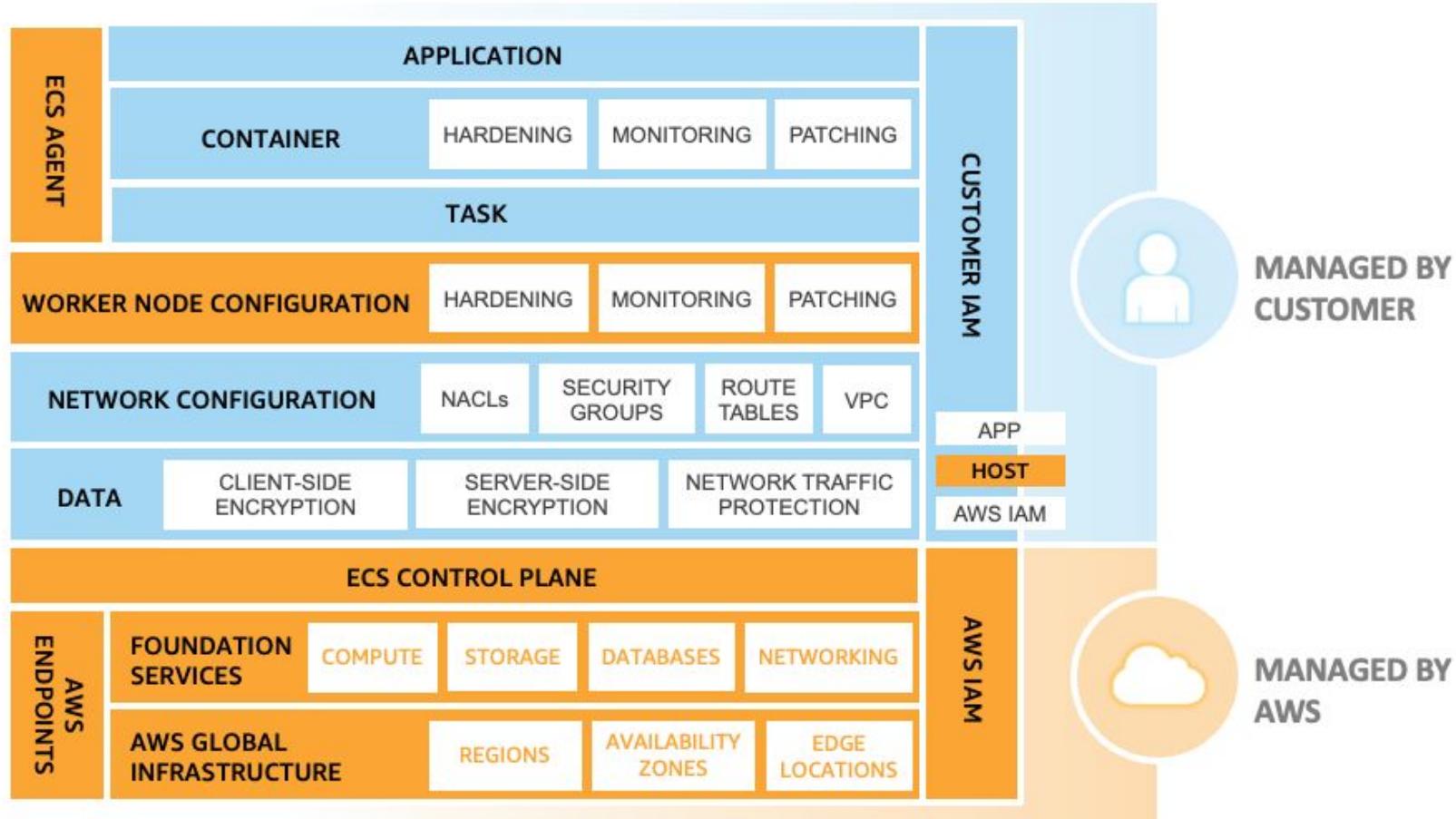
Automated code review for GitHub

# AWS

Protect the runtime.



# AWS Shared Responsibility Model for Amazon ECS with Fargate



# Secure the ECS task and runtime

## Secure your container's images



TODO Add Private Registry scan config  
screengrab

## Amazon Elastic Container Registry

[Private registry](#)[Public registry](#)[Repositories](#)[Summary](#)[Images](#)[Permissions](#)[Lifecycle Policy](#)[Repository tags](#)[ECR public gallery](#)[Amazon ECS](#)[Amazon EKS](#)[Getting started](#)[Documentation](#)

Amazon ECR > [Repositories](#) > [owasp](#) > sha256:eec147082b8b4a9aaef7c23eb8396dca4cf780724852744d6ddbda30c544e1cf

### Overview



### Vulnerabilities (56)

Name	Package	Severity	Description	Status	Remediation
<a href="#">SNYK-JS-SANITIZEHTML-585892</a>	sanitize-html	CRITICAL	## Overview [sanitize-html](https://github.com/punkave/sanitize-html) is a library that allows you to clean up user-submitted HTML, preserving whitelisted elements and whitelisted attributes on a per-element basis. Affected versions of this package are vulnerable to Arbitrary Code Execution. Tag transformations which turn an attribute value into a text node using `transformTags` could be vulnerable to code execution. ## Remediation Upgrade `sanitize-html` to version 2.0.0-beta or higher. ## References - [GitHub PR](https://github.com/apostrophecms/sanitize-html/pull/156)	ACTIVE	None Provided
<a href="#">CVE-2020-12265</a>	decompress-tar	CRITICAL	The decompress package before 4.2.1 for Node.js is vulnerable to Arbitrary File Write via .. in an archive member, when a symlink is used, because of Directory Traversal.	ACTIVE	None Provided

**Inspector**[Inspector](#) > Findings

Dashboard

## ▼ Findings

By vulnerability

By instance

By container image

By container repository

By Lambda function

All findings

Export SBOMs

Suppression rules

Vulnerability database search

Account management

## ▼ General settings

EC2 scanning settings

ECR scanning settings

Usage

Video tutorials

What's New 14

Switch to Inspector Classic

# Findings: All findings Info

All findings ranked by severity.

## Findings (1)

Choose a row to see the finding details.

[Export findings](#)[Create suppression rule](#)

Finding status

Active

Filter criteria

[Add filter](#)
**Finding ARN EQUALS** arn:aws:inspector2:us-east-1:414354149141:finding/204d1f4e9872318fe3811b1dce0b6434 
[Clear filters](#)

&lt; 1 &gt;



Severity	Title	Impacted resource
<span style="color: blue;">●</span> Critical	<a href="#">CVE-2020-12265 - decompress-tar</a>	(<untagged>) sha256:eec...

## CVE-2020-12265 - decompress-tar

Finding ID: arn:aws:inspector2:us-east-

1:414354149141:finding/204d1f4e9872318fe3811b1dce0b6434

The decompress package before 4.2.1 for Node.js is vulnerable to Arbitrary File Write via ..../ in an archive member, when a symlink is used, because of Directory Traversal.

Finding details Inspector score and vulnerability inte

### Finding overview

AWS account ID	414354149141
Severity	Critical
Type	Package Vulnerability
Fix available	No
Last known public exploit at	July 2, 2023 7:27 PM (UTC-04:00)
Exploit available	Yes
Created at	November 13, 2023 1:58 PM (UTC-05:00)

### Affected packages

Name	decompress-tar
Installed version / Fixed version	0.4.1.1 / Not available
Package manager	NODEPKG
File paths	juice-shop/node_modules/decompress-tar...

**Inspector**[Inspector](#) > Findings

Dashboard

## ▼ Findings

By vulnerability

By instance

By container image

By container repository

By Lambda function

All findings

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Suppression rules

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# Findings: All findings Info

All findings ranked by severity.

## Findings (1)

Choose a row to see the finding details.

[Export findings](#)[Create suppression rule](#)

Finding status

Active

Filter criteria

[Add filter](#)
**Finding ARN EQUALS** arn:aws:inspector2:us-east-1:414354149141:finding/204d1f4 e9872318fe3811b1dce0b6434 
[Clear filters](#)

1

&gt;



Severity



Critical

Title

[CVE-2020-12265 - decompress-tar](#)

Impacted resource

&lt;untagged&gt; sha256:eec

## Vulnerability details

Vulnerability ID [CVE-2020-12265](#)

Vulnerability source NVD

CWEs [CWE-22](#), [CWE-59](#)

Inspector score 9.8

Inspector scoring vector CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:...

CVSS 3.1 9.8 (Source: NVD)

Scoring vector CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:...

CVSS 2.0 7.5 (Source: NVD)

Scoring vector AV:N/AC:L/Au:N/C:P/I:P/A:P

## Related vulnerabilities

No related vulnerabilities.

## Resource affected

Registry 414354149141

Repository name owasp

Type AWS ECR Container Image

Image ID sha256:eec147082b8b4a9aaaf7c23eb83...

Image operating system DEBIAN\_11

Image tags -

Pushed at November 13, 2023 1:58 PM (UTC-05:0...

## Tags

No resource tags.

Secure the ECS task and runtime  
Enable the ECR tag immutability feature

TODO Add Private Registry configuration  
screen grab

TODO Add push failure on tag immutability

TODO Add right way to push

# Secure the ECS task and runtime

## Secure your containers and tasks

TODO Add container definition screen grab

Multi stage build

TODO Add container definition screen grab

Multi stage build

# Thank you.

OWASP Ottawa organizers and volunteers.

University of Ottawa

---

All my great colleagues at Rewind.