

Ultimate DevSecOps Library



Contribution rules

If you want to contribute to this library of knowledge please create proper PR (Pull Request) with description what you are adding following these set of rules:

- Clear description of PR (which tool, why, number of stars, maturity and topic)
- Keep it simple - Fill the description properly
- Fact over feelings or personal opinions
- Add source and follow the library style
- Avoid duplicits - one tool, one topic
- Try to make bigger updates then on tool link
- Currently open-source only
- Add only active projects

- Add only security tools
- Report typos as issue not via PR.

Note: Currently this is an early version of the library. I recommend PR after first official release.

DevSecOps library info:

STARS	4.9K	WATCHERS	151	FORKS	862
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This library contains list of tools and methodologies accompanied with resources. The main goal is to provide to the engineers a guide through opensource DevSecOps tooling. This repository covers only cyber security in the cloud and the DevSecOps scope.

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What is DevSecOps

DevSecOps focuses on security automation, testing and enforcement during DevOps - Release - SDLC cycles. The whole meaning behind this methodology is connecting together Development, Security and Operations. DevSecOps is methodology providing different methods, techniques and processes backed mainly with tooling focusing on developer / security experience.

DevSecOps takes care that security is part of every stage of DevOps loop - Plan, Code, Build, Test, Release, Deploy, Operate, Monitor.

Various definitions:



- <https://www.redhat.com/en/topics/devops/what-is-devsecops>
- <https://www.ibm.com/cloud/learn/devsecops>
- <https://snyk.io/series/devsecops/>
- <https://www.synopsys.com/glossary/what-is-devsecops.html>
- <https://spacelift.io/blog/what-is-devsecops>





Tooling

Pre-commit time tools

In this section you can find lifecycle helpers, precommit hook tools and threat modeling tools. Threat modeling tools are specific category by themselves allowing you to simulate and discover potential gaps before you start to develop the software or during the process.

Modern DevSecOps tools allow using Threat modeling as code or generation of threat models based on the existing code annotations.

Name	URL	Description	Meta
git-secrets	https://github.com/awslabs/git-secrets	AWS labs tool preventing you from committing secrets to a git repository	 12K
git-hound	https://github.com/tillson/git-hound	Searchers secrets in git	 1.1K








goSDL	https://github.com/slackhq/goSDL	Security Development Lifecycle checklist	 STARS 512
ThreatPlaybook	https://github.com/we45/ThreatPlaybook	Threat modeling as code	 STARS 260
Threat Dragon	https://github.com/OWASP/threat-dragon	OWASP Threat modeling tool	 STARS 646
threatspec	https://github.com/threatspec/threatspec	Threat modeling as code	 STARS 268
pytm	https://github.com/izar/pytm	A Pythonic framework for threat modeling	 STARS 771
Threagile	https://github.com/Threagile/threagile	A Go framework for threat modeling	 STARS 502
MAL-lang	https://mal-lang.org/#what	A language to create cyber threat modeling systems for specific domains	 STARS 22
Microsoft Threat modeling tool	https://docs.microsoft.com/en-us/azure/security/develop/threat-modeling-tool	Microsoft threat modeling tool	 STARS 156
Talisman	https://github.com/thoughtworks/talisman	A tool to detect and prevent secrets from getting checked in	 STARS 1.8K
		The SEDATED® Project (Sensitive	

SEDATED	https://github.com/OWASP/SEDATED	Enterprise Data Analyzer To Eliminate Disclosure) focuses on preventing sensitive data such as user credentials and tokens from being pushed to Git.	<small>STARS</small> 109
Sonarlint	https://github.com/SonarSource/sonarlint-core	Sonar linting utility for IDE	<small>STARS</small> 210
DevSkim	https://github.com/microsoft/DevSkim	DevSkim is a framework of IDE extensions and language analyzers that provide inline security analysis	<small>STARS</small> 834
detect-secrets	https://github.com/Yelp/detect-secrets	Detects secrets in your codebase	<small>STARS</small> 3.2K
tflint	https://github.com/terraform-linters/tflint	A Pluggable Terraform Linter	<small>STARS</small> 4.3K
Steampipe Code Plugin	https://github.com/turbot/steampipe-plugin-code	Use SQL to detect secrets from source code and data sources.	<small>stars</small> 14

Secrets management

Secrets management includes managing, versioning, encryption, discovery, rotating,

provisioning of passwords, certificates, configuration values and other types of secrets.

Name	URL	Description	Meta
GitLeaks	https://github.com/zricethezav/gitleaks	GitLeaks is a scanning tool for detecting hardcoded secrets	 STARS 14K
ggshield	https://github.com/gitguardian/ggshield	GitGuardian shield (ggshield) is a CLI application that runs in your local environment or in a CI environment and helps you detect more than 350+ types of secrets and sensitive files.	 STARS 1.4K
TruffleHog	https://github.com/trufflesecurity/truffleHog	TruffleHog is a scanning tool for detecting hardcoded secrets	 STARS 13K
Hashicorp Vault	https://github.com/hashicorp/vault	Hashicorp Vault secrets management	 STARS 29K
Mozilla SOPS	https://github.com/mozilla/sops	Mozilla Secrets Operations	 STARS 14K
AWS secrets manager GH action	https://github.com/marketplace/actions/aws-secrets-manager-actions	AWS secrets manager docs	 STARS 60
GitRob	https://github.com/michenriksen/gitrob	Gitrob is a tool to help find potentially sensitive files pushed to public repositories on Github	 STARS 5.7K

git-wild-hunt	https://github.com/d1vious/git-wild-hunt	A tool to hunt for credentials in the GitHub	<small>STARS</small> 2.8k
aws-vault	https://github.com/99designs/aws-vault	AWS Vault is a tool to securely store and access AWS credentials in a development environment	<small>STARS</small> 7.8k
Knox	https://github.com/pinterest/knox	Knox is a service for storing and rotation of secrets, keys, and passwords used by other services	<small>STARS</small> 1.2k
Chef vault	https://github.com/chef/chef-vault	allows you to encrypt a Chef Data Bag Item	<small>STARS</small> 409
Ansible vault	Ansible vault docs	Encryption/decryption utility for Ansible data files	<small>STARS</small> 317

OSS and Dependency management

Dependency security testing and analysis is very important part of discovering supply chain attacks. SBOM creation and following dependency scanning (Software composition analysis) is critical part of continuous integration (CI). Data series and data trends tracking should be part of CI tooling. You need to know what you produce and what you consume in context of libraries and packages.

Name	URL	Description
CycloneDX	https://github.com/orgs/CycloneDX/repositories	CycloneDX format for SBOM
		Generates






cdxgen	https://github.com/AppThreat/cdxgen	CycloneDX SBOM , supports many languages and package managers.
SPDX	https://github.com/spdx/spdx-spec	SPDX format for SBOM - Software Package Data Exchange
Snyk	https://github.com/snyk/snyk	Snyk scans and monitors your projects for security vulnerabilities
vulncost	https://github.com/snyk/vulncost	Security Scanner for VS Code
Dependency Combobulator	https://github.com/apiiro/combobulator	Dependency-related attacks detection and prevention through heuristics and insight engine (support multiple dependency schemes)
DependencyTrack	https://github.com/DependencyTrack/dependency-track	Dependency security tracking

		platform
DependencyCheck	https://github.com/jeremylong/DependencyCheck	Simple dependency security scanner good for CI
Retire.js	https://github.com/retirejs/retire.js/	Helps developers to detect the use of JS-library versions with known vulnerabilities
PHP security checker	https://github.com/fabpot/local-php-security-checker	Check vulnerabilities in PHP dependencies
bundler-audit	https://github.com/rubysec/bundler-audit	Patch-level verification for bundler
gemnasium	https://gitlab.com/gitlab-org/security-products/analyzers/gemnasium	Dependency Scanning Analyzer based on Gemnasium
Dependabot	https://github.com/dependabot/dependabot-core	Automated dependency updates built into GitHub providing security alerts
		Automated dependency

Renovatebot	https://github.com/renovatebot/renovate	updates, patches multi-platform and multi-language
npm-check	https://www.npmjs.com/package/npm-check	Check for outdated, incorrect, and unused dependencies.
Security Scorecards	https://securityscorecards.dev	Checks for several security health metrics on open source libraries and provides a score (0-10) to be considered in the decision making of what libraries to use.
Syft	https://github.com/anchore/syft	CLI tool and library for generating an SBOM from container images (and filesystems).


Supply chain specific tools

Supply chain is often the target of attacks. Which libraries you use can have a massive impact on security of the final product (artifacts). CI (continuous integration) must be monitored inside the tasks and jobs in pipeline steps. Integrity checks must be stored out of the system and in ideal case several validation runs with comparison of integrity hashes / or attestation must be performed.



Name	URL	Description	Meta
Tekton chains	https://github.com/tektoncd/chains	Kubernetes Custom Resource Definition (CRD) controller that allows you to manage your supply chain security in Tekton.	 224
in-toto	https://github.com/in-toto/attestation/tree/v0.1.0/spec	An in-toto attestation is authenticated metadata about one or more software artifacts	 197
SLSA	Official GitHub link	Supply-chain Levels for Software Artifacts	 1.3K
kritis	https://github.com/grafeas/kritis	Solution for securing your software supply chain for Kubernetes apps	 677
ratify	https://github.com/deislabs/ratify	Artifact Ratification Framework	 152

SAST

Static code review tools working with source code and looking for known patterns and relationships of methods, variables, classes and libraries. SAST works with the raw code and usually not with build packages.

Name	URL	Description	Meta
Brakeman	https://github.com/presidentbeef/brakeman	Brakeman is a static analysis tool which checks Ruby on Rails applications	 6.8K

		for security vulnerabilities	
Semgrep	https://semgrep.dev/	Hi-Quality Open source, works on 17+ languages	 8.9K
Bandit	https://github.com/PyCQA/bandit	Python specific SAST tool	 9.2K
libsast	https://github.com/ajinabraham/libsast	Generic SAST for Security Engineers. Powered by regex based pattern matcher and semantic aware semgrep	 10K
ESLint	https://eslint.org/	Find and fix problems in your JavaScript code	
nodejsscan	https://github.com/ajinabraham/nodejsscan	NodeJs SAST scanner with GUI	 2.2K
FindSecurityBugs	https://find-sec-bugs.github.io/	The SpotBugs plugin for security audits of Java web applications	 2.1K

SonarQube community	https://github.com/SonarSource/sonarqube	Detect security issues in code review with Static Application Security Testing (SAST)	
gosec	https://github.com/securego/gosec	Inspects source code for security problems by scanning the Go AST.	
Safety	https://github.com/pyupio/safety	Checks Python dependencies for known security vulnerabilities.	








Note: Semgrep is free CLI tool, however some rulesets (<https://semgrep.dev/r>) are having various licences, some can be free to use and can be commercial.

OWASP curated list of SAST tools : https://owasp.org/www-community/Source_Code_Analysis_Tools


DAST

Dynamic application security testing (DAST) is a type of application testing (in most cases web) that checks your application from the outside by active communication and analysis of the responses based on injected inputs. DAST tools rely on inputs and outputs to operate. A DAST tool uses these to check for security problems while the software is actually running and is

actively deployed on the server (or serverless function).



Name	URL	Description	Meta
Zap proxy	https://owasp.org/www-project-zap/	Zap proxy providing various docker containers for CI/CD pipeline	 11K
Wapiti	https://github.com/wapiti-scanner/wapiti	Light pipeline ready scanning tool	 805
Nuclei	https://github.com/projectdiscovery/nuclei	Template based security scanning tool	 15K
purpleteam	https://github.com/purpleteam-labs/purpleteam	CLI DAST tool incubator project	 10K
oss-fuzz	https://github.com/google/oss-fuzz	OSS-Fuzz: Continuous Fuzzing for Open Source Software	 9.5K
nikto	https://github.com/sullo/nikto	Nikto web server scanner	 7.2K
skipfish	https://code.google.com/archive/p/skipfish/	Skipfish is an active web application security reconnaissance tool	 619


Continuous deployment security

Name	URL	Description	M
SecureCodeBox	https://github.com/secureCodeBox/secureCodeBox	Toolchain for continuous scanning of applications	

		and infrastructure	
OpenSCAP	https://github.com/OpenSCAP/openscap	Open Source Security Compliance Solution	
ThreatMapper	https://github.com/deepfence/ThreatMapper	ThreatMapper hunts for vulnerabilities in your production platforms, and ranks these vulnerabilities based on their risk-of-exploit.	



Kubernetes

Name	URL	Description	Meta
KubiScan	https://github.com/cyberark/KubiScan	A tool for scanning Kubernetes cluster for risky permissions	 1.2K
Kubeaudit	https://github.com/Shopify/kubeaudit	Audit Kubernetes clusters for various different security concerns	 1.7K

Kubescape	https://github.com/armosec/kubescape	The first open-source tool for testing if Kubernetes is deployed according to the NSA-CISA and the MITRE ATT&CK®.	 STARS 
kubesecc	https://github.com/controlplaneio/kubesecc	Security risk analysis for Kubernetes resources	 STARS 
kube-bench	https://github.com/aquasecurity/kube-bench	Kubernetes benchmarking tool	 STARS 
kube-score	https://github.com/zegl/kube-score	Static code analysis of your Kubernetes object definitions	 STARS 
kube-hunter	https://github.com/aquasecurity/kube-hunter	Active scanner for k8s (purple)	 STARS 
Calico	https://github.com/projectcalico/calico	Calico is an open source networking and network security solution for containers	 STARS 
		Simple Kubernetes	

Krane	https://github.com/appvia/krane	RBAC static analysis tool	<small>STARS</small> 628
Starboard	https://github.com/aquasecurity/starboard	Starboard integrates security tools by outputs into Kubernetes CRDs	<small>STARS</small> 1.3K
Gatekeeper	https://github.com/open-policy-agent/gatekeeper	Open policy agent gatekeeper for k8s	<small>STARS</small> 3.3K
Inspektor-gadget	https://github.com/kinvolk/inspektor-gadget	Collection of tools (or gadgets) to debug and inspect k8s	<small>STARS</small> 1.6K
kube-linter	https://github.com/stackrox/kube-linter	Static analysis for Kubernetes	<small>STARS</small> 2.5K
mizu-api-traffic-viewer	https://github.com/up9inc/mizu	A simple-yet-powerful API traffic viewer for Kubernetes enabling you to view all API communication between microservices to help your debug and troubleshoot regressions.	<small>stars</small> 9.6k
		The Helm	

HelmSnyk	https://github.com/snyk-labs/helm-snyk	plugin for Snyk provides a subcommand for testing the images.	stars 40
Kubewarden	https://github.com/orgs/kubewarden/repositories	Policy as code for kubernetes from SUSE.	stars 64
Kubernetes-sigs BOM	https://github.com/kubernetes-sigs/bom	Kubernetes BOM generator	stars 267
Capsule	https://github.com/clastix/capsule	A multi-tenancy and policy-based framework for Kubernetes	stars 1.3k
Badrobot	https://github.com/controlplaneio/badrobot	Badrobot is a Kubernetes Operator audit tool	stars 208
kube-scan	https://github.com/octarinesec/kube-scan	k8s cluster risk assessment tool	stars 774
Istio	https://istio.io	Istio is a service mesh based on Envoy. Engage encryption, role-based access, and authentication across services.	stars 34k
		Visualize	

Kubernetes Insights	https://github.com/turbot/steampipe-mod-kubernetes-insights	Kubernetes inventory and permissions through relationship graphs.	
Kubernetes Compliance	https://github.com/turbot/steampipe-mod-kubernetes-compliance	Check compliance of Kubernetes configurations to security best practices.	

Containers

Name	URL	Description	Meta
Harbor	https://github.com/goharbor/harbor	Trusted cloud native registry project	
Anchore	https://github.com/anchore/anchore-engine	Centralized service for inspection, analysis, and certification of container images	
Clair	https://github.com/quay/clair	Docker vulnerability scanner	
Deepfence	https://github.com/deepfence/ThreatMapper	Apache v2, powerful runtime vulnerability	

ThreatMapper		scanner for kubernetes, virtual machines and serverless.	
Docker bench	https://github.com/docker/docker-bench-security	Docker benchmarking against CIS	 21K
Falco	https://github.com/falcosecurity/falco	Container runtime protection	 6.4K
Trivy	https://github.com/aquasecurity/trivy	Comprehensive scanner for vulnerabilities in container images	 19K
Notary	https://github.com/notaryproject/notary	Docker signing	 3.1K
Cosign	https://github.com/sigstore/cosign	Container signing	 3.7K
watchtower	https://github.com/containrrr/watchtower	Updates the running version of your containerized app	 15K
Grype	https://github.com/anchore/grype	Vulnerability scanner for container images (and also filesystems).	 6.7K

Multi-Cloud

Name	URL	Description	Meta
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Cloudsploit	https://github.com/aquasecurity/cloudsploit	Detection of security risks in cloud infrastructure	<small>STARS</small> 2.8K
ScoutSuite	https://github.com/nccgroup/ScoutSuite	NCCgroup mutlicloud scanning tool	<small>STARS</small> 5.8K
CloudCustodian	https://github.com/cloud-custodian/cloud-custodian/	Multicloud security analysis framework	<small>STARS</small> 5K
CloudGraph	https://github.com/cloudgraphdev/cli	GraphQL API + Security for AWS, Azure, GCP, and K8s	<small>STARS</small> 850
Steampipe	https://github.com/turbot/steampipe	Instantly query your cloud, code, logs & more with SQL. Build on thousands of open-source benchmarks & dashboards for security & insights.	<small>stars</small> 5.7k

AWS




AWS specific DevSecOps tooling. Tools here cover different areas like inventory management, misconfiguration scanning or IAM roles and policies review.

Name	URL	Description	Meta
		Dragoneye	

Dragoneye	https://github.com/indeni/dragoneye	Indeni AWS scanner	
Prowler	https://github.com/toniblyx/prowler	Prowler is a command line tool that helps with AWS security assessment, auditing, hardening and incident response.	
aws-inventory	https://github.com/nccgroup/aws-inventory	Helps to discover all AWS resources created in an account	
PacBot	https://github.com/tmobile/pacbot	Policy as Code Bot (PacBot)	
Komiser	https://github.com/mlabouardy/komiser	Monitoring dashboard for costs and security	
Cloudsplaining	https://github.com/salesforce/cloudsplaining	IAM analysis framework	
ElectricEye	https://github.com/jonrau1/ElectricEye	Continuously monitor your AWS services for configurations	
Cloudmapper	https://github.com/duo-labs/cloudmapper	CloudMapper helps you analyze your	

		Amazon Web Services (AWS) environments	
cartography	https://github.com/lyft/cartography	Consolidates AWS infrastructure assets and the relationships between them in an intuitive graph	 STARS 2.8K
policy_sentry	https://github.com/salesforce/policy_sentry	IAM Least Privilege Policy Generator	 STARS 1.9K
AirIAM	https://github.com/bridgecrewio/AirIAM	IAM Least Privilege analyzer and Terraformer	 STARS 739
StreamAlert	https://github.com/airbnb/streamalert	AirBnB serverless, real-time data analysis framework which empowers you to ingest, analyze, and alert	 STARS 2.8K
CloudQuery	https://github.com/cloudquery/cloudquery/	AirBnB serverless, real-time data analysis framework which empowers you	 STARS 5.2K

		to ingest, analyze, and alert	
S3Scanner	https://github.com/sa7mon/S3Scanner/	A tool to find open S3 buckets and dump their contents	 STARS 2.2K
aws-iam-authenticator	https://github.com/kubernetes-sigs/aws-iam-authenticator/	A tool to use AWS IAM credentials to authenticate to a Kubernetes cluster	 STARS 2.1K
kube2iam	https://github.com/jtblin/kube2iam/	A tool to use AWS IAM credentials to authenticate to a Kubernetes cluster	 STARS 1.9K
AWS open source security samples	Official AWS opensource repo	Collection of official AWS open-source resources	
AWS Firewall factory	Globaldatanet FMS automation	Deploy, update, and stage your WAFs while managing them centrally via FMS	 STARS 182
Parliment	Parliment	Parliament is an AWS IAM linting library	 STARS 961

Yor	Yor	Adds informative and consistent tags across infrastructure-as-code frameworks such as Terraform, CloudFormation, and Serverless	 727
AWS Insights	https://github.com/turbot/steampipe-mod-aws-insights	Visualize AWS inventory and permissions through relationship graphs.	 76
AWS Compliance	https://github.com/turbot/steampipe-mod-aws-compliance	Check compliance of AWS configurations to security best practices.	 320

Google cloud platform

GCP specific DevSecOps tooling. Tools here cover different areas like inventory management, misconfiguration scanning or IAM roles and policies review.

Name	URL	Description	Meta
Forseti	https://github.com/forseti-security/forseti-security	Complex security orchestration and scanning platform	 1.3K
GCP	https://github.com/turbot/steampipe-	Visualize GCP inventory and permissions through	 8

Insights	mod-gcp-insights	relationship graphs.	
GCP Compliance	https://github.com/turbot/steampipe-mod-gcp-compliance	Check compliance of GCP configurations to security best practices.	stars 28

Microsoft Azure




Azure specific DevSecOps tooling. Tools here cover different areas like inventory management, misconfiguration scanning or IAM roles and policies review.

Name	URL	Description	Meta
Azure Insights	https://github.com/turbot/steampipe-mod-azure-insights	Visualize Azure inventory and permissions through relationship graphs.	stars 8
Azure Compliance	https://github.com/turbot/steampipe-mod-azure-compliance	Check compliance of Azure configurations to security best practices.	stars 47

Policy as code

Policy as code is the idea of writing code in a high-level language to manage and automate policies. By representing policies as code in text files, proven software development best practices can be adopted such as version control, automated testing, and automated deployment. (Source: <https://docs.hashicorp.com/sentinel/concepts/policy-as-code>)







Name	URL	Description	Meta
Open Policy agent	https://github.com/open-policy-agent/opa	General-purpose policy engine that enables unified, context-aware policy enforcement across the entire stack	STARS 8.6K
Kyverno	https://github.com/kyverno/kyverno	Kyverno is a policy engine designed for Kubernetes	STARS 4.5K

Inspec	https://github.com/inspec/inspec	<p>Chef InSpec is an open-source testing framework for infrastructure with a human- and machine-readable language for specifying compliance, security and policy requirements.</p>	 STARS 2.8K
Cloud Formation guard	https://github.com/aws-cloudformation/cloudformation-guard	<p>Cloud Formation policy as code</p>	 STARS 1.2K
cnspec	https://github.com/mondoohq/cnspec	<p>cnspec is a cloud-native and powerful Policy as Code engine to assess the security and compliance of your business-critical infrastructure. cnspec finds vulnerabilities and misconfigurations on all systems in your infrastructure including: public and private cloud environments, Kubernetes clusters, containers, container registries, servers and endpoints, SaaS products, infrastructure as code, APIs, and more.</p>	 STARS 203

Chaos engineering

Chaos Engineering is the discipline of experimenting on a system in order to build confidence in the system's capability to withstand turbulent conditions in production.

Reading and manifestos: <https://principlesofchaos.org/>

















Name	URL	Description	Meta
chaos-mesh	https://github.com/chaos-mesh/chaos-mesh	It is a cloud-native Chaos Engineering platform that orchestrates chaos on Kubernetes environments	 STARS 6K
Chaos monkey	https://netflix.github.io/chaosmonkey/	Chaos Monkey is responsible for randomly terminating instances in production to ensure that engineers implement their services to be resilient to instance failures.	 STARS 14K
Chaos Engine	https://thalesgroup.github.io/chaos-engine/	The Chaos Engine is a tool that is designed to intermittently destroy or degrade application resources running in cloud based infrastructure. These events are designed to occur while the appropriate resources are available to resolve the issue if the platform fails to do so on it's own.	 STARS 66
chaoskube	https://github.com/linki/chaoskube	Test how your system behaves under arbitrary pod failures.	 STARS 1.7K
Kube-Invaders	https://github.com/lucky-sideburn/KubeInvaders	Gamified chaos engineering tool for Kubernetes	 STARS 927
kube-monkey	https://github.com/asobti/kube-monkey	Gamified chaos engineering tool for Kubernetes	 STARS 2.8K

Litmus Chaos	https://litmuschaos.io/	Litmus is an end-to-end chaos engineering platform for cloud native infrastructure and applications. Litmus is designed to orchestrate and analyze chaos in their environments.	<small>STARS</small> 3.9K
Gremlin	https://github.com/gremlin/gremlin-python	Chaos engineering SaaS platform with free plan and some open source libraries	<small>STARS</small> 54
AWS FIS samples	https://github.com/aws-samples/aws-fault-injection-simulator-samples	AWS Fault injection simulator samples	<small>STARS</small> 31
CloudNuke	https://github.com/gruntwork-io/cloud-nuke	CLI tool to delete all resources in an AWS account	<small>STARS</small> 2.5K

Infrastructure as code security

Scanning your infrastructure when it is only code helps shift-left the security. Many tools offer in IDE scanning and providing real-time advisory do Cloud engineers.

Name	URL	Description	Meta
KICS	https://github.com/Checkmarx/kics	Checkmarx security testing opensource for IaC	<small>STARS</small> 1.7K
Checkov	https://github.com/bridgecrewio/checkov	Checkov is a static code analysis tool for infrastructure-as-code	<small>STARS</small> 6K
		tfsec uses static analysis of your terraform templates to	

tfsec	https://github.com/aquasecurity/tfsec	spot potential security issues. Now with terraform CDK support	 STARS 
terrascan	https://github.com/accurics/terrascan	Terrascan is a static code analyzer for Infrastructure as Code	 STARS 
cfsec	https://github.com/aquasecurity/cfsec	cfsec scans CloudFormation configuration files for security issues	 STARS 
cfn_nag	https://github.com/stelligent/cfn_nag	Looks for insecure patterns in CloudFormation	 STARS 
Sysdig IaC scanner action	https://github.com/sysdiglabs/cloud-iac-scanner-action	Scans your repository with Sysdig IAC Scanner and report the vulnerabilities.	 STARS 
Terraform Compliance for AWS	https://github.com/turbot/steampipe-mod-terraform-aws-compliance	Check compliance of Terraform configurations to AWS security best practices.	 stars 
Terraform Compliance for Azure	https://github.com/turbot/steampipe-mod-terraform-azure-compliance	Check compliance of Terraform configurations to Azure security best practices.	 stars 
Terraform Compliance for GCP	https://github.com/turbot/steampipe-mod-terraform-gcp-compliance	Check compliance of Terraform configurations to GCP security best practices.	 stars 

Terraform Compliance for OCI	https://github.com/turbot/steampipe-mod-terraform-oci-compliance	Check compliance of Terraform configurations to OCI security best practices.	stars 2
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Orchestration

Event driven security help to drive, automate and execute tasks for security processes. The tools here are not dedicated security tools but are helping to automate and orchestrate security tasks or are part of most modern security automation frameworks or tools.

Name	URL	Description	Meta
StackStorm	https://github.com/StackStorm/st2	Platform for integration and automation across services and tools supporting event driven security	stars 5.7k
Camunda	https://github.com/camunda/camunda-bpm-platform	Workflow and process automation	stars 3.6k
DefectDojo	https://github.com/DefectDojo/django-DefectDojo	Security orchestration and vulnerability management platform	stars 3.1k
Faraday	https://github.com/infobyte/faraday	Security suite for Security Orchestration, vulnerability management and centralized information	stars 4.3k

Methodologies, whitepapers and architecture

List of resources worth investigating:

- https://dodcio.defense.gov/Portals/0/Documents/DoD%20Enterprise%20DevSecOps%20Reference%20Design%20v1.0_Public%20Release.pdf
- <https://dodcio.defense.gov/Portals/0/Documents/Library/DoDEnterpriseDevSecOpsStrategyGuide.pdf>
- <https://csrc.nist.gov/publications/detail/sp/800-204c/draft>
- <https://owasp.org/www-project-devsecops-maturity-model/>
- <https://www.sans.org/posters/cloud-security-devsecops-best-practices/>

AWS DevOps whitepapers:

- <https://d1.awsstatic.com/whitepapers/aws-development-test-environments.pdf>
- https://d1.awsstatic.com/whitepapers/AWS_DevOps.pdf
- https://d1.awsstatic.com/whitepapers/AWS_Blue_Green_Deployments.pdf
- <https://d1.awsstatic.com/whitepapers/DevOps/import-windows-server-to-amazon-ec2.pdf>
- https://d1.awsstatic.com/whitepapers/DevOps/Jenkins_on_AWS.pdf
- <https://d1.awsstatic.com/whitepapers/DevOps/practicing-continuous-integration-continuous-delivery-on-AWS.pdf>
- <https://d1.awsstatic.com/whitepapers/DevOps/infrastructure-as-code.pdf>
- <https://d1.awsstatic.com/whitepapers/microservices-on-aws.pdf>
- <https://d1.awsstatic.com/whitepapers/DevOps/running-containerized-microservices-on-aws.pdf>
- <https://d1.awsstatic.com/Marketplace/solutions-center/downloads/AppSec-DevSecOps-AWS-SANS-eBook.pdf> (AWS + SANS whitepaper)

AWS blog:

- <https://aws.amazon.com/blogs/devops/building-end-to-end-aws-devsecops-ci-cd-pipeline-with-open-source-sca-sast-and-dast-tools/>
- <https://aws.amazon.com/blogs/devops/building-an-end-to-end-kubernetes-based-devsecops-software-factory-on-aws/>

Microsoft whitepapers:

- https://azure.microsoft.com/mediahandler/files/resourcefiles/6-tips-to-integrate-security-into-your-devops-practices/DevSecOps_Report_Tips_D6_fm.pdf
- <https://docs.microsoft.com/en-us/azure/architecture/solution-ideas/articles/devsecops-in-azure>



- <https://docs.microsoft.com/en-us/azure/architecture/solution-ideas/articles/devsecops-in-github>

GCP whitepapers:

- <https://cloud.google.com/architecture/devops/devops-tech-shifting-left-on-security>
- <https://cloud.google.com/security/overview/whitepaper>
- https://services.google.com/fh/files/misc/security_whitepapers_march2018.pdf
- <https://cloud.google.com/security/encryption-in-transit/application-layer-transport-security>
- <https://services.google.com/fh/files/misc/google-cloud-security-foundations-guide.pdf>

Other

Here are the other links and resources that do not fit in any previous category. They can meet multiple categories in time or help you in your learning.

Name	URL	Description	Meta
Automated Security Helper (ASH)	https://github.com/aws-samples/automated-security-helper	ASH is a one stop shop for security scanners, and does not require any installation. It will identify the different frameworks, and download the relevant, up to date tools. ASH is running on isolated Docker containers, keeping the user environment clean, with a single aggregated report. The following frameworks are supported: Git, Python, Javascript, Cloudformation, Terraform and Jupyter Notebooks.	 STARS 242
Mobile security framework	https://github.com/MobSF/Mobile-Security-Framework-MobSF	SAST, DAST and pentesting tool for mobile apps	 STARS 15K