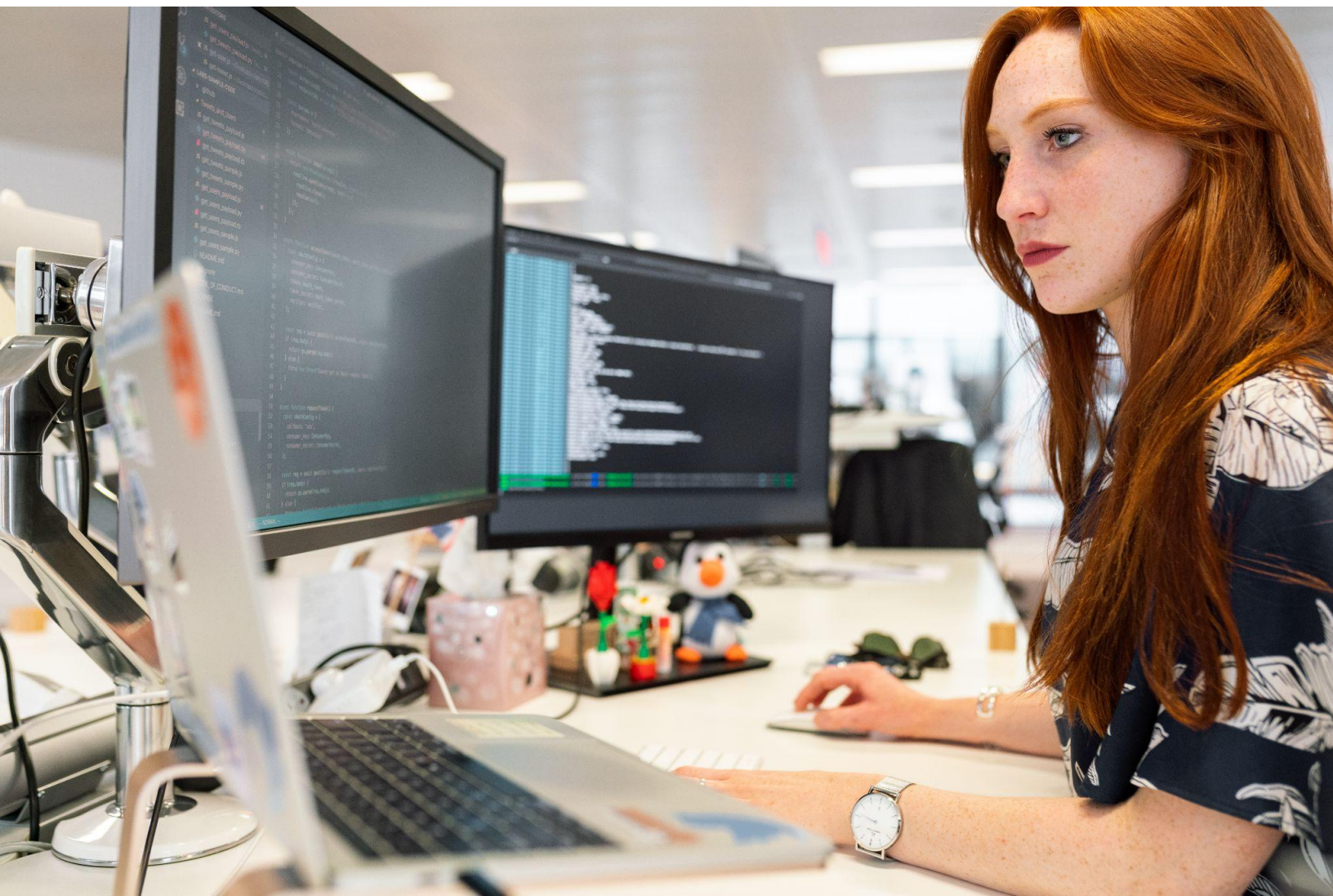


Cloudify & ServiceNow: Speed and agility for your developers while managing enterprise risks

Automatic provisioning, management, and governance in your multi-cloud infrastructure for your DevOps and CCoE teams



Can you empower your digital teams while ensuring a smooth operational model between DevOps and CCoE teams?

Enterprise IT infrastructure is becoming more complex every day. Adoption of cloud-based technologies and the use of digital footprints have added new challenges for IT operations teams. They're expected to deliver business outcomes faster with rapid application and service delivery to internal developers and customers.

Software developers need frictionless processes and quick access to infrastructure to rapidly deliver new features. However, providing access to infrastructure with insufficient control results in IT waste, including costly cloud security breaches and skyrocketing infrastructure costs. This is not acceptable for most organizations, especially in highly regulated industries.

Investing in a strategic solution that provides automation and governance for managed cloud infrastructure resources across multiple business areas is the key for scaling cloud operations.

Cloudify integration with ServiceNow ITOM allows CCoE teams to design remediation actions for automatic compliance operations, navigating through a list of suggested remediation options, and apply the right remediation change for the specific violation. Cloudify integration with ServiceNow ITSM allows developers to deploy or perform day-2 operation as a self-service directly through ServiceNow's Service Catalog.

Figure 1: Barriers to efficient fast and agile development



Siloed tools operated by a specific lines of business



Multi-cloud deployments is stressing existing tooling



Too many stitched between DevOps tools & CI/CD pipelines



Developers are waiting for access to infrastructure



Policy scans blocks development processes



Infrastructure is accessed with no sufficient control and compliance



Manual remediation of compliance violations

Automatic provisioning & day-2 operations of your development environments with Cloudify

Cloudify allows DevOps to manage development, testing, and production environments by importing all their existing automation templates such as Terraform, CloudFormation, Azure ARM, Ansible, Kubernetes, Helm, and many more, converting them into certified environments, and provisioning them automatically through ServiceNow ITSM or CI/CD pipelines.

Configuration control governance of your provisioned resources with ServiceNow

ServiceNow ITOM allows Technology teams to define configuration policies and tag standardization, identify compliance violations, and remediate them through ServiceNow. Cloudify automatically executes the remediation actions and sustains a single pane of glass for cloud environments to be used in CI/CD pipelines or ServiceNow Service Catalog requests.

Customer benefits with the combined solution

- **Deploy apps & infrastructure faster in a compliant way** - Developers can spin up and tear down authorized development, testing, and production environments with a few clicks from ServiceNow. Meanwhile, ITOM Governance scans for policy violations and remediates them through Cloudify without taking the environment down.
- **Automate Cloud Configuration Governance processes** - CCoE teams can enforce policies and automate remediations to ensure compliance with multi-cloud management best practices. ServiceNow Cloud Configuration Governance (CCG) allows CCoE teams to define configuration and tag policies and identify violations. Then, execute remediation changes automatically through Cloudify.
- **Enable frictionless processes between DevOps and CCoE teams** - Cloudify integration with ServiceNow ITOM Governance empowers the CCoE team and ensures smooth CI/CD processes between DevOps and IT. Allowing CCoE operators to remediate violations through ServiceNow, while sustaining a single pane of glass between CI/CD pipelines and ServiceNow remediation actions.

Speed and agility for developers

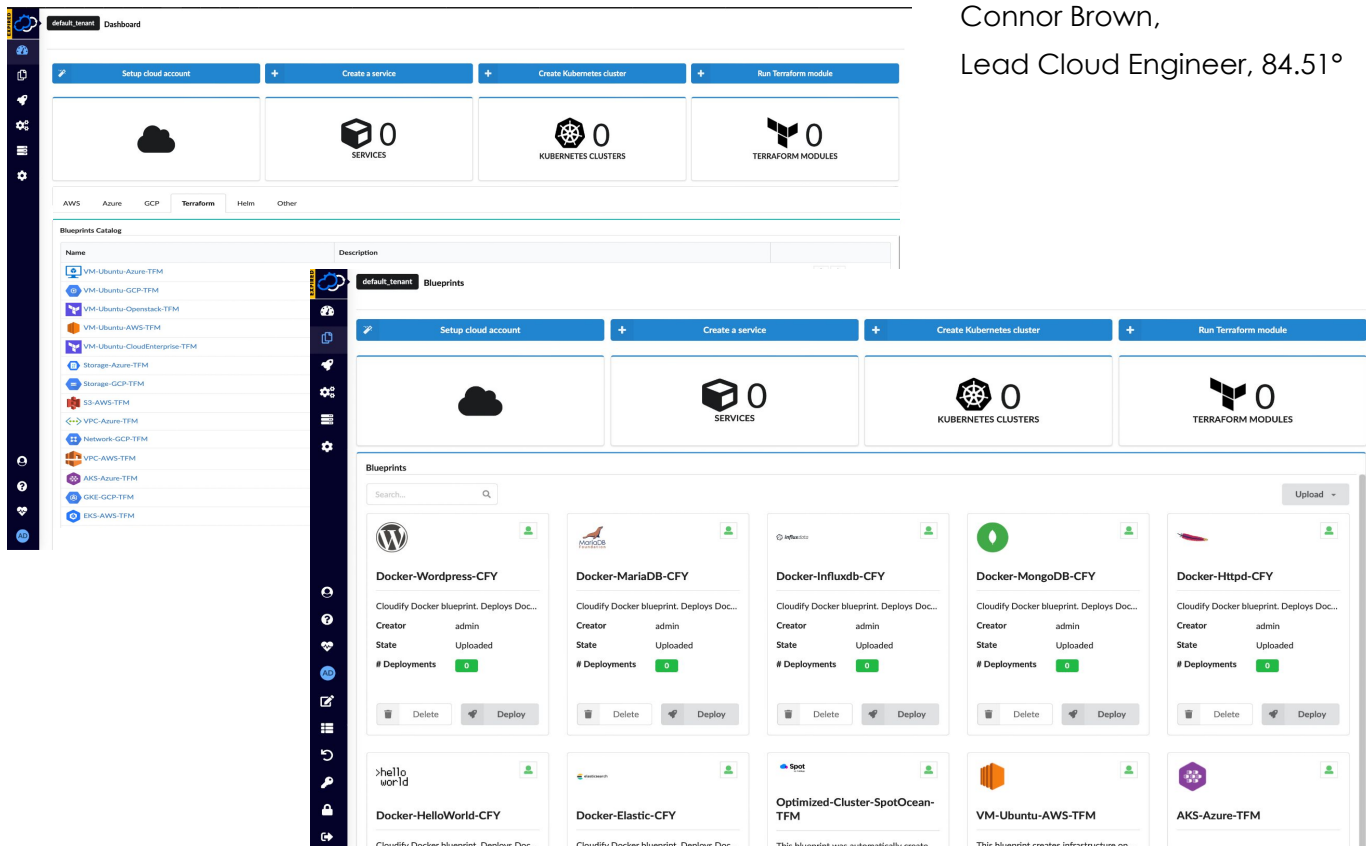
Developers can enjoy a self-service experience needed to rapidly spin up and tear down dev/test environments with minimal effort, as well as simplifying change management of production environments. Policy checks and remediation occurs in the background without interfering with development processes.

- Environment creation from existing IaC tools such as Terraform, CloudFormation, Azure ARM Ansible, Kubernetes, Helm Charts, and many more
- Selection of environment from ServiceNow for either initial provisioning (Day-1) or Day-2 operation
- Approval workflows and environment access details through ServiceNow
- Scanning and remediation policy violations without interrupting development

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Prior to Cloudify, we delivered complex automation use cases using in-house developed APIs. This required us to maintain infrastructure, contracts, authentication, etc. for our APIs. With Cloudify we can focus our time on the automation logic without worrying about the overhead of an in-house API.

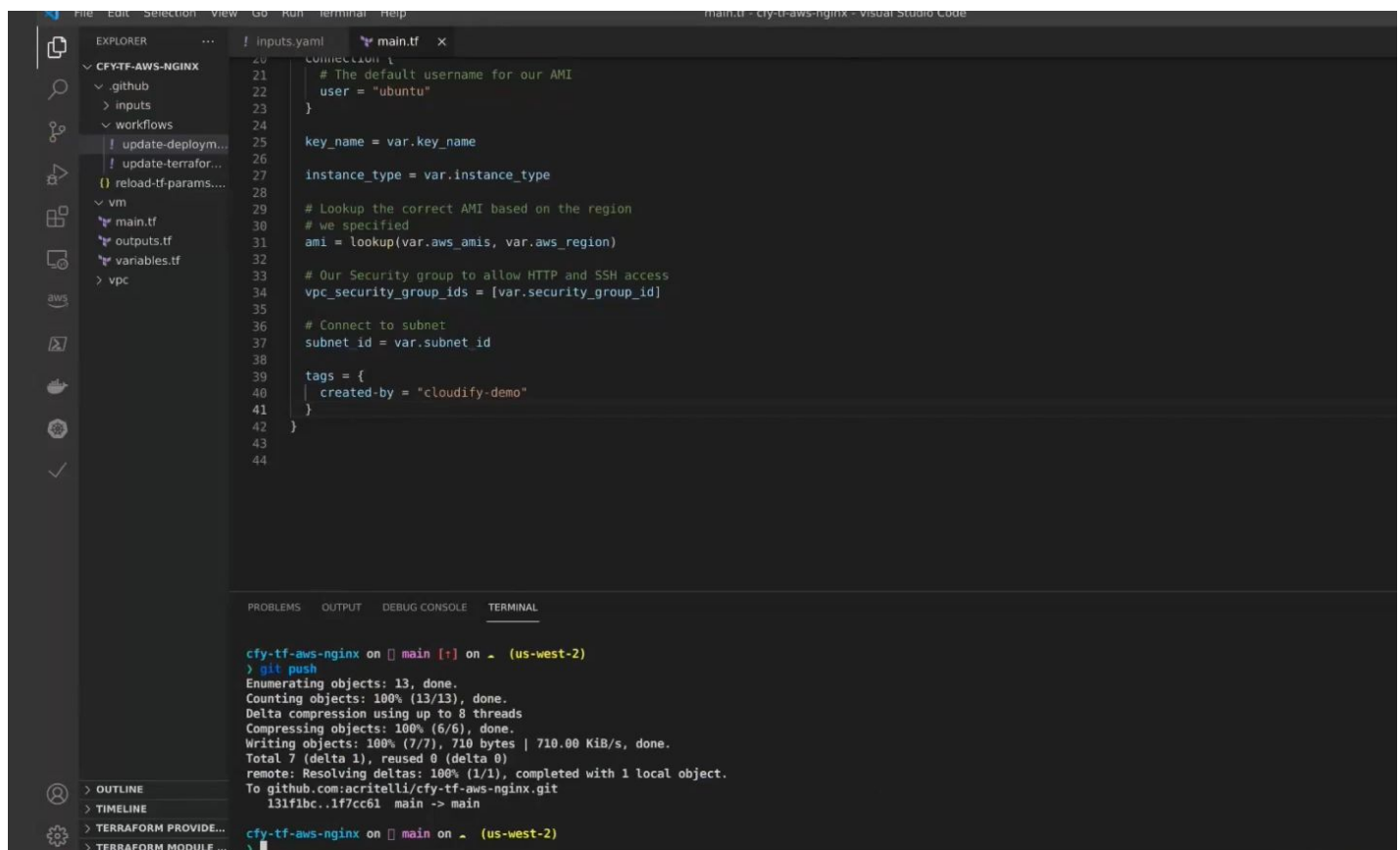
Connor Brown,
Lead Cloud Engineer, 84.51°



Smooth CI/CD processes between DevOps and CCoE teams

Cloudify's integration with ITOM Governance allows IT operators to remediate violations through ServiceNow, while sustaining a single pane of glass between CI/CD pipelines and ServiceNow remediation actions. Policy checks and remediation occurs in the background without interfering with development processes.

- Automatic policy checks on provisioning through CI/CD pipelines
- Automatic management of environment states for every provisioning
- Change management through existing IaC tools such as Terraform, Ansible, Kubernetes, etc.
- Compatibility with any CI/CD pipelines (Jenkins, GitHub Action, Circle CI, etc.)
- Selection of preferred remediation through ServiceNow Cloud Configuration Governance (CCG)



```
40 connection {
21   # The default username for our AMI
22   user = "ubuntu"
23 }
24
25 key_name = var.key_name
26
27 instance_type = var.instance_type
28
29 # Lookup the correct AMI based on the region
30 # we specified
31 ami = lookup(var.aws_amis, var.aws_region)
32
33 # Our Security group to allow HTTP and SSH access
34 vpc_security_group_ids = [var.security_group_id]
35
36 # Connect to subnet
37 subnet_id = var.subnet_id
38
39 tags = {
40   created-by = "cloudify-demo"
41 }
42
43
44
```

```
cfy-tf-aws-nginx on main [!] on - (us-west-2)
> git push
Enumerating objects: 13, done.
Counting objects: 100% (13/13), done.
Delta compression using up to 8 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (7/7), 710 bytes | 710.00 KiB/s, done.
Total 7 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:acritelli/cfy-tf-aws-nginx.git
131f1bc..1f7cc61 main -> main
cfy-tf-aws-nginx on main on - (us-west-2)
>
```

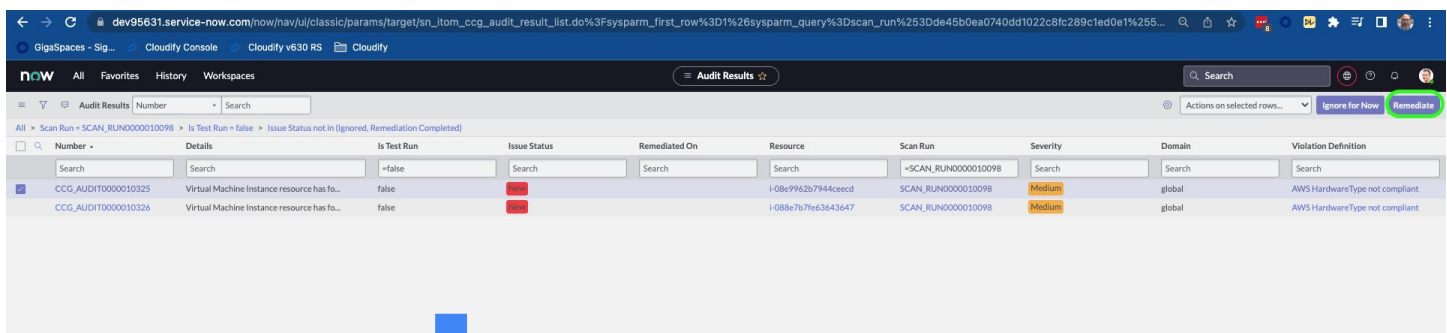
Compliance with multi-cloud management best practices

Cloudify's integration with ServiceNow ITOM allows CCoE to define configuration and tag policies with ITOM governance, as well as identify violations and execute remediation changes via ITOM Governance. The remediation triggers an action that executes automatically through Cloudify on any provisioned environment.

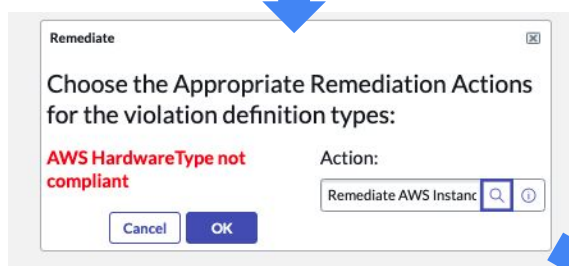
- Definition of configuration and tags policies with ITOM governance
- Policy scans and violations identification for every provisioned or updated environment
- Remediation selection list for every violation through ServiceNow Cloud Configuration Governance (CCG)
- Automatic remediation execution through Cloudify in consistent with DevOps

“

Updates previously took the cloud team hours to complete and limited how many environments we could support. Updates are now even easier with the new Environment as a Service features in Cloudify. Cloudify has contributed to significantly reducing the toil experienced by the cloud team.



Number	Details	Is Test Run	Issue Status	Remediated On	Resource	Scan Run	Severity	Domain	Violation Definition
CCG_AUDIT0000010325	Virtual Machine Instance resource has fo...	false	Issue		I-08e9962b7944cecd	SCAN_RUN0000010098	Medium	global	AWS HardwareType not compliant
CCG_AUDIT0000010326	Virtual Machine Instance resource has fo...	false	Issue		I-088e7b77e63643647	SCAN_RUN0000010098	Medium	global	AWS HardwareType not compliant



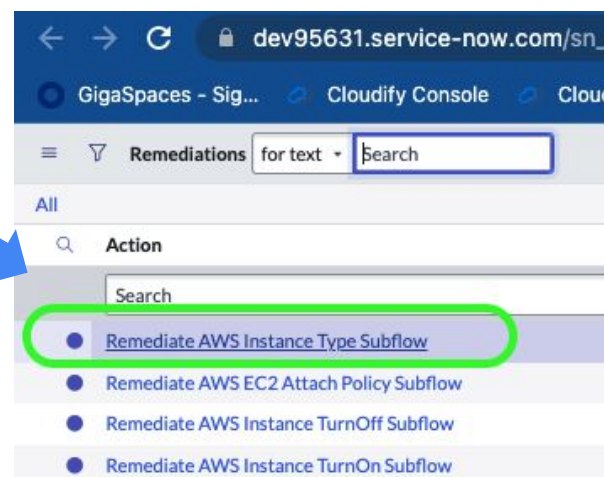
Remediate

Choose the Appropriate Remediation Actions for the violation definition types:

AWS HardwareType not compliant

Action: Remediate AWS Instance

Cancel OK



dev95631.service-now.com/sn

GigaSpaces - Sig... Cloudify Console Cloudify

Remediations for text search

All

Action

Search

- Remediate AWS Instance Type Subflow
- Remediate AWS EC2 Attach Policy Subflow
- Remediate AWS Instance TurnOff Subflow
- Remediate AWS Instance TurnOn Subflow

Getting started

Get started with Cloudify and ServiceNow today by downloading the integration pack from [the ServiceNow Store](#).

About Cloudify

Cloudify is an open-source DevOps automation platform delivering an 'Environment as a Service' technology that packages infrastructure, technologies and existing automation tools into certified blueprints. Cloudify is designed to manage heterogeneous cloud environments at scale. Cloudify is implemented across leading global enterprises in financial services, technology, manufacturing, telecommunications, retailers, and many more.

[Learn more at cloudify.co](#)

About ServiceNow

ServiceNow is changing the way people work. By combining IT operations management and IT service management on a single cloud platform, we help eliminate service outages and get to the cloud faster, making the modern enterprise faster and more scalable than ever before. With over 3500 customers globally, ServiceNow is redefining IT operations.

[Learn more at servicenow.com](#)

