

Say Goodbye to Click-Ops



Patrick de Kruijf - Azure Architect

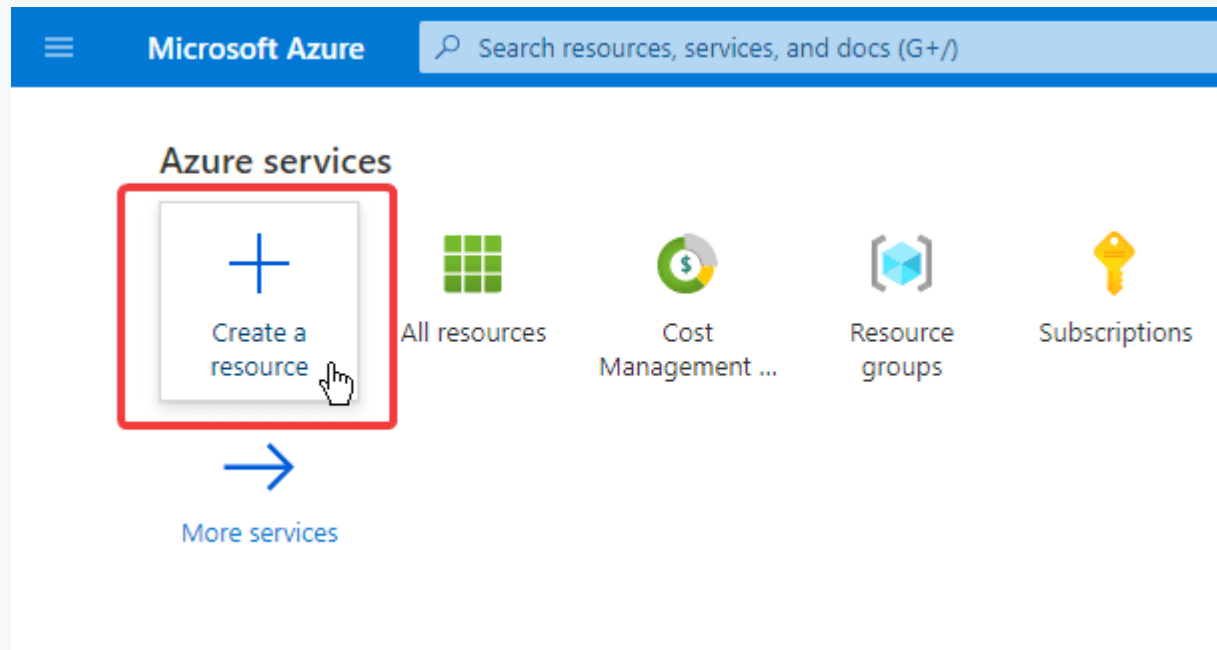
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Agenda

- Click-Ops
- Infra(structure) as Code (IaC)
- Real-life scenarios
- Takeaways

Click-Ops: What is it?

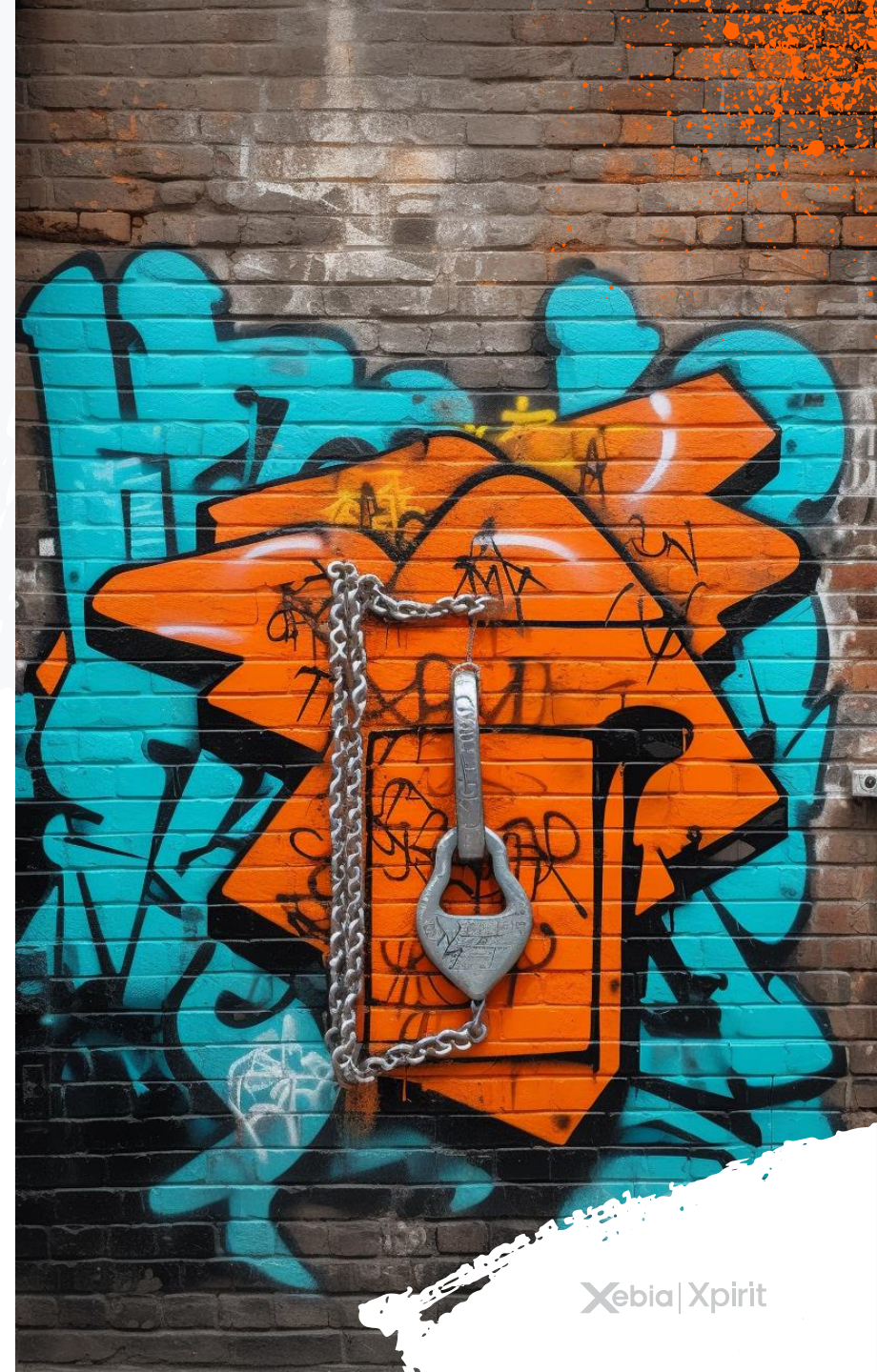


Click-Ops: Why use it?

You have an overview of the current state and can adjust it directly

Changes are easy to make

You can do it all by yourself



Infra as Code: What is it?

- Management and provisioning of infrastructure through code
- You, generally, declare the end state of your infrastructure
- The code is stored in a version control system (i.e. Git)
- Code can be executed using (automated) pipelines or scripts
- Infra as code also serves as documentation

Infra as Code: Which are there?

- Commonly used (with Azure):
 - Azure ARM
 - Bicep
 - Terraform
- But there are many more:
 - Pulumi
 - OpenTOFU
 - Terragrunt
 - Chef
 - Ansible
 - Etc..

Infra as Code: Why use it?

- Version control
 - Audit changes
 - Security (i.e. approval or automated code scanning)
 - Collaboration
- Documentation
- Scalability
- Reusability
- Efficiency



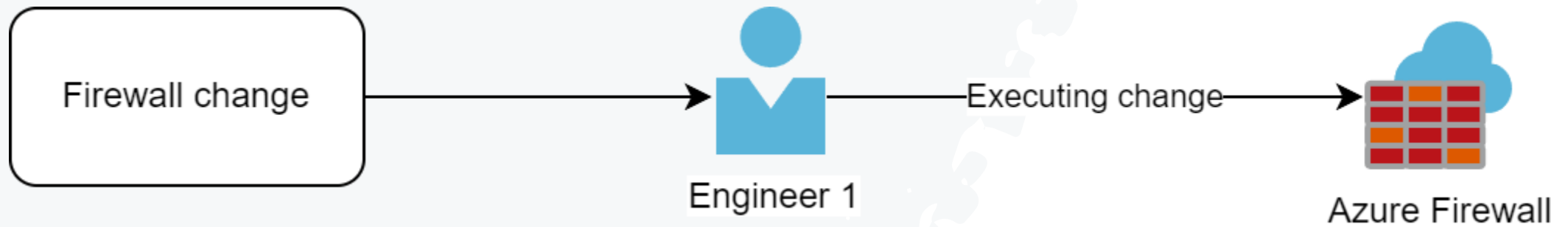


DEMO

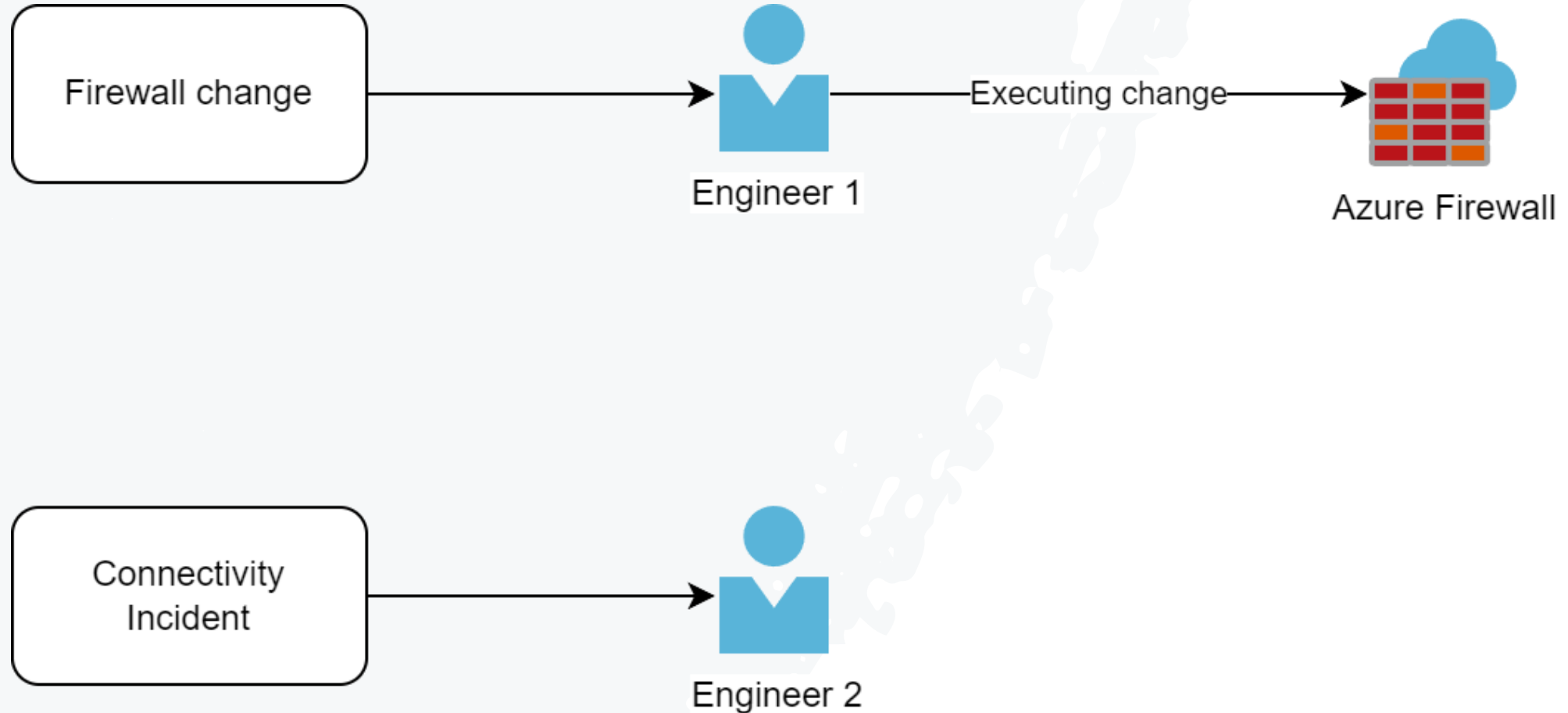
Real-life scenario's: Case 1

- A firewall change request as received
- After executing the firewall rule change an incident occurred

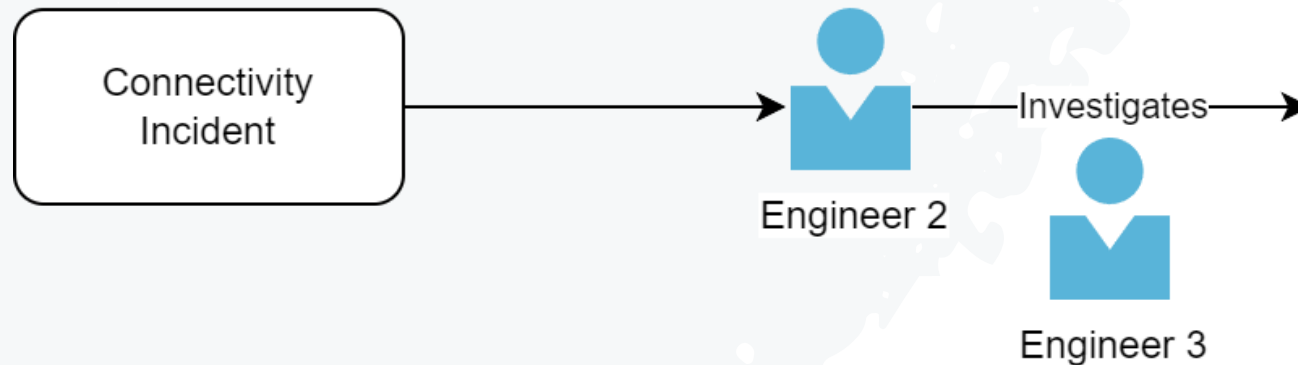
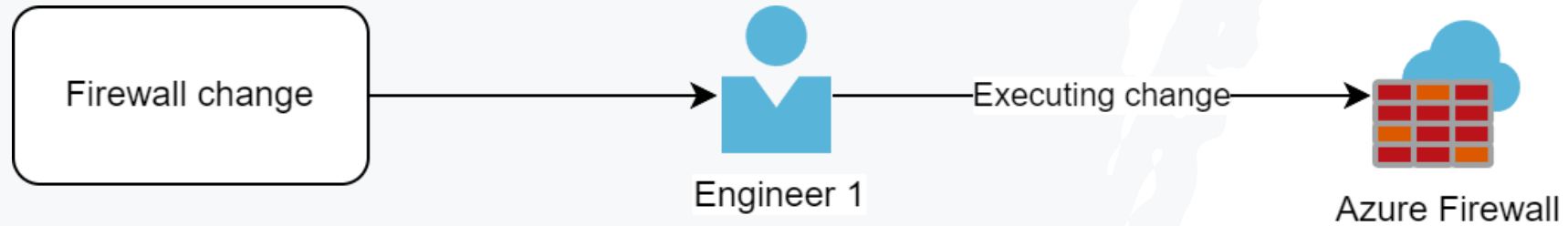
Real-life scenario's: Case 1



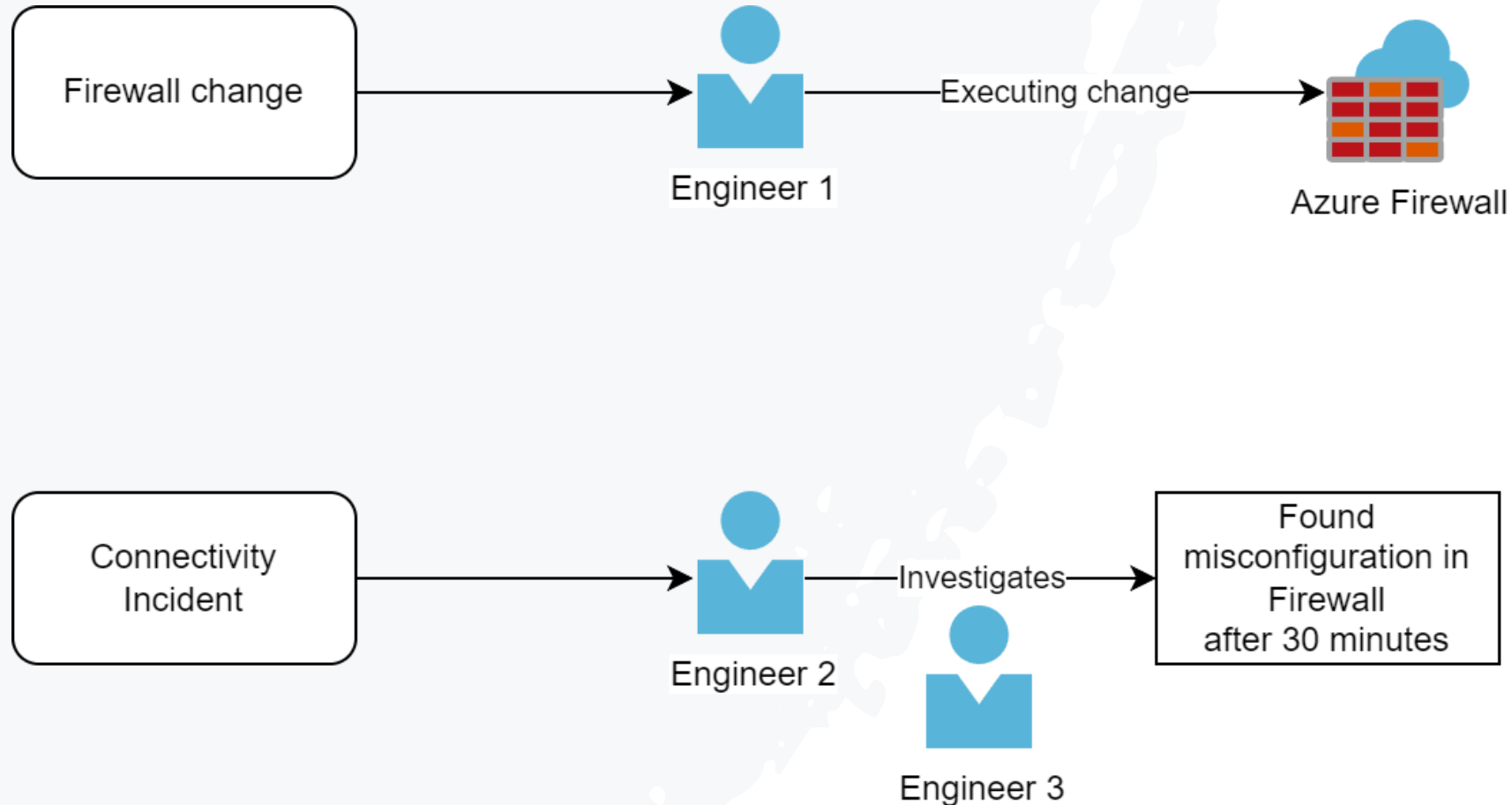
Real-life scenario's: Case 1



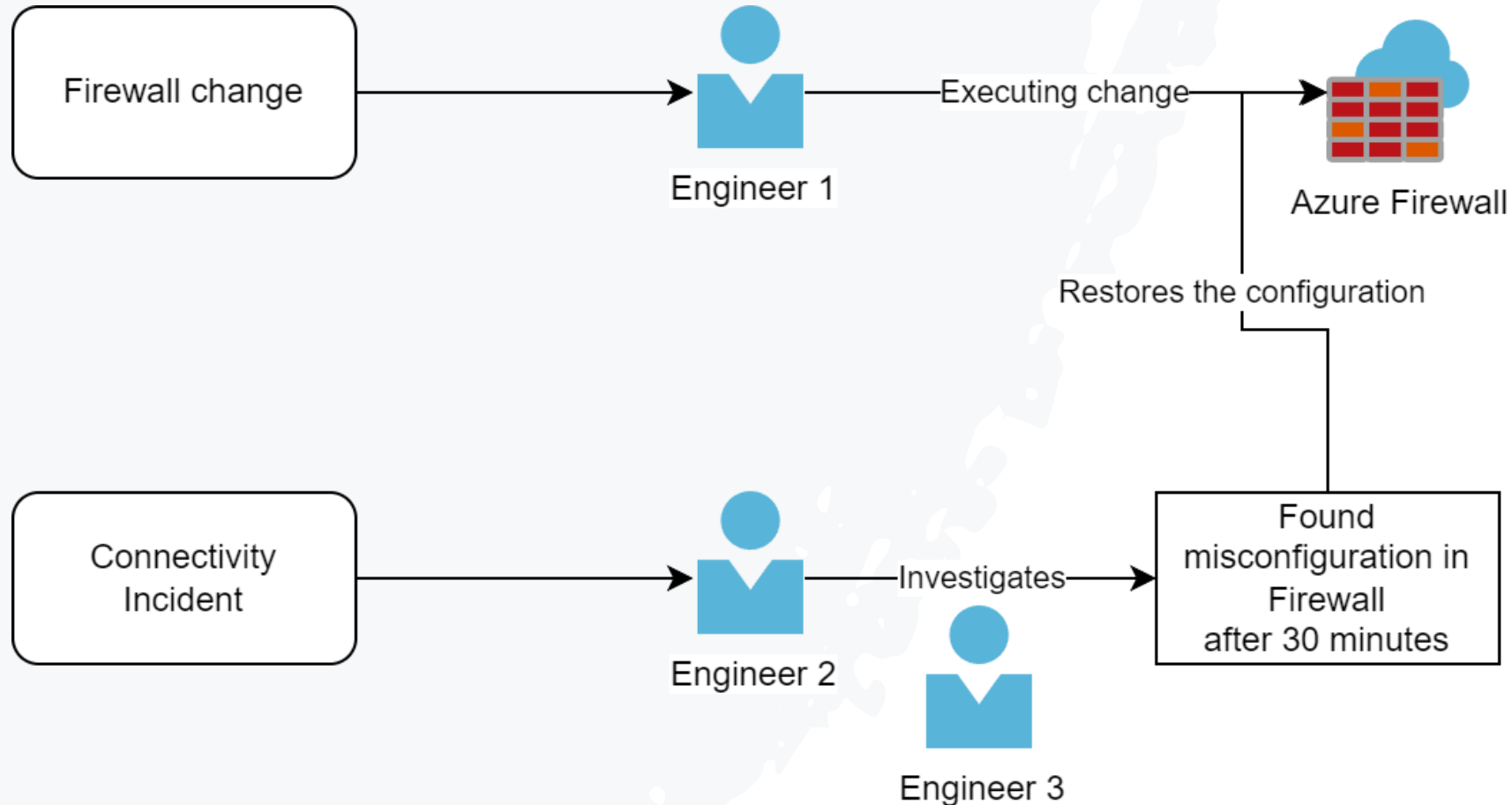
Real-life scenario's: Case 1



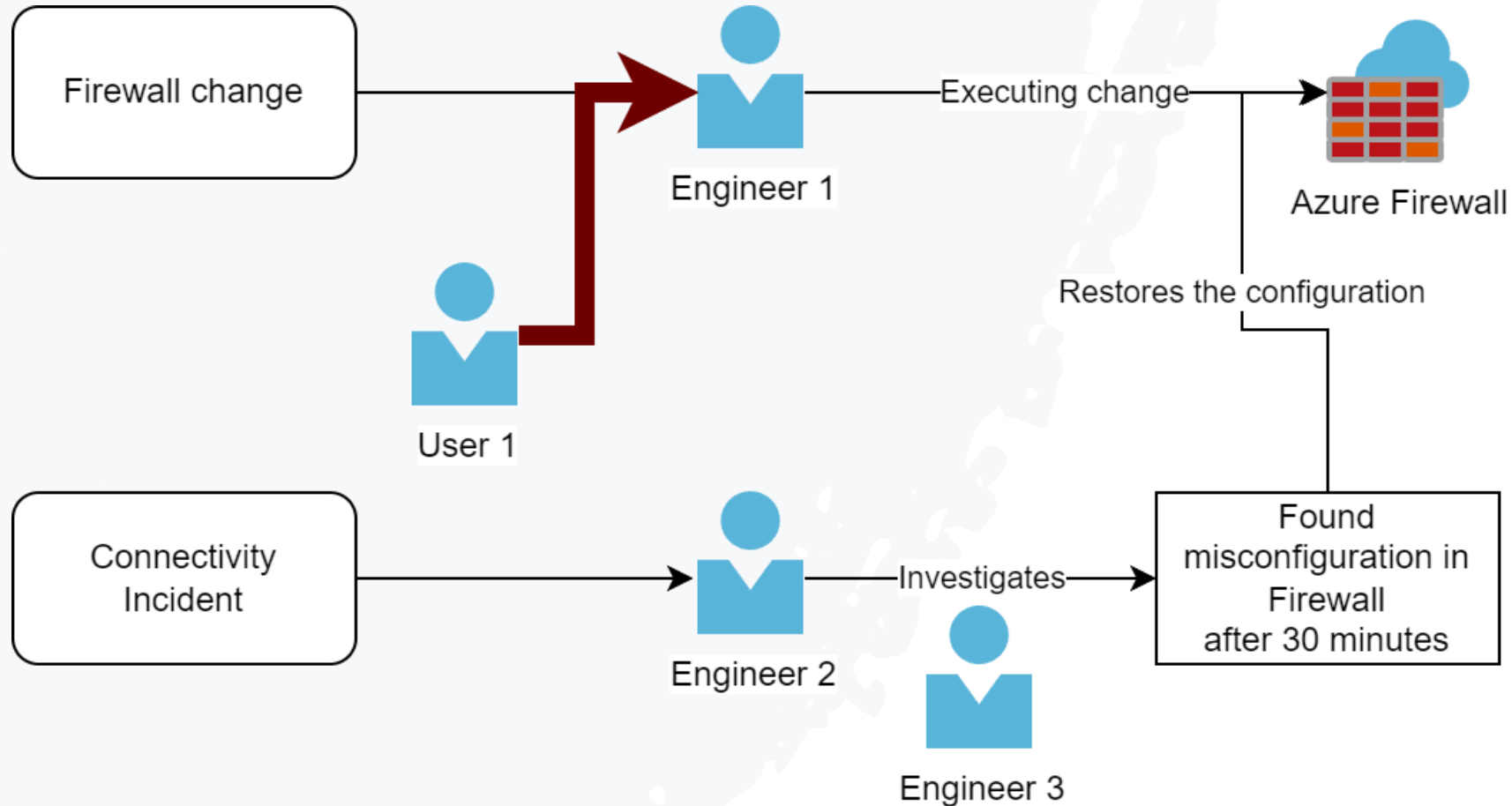
Real-life scenario's: Case 1



Real-life scenario's: Case 1



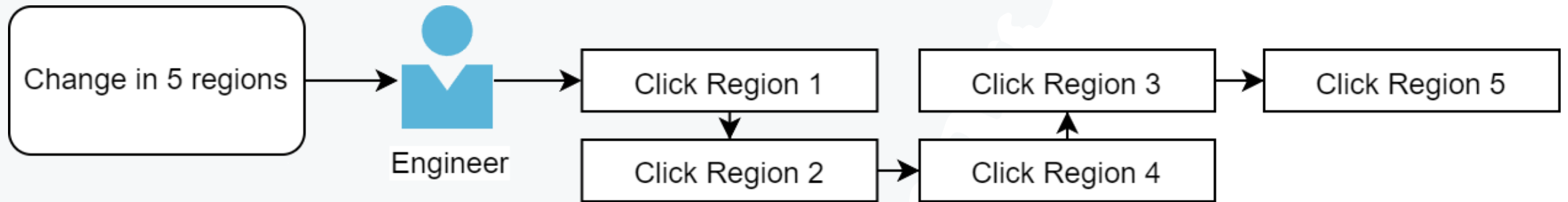
Real-life scenario's: Case 1



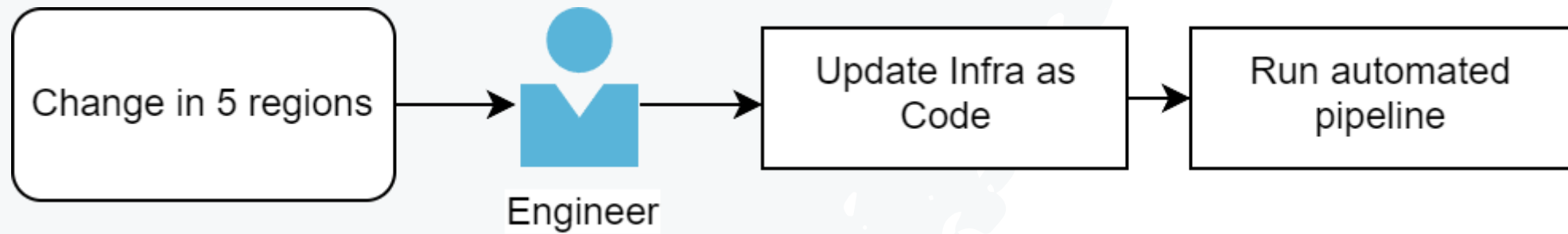
Real-life scenario's: Case 2

- You receive a request to perform changes in 5 different regions

Real-life scenario's: Case 2



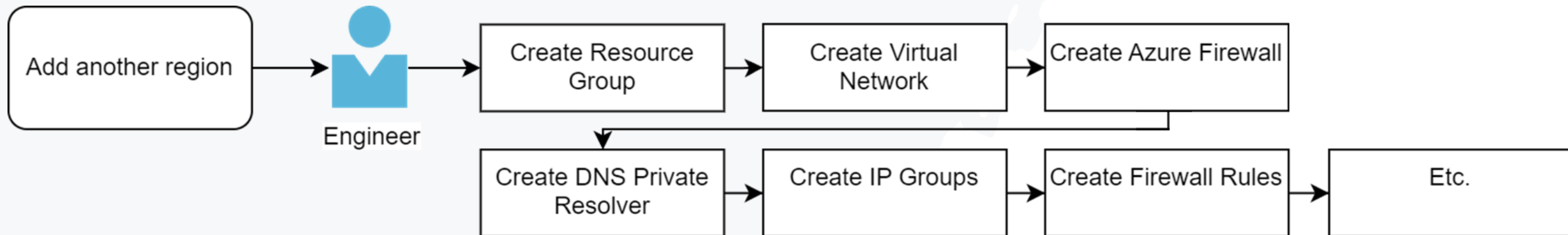
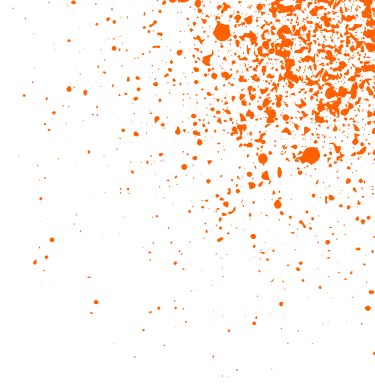
Real-life scenario's: Case 2



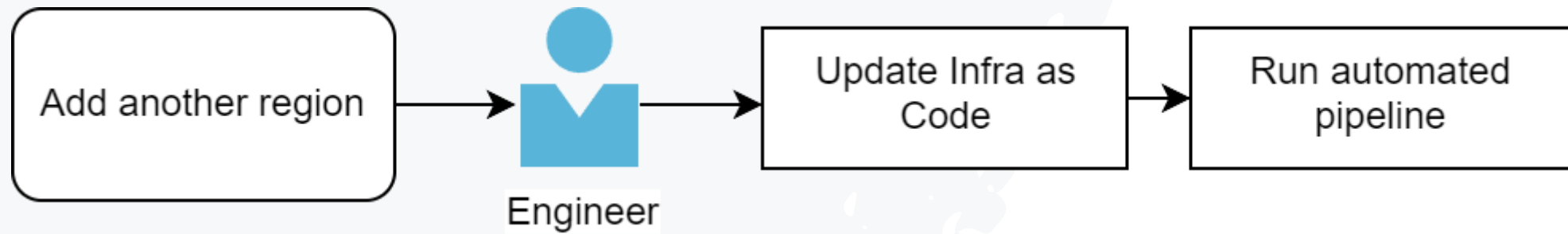
Real-life scenario's: Case 3

- You receive a request to deploy an addition region

Real-life scenario's: Case 3



Real-life scenario's: Case 3



Takeaways

- Working together
- Tracking changes
- Rebuilding or expanding
- Additional security measures

Thank you!



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