Troubleshooting Terraform



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Overview



Validating configurations

Enable verbose logging

Resource taints

Crash logs



Globomantics Environment





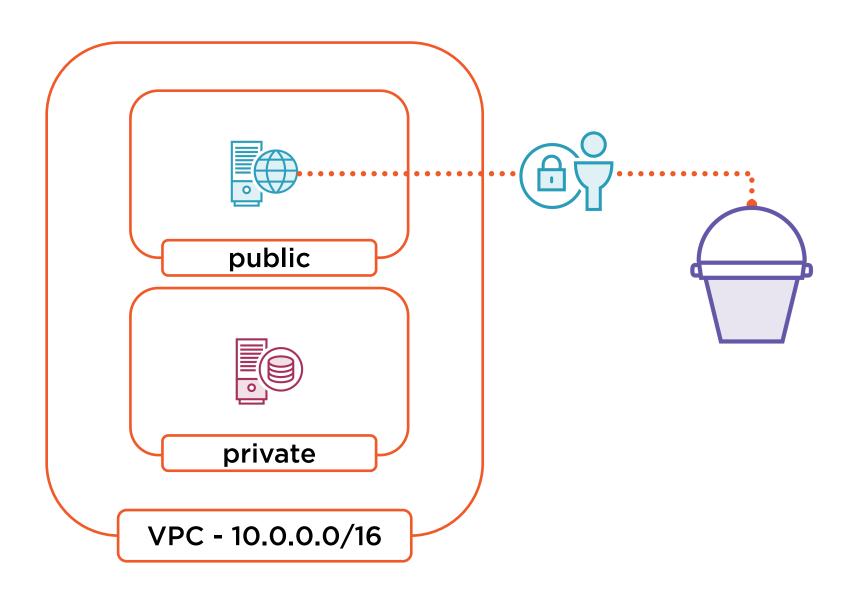
Application team update

Troubleshooting deployment issues

Panic! at the Terraform



Application Update



Types of Errors

Command error

Syntax validation

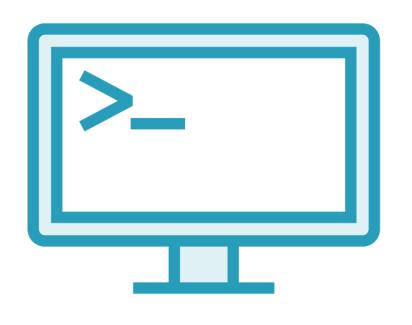
Provider validation

Deployment error

Panic!



Command Error



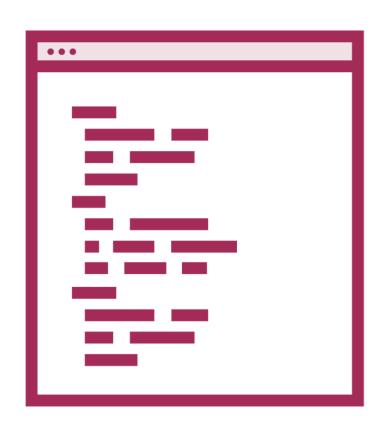
Happens at the command line

Bad CLI syntax or arguments

Use the help argument

Read the docs

Syntax Validation



Terraform init first

Checks syntax and logic

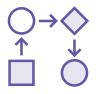
Does not check state

Manual or automatic

Automation checks



Provider Validation and Deployment Errors



↑ ↓ Happens during plan or apply



Read the error message, then read it again



Enable logging for more detail



Use taint to destroy bad resources



Verbose Logging



Exposes Terraform actions

Enabled through TF_LOG

Write to file with TF_LOG_PATH

Trace is most verbose

Useful in automation



Resource Taints



Marks a resource for recreation

Terraform will taint automatically

Identify resources by address

Resources can be untainted as well



Taint and Untaint Command

```
# Command syntax
terraform taint [options] address

# Example single resource
terraform taint aws instance.example
```

Example module or collection terraform taint aws_instance.collection[0] terraform taint module.asg.aws_instance.example

Untaint syntax terraform untaint [options] address

Example single resource terraform untaint aws_instance.example



Crash Log



Generated when Terraform panics

Caused by Terraform or provider

Similar to trace logging

Open an issue on GitHub

Summary



Errors can and will happen

Read the error twice

Enable logs

Use taints

Coming up:

- Integrating Terraform with Jenkins
- Enabling automation for Terraform

