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SQLSATURD
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frastructure as Code with
rraform

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software ONE

MANNING

Presenter

hn Q. Martin CITP

ta Platform MVP

ver a decade of experience working with the
icrosoft Data Platform on-premises and in the
oud. Currently working in the financial sector
d doing all things database engineering.

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https://www.mssqltips.com/sqlserverauthor/291/john-martin/

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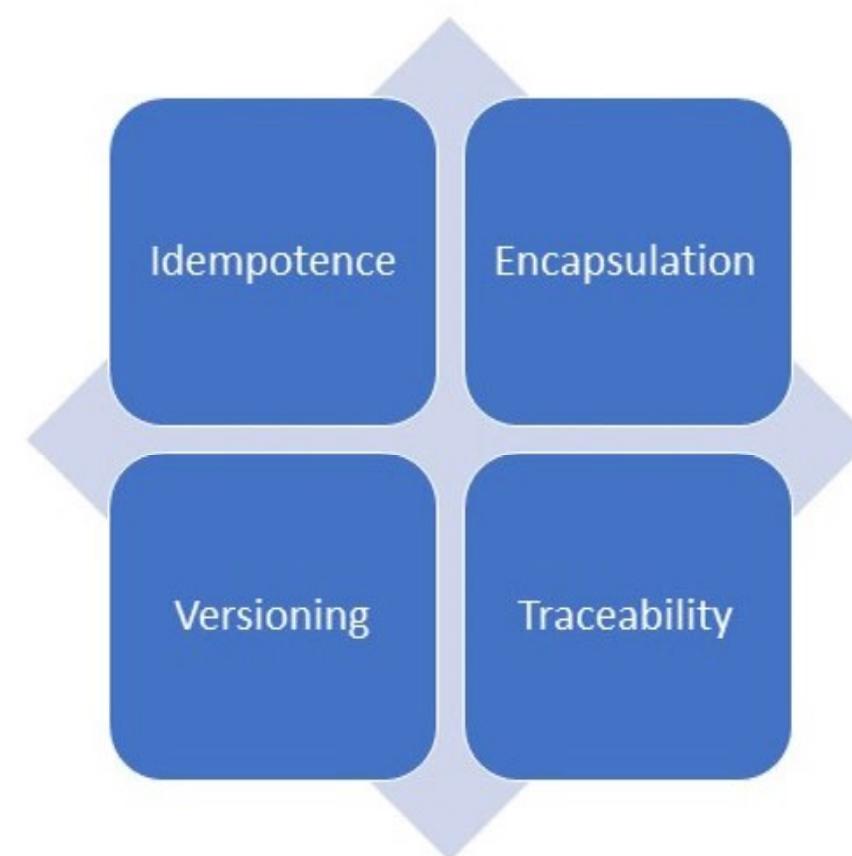
t is Infrastructure as Code?

declarative representation of our infrastructure components that ows for automation deployment and management.

Infrastructure as Code

emoving humans from the process improves consistency of
pplication.

Consistency of deployments

Automation

structure as Code

structure as Code

t is Terraform?

mmand line tool that helps build infrastructure based on declared ate.
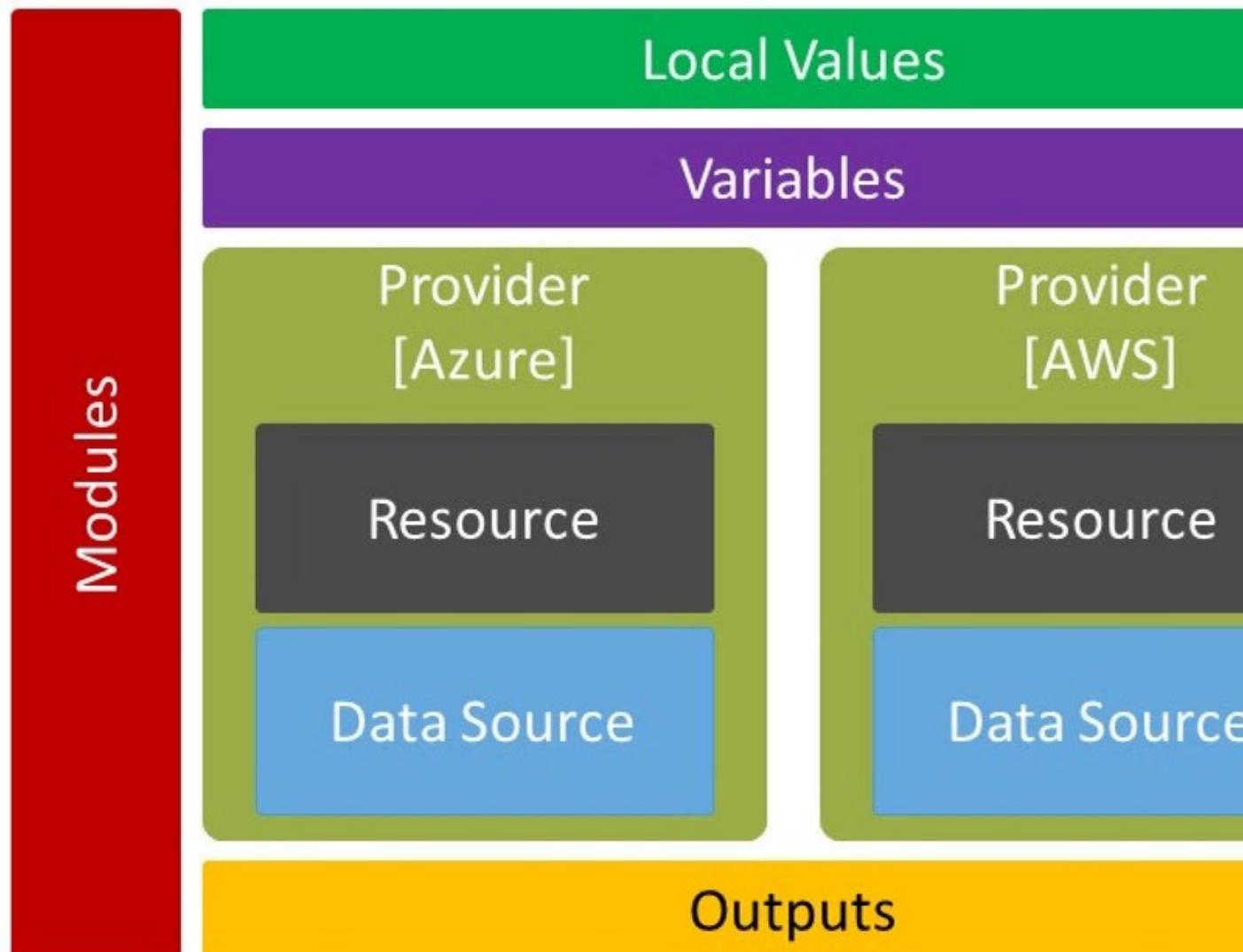
ses HashiCorp Configuration Language (HCL) to define resources

ses graphing concepts to identify relationships between resources ior to build

c Terraform Concepts

uilding blocks allowing
to build infrastructure
uickly and easily.

eusable modules that
ostract complexity from
d users.

Modules

Local Values

Variables

Provider [Azure]

Resource

Data Source

Provider [AWS]

Resource

Data Source

Outputs

iders

e interface to creating resources on different
ouds and technologies

andle connectivity and authentication for the
rget platform

ultiple providers can be used in a single
rraform solution

Azure

AW

Azure Stack

Goog

Docker

Kubernet

VMware NSX-T

Clou

OpenStack

VMware vSphere

GitH
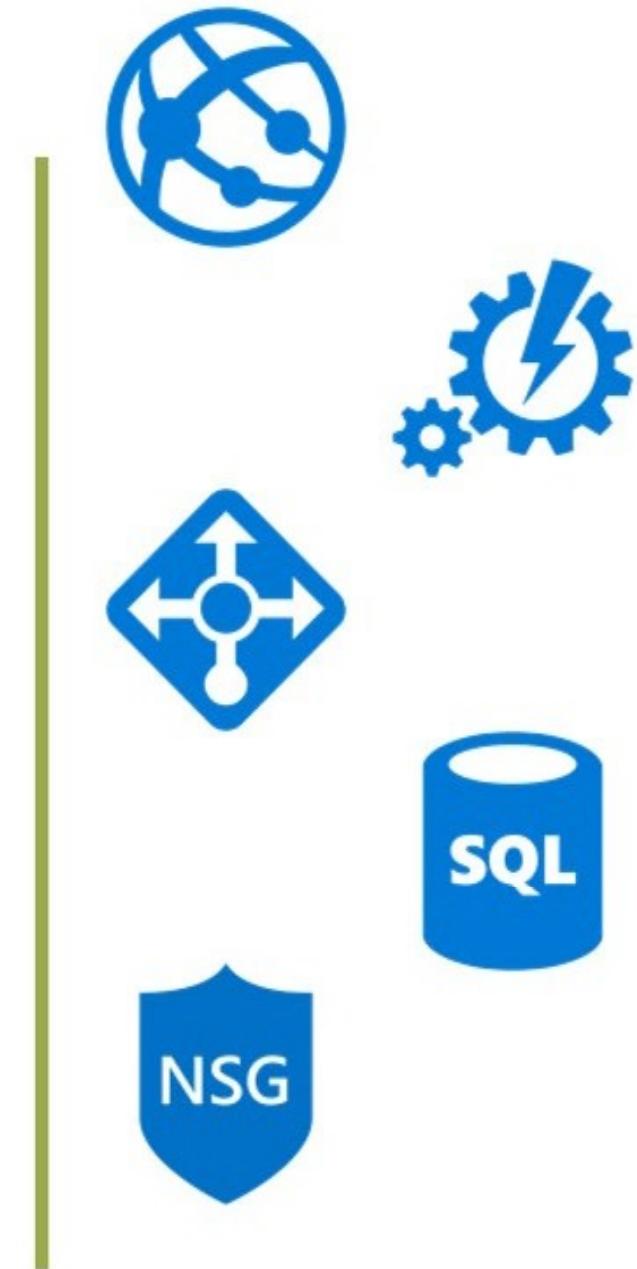
urces

ese are what we want to create

eate implicit and explicit dependencies
etween resources

Will be created in parallel as much as possible

efinition is specific to providers

Demo

Quick look at Terraform in action.

e Management

nderstand what the deployed environment
oks like

    Used for plans when you make changes

ate can be managed locally or in a remote
ore.

ored in JSON format.

    Do not alter state files manually

end Management

bility to store Terraform State in central locations.

Terraform Enterprise

Azure Blob Storage

Amazon S3

ovides better management for team based management and utomation.

Locking state prevents multiple concurrent deployments

stions

...nks for your time.

...hn Q. Martin CITP
...ta Platform MVP

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