Exploring Terraform State
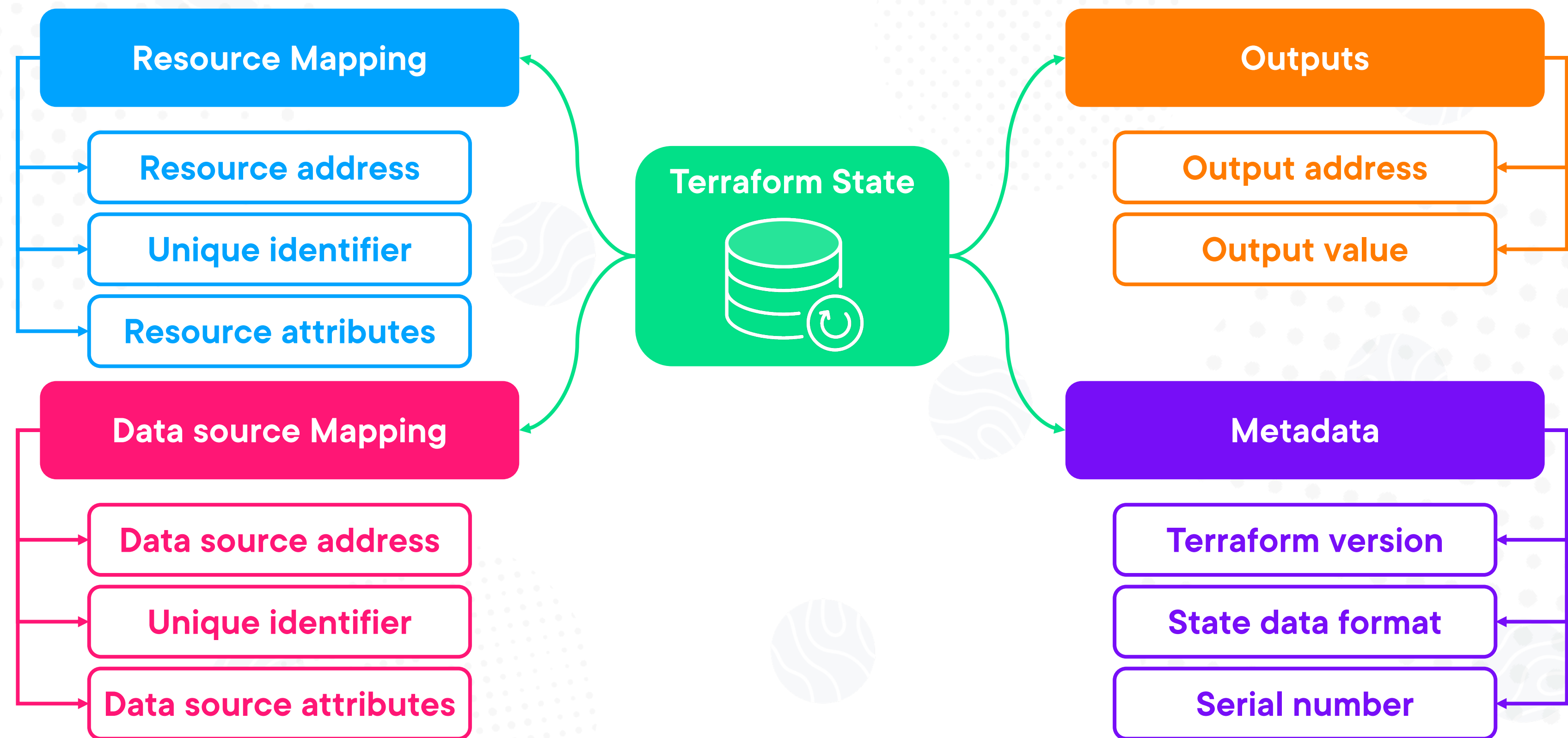
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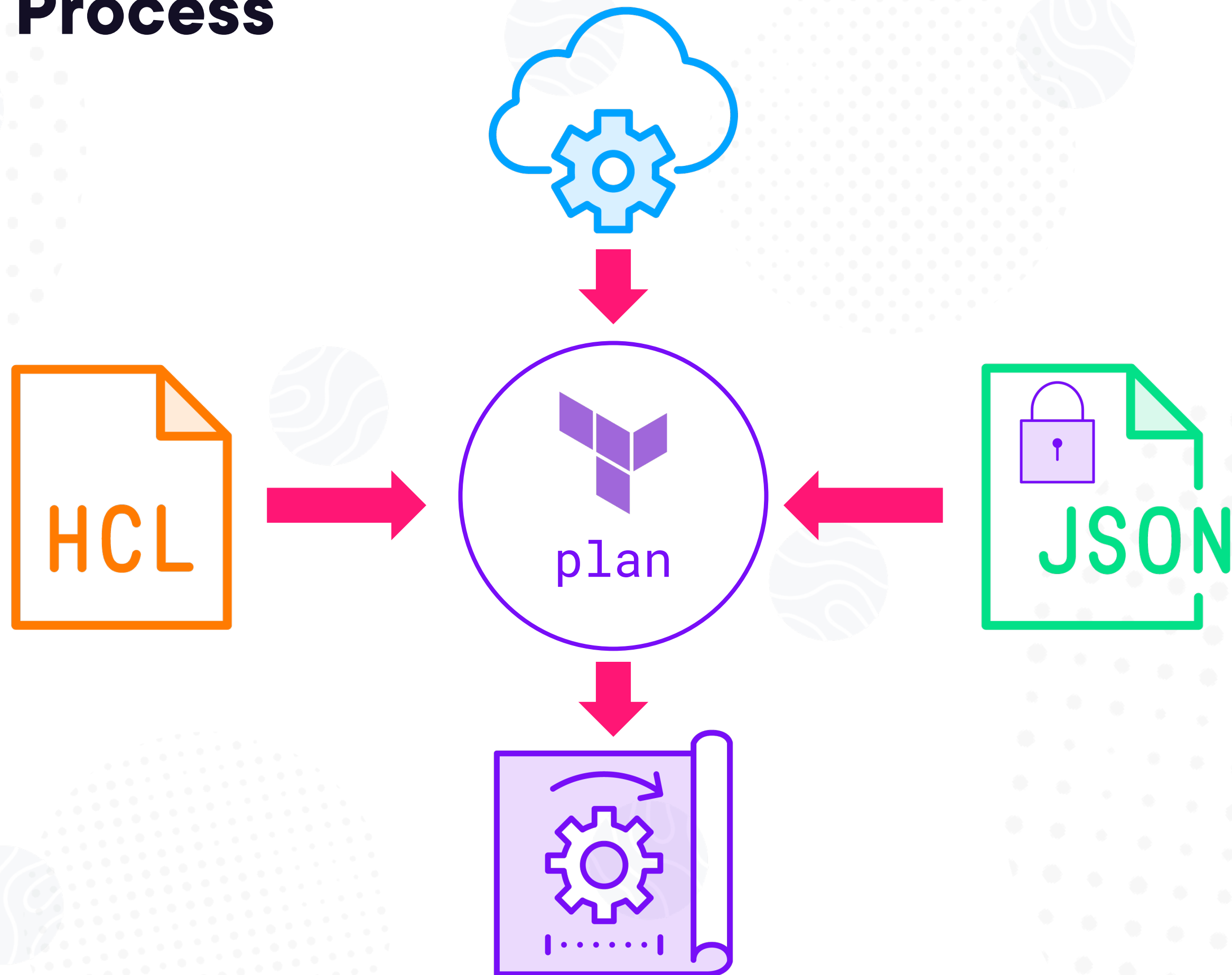
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State Data

Planning Process

Backend Options

{JSON}

Local backend
– Default setting

Remote backend
– S3, Azure Storage, Google Cloud Storage
– HCP Terraform and Consul

Features
– Locking
– Workspaces

Data encryption

Access control

Backend Block

backend.tf

```
terraform {

  backend "backend_type" {

    IDENTIFIER = LITERAL_VALUE

  }

}
```

Backend Block

backend.tf

```
terraform {

  backend "s3" {
    bucket          = "globo-state-12345"
    key             = "dev/terraform.tfstate"
    region          = "us-east-1"
    access_key      = "HGT657UHT56786YUHT6"
    secret_key      = "ytgvbJU&*ijhgt6%TYUijhy"

  }

}
```

Backend Block

backend.tf

```
terraform {

  backend "s3" {
    bucket            = "globo-state-12345"
    key               = "dev/terraform.tfstate"
  }

}
```

```
terraform {

  backend "s3" {}

}
```

Partial Configuration

```
# Using in-line settings
terraform init -backend-config="bucket=globo-state-12345"

# Using a backend config file
terraform init -backend-config="backend-settings.txt"
```

State Data Migration

Use S3 bucket provided by Ops

Migrate existing state data

Use a partial configuration

State Inspection Commands

```
# Display all state data
terraform show

# List all resources and data sources
terraform state list

# List all attributes of a single object
terraform state show ADDR
terraform state show aws_vpc.main

# Show outputs stored in state
terraform output NAME
```

Moved Block

moved.tf

```
moved {
  from = ADDRESS
  to   = ADDRESS
}
```

Import Block

imports.tf

```
import {
  to = ADDRESS
  id = "UNIQUE_IDENTIFIER"
}
```

Removed Block

removed.tf

```
removed {
  from = ADDRESS

  lifecycle {
    prevent_destroy = false
  }
}
```