

# Terraform Provider Versioning

# Provider Versioning

- Each Provider maintains its own version - independent from Terraform
- Providers release their own bug fixes and features, based on the platform supported by Provider
  - AWS releases new services, requires AWS Provider to update
- Best practice is to provide strict version constraint
  - Helps maintain stability across team members
  - Version constraints are locked into the dependency lock file

```
workflow_basics > providers.tf
1 terraform {
2   required_providers {
3     aws = {
4       source = "hashicorp/aws"
5       version = "~> 3.0"
6     }
7   }
8   required_version = "~> 1.0.4"
9 }
10
11 # Configure the AWS Provider
12 provider "aws" {
13   region = "us-west-2"
14   profile = "levelup_terraform"
15 }
```

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- Version constraints must meet certain requirements:
  - Must be a string literal, cannot use variables
  - Must follow the semantic versioning format (1.0.0, 1.0, 3.1.2, etc)
- Valid operators
  - = An exact match (version = "= 3.0")
  - !=: Excluding an exact match (version = "!= 3.0")
  - >, >=, <, <= Standard less than, greater than operators
  - ~> Allow only rightmost version increase (3.0 -> 3.1, 3.2) (3.0.1 -> 3.0.2, 3.0.3)
- Detailed versioning is possible: ">= 1.2.0, < 2.0.0"
- Terraform will install the latest version that matches the version constraint