

# Upgrade to 0.12

## What's new in 0.12

- Terraform 0.12 moved to HCL2 as the underlying language
- Expressions are a first-class construct that can be used anywhere, without all the extra wrapping.
- First-class expressions: Prior to v0.12, expressions could be used only via string interpolation, like `"${var.foo}"`. Expressions are now fully integrated into the language, allowing them to be used directly as argument values, like `ami = var.ami`.
- Generalized Type System
- Improved `for` expression
- Structural Rendering of Plans

Refer here for more information <https://www.hashicorp.com/blog/announcing-terraform-0-12/>

## Install Terraform 0.12

```
tfenv install 0.12.9
tfenv use 0.12.9
```

## HandsOn:

Let's upgrade a module that we had written yesterday to 0.12 & look at plan improvements Refer to 08-Upgrade-to-0.12/01-Single-EC2-Server-With-Vars While using v0.11, perform a deployment Look at terraform plan by changing the ec2 tag name. Plan should show the actions that will be performed. Do not run apply. Now switch to terraform terraform v0.12 Run the upgrade tool. Look at the diff. Now look at the plan generated by newer version of terraform. What difference do you see? Let's destroy the resource.

```
terraform -v
terraform 0.12upgrade
git diff
terraform apply
```

- Key takeaways:
  - Look at the automatically modified files
  - Notice the subtle changes of using variable names between 0.11 and 0.12
  - Structural Rendering of Plans