```
$ terraform init -backend-config=backend.hcl
```

Terraform merges the partial configuration in *backend.hcl* with the partial configuration in your Terraform code to produce the full configuration used by your module. You can use the same *backend.hcl* file with all of your modules, which reduces duplication considerably; however, you'll still need to manually set a unique `key` value in every module.

Another option for reducing copy-and-paste is to use Terragrunt, an open source tool that tries to fill in a few gaps in Terraform. Terragrunt can help you keep your entire `backend` configuration DRY (Don't Repeat Yourself) by defining all the basic backend settings (bucket name, region, DynamoDB table name) in one file and automatically setting the `key` argument to the relative folder path of the module.

You'll see an example of how to use Terragrunt in Chapter 10.

State File Isolation

With a remote backend and locking, collaboration is no longer a problem. However, there is still one more problem remaining: isolation. When you first start using Terraform, you might be tempted to define all of your infrastructure in a single Terraform file or a single set of Terraform files in one folder. The problem with this approach is that all of your Terraform state is now stored in a single file, too, and a mistake anywhere could break everything.

For example, while trying to deploy a new version of your app in staging, you might break the app in production. Or, worse yet, you might corrupt your entire state file, either because you didn't use locking or due to a rare Terraform bug, and now all of your infrastructure in all environments is broken.[4]

The whole point of having separate environments is that they are isolated from one another, so if you are managing all the environments from a single set of Terraform configurations, you are breaking that isolation. Just as a

ship has bulkheads that act as barriers to prevent a leak in one part of the ship from immediately flooding all the others, you should have "bulkheads" built into your Terraform design, as shown in Figure 3-3.

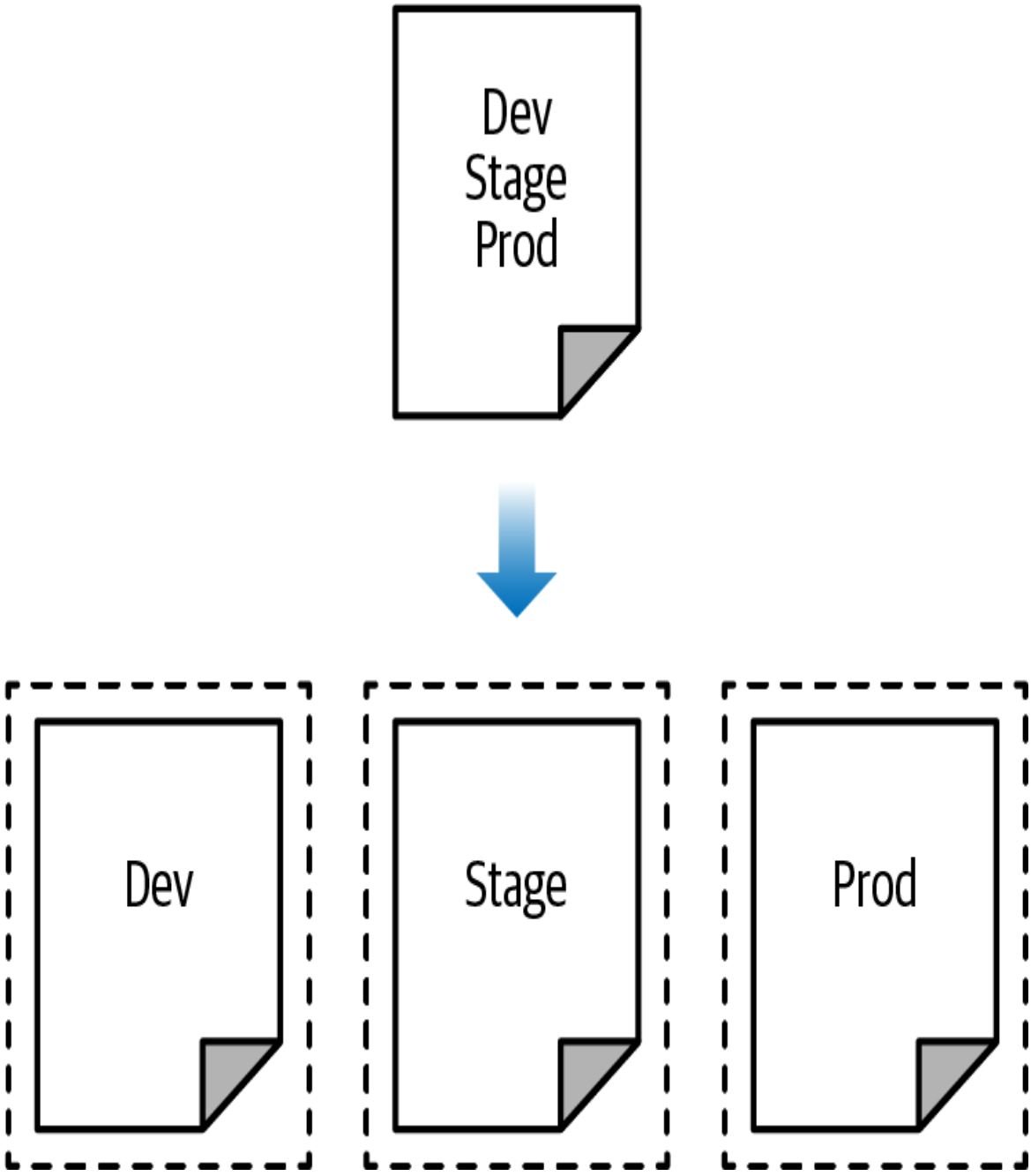

Figure 3-3. Create isolation ("bulkheads") between your environments by defining each environment in a separate Terraform configuration.

As Figure 3-3 illustrates, instead of defining all your environments in a single set of Terraform configurations (top), you want to define each