Paid Versus Free Offering

CloudFormation and OpenStack Heat are completely free: the resources you deploy with those tools may cost money, but you don't pay anything to use the tools themselves. Terraform, Chef, Puppet, Ansible, and Pulumi are all available in free versions and paid versions: for example, you can use the free and open source version of Terraform by itself, or you could choose to use it with HashiCorp's paid product, Terraform Cloud. The price points, packaging, and trade-offs with the paid versions are beyond the scope of this book. The one question I want to focus on here is whether the free version is so limited that you are effectively *forced* to use the paid offering for real-world, production use cases.

To be clear, there's nothing wrong with a company offering a paid service for one of these tools; in fact, if you're using these tools in production, I strongly recommend looking into the paid services, as many of them are well worth the money. However, you have to realize that those paid services aren't under your control—they could go out of business, or get acquired (e.g., Chef, Puppet, and Ansible have all gone through acquisitions that had significant impacts on their paid product offerings), or change their pricing model (e.g., Pulumi changed its pricing in 2021, which benefited some users but increased prices by ~10x for others), or change the product, or discontinue the product entirely—so it's important to know whether the IaC tool you picked would still be usable if, for some reason, you couldn't use one of these paid services.

In my experience, the free versions of Terraform, Chef, Puppet, and Ansible can all be used successfully for production use cases; the paid services can make these tools even better, but if they weren't available, you could still get by. Pulumi, on the other hand, is harder to use in production without the paid offering known as Pulumi Service.

A key part of managing infrastructure as code is managing state (you'll learn about how Terraform manages state in Chapter 3), and Pulumi, by default, uses Pulumi Service as the backend for state storage. You can switch to other supported backends for state storage, such as Amazon S3,