Rapid Access Cloud Guide: Part 2

Getting the Most from the Cloud

As Infrastructure-as-a-Service, the Rapid Access Cloud presumes very little about how it will be used. This guide is meant only to provide a set of tips and tricks as a next step for beginners in the journey to using different cloud platforms in general and provide an understanding of the context of cloud architecture.

With that in mind, this is document is meant to be used in conjunction with the Basic Guide to provide a set of fundamental skills and tools for exploration of cloud technology and using the Rapid Access Cloud as a resource for people to experiment and innovate.

Overview

This Advanced Guide introduces cloud concepts such as using the command-line for cloud interaction, building custom images, automating the provisioning of cloud resources, some advanced cloud network techniques, and using Windows images inside the Rapid Access Cloud.

The topics below cover a wide range of cloud operations and use-cases that are meant as a sort of toolbox for reference as you build out more complex environments in the Rapid Access Cloud. There is no need to follow the document from beginning to end; topics may reference other topics in the document or even separate documents available in Cybera's wiki. If a topic has any prerequisites, they will be noted as such with links provided.

This document assumes the reader has a basic knowledge of a Unix/Linux/BSD command line interface, shell scripting, and command-line editors, as well as networking concepts of TCP/IP, DNS and DHCP.

Conventions in this document

Similarly to the Basic Guide, this document will use formatting to ensure readability for the various concepts presented. Given the nature of the topics covered, there will be many sections that are purely code or pseudo-code that can be copied and modified, and where appropriate links to Cybera's GitHub code repositories are provided.

- User inputted variables will be formatted with angle brackets:

```
<instance_name>, <security_group_name>, <description>
```

- If there are pre-determined choices, they will be formatted with parentheses:

```
(chocolate, strawberry, vanilla)
```

- Commands to be entered at a command prompt will be prefixed with a '$'
- File name paths are indicated as /path/to/<some_file_or_command>

Advanced Features

- Command Line Tools
- DNS Service
- GPU-Enabled Instances
- Instance Hostname
- Making the most of a single IPv4 address
- Networking
- Rapid Access Cloud Virtual Private Network
- Using Multiple Regions
- Volume Arrays
- Volume Snapshots
- Windows Images