```
git add my-new-lab
git commit my-new-lab -m "Adding an IModule"
```

• Publish the lab container images:

```
cd $LABTAINER_DIR/distrib
./publish.py -d -l my-new-lab
```

This will rebuild the lab container images and publish them to your DockerHub registry. Your start.config files for your labs name this registry, and that allows student Labtainer implementations to retrieve your lab images without having to rebuild them. Note the -d option directs the function to publish to the DockerHub registry named in your lab start.config file. Otherwise, it will try to publish to a test registry. Use of test registries is optional, and are described in the Lab Designer User Guide.

• Generate the updated IModule tar:

```
create-imodules.sh
```

This creates a tar that contains all of your IModule labs, i.e., those you have added to your git repo. If you do not use git to manage your lab source, you will have to create the IModule.tar yourself.

• Then publish the imodule.tar to your website and distribute the URL to whoever you want to have access to your labs.

11 Remote access and control of Labtainer exercises

This section describes features intended for use within structured environments in which one or more students are performing a lab exercise under supervision of an instructor or red-team member. This does not apply to environments in which students individually run Labtainers on dedicated computers at their own pace.

The environment may have one of two forms:

- 1. Each student has a dedicated computer upon which a Labtainer VM resides, and the instrutor has network access to each computer; or,
- 2. Multiple Labtainer VMs (or custom-built VMs containing Labtainers) run on one or more servers that are networked together. Students interact individually with their allocated VM using a tool such as VMWare Horizon or Apache Guacamole, which presents the student with the Linux desktop of their allocated VM via a browser or client application.

We assume that something within the infrastructure allows remote network access by an instructor to each VM, e.g., via port forwarding. The instructor will use this network access to manage aspects of the lab exercise, and/or remotely access selected containers, e.g., as a red-team activity.