stratuslab

Client Installation

StratusLab Tutorial (Orsay, France)

28 November 2012

Tutorial Infrastructure

Reference Cloud Infrastructure

- Allow users to test a StratusLab cloud without having to install one
- Two sites: LAL (Orsay, France) and GRNET (Athens, Greece)
- Registration Service accounts work on both sites
- Problems, ask questions via support@stratuslab.eu

In this tutorial we will be using:

- Registration: https://register.stratuslab.eu:8444/
- Endpoint: cloud.lal.stratuslab.eu
- Persistent Disk Endpoint: pdisk.lal.stratuslab.eu
- Public Marketplace: https://marketplace.stratuslab.eu/
- Account (username/password) you created when registering

Prerequisites

Client allows remote access and control of VMs in cloud.

Client has minimal prerequisites:

- Python 2.6+ (but < 3.x)
- Java 1.6+ (for metadata signatures/validation)
- SSH client with user keypair
- Certificate for signing image metadata entries (grid cert. OK)

Platform Support

Supported platforms for client:

- CentOS 6.2, OpenSuSE 12.1 (tarball or RPM package)
- Mac OSX (tarball)
- Windows (tarball)
- Other linux systems (tarball)

Instructions

- Similar procedure although details differ by OS and pkg. format
- http://stratuslab.eu/try/2012/01/10/try-user-cli-installation.html

This presentation shows the linux tarball installation procedure. Adjust procedure for your platform.

Tarball Installation

Download

- “Try It” button on http://stratuslab.eu/
- Look in “Install” document for correct repository
- http://yum.stratuslab.eu/releases/centos-6.2/
- Download the tarball/zip (`stratuslab-cli-user-pkg-*`)

Install client via OS-independent tarball/zip:

- Create the directory: `$HOME/stratuslab`
- Extract files: `tar zxf mytarball $HOME/stratuslab`

Configure Environment

Configure path variables:

- `PATH=$HOME/stratuslab/bin:$PATH`
- `PYTHONPATH=$HOME/stratuslab/lib/stratuslab/python/`

Ensure that you have an SSH keypair:

- Look in `$HOME/.ssh/` for `id_rsa`, `id_rsa.pub` files (or similar)
- Use `ssh-keygen` to create keys if necessary (remember password!)

StratusLab Client Configuration

Multiple ways to provide command options

- Configuration file: `$HOME/.stratuslab/stratuslab-user.cfg`
- Environmental variables: `STRATUSLAB_*`
- Command line options: `--endpoint=XXX`

Client configuration file:

- Create: `$HOME/.stratuslab` **(Note the dot in the name!)**
- Copy:
  `$HOME/stratuslab/conf/stratuslab-user.cfg.ref` to
  `$HOME/.stratuslab/stratuslab-user.cfg`
- **Rename file to end with `*.cfg` and NOT `*.ref`!**
- Provide values: endpoint, username, password, user_public_key_file

Test Client

Determine if environment is correct:

- stratus-describe-instance --help

```
$ stratus-describe-instance --help
Usage: stratus-describe-instance [options] [vm-id]

[vm-id] - space separated list of VM IDs. Without the parameter [vm-id] the
command lists the available VMs belonging to the user (-u/--username).

Options:
  --version             show program's version number and exit

...
```

Determine if credentials are correct:

- stratus-describe-instance

```
$ stratus-describe-instance
id   state     vcpu memory    cpu% host/ip                 name
```

Questions and Discussion

Exercises: Command Line Interface

Explore command options:

- All commands start with `stratus-*`
- Get information with `--help` and `--usage` options
- Determine the version with `--version` option

Identify what commands control which resources:

- Virtual Machines
- Storage
- Image management
- Network
- …

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http://www.stratuslab.eu