## Assumptions

1. Development env is MacOS laptop
2. Runtime env for Controller is Ubuntu 16.04 VM (min. 2 CPU, 4GB RAM, 10 GB free disk). **This VM can be created in VirtualBox on dev laptop**
3. VM is reachable from laptop (e.g. "ping <VM IP address>" from laptop works)
4. It is possible to copy files from laptop to VM (scp or equivalent)

If your environment is different, adapt the steps accordingly.

## Development env setup

1. Install JDK 8

* Download DMG file (e.g. jdk-8u231-macosx-x64.dmg) from https://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html
* Install it by double-clicking it and following prompts
* Run command "java -v" and verify that it shows the Java version

1. Install Maven

* Download binary apache-maven-3.6.2-bin.zip from https://maven.apache.org/download.cgi
* Unzip it
* Add bin directory created directory apache-maven-3.6.2 to the PATH environment variable e.g. export PATH=${PATH}:/Users/alele/Downloads/apache-maven-3.6.2/bin
* Run command "mvn -v" and verify that it shows the Maven version

1. Install Eclipse IDE for Java

* Download DMG file (e.g. eclipse-java-2019-09-R-macosx-cocoa-x86\_64.dmg) from https://www.eclipse.org/downloads/packages/release/2019-09/r/eclipse-ide-java-developers
* Install it by double-clicking it and following prompts

1. Install Postman and import this collection: <https://www.getpostman.com/collections/022528c355197d2e317f>

## Runtime env setup

1. Install JDK 8

* Run commands "sudo apt-get update" followed by "sudo apt-get install openjdk-8-jdk"
* Run command "java -v" and verify that it shows the Java version

1. Install LSC 11.0
   * Download LSC 11.0 distribution tar.gz to VM using command “wget <https://artifactory.luminanetworks.com/artifactory/lumina-maven/com/luminanetworks/lsc/distribution/lumina-sdn-controller/11.0.0/lumina-sdn-controller-11.0.0-deb.tar.gz> --user=lumina-vzn-demo --password=AKCp5e2qkc1yY5RnfnHP5qKVqACf7kiwKeVeHSc7bSRkA631yXxLTVaak3e91D9f24w7kuasA”
   * Extract it, cd and run “sudo ./unpack”
   * Install by running “sudo apt-get install lumina-lsc-core”
   * Start LSC by running “sudo service lumina-lsc start”
   * Verify installation under /opt/lumina, karaf.log under /opt/lumina/lsc/controller/data/log
   * Karaf client can be accessed by running “/opt/lumina/lsc/bin/client”
   * Verify that APIDOC Explorer is accessible by opening “http://<VM-address>:8181/apidoc/explorer/index.html” from browser on laptop