Eclipse Sequoyah for Android App Developers

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Sequoyah

Sequoia

Sequoyah

Wikimedia Commons

Sequoia

Sequoyah

- Native American silversmith who created a syllabary for the Cherokee language in 1821, allowing his people to communicate across vast distances
  - http://en.wikipedia.org/wiki/Sequoyah

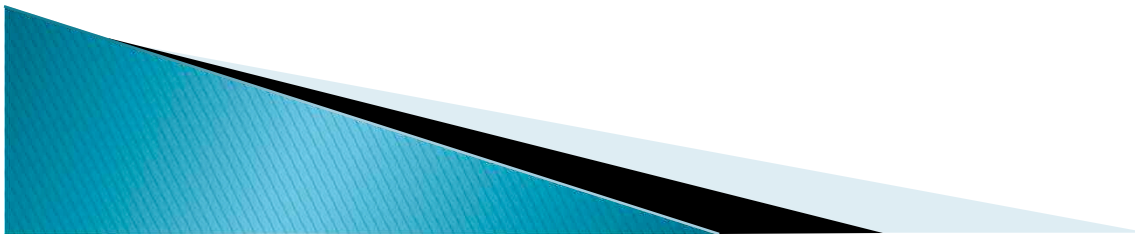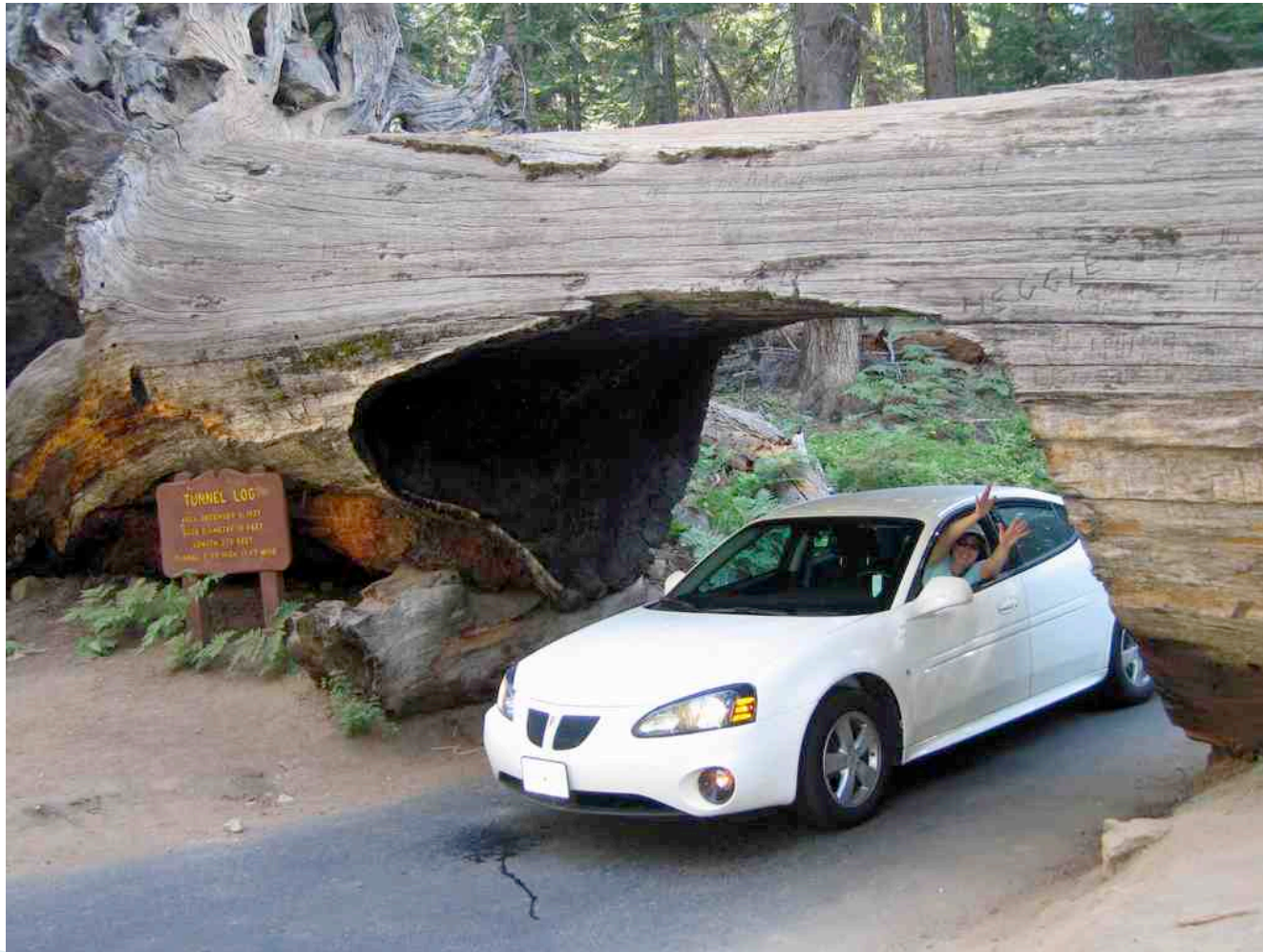| a				e			i			o		u		v [ə̃]	
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Sequoia

- A species of large and long-living redwood trees that are found primarily on the western slopes of the Sierra Nevada mountain range
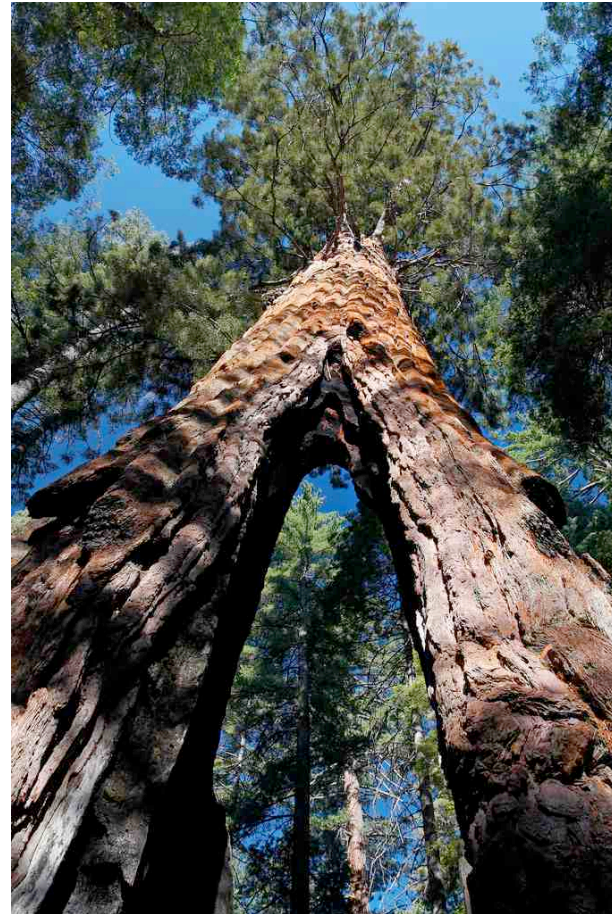 - http://en.wikipedia.org/wiki/Sequoiadendron
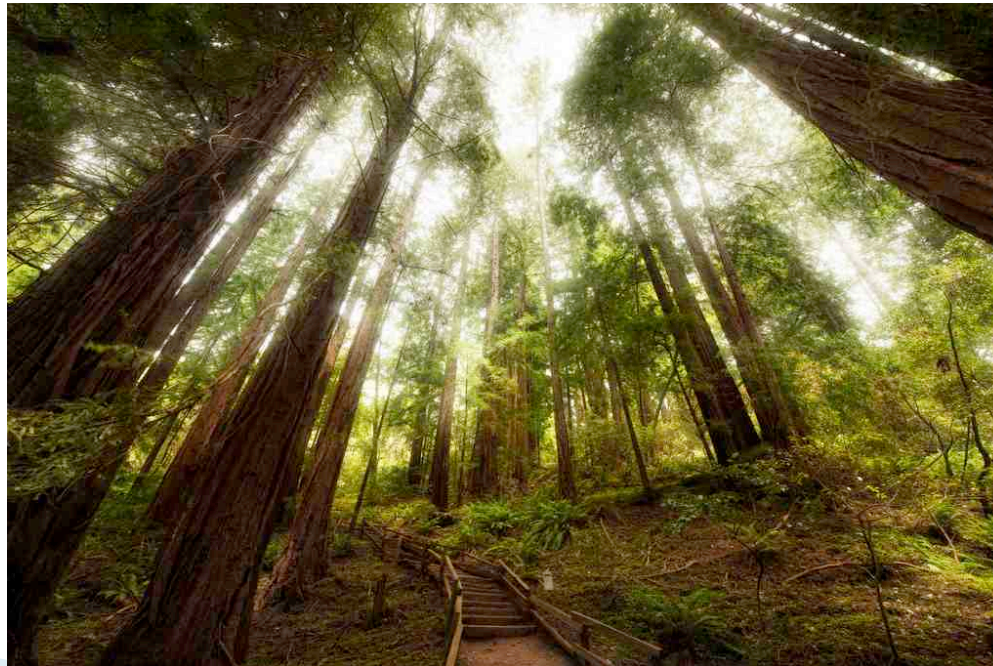
Important fact

- Sequoia (the tree) was named in honor of Sequoyah (the man)

Sequoyah/Sequoia

History Lesson

- 2008: The Eclipse Mobile Industry Working Group (EMIWG) was formed by the Eclipse Foundation and handset manufacturers toward the goal of creating a common mobile tool set

- 2009: Eclipse Pulsar 1.0 ships with requirements delivered by the EMIWG. From one set of tools, Java ME developers are able to find, download and target several mobile vendors' SDKs.

- 2009: Sequoyah project is formed from the *Tools for Mobile Linux* and *Mobile Tools for Java* projects. Sequoyah is created to be focused on mobile development tools and frameworks without the artificial barriers of "*for Linux*" or "*for Java*".

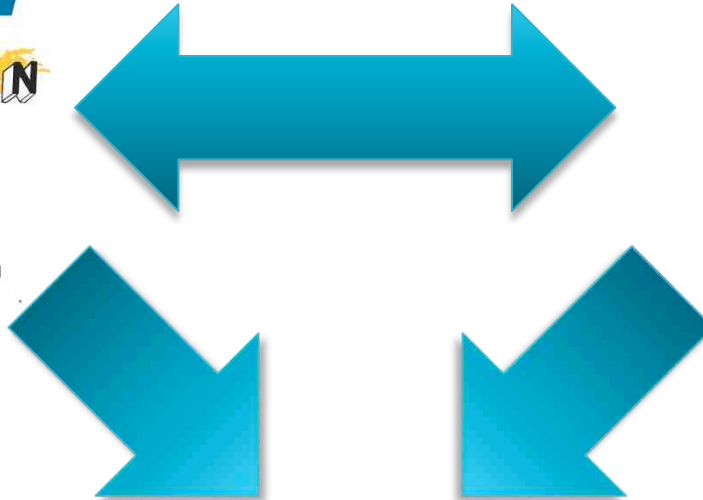- June 2010: Sequoyah 1.0 ships as a mature project with Eclipse Helios 3.6
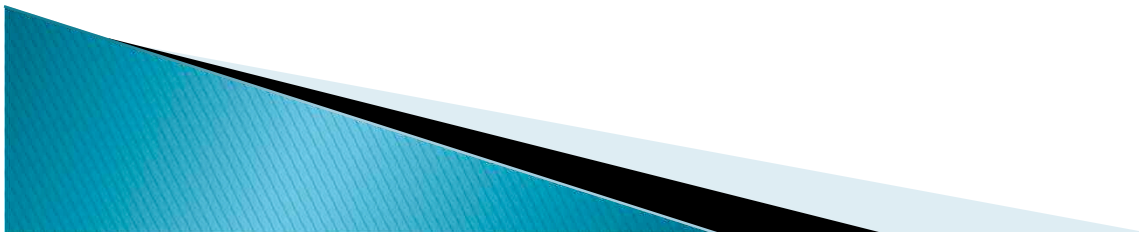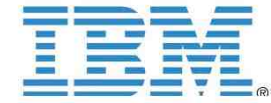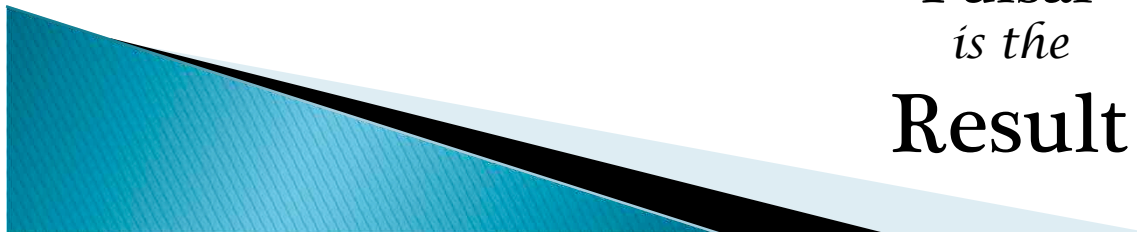
Mobile Industry
Working Group
provides
Roadmap

Sequoyah
Project
provides
Execution

Pulsar
is the
Result

Sequoyah Technologies

- Tools and technologies useful to mobile developers
  - Localization tools with an Android implementation
  - Tools for Mobile Web
  - Mobile SDK discovery for Java ME
- Platform-specific mobile tooling
  - Android NDK build support
- Frameworks for building mobile tools
  - Device management
  - VNC protocol implementation and viewer plugin (VNC 3.x)
- Future
  - Manage non-string resources for localization
  - Test automation
  - Localization tools for Eclipse plugins

Open for Participation

- Project home
  - http://www.eclipse.org/sequoyah/

- Project wiki
  - http://wiki.eclipse.org/Sequoyah

- Mailing list
  - https://dev.eclipse.org/mailman/listinfo/sequoyah-dev
  - mailto:sequoyah-dev@eclipse.org

- File a bug
  - https://bugs.eclipse.org/bugs/enter_bug.cgi?product=Sequoyah

Roll your own (IDE)

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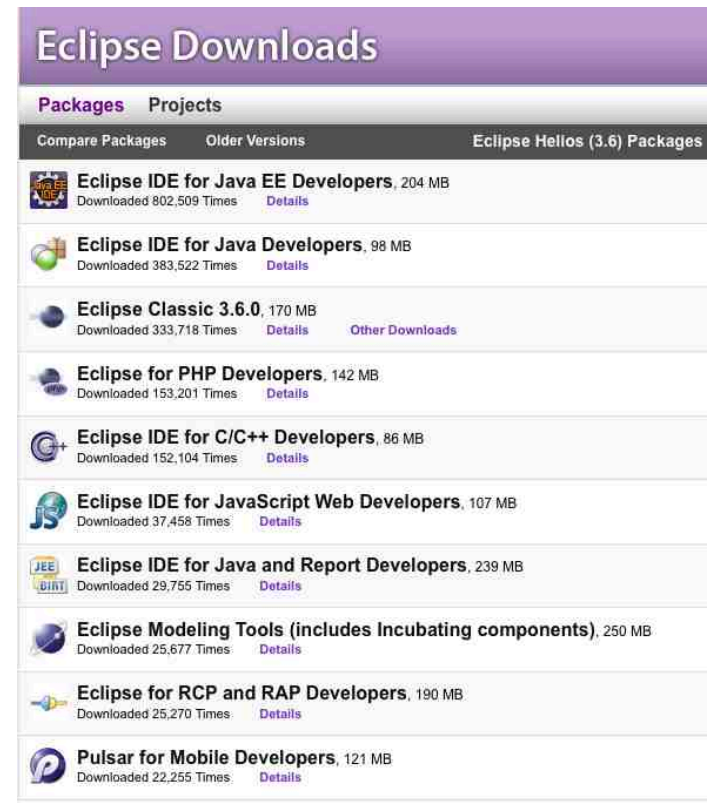
Choose a flavor

▸ **Eclipse IDE for Java Developers**
http://www.eclipse.org/downloads/packages/eclipse-ide-java-developers/heliosr

▸ **Pulsar**
http://www.eclipse.org/downloads/packages/pulsar-mobile-developers/heliosr

◦ Pulsar ≈ Eclipse for Java + Sequoyah

Configure Network Connection

- If necessary for proxy based configurations
  - Preferences->General->Network Connections
- Active Provider = "Manual"
- Set HTTP and HTTPS connections
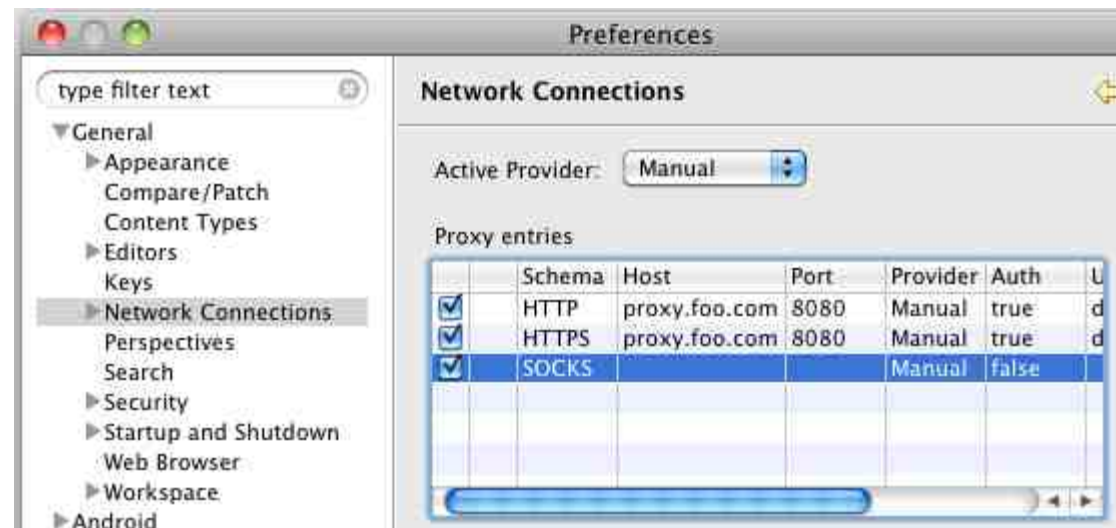
Install ADT

- Help -> Install New Software
- Add a new Software Site:
  - https://dl-ssl.google.com/android/eclipse/
- ▸ Keep the following checkboxes unchecked:
  - Show only the latest versions of available software
  - Group items by category
- ▸ Follow steps to install ADT
  - Approve unsigned content warning
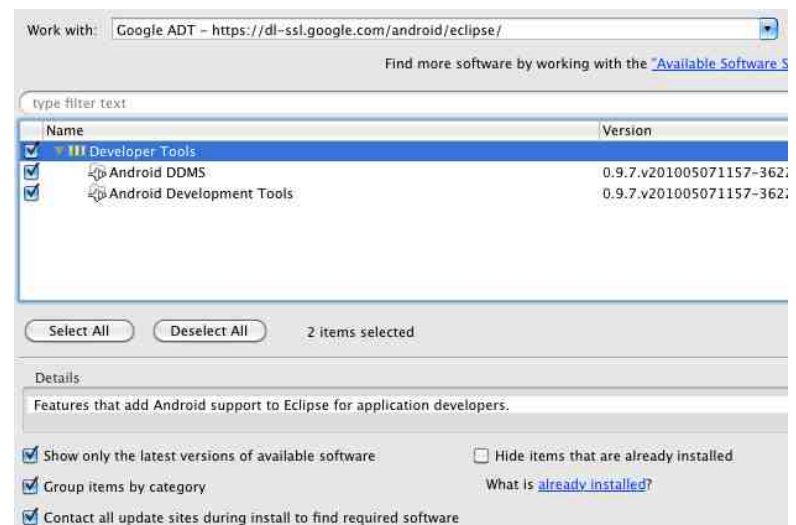
Install Sequoyah

- Install Sequoyah if not using Pulsar as a basis
- Configure install/update site for Sequoyah installation
  - Help -> Install New Software
  - Add a new Software Site:
    - http://download.eclipse.org/sequoyah/updates/1.1
  - Keep the following checkboxes unchecked:
    - *Show only the latest versions of available software*
    - *Group items by category*
  - Follow the steps necessary to install all the Sequoyah features
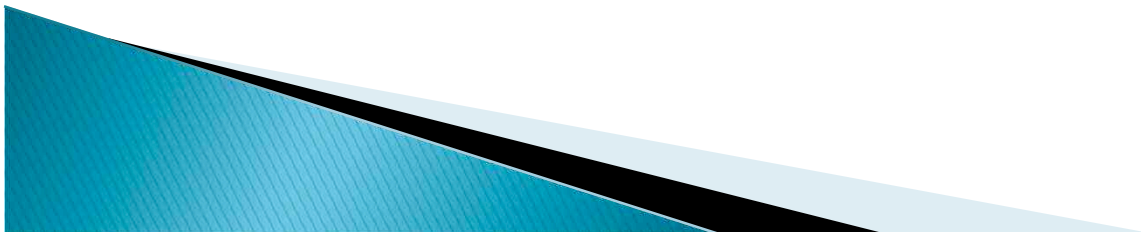
Install SDK and NDK

- Download the SDK
  - http://developer.android.com/sdk/index.html
- Download the NDK if desired
  - http://developer.android.com/sdk/ndk/index.html
- Run *SDK Setup* to download platforms, additional APIs, and samples
  - Alternatively, run *Android SDK and AVD Manager* from Eclipse
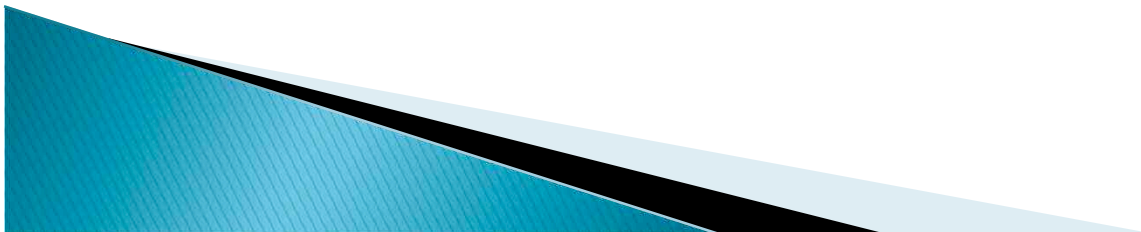
Windows Users

▸ If using the NDK, install Cygwin
  ◦ http://www.cygwin.com/mirrors.html
▸ In addition to the standard Cygwin distribution, select the following packages
  ◦ GCC
  ◦ G++
  ◦ Make
  ◦ Gawk
▸ Add Cygwin\bin and ndk at the start of your PATH
  ◦ Avoid spaces in the path to Cygwin, workspaces, or project names
▸ Test a command line NDK build before trying in Eclipse
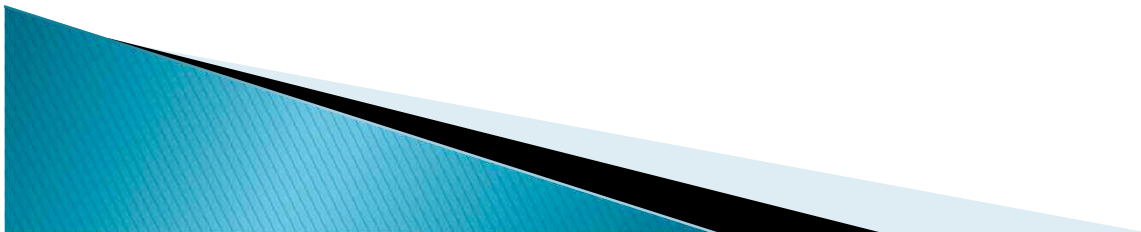
Demos

- VNC Viewer
- NDK Support
- Localization

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