

Eclipse Sequoyah for Android App Developers

Eric Cloninger
Sequoyah Project Lead

Find this presentation online at: <http://bit.ly/goog10seq>

Sequoyah



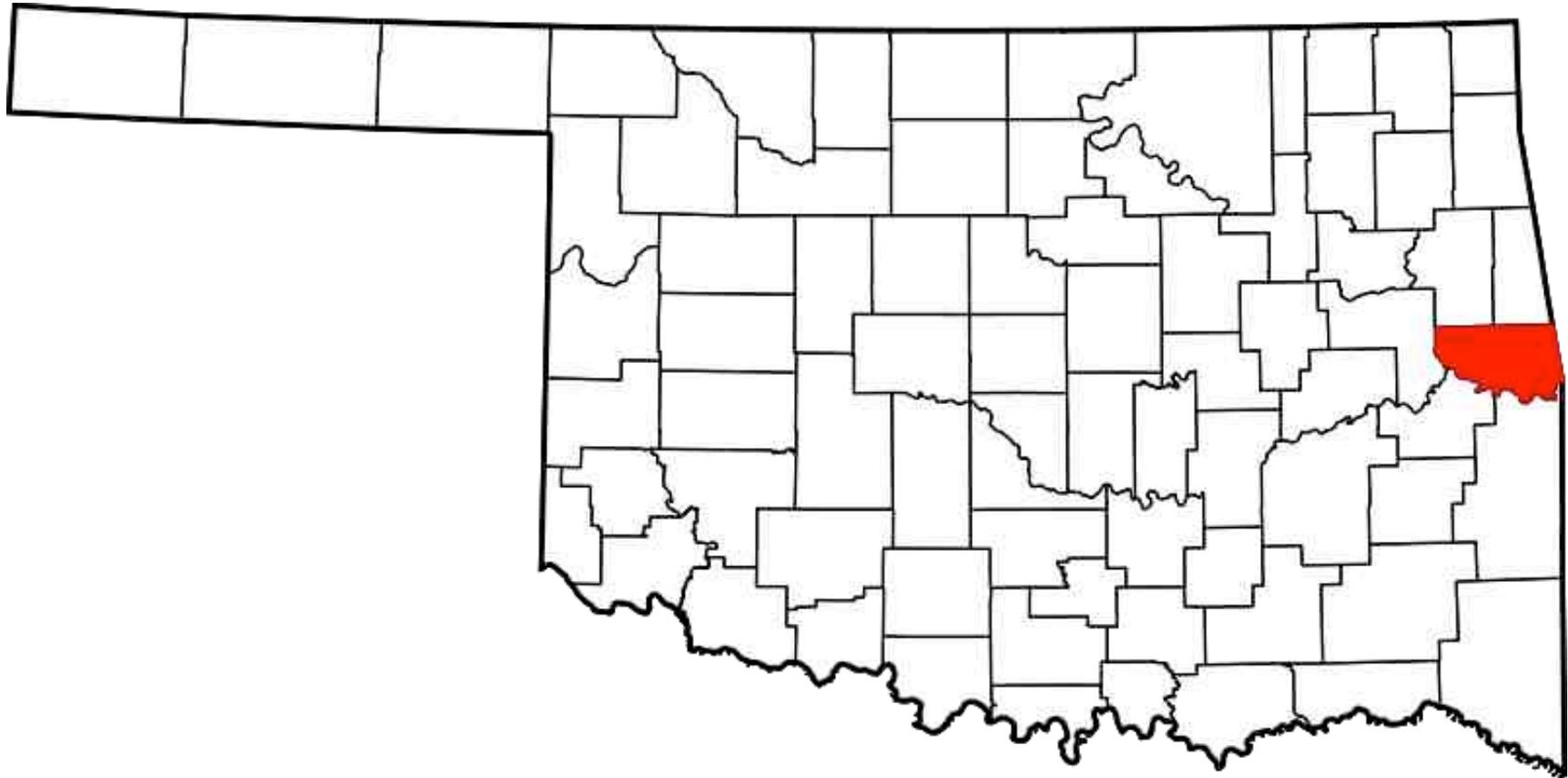
1795-1843

Sequoyah, Cherokee inventor of the Cherokee syllabary.

Sequoia



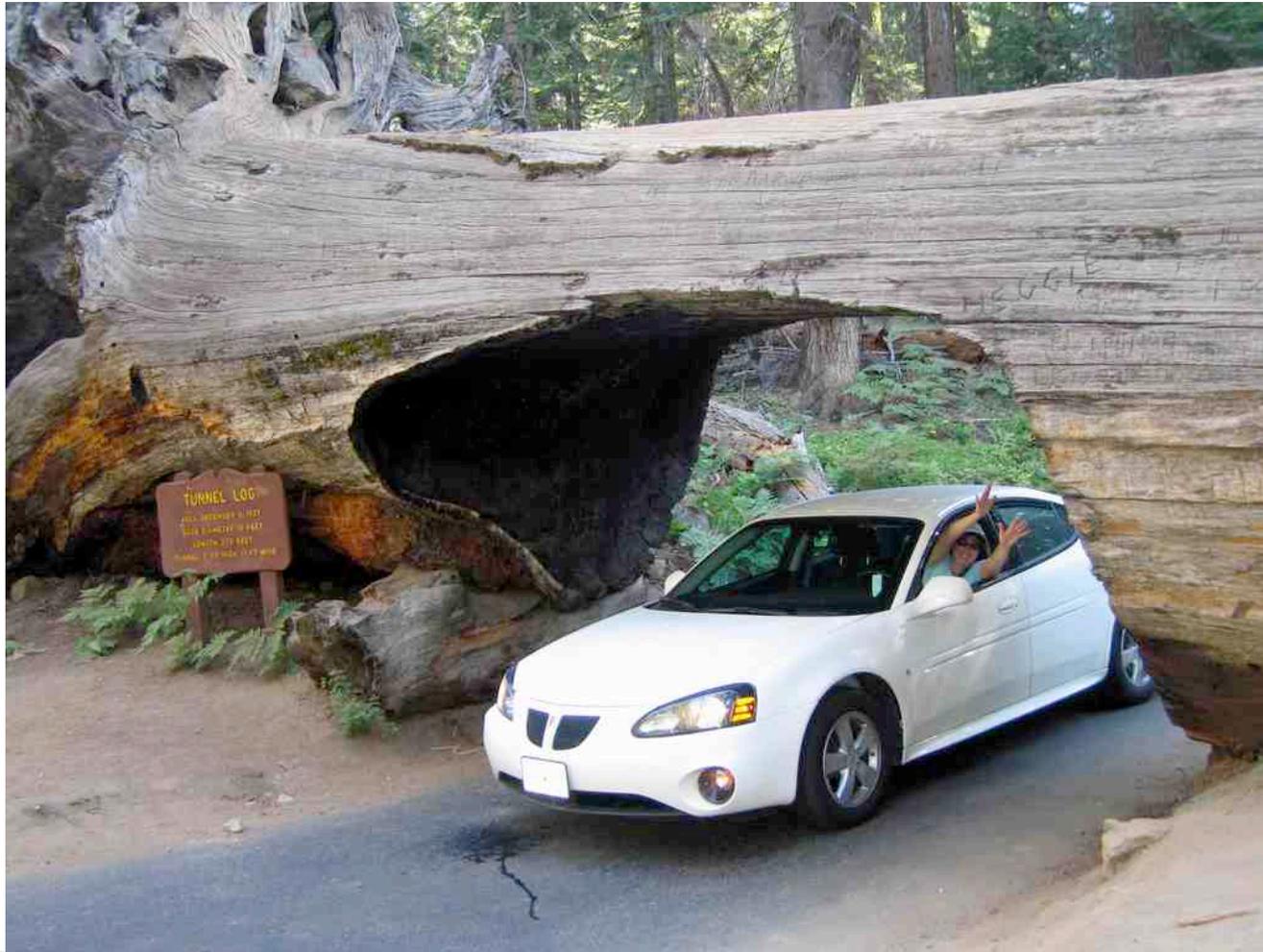
Sequoyah



Wikimedia Commons



Sequoia



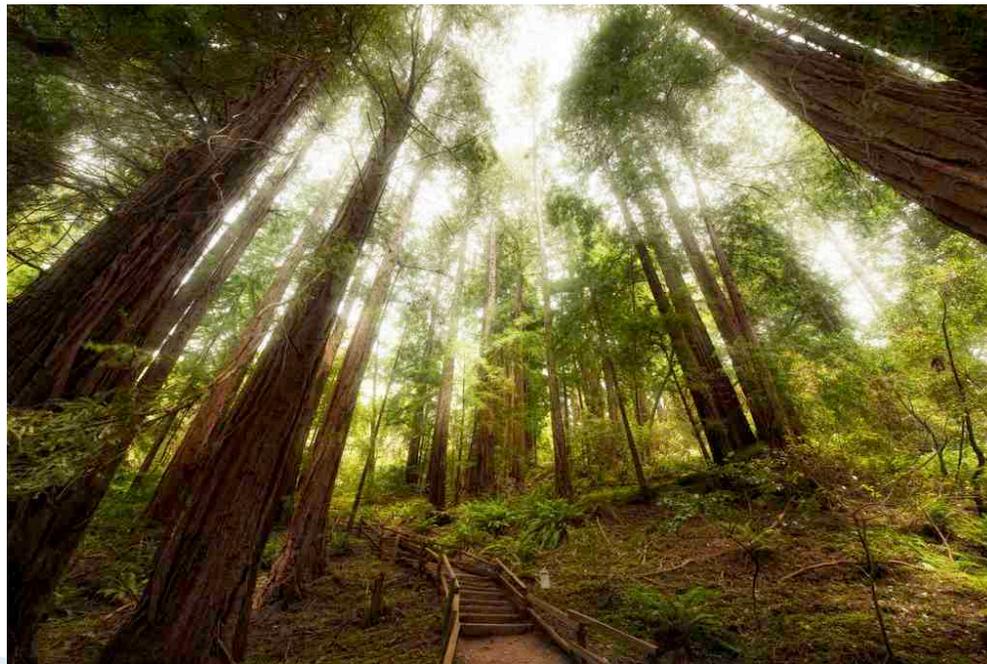
Sequoyah

- ▶ 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 [ǎ]
D a	R e	T i	Ꭰ o	Ꭱ u	i v
Ꭲ ga Ꭳ ka	Ꭴ ge	Ꭵ gi	Ꭶ go	Ꭷ gu	Ꭸ gv
Ꭹ ha	Ꭺ he	Ꭻ hi	Ꭼ ho	Ꭽ hu	Ꭾ hv
Ꭿ la	Ꮀ le	Ꮁ li	Ꮂ lo	Ꮃ lu	Ꮄ lv
Ꮅ ma	Ꮆ me	Ꮇ mi	Ꮈ mo	Ꮉ mu	
Ꮊ na Ꮋ hna Ꮌ nah	Ꮍ ne	Ꮎ ni	Ꮏ no	Ꮐ nu	Ꮑ nv
Ꮒ qua	Ꮓ que	Ꮔ qui	Ꮕ quo	Ꮖ quu	Ꮗ quv
Ꮘ s Ꮙ sa	Ꮚ se	Ꮛ si	Ꮜ so	Ꮝ su	Ꮞ sv
Ꮟ da Ꮠ ta	Ꮡ de Ꮢ te	Ꮣ di Ꮤ ti	Ꮥ do	Ꮦ du	Ꮧ dv
Ꮩ dla Ꮪ tla	Ꮫ tle	Ꮬ tli	Ꮭ tlo	Ꮮ tlu	Ꮯ tlv
Ꮰ tsa	Ꮱ tse	Ꮲ tsi	Ꮳ tso	Ꮴ tsu	Ꮵ tsv
Ꮶ wa	Ꮷ we	Ꮸ wi	Ꮹ wo	Ꮺ wu	Ꮻ ww
Ꮼ ya	Ꮽ ye	Ꮾ yi	Ꮿ yo	Ᏸ yu	Ᏹ yv

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>

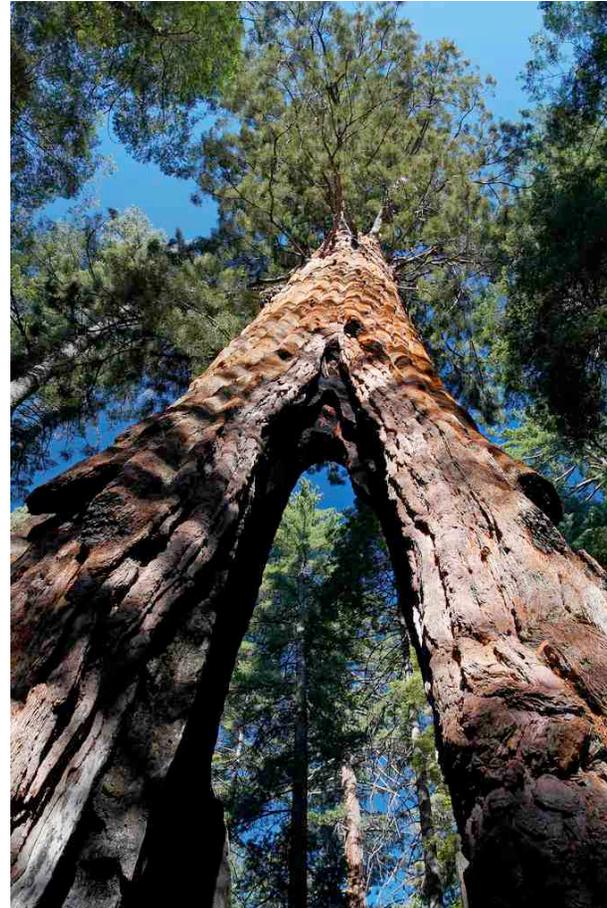


Important fact

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



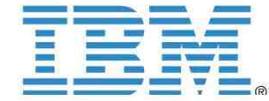
Sequoyah / Sequoia



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



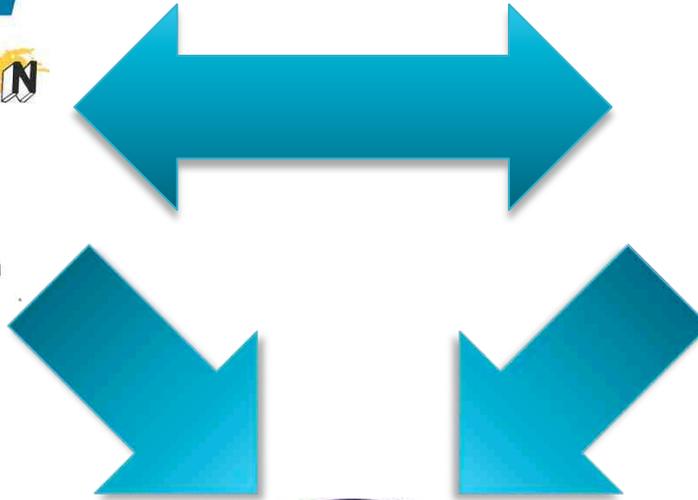


MOTOROLA



Sony Ericsson

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
- ▶ 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

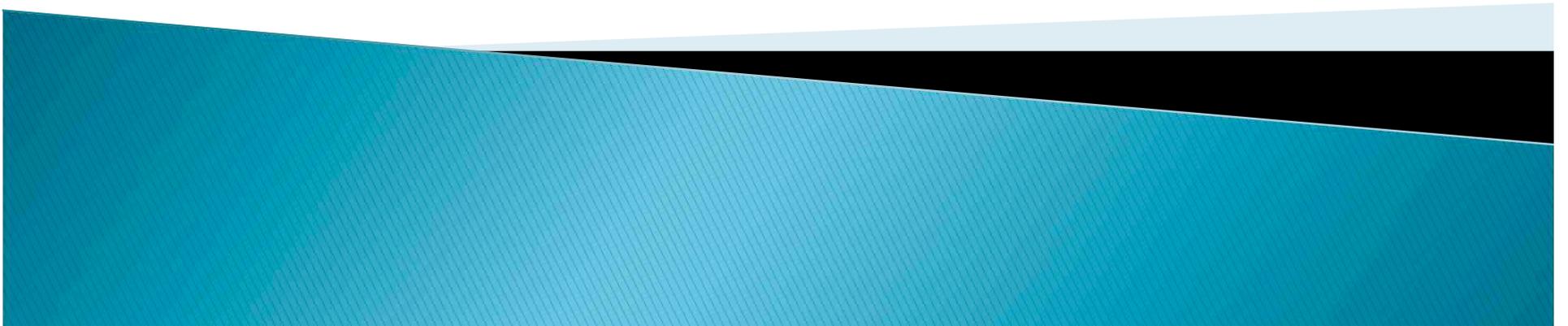
- <https://dev.eclipse.org/mailman/listinfo/sequoyah-dev>
- <mailto:sequoyah-dev@eclipse.org>

- ▶ File a bug

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



Roll your own (IDE)



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 \approx Eclipse for Java + Sequoyah

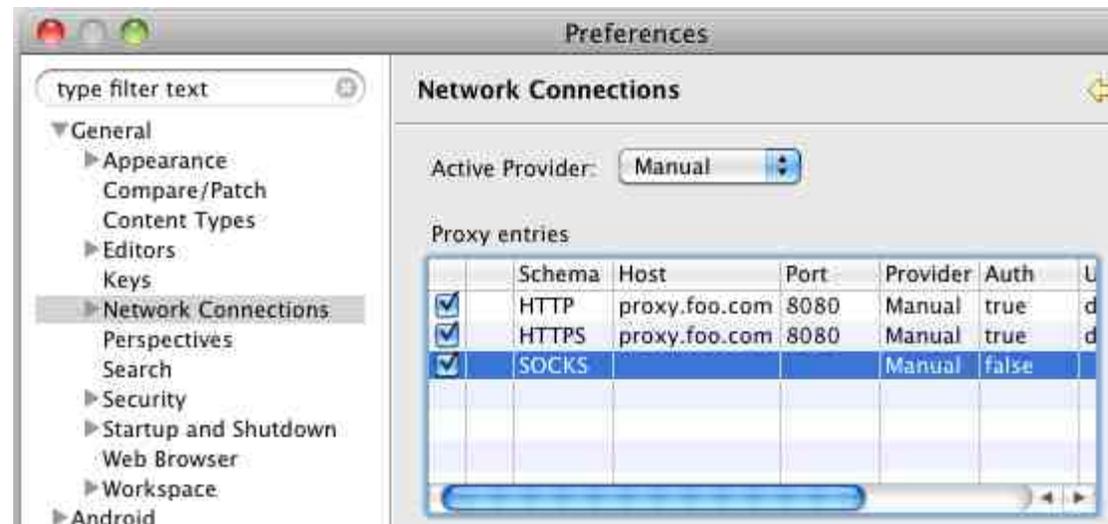


The screenshot shows the Eclipse Downloads page with a list of packages. The page has a purple header and a navigation bar with 'Packages' and 'Projects' tabs. Below the navigation bar, there are links for 'Compare Packages', 'Older Versions', and 'Eclipse Helios (3.6) Packages'. The main content area lists several packages with their respective download counts and details links.

Package Name	Size	Downloaded Times	Details
Eclipse IDE for Java EE Developers	204 MB	802,509	Details
Eclipse IDE for Java Developers	98 MB	383,522	Details
Eclipse Classic 3.6.0	170 MB	333,718	Details Other Downloads
Eclipse for PHP Developers	142 MB	153,201	Details
Eclipse IDE for C/C++ Developers	86 MB	152,104	Details
Eclipse IDE for JavaScript Web Developers	107 MB	37,458	Details
Eclipse IDE for Java and Report Developers	239 MB	29,755	Details
Eclipse Modeling Tools (includes Incubating components)	250 MB	25,677	Details
Eclipse for RCP and RAP Developers	190 MB	25,270	Details
Pulsar for Mobile Developers	121 MB	22,255	Details

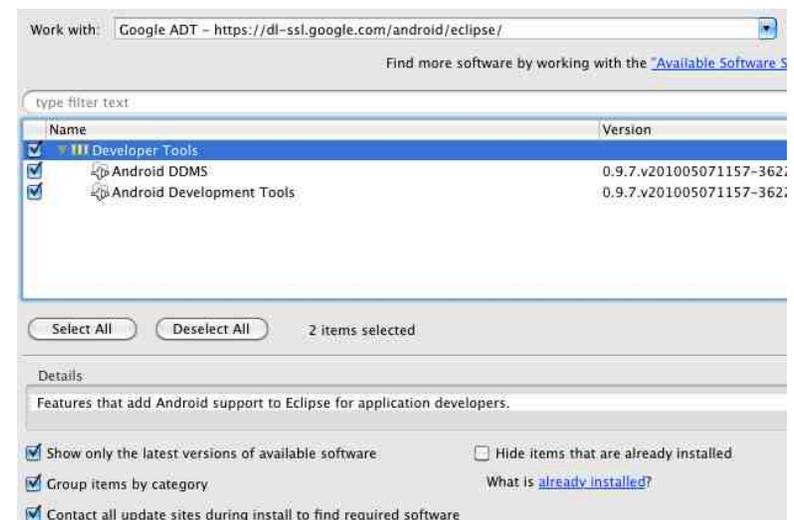
Configure Network Connection

- ▶ 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

<http://bit.ly/googl0seq>

Thank You

- ▶ Illustrations used in this presentation are courtesy of
 - Eclipse Foundation
 - Wikimedia Commons
 - University of Arkansas at Little Rock
 - The Smithsonian Institute, National Postal Museum
 - University of North Carolina, School of Education
- ▶ All photographs are Creative Commons licensed and courtesy of
 - Beth Sargent, <http://www.flickr.com/photos/happybef/>
 - *Greg the Busker*, <http://www.flickr.com/photos/gregthebusker/>
 - *Kern.justin*, <http://www.flickr.com/photos/24894289@N08/>
 - *Henryalien*, <http://www.flickr.com/photos/henryalien/>
 - Ken McCown, <http://www.flickr.com/photos/kenmccown/>



<http://bit.ly/goog10seq>