

Eclipse Sequoyah for Android App Developers

Eric Cloninger
Sequoyah Project Lead

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

Sequoyah



1795-1846

Sequoyah, Cherokee Inventor of the Cherokee Syllabary

Sequoyah, Cherokee Inventor of the Cherokee Syllabary

Sequoyah, Cherokee Inventor of the Cherokee Syllabary

Sequoyah, Cherokee Inventor of the Cherokee Syllabary

Sequoyah, Cherokee Inventor of the Cherokee Syllabary

Sequoyah, Cherokee Inventor of the Cherokee Syllabary

Sequoyah, Cherokee Inventor of the Cherokee Syllabary

Sequoyah, Cherokee Inventor of the Cherokee Syllabary

Sequoyah, Cherokee Inventor of the Cherokee Syllabary

Sequoyah, Cherokee Inventor of the Cherokee Syllabary

Sequoyah, Cherokee Inventor of the Cherokee Syllabary

Sequoyah, Cherokee Inventor of the Cherokee Syllabary

Sequoyah, Cherokee Inventor of the Cherokee Syllabary

Sequoyah, Cherokee Inventor of the Cherokee Syllabary

Sequoyah, Cherokee Inventor of the Cherokee Syllabary

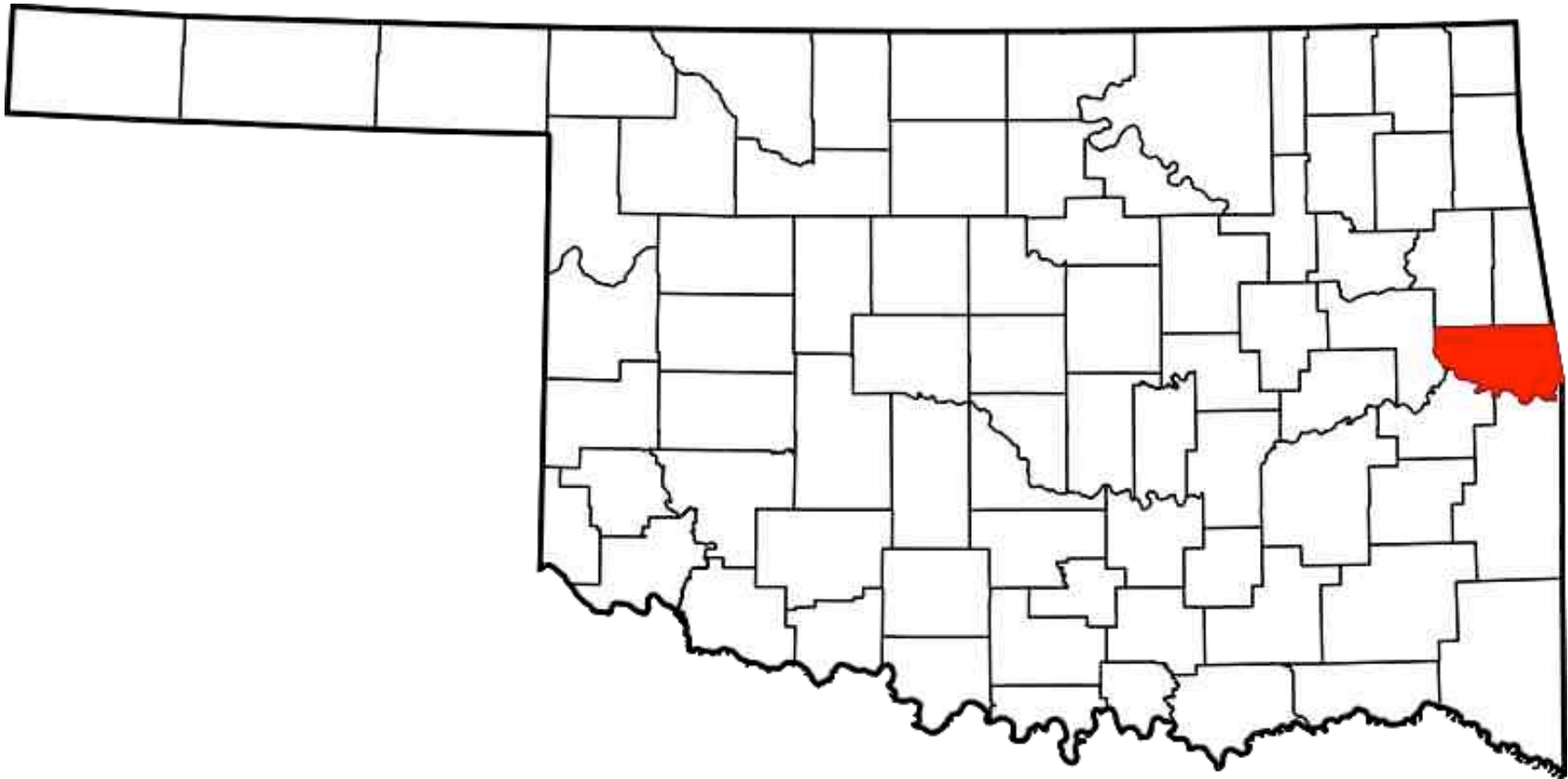
Sequoyah, Cherokee Inventor of the Cherokee Syllabary

Sequoyah, Cherokee Inventor of the Cherokee Syllabary

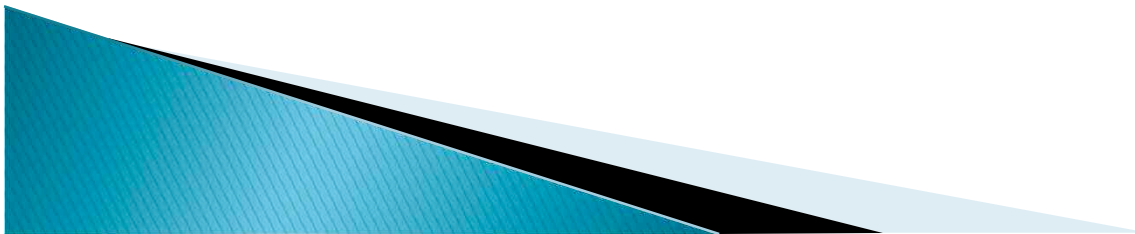
Sequoia



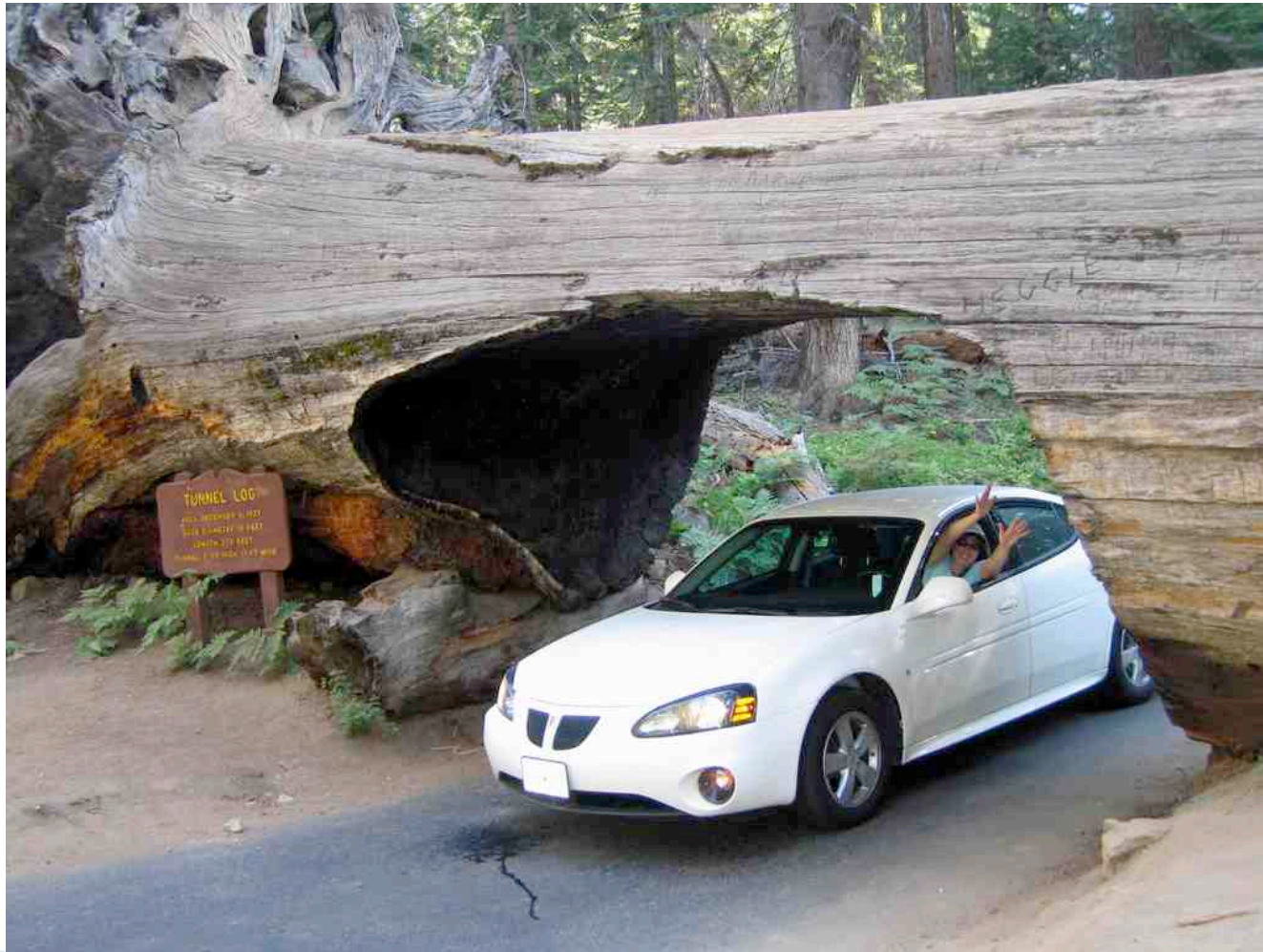
Sequoyah



Wikimedia Commons



Sequoia



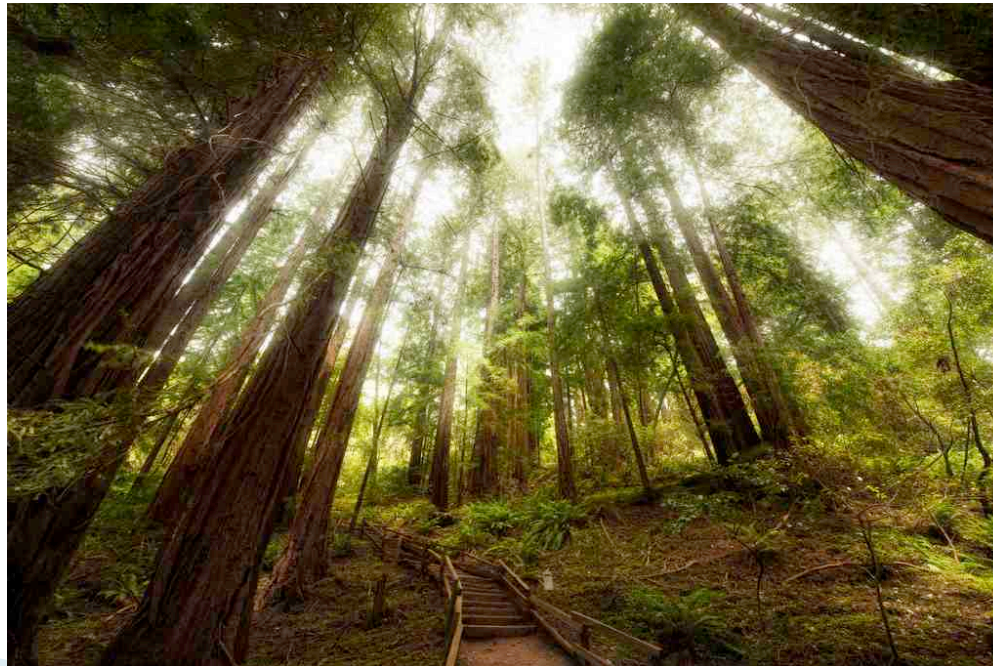
Sequoyah

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

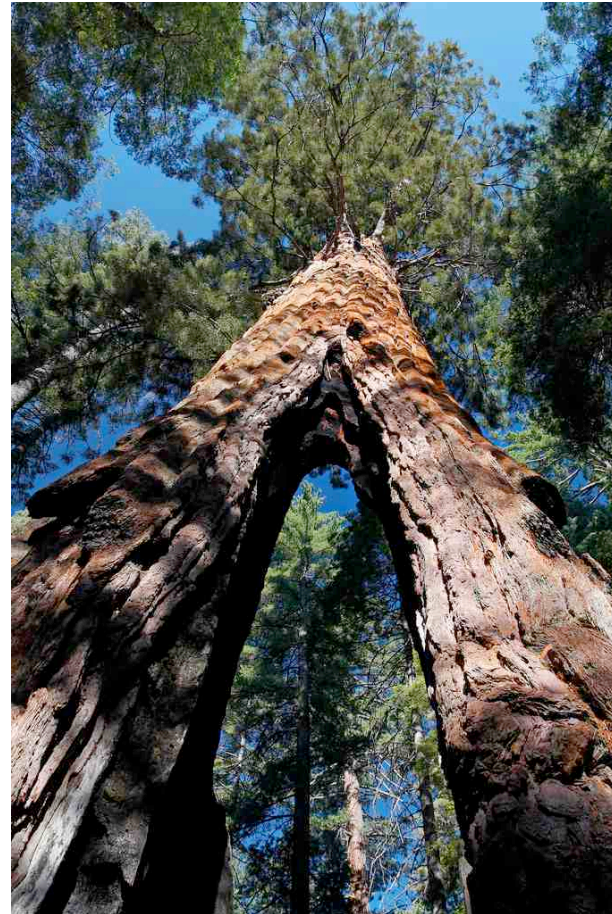


Important fact

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

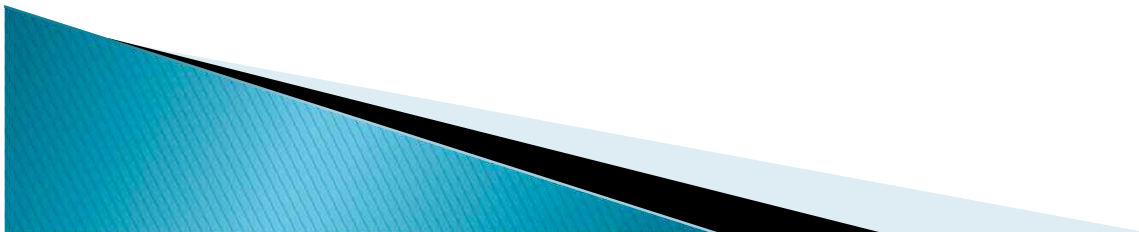


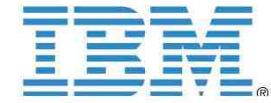
Sequoyah/Sequoia



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



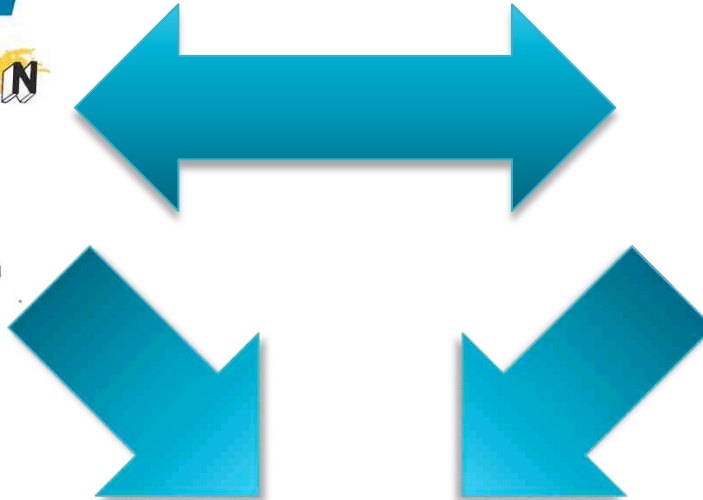


MOTOROLA



Sony Ericsson

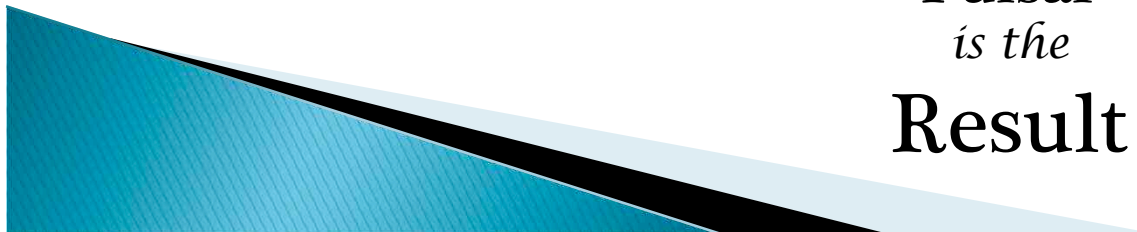
Mobile Industry
Working Group
provides
Roadmap



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

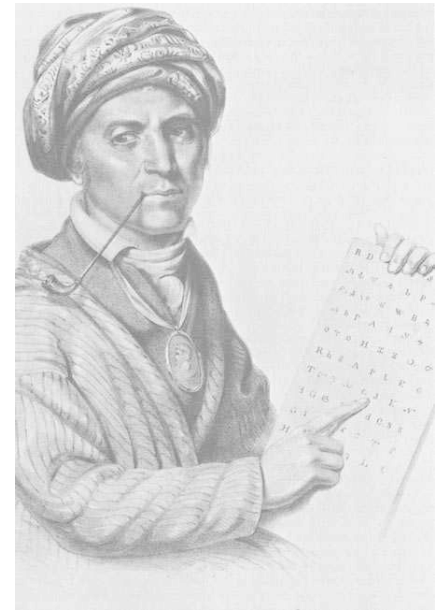
- <http://wiki.eclipse.org/Sequoyah>

- ▶ Mailing list

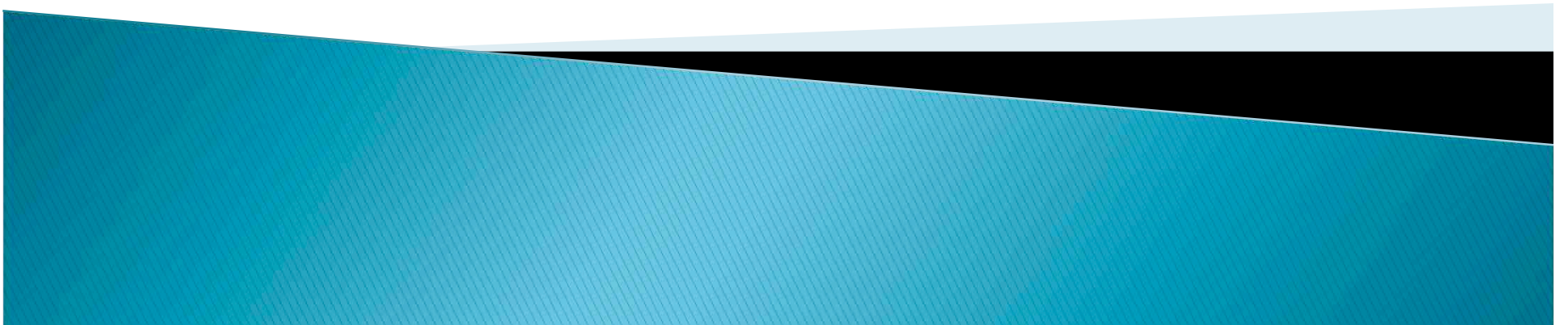
- <https://dev.eclipse.org/mailman/listinfo/sequoyah-dev>
- <mailto:sequoyah-dev@eclipse.org>

- ▶ File a bug

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

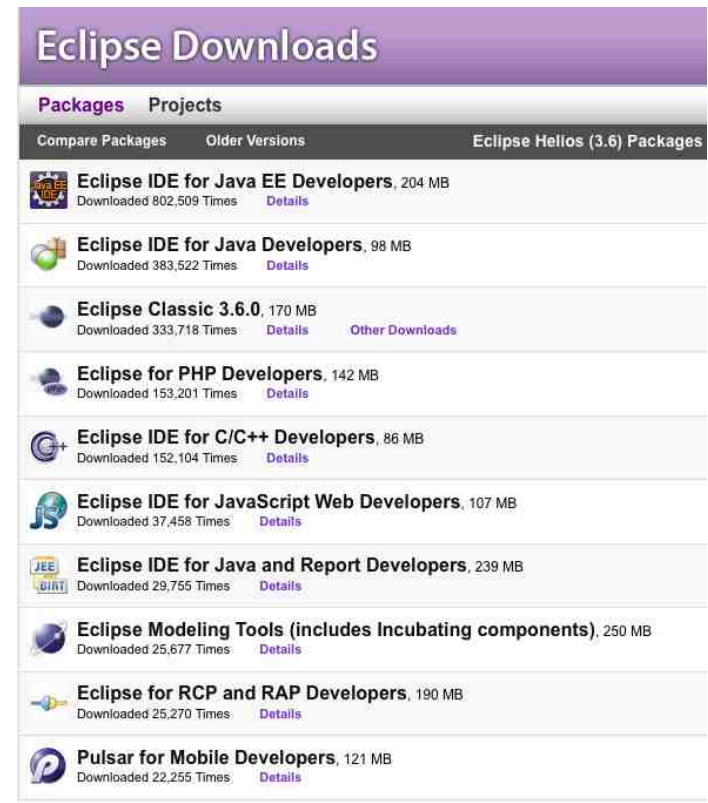











Roll your own (IDE)

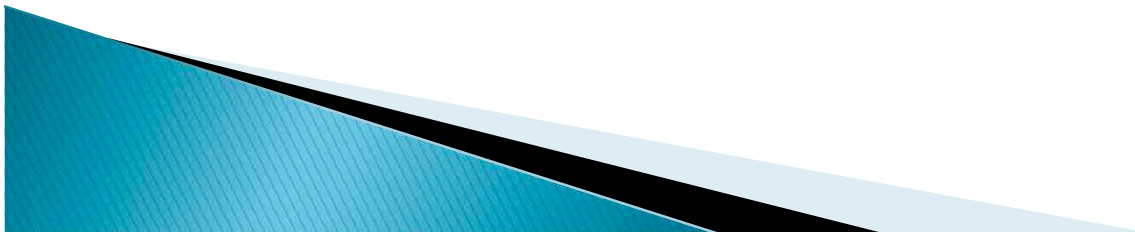


Choose a flavor

- ▶ 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

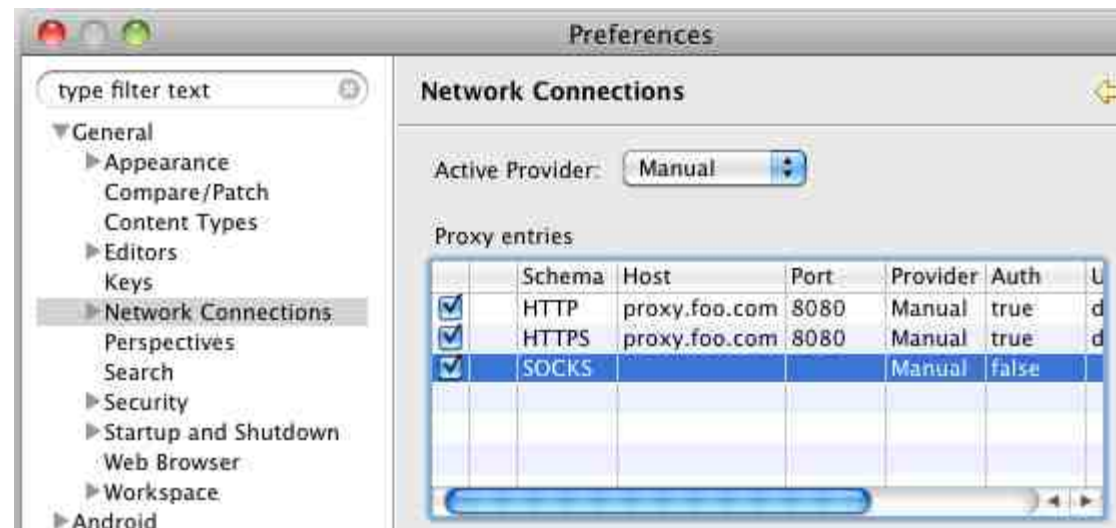


Eclipse Downloads	
Packages	Projects
Compare Packages	Older Versions
Eclipse Helios (3.6) Packages	
 Eclipse IDE for Java EE Developers, 204 MB Downloaded 802,509 Times Details	
 Eclipse IDE for Java Developers, 98 MB Downloaded 383,522 Times Details	
 Eclipse Classic 3.6.0, 170 MB Downloaded 333,718 Times Details Other Downloads	
 Eclipse for PHP Developers, 142 MB Downloaded 153,201 Times Details	
 Eclipse IDE for C/C++ Developers, 86 MB Downloaded 152,104 Times Details	
 Eclipse IDE for JavaScript Web Developers, 107 MB Downloaded 37,458 Times Details	
 Eclipse IDE for Java and Report Developers, 239 MB Downloaded 29,755 Times Details	
 Eclipse Modeling Tools (includes Incubating components), 250 MB Downloaded 25,677 Times Details	
 Eclipse for RCP and RAP Developers, 190 MB Downloaded 25,270 Times Details	
 Pulsar for Mobile Developers, 121 MB Downloaded 22,255 Times Details	



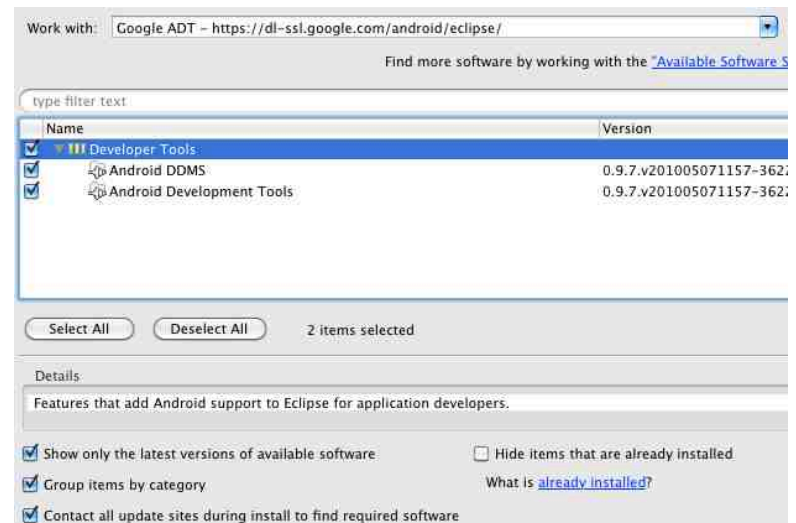
Configure Network Connection

- ▶ If necessary for proxy based configurations
 - Preferences->General->Network Connections
- ▶ Active Provider = “Manual”
- ▶ Set HTTP and HTTPS connections



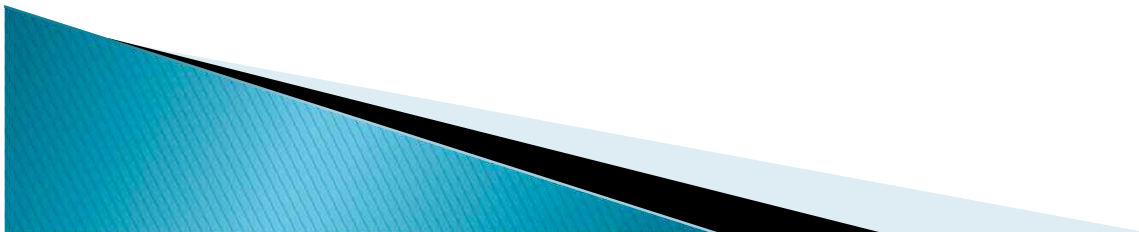
Install ADT

- 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



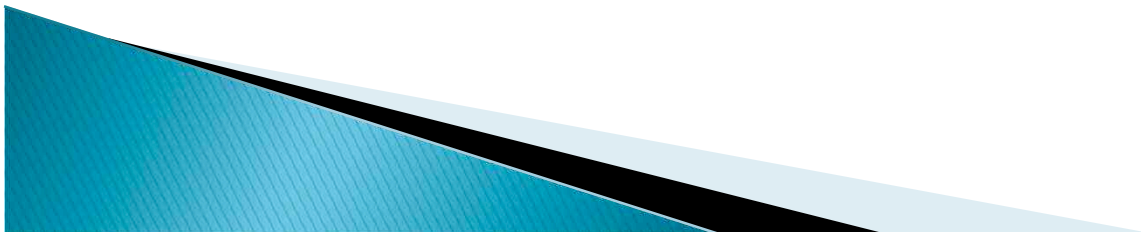
Install Sequoyah

- ▶ 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



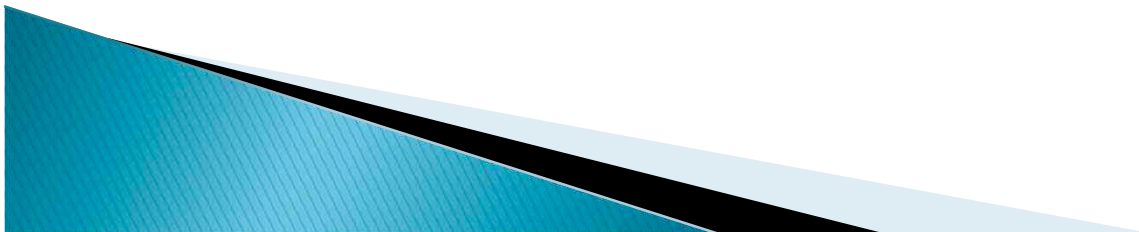
Install SDK and NDK

- ▶ 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/goog10seq>

Thank You

- ▶ Illustrations used in this presentation are courtesy of
 - Eclipse Foundation (<http://www.eclipse.org/legal/termsofuse.php>)
 - Wikimedia Commons (CC-sa http://wikimediafoundation.org/wiki/Terms_of_Use)
 - The Smithsonian Institute, National Postal Museum (<http://si.edu/termsofuse/>)
- ▶ All photographs are Creative Commons (*by-nc-nd*) 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>