

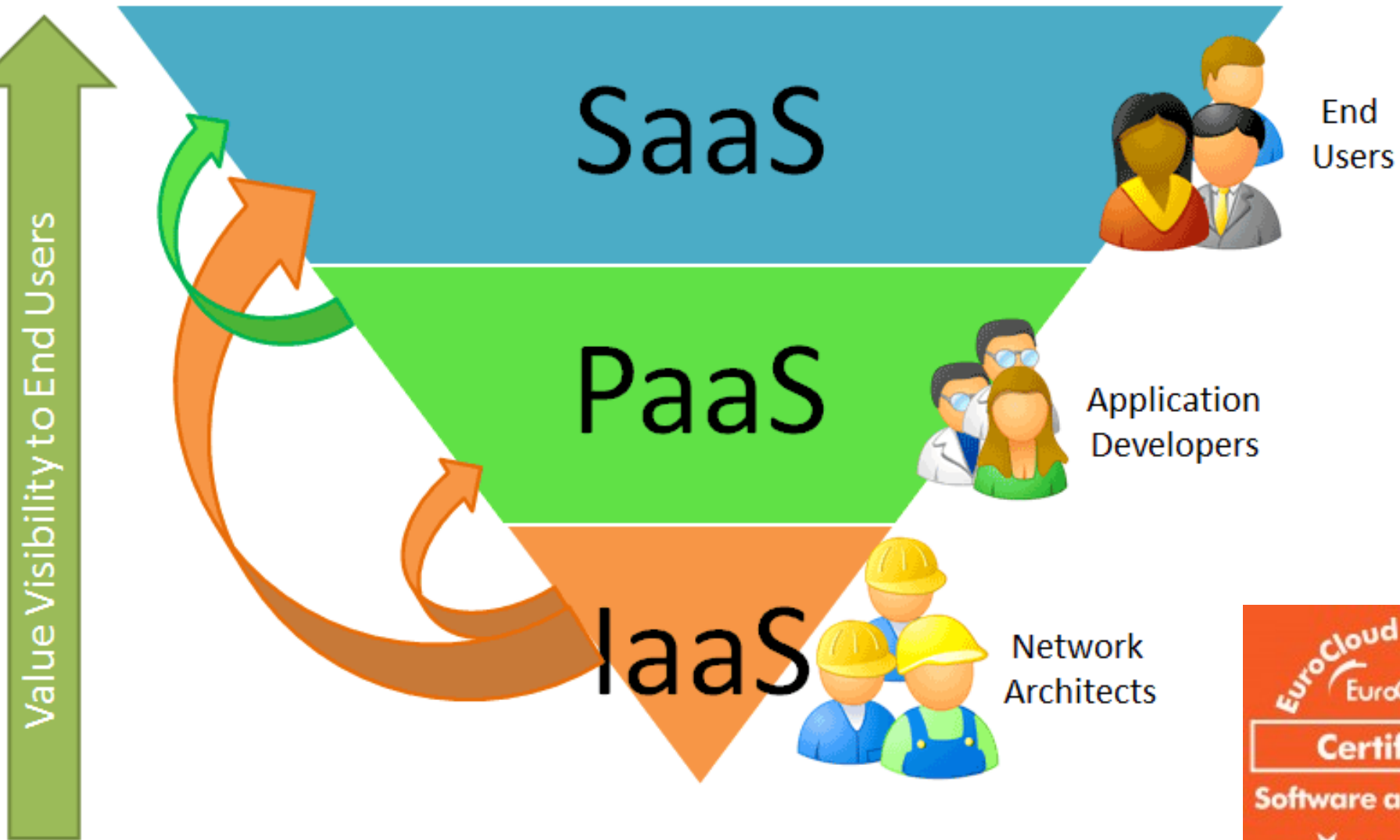
"Java in der Cloud"

Vorgestellt
vom GTUG OWL



Google App Engine

"Cloud"



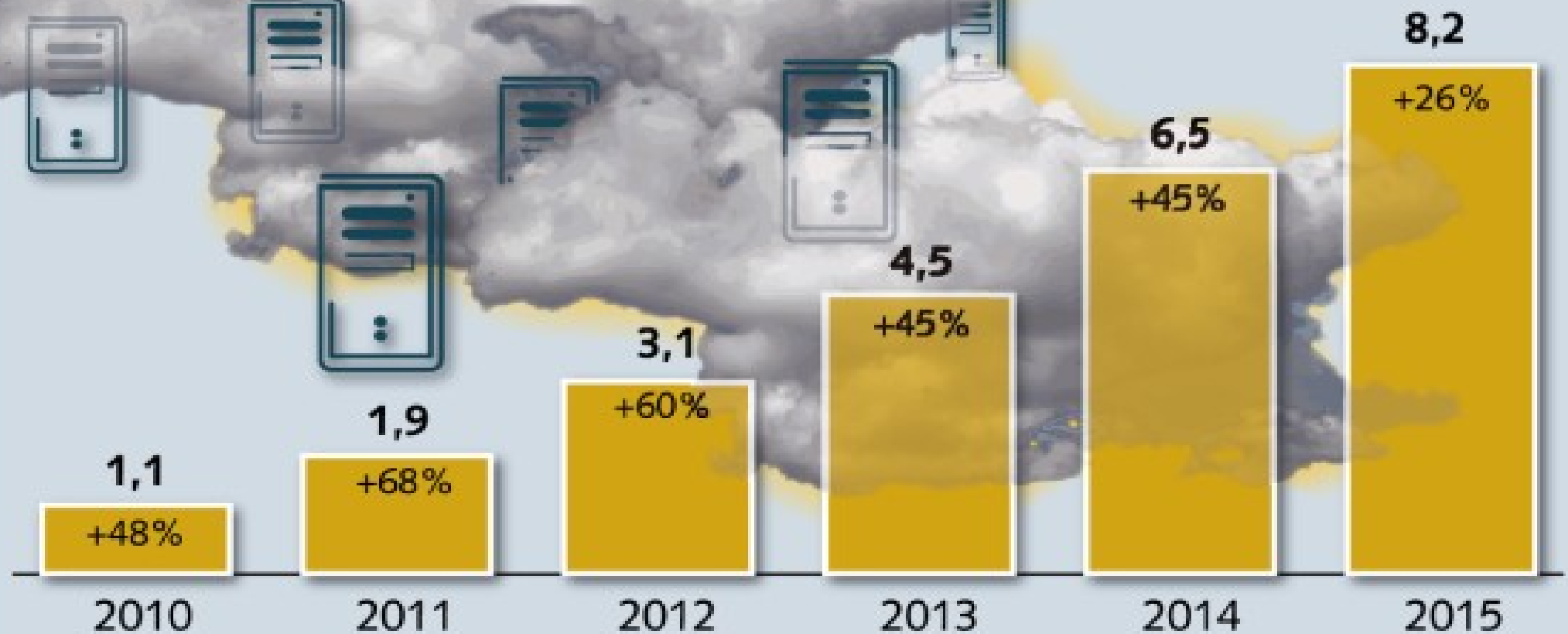
[EuroCloud](#) Deutschland_eco e.V.



im Schnitt 45% Zuwachs bis 2015

Rechnen mit der Wolke

Umsatz mit Cloud Computing
in Deutschland*
in Mrd. Euro



Google App Engine

*"Deine Web Anwendung
läuft auf Google's Infrastruktur"*

- integrierte Entwicklungsumgebung
- skalierbar von 1 - 1 Mio Anwender ohne Aufbau von Hardware, Datenbanken,....
- Startnutzung kostenlos
 - - freie Quota wird immer besser :-)



Google Web Toolkit "GWT"

*"GWT ist eine Sammlung von Open Source Werkzeugen, die es Web Entwicklern erlaubt komplexe **JavaScript front-end Anwendungen in Java** zu schreiben."*

- GWT Java-to-JavaScript Compiler
- GWT Development Mode
- GWT Web UI class library



Google App Engine & Google Web Toolkit

2006 [GWT](#)

"6 Updates 2010!"



2008 [GAE](#)

"Over the past twelve months, 73 developers contributed new code to Google Web Toolkit.

This is one of the largest open-source teams in the world."

Ökosystem: [GTUG](#)

Eclipse IDE: [QUICK START GAE + GWT](#)

Wer sollte die App Engine nutzen ?

Auszug aus dem Statement zu "App Engine for Business"

Internal: für Teams und Firmen (kein Backup, Patchen, Hardware Monitoring) mit on demand Kapazität kann das ganze wachsen zu einer Administrativen und CRM Lösung.

External: Firmen-Website, **Public Web Services**, Kunden- oder Partner Website oder sogar ein Firmenprodukt.



Setup



Install

Available Software
Check the items that you wish to install.

Work with:

Find more software by working with the ["Available Software Sites"](#) preferences.

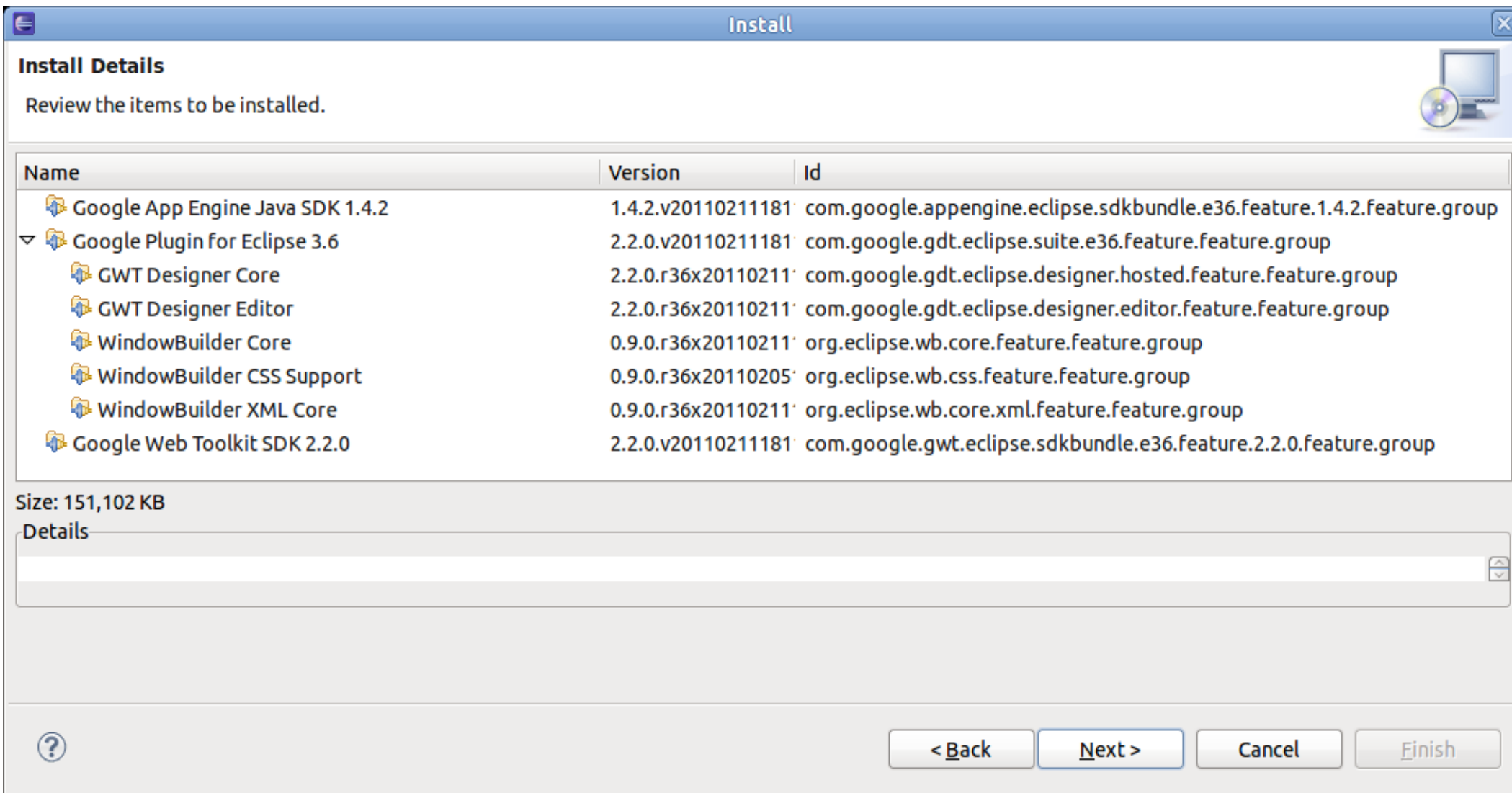
type filter text

Name	Version
<input type="checkbox"/> Plugin	
<input type="checkbox"/> Google Plugin for Eclipse 3.6	2.2.0.v201102111811
<input type="checkbox"/> SDKs	
<input type="checkbox"/> Google App Engine Java SDK 1.4.2	1.4.2.v201102111811
<input type="checkbox"/> Google Web Toolkit SDK 2.2.0	2.2.0.v201102111811

Details
Google Web Toolkit 2.2.0 SDK Bundle for Eclipse 3.6

Show only the latest versions of available software Hide items that are already installed
 Group items by category What is [already installed?](#)
 Contact all update sites during install to find required software

GAE Java SDK, GWT, Designer, Editor

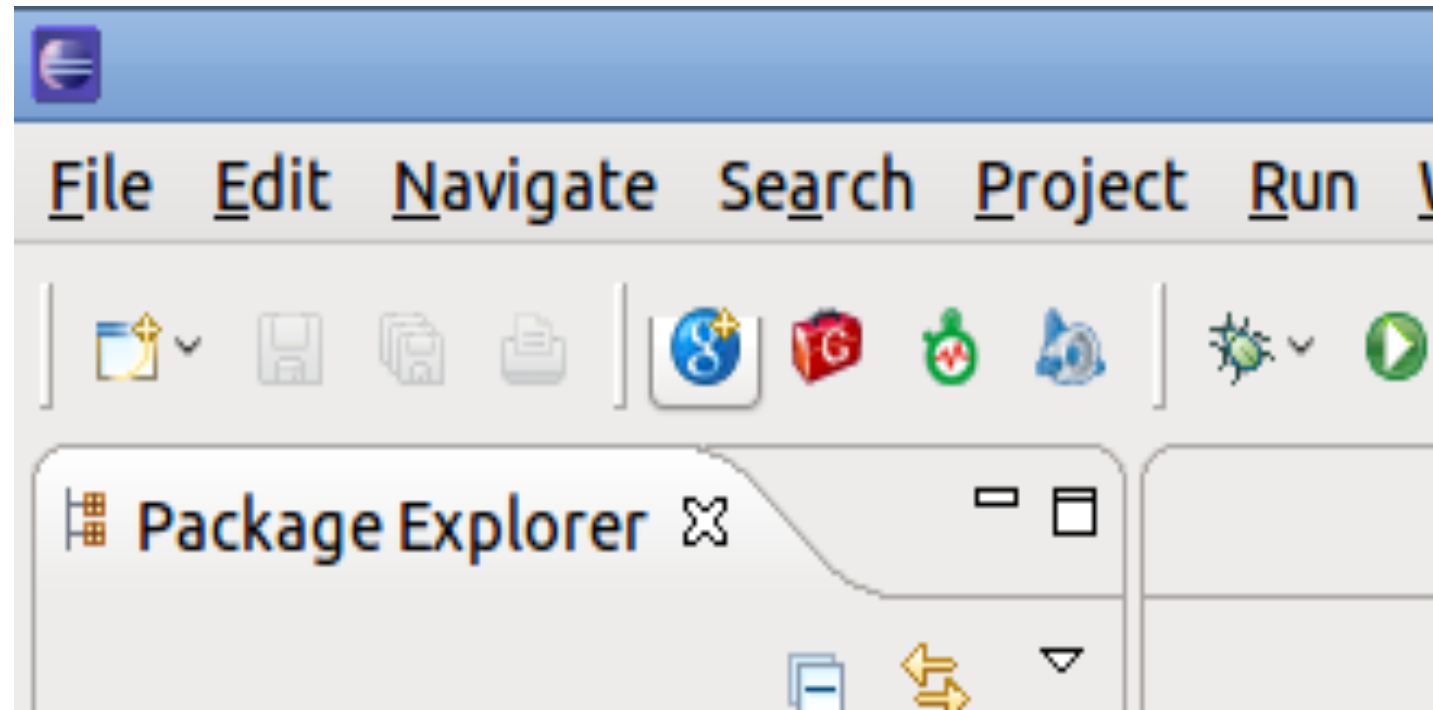


Java: genutzt werden kann ein subset der
JRE standard Edition classes - siehe: [Whitelist](#)



Eclipse plugin

- **New** Web Application Project
- **RUN** ... as Web Application
- GWT Compile Project
- Profile Using Speed Tracer
- **Deploy** App Eninge Projcet



Create Web Application

Projekt
Wizard :-)

*Es gibt eine Liste
mit unterstützten
Frameworks & Libs!*

will it play in Java



New Web Application Project

Create a Web Application project in the workspace or in an external location

Project name:
Licht

Package: (e.g. com.example.myproject)
de.brandsmill.licht

Location

Create new project in workspace
 Create new project in:
Directory: /home/malte/workspace/Licht [Browse...](#)

Google SDKs

Use Google Web Toolkit

Use default SDK (GWT - 2.2.0) [Configure SDKs...](#)
 Use specific SDK: GWT - 2.2.0

Use Google App Engine

Use default SDK (App Engine - 1.4.2) [Configure SDKs...](#)
 Use specific SDK: App Engine - 1.4.2

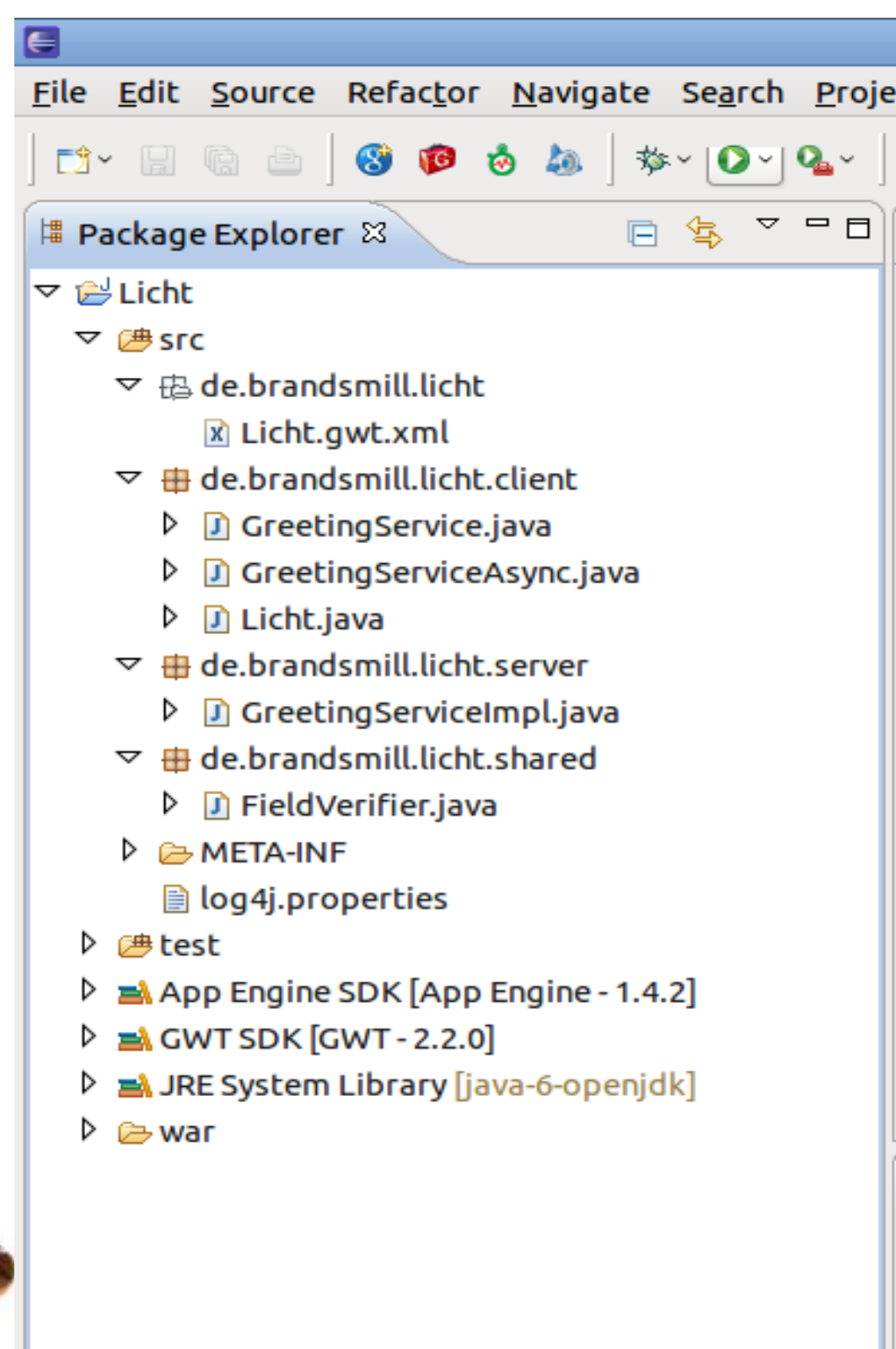
Sample Code

Generate GWT project sample code

[?](#) [Cancel](#) [Finish](#)

Licht !

Client &
Serverside &
Shared





Development Mode GWT Plugin

Cloud Technology x Web Application Starte... x Web Application Starte... x

127.0.0.1:8888/Licht.html?gwt.codesvr=127.0.0.1:8888

gRead Data.local eP.local run.local dev GAE eP.de run.de brand's mill Quickly - Ubuntu ... Telepolis

Development Mode requires the Google Web Toolkit Developer Plugin

By downloading, you agree to the [Terms & Conditions](#) and [Privacy Policy](#).

Download the GWT Developer Plugin For Chrome

[plugins for other systems](#)

For help or troubleshooting, ask questions in the [discussion group](#).

Confirm Installation

Install GWT Developer Plugin?

It can access:

All data on your computer and the websites you visit

Cancel Install

Extensions, apps, and themes can harm your computer. Are you sure you want to continue? Discard Continue

ae_gwt_java.png

Show all downloads...

Deploy "Vorbereitung"



Google app engine

My Applications

< Prev 20 **1-5 of 5** Next 20 >

Application	Title	Storage Scheme	Current Version
<input type="button" value="Create Application"/>			< Prev 20 1-5 of 5 Next 20 >

You have 10 applications remaining.

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Google app engine

mjaeger@brandsmill.de | [My Account](#) | [Help](#) | [Sign out](#)

Verify Your Account by SMS

To create applications with Google App Engine, you need a verification code. Select the country and carrier for your mobile phone and enter your mobile phone number. The verification code will be sent to it via SMS. Note you will only need to verify your account once.

Country and Carrier:

If your country and carrier are not on the list, select Other (Not Listed). [What carriers are supported?](#)

Mobile Number:

Include your [country code](#) and full phone number. eg. +1 650 555 1212

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"deployed" Versionsmanagement inkl.



10 Apps per developer
2 GB Blobstore
10 MB HTTP response size
1 MB Datastore item size
150 MB Application code size

2000 E-Mail tägl.
1000 MB in/out Bandbreite
6.5 Stunden CPU tägl.
1.300.000 HTTP Request tägl.
10.000.000 Datastore API calls tägl.
1 GB Data stored
657,084 URLFetch API calls tägl.

Man ist nicht an AppEngine gebunden - siehe [Appscale](#)

BigTable non-relational database

SQL like Syntax called "GQL"

... aber nicht relational wie im Sinne von SQL.

Kein SQL !



Was ich mag

- Enterprise Service Bus
- Activities & Places
- Multitenancy

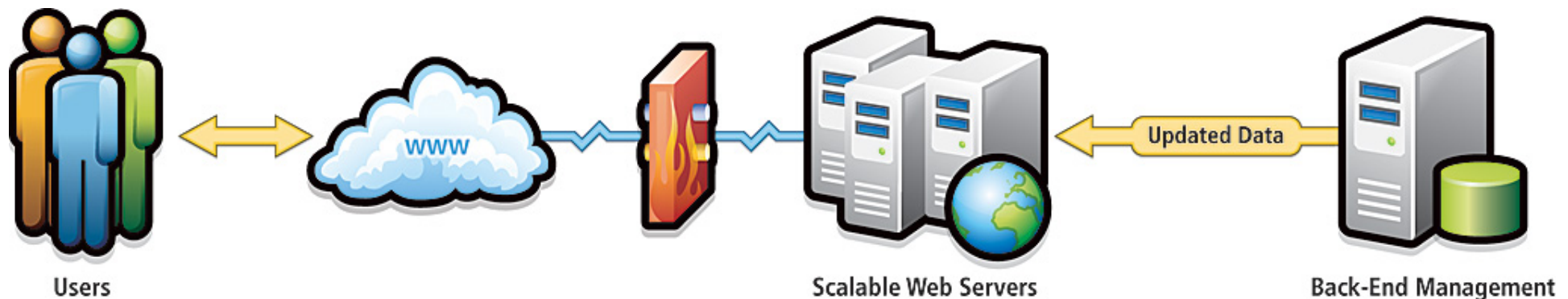
... Push Technik "proxy ähnlich"

... Spring Source-Tools Roo und Isight sowie der SpringSource tool Suite (STS)



Platform as a Service

- "scale easily"
 - interface served by GWT *"das ist offensichtlich total AJAXy – die schnellste Web Plattform die ich je gesehen habe !"*
 - Ökosystem
 - Marktplatz
- ++ Einfacher Einstieg für jeden Java Entwickler !



Wir haben Mitbewerber !



"Je einfacher es ist hoch skalierbare web Anwendungen zu entwickeln und zur Verfügung zu stellen, um so mehr innovative und kreative Lösungen werden wir entdecken."



"[Techdirt](#) publisher [Mike Masnick](#) "



Google Technology User Group

GTUG OWL

www.owl-gtug.org

groups.google.com/group/gtug-OWL