Creating OpenSocial Gadgets

Bastian Hofmann

Agenda

✓ **Part 1: Theory**

    ✓ What is a Gadget?

    ✓ What is OpenSocial?

    ✓ Privacy at VZ-Netzwerke

    ✓ OpenSocial Services

    ✓ OpenSocial without Gadgets - The Rest API

✓ **Part 2: Practical**

    ✓ Let's write our own Gadget

Mittwoch, 10. Februar 2010

What is a Gadget?

✓ XML file with HTML and JavaScript (and CSS, Images, Flash, …)

✓ Application based on the Google Gadgets specification

✓ Can be included on various platforms, which support this specification

Mittwoch, 10. Februar 2010

How to include gadgets?

- ✓ The Gadget Server
    - ✓ renders the Gadget XML
    - ✓ provides the JavaScript API
    - ✓ provides the REST (or RPC) API

- ✓ Rendered result is included through an `<iframe>` into the parent page (Container)

Mittwoch, 10. Februar 2010
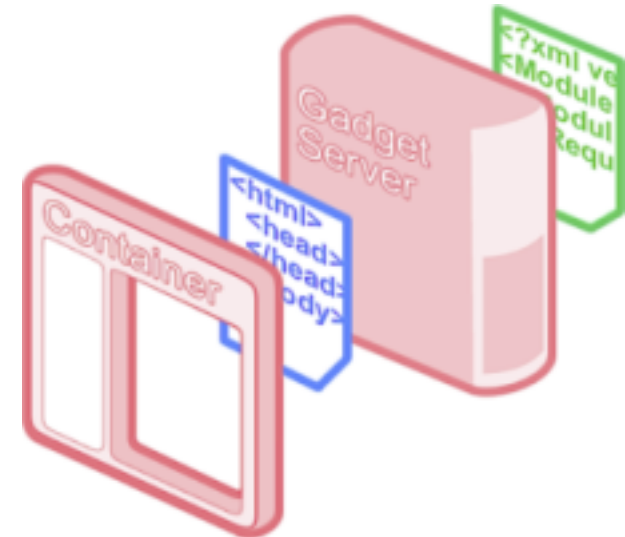
Gadget Features

✓ Gadget specification includes a rich JavaScript API with a multitude of features
  - ✓ preferences
  - ✓ views
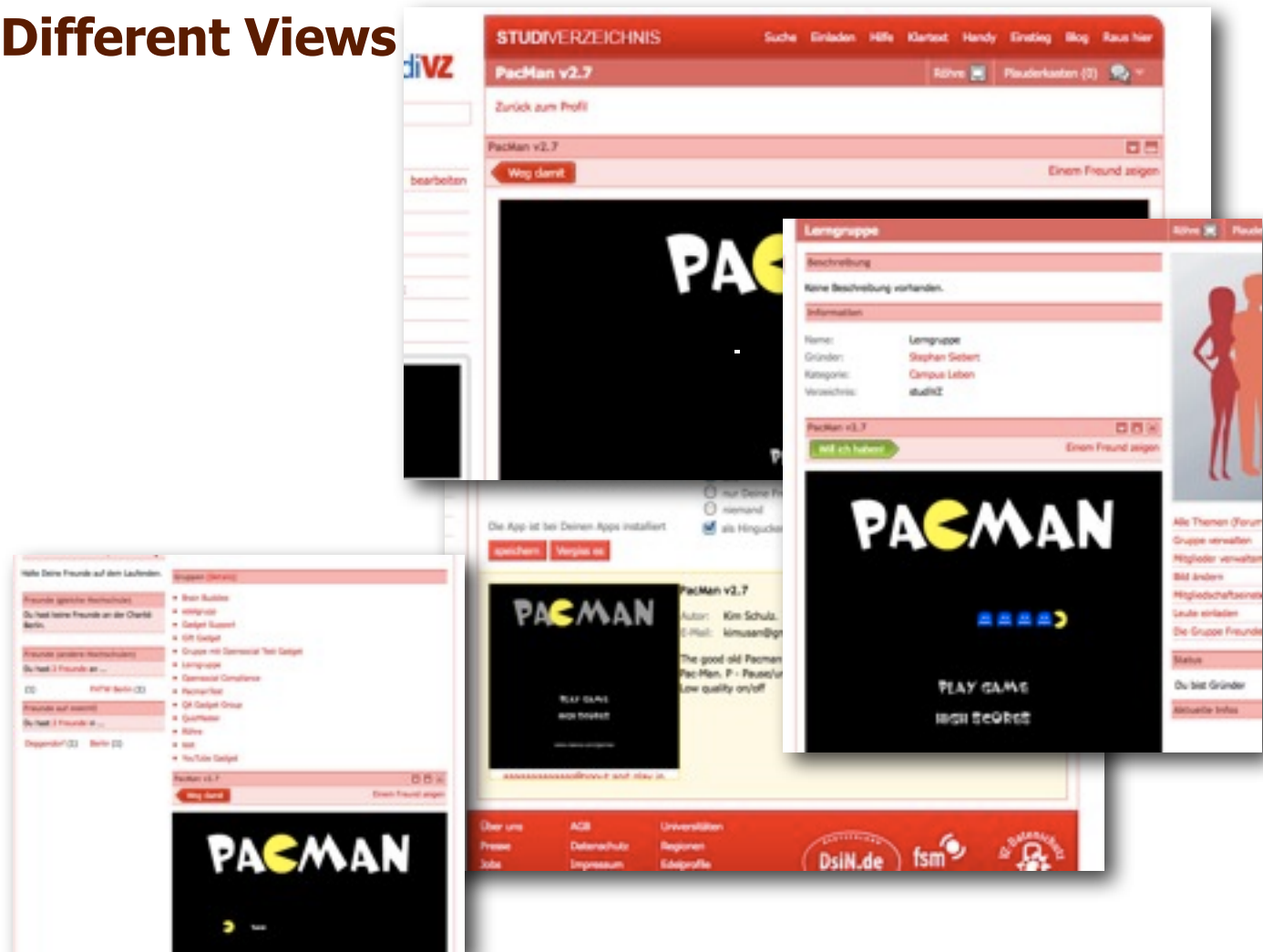 - ✓ dynamic-height
  - ✓ flash
  - ✓ io
  - ✓ ...

✓ Extendabel

Mittwoch, 10. Februar 2010

One Gadget - Different Views

- ✓ Profile
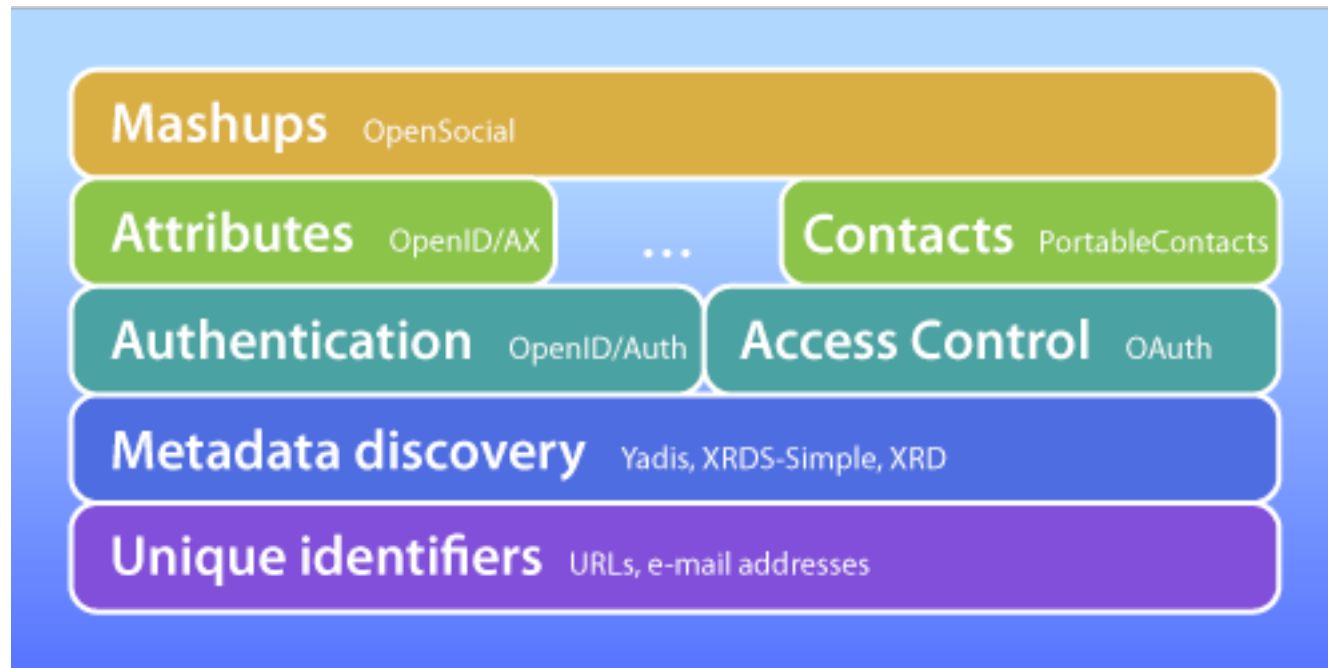- ✓ Canvas
- ✓ Preview
- ✓ Group
- ✓ Popup
- ✓ Integration

And what is OpenSocial?

✓ Extension of the Gadget JavaScript API

✓ an open standard
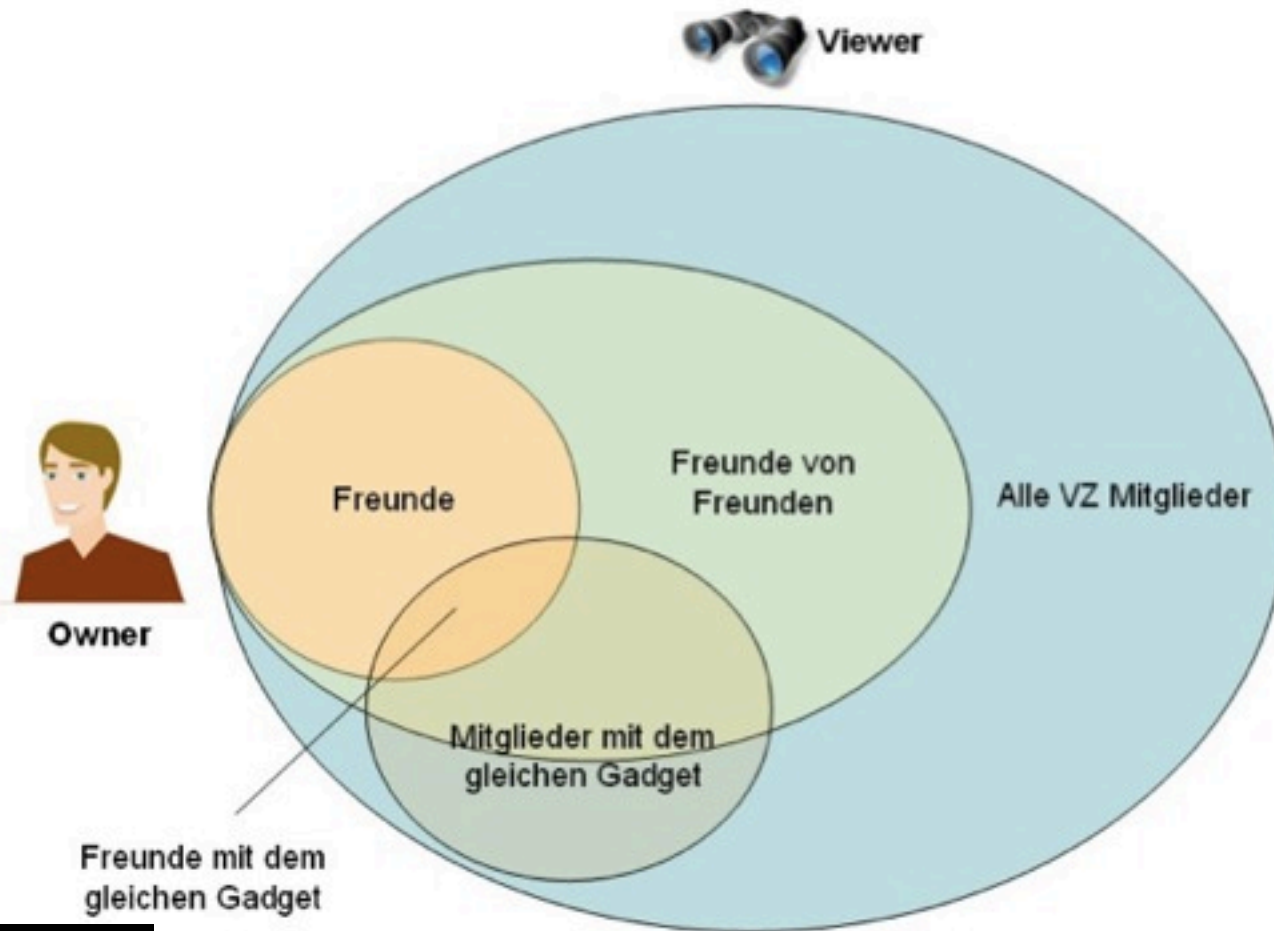
✓ enables gadgets to access the social graph of users

Mittwoch, 10. Februar 2010

The OpenStack

Mittwoch, 10. Februar 2010

schüler**VZ** studi**VZ** mein**VZ**

Viewer != Owner or Viewer == Owner and Friends

Viewer

Owner

Freunde

Freunde von Freunden

Alle VZ Mitglieder

Mitglieder mit dem gleichen Gadget

Freunde mit dem gleichen Gadget

Mittwoch, 10. Februar 2010

What about privacy? Example of our solution.

✓ **Visibility**

  ✓ Visibility on a user's profile page can be changed individually for friends or other people.

✓ **Access**

  ✓ Access to user data is handled through a special vcard

✓ **Communication**

  ✓ Gadget needs user permissions for communication (Messages, Activity Stream, Notifications, …)

VCards

- ✓ Wile installing a gadget, the user has to assign an existing or new vcard to it

- ✓ Data on vcard can differ to the user's profile

- ✓ Gadget has only access to data of users which have installed the gadget

Mittwoch, 10. Februar 2010

schüler**VZ** studi**VZ** mein**VZ**

Services

Mittwoch, 10. Februar 2010

People Service

✓ Access to social graph
  (Users and their friends)

✓ At VZ: all vcards of users who have installed the
  gadget accessable

✓ At VZ: not writable

✓ API offers sorting and filtering abilities

✓ Identification with special OpenSocial ID:
  www.studivz.net:K0UCbAZQeQsyHC467mx3Cw

Mittwoch, 10. Februar 2010

AppData Service

✓ Persistent Key - Value Store

✓ stored by gadget

✓ In practice most gadgets store data in their own backend

Mittwoch, 10. Februar 2010

... and even more services

✓ numerous additional services are specified by the OpenSocial standard or by extensions implemented in one or more big containers:

  ✓ Activities
  ✓ Messages
  ✓ Payment
  ✓ Photos

Mittwoch, 10. Februar 2010

schüler**VZ** studi**VZ** mein**VZ**

Server to Server - The OpenSocial REST API

✓ All JavaScript OpenSocial APIs are available in the REST (and RPC) API as well

✓ Access with
  ✓ Two-legged OAuth (in the context of a gadget)
  ✓ or Three-legged OAuth with Consumer Key and Secret

16

Mittwoch, 10. Februar 2010
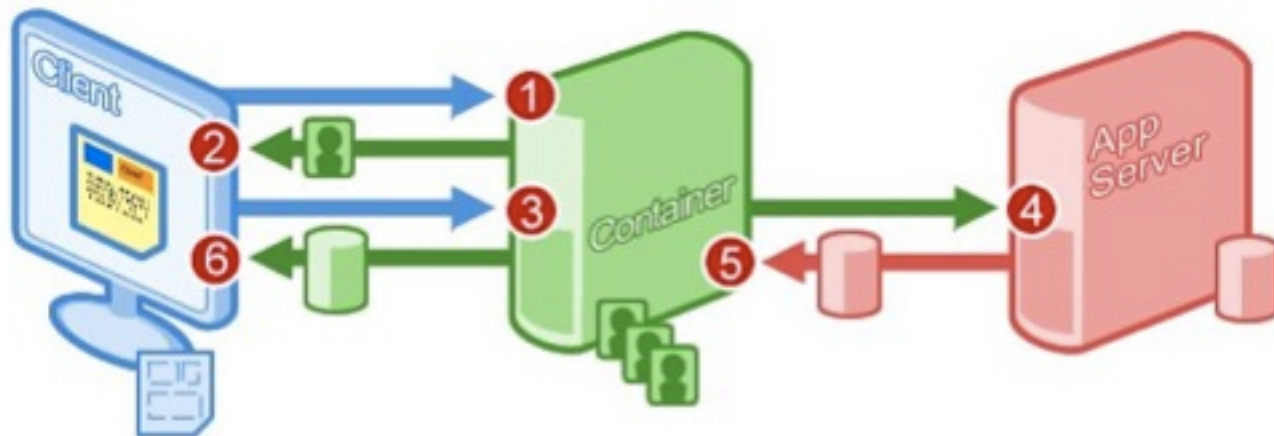
And now the fun part ...

✓ Let's write our own gadget in six steps:

  ✓ Hello World, Metadata and Views
  ✓ Static Content and CDN Access
  ✓ It's getting social: People Service
  ✓ Be safe while saving: AppData Service
  ✓ A bit more complex: Accessing your own backend with OAuth
  ✓ Spread it: Viral proliferation with invites

Mittwoch, 10. Februar 2010

DEMO

Mittwoch, 10. Februar 2010

What's on the roadmap 2010?

Mittwoch, 10. Februar 2010

What's on the roadmap 2010?

✓ OpenSocial 0.9

Mittwoch, 10. Februar 2010

schülerVZ studiVZ meinVZ

What's on the roadmap 2010?

✓ OpenSocial 0.9

✓ Activity Service

Mittwoch, 10. Februar 2010

What's on the roadmap 2010?

- ✓ OpenSocial 0.9
- ✓ Activity Service
- ✓ Messages Service

Mittwoch, 10. Februar 2010

schülerVZ studiVZ meinVZ

What's on the roadmap 2010?

- ✓ OpenSocial 0.9
- ✓ Activity Service
- ✓ Messages Service
- ✓ Photos Service

Mittwoch, 10. Februar 2010

schülerVZ studiVZ meinVZ

What's on the roadmap 2010?

- ✓ OpenSocial 0.9
- ✓ Activity Service
- ✓ Messages Service
- ✓ Photos Service
- ✓ Payment API

Mittwoch, 10. Februar 2010

What's on the roadmap 2010?

- ✓ OpenSocial 0.9
- ✓ Activity Service
- ✓ Messages Service
- ✓ Photos Service
- ✓ Payment API
- ✓ Advertising API

Mittwoch, 10. Februar 2010

What's on the roadmap 2010?

✓ OpenSocial 0.9

✓ Activity Service

✓ Messages Service

✓ Photos Service

✓ Payment API

✓ Advertising API

✓ Sandbox improvements
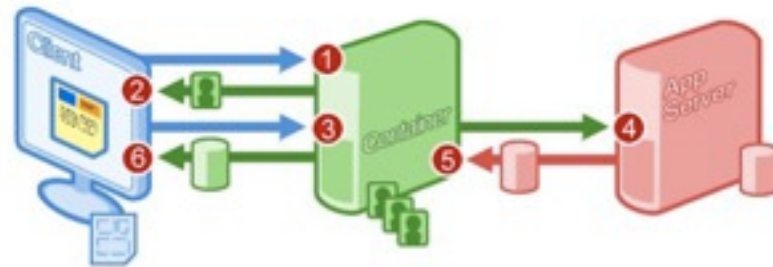
Mittwoch, 10. Februar 2010

What's on the roadmap 2010?

- ✓ OpenSocial 0.9
- ✓ Activity Service
- ✓ Messages Service
- ✓ Photos Service
- ✓ Payment API
- ✓ Advertising API
- ✓ Sandbox improvements
- ✓ OpenSocial REST API in Sandbox

Mittwoch, 10. Februar 2010

What's on the roadmap 2010?

- ✓ OpenSocial 0.9
- ✓ Activity Service
- ✓ Messages Service
- ✓ Photos Service
- ✓ Payment API
- ✓ Advertising API
- ✓ Sandbox improvements
- ✓ OpenSocial REST API in Sandbox
- ✓ OpenID

Mittwoch, 10. Februar 2010

VZnet Netzwerke Ltd. I studiVZ.net I schuelerVZ.net I meinVZ.net

schülerVZ studiVZ meinVZ

friendster

Ning

YAHOO!

orkut

NETLOG

IBM

MTV youthicon2007

XING

Lokalisten.de

iGoogle

hi5

Linked in

ATLASSIAN

myspace
a place for friends

Berlin GTUG

schüler**VZ** studi**VZ** mein**VZ**

OpenSocial's Monthly Reach

Mittwoch, 10. Februar 2010
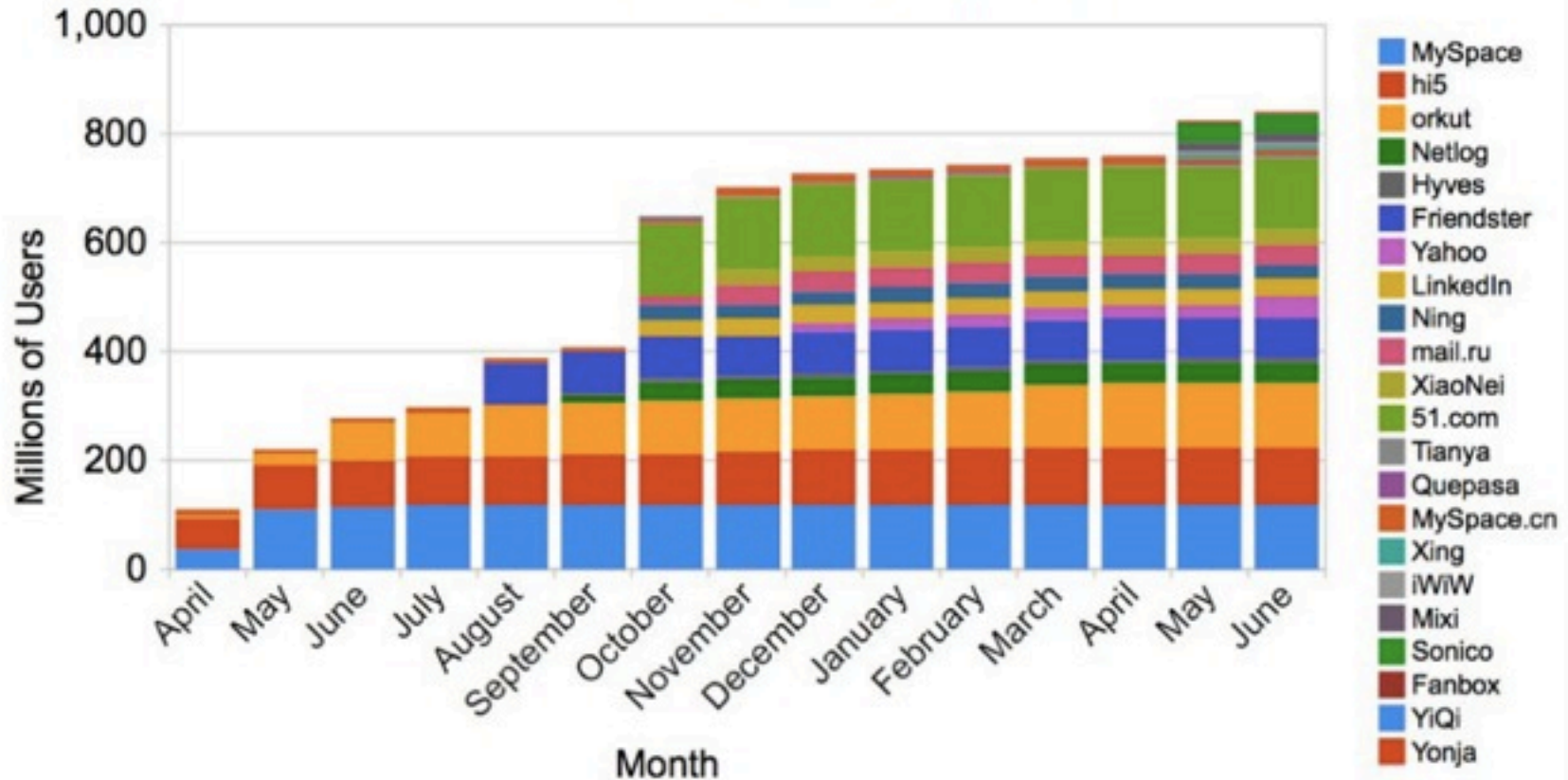
And at VZ-Netzwerke?

43 Apps in Gallery, ca. 90 Apps live

Launch Dec. 2009

5.37 Million Installations

250.000 Unique Users at Canvas Views

16.1 Million Users

Further information ...

- ✓ http://www.opensocial.org

- ✓ Our blog: http://developer.studivz.net

- ✓ Our wiki: http://developer.studivz.net/wiki

- ✓ Become a developer and get access to our sandbox:
  http://www.studivz.net/Developer and http://www.meinvz.net/Developer

- ✓ Or implement an OpenSocial container yourself:
  http://incubator.apache.org/shindig/

Mittwoch, 10. Februar 2010

Thank you!

Contact:

Bastian Hofmann

bhofmann@vz.net

http://www.studivz.net/bastian