

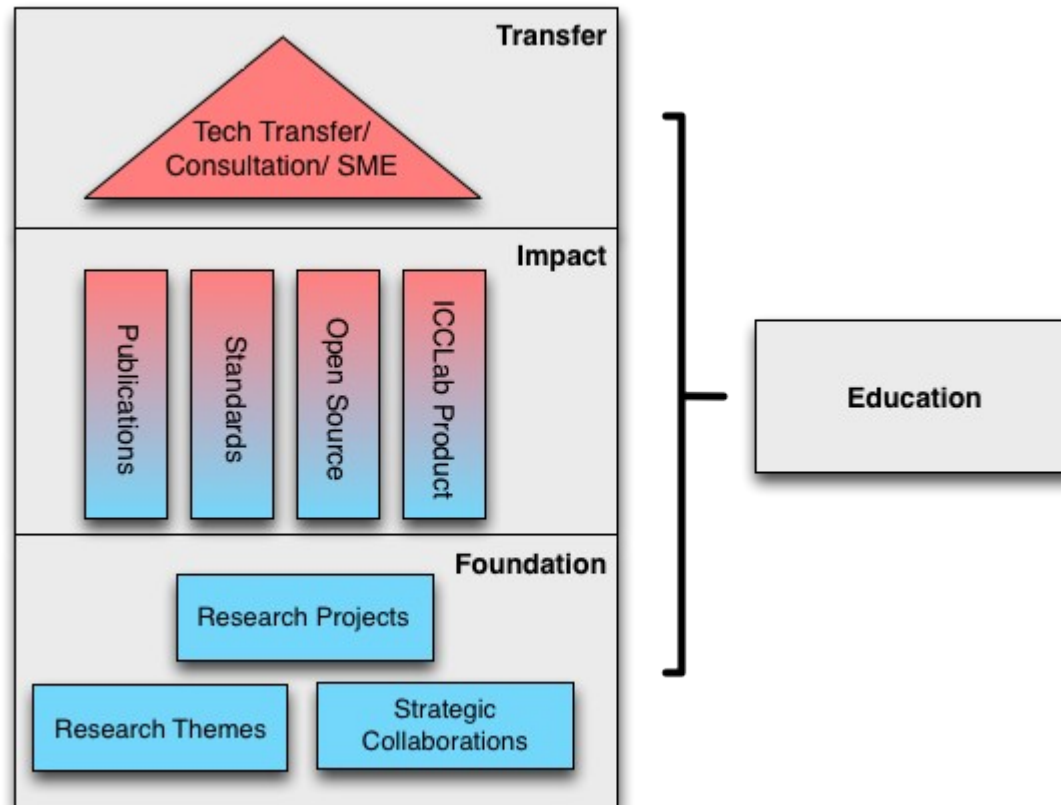


# InIT Cloud Computing Lab

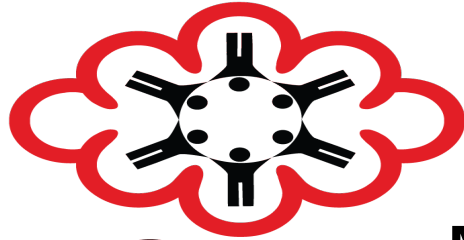
Thomas Michael Bohnert  
Andy Edmonds, Christof Marti  
#ICCLab / ZHAW  
[www.cloudcomp.ch](http://www.cloudcomp.ch)



# ICCLab Research Approach



# Open Cloud Computing Interface



**Occi**

Open Cloud Computing Interface

Protocol and API for  
Management Of Cloud Service  
Resources.





*OCCL was originally initiated to create a remote management API for IaaS, PaaS model based Services*



WIRTSCHAFT.  
WACHSTUM.  
WOHLSTAND.



# Open Source Infrastructure-as-a-Service

|  | Year Started  | License | Hypervisors Supported   |
|--|---|---------|---|
|   | 2008  | GPL     | Xenserver, XCP, KVM, Vmware, OVM, Hyper-V                                 |
|   | 2006  | GPL     | Xen, KVM, VMware  |
|  | 2010<br>(Developed by NASA by Anso Labs previously) | Apache  | VMware ESX and ESXi, Microsoft Hyper-V, Xen, KVM and Virtual Box and more |

Source: "Crash Course in Open Source Cloud Computing"  
David Nalley, CloudStack Community Manager

# Adopters



# OpenStack in the ICCLab

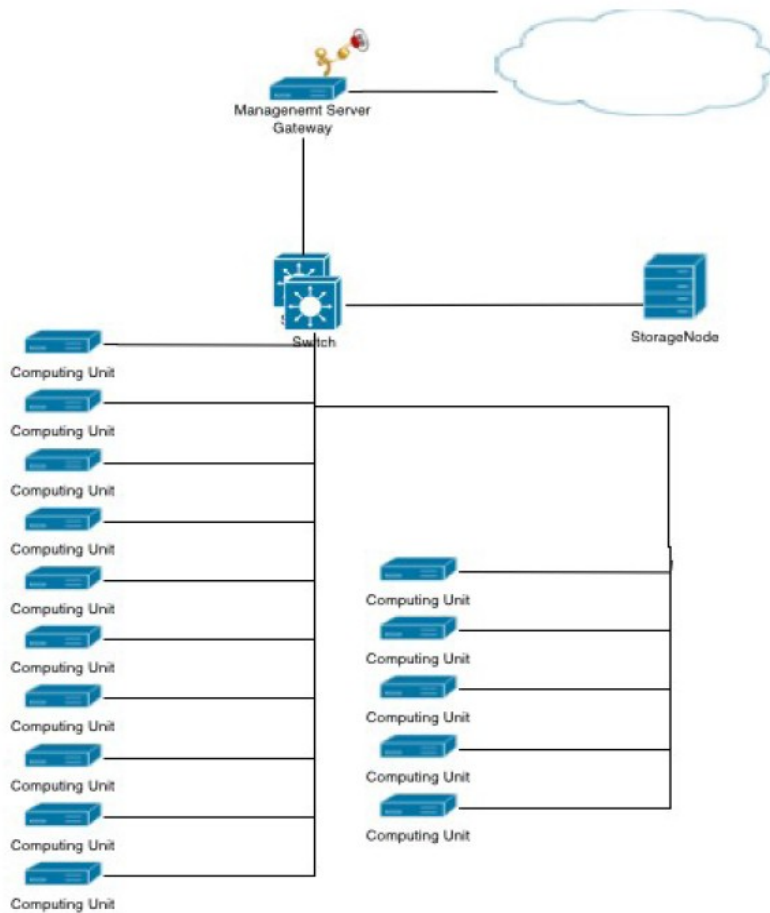
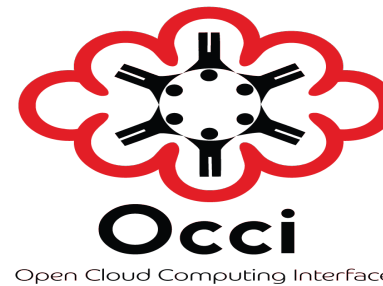


Figure1: Overview



# Future Internet Public Private Partnership

**2x € 300 MILLION**

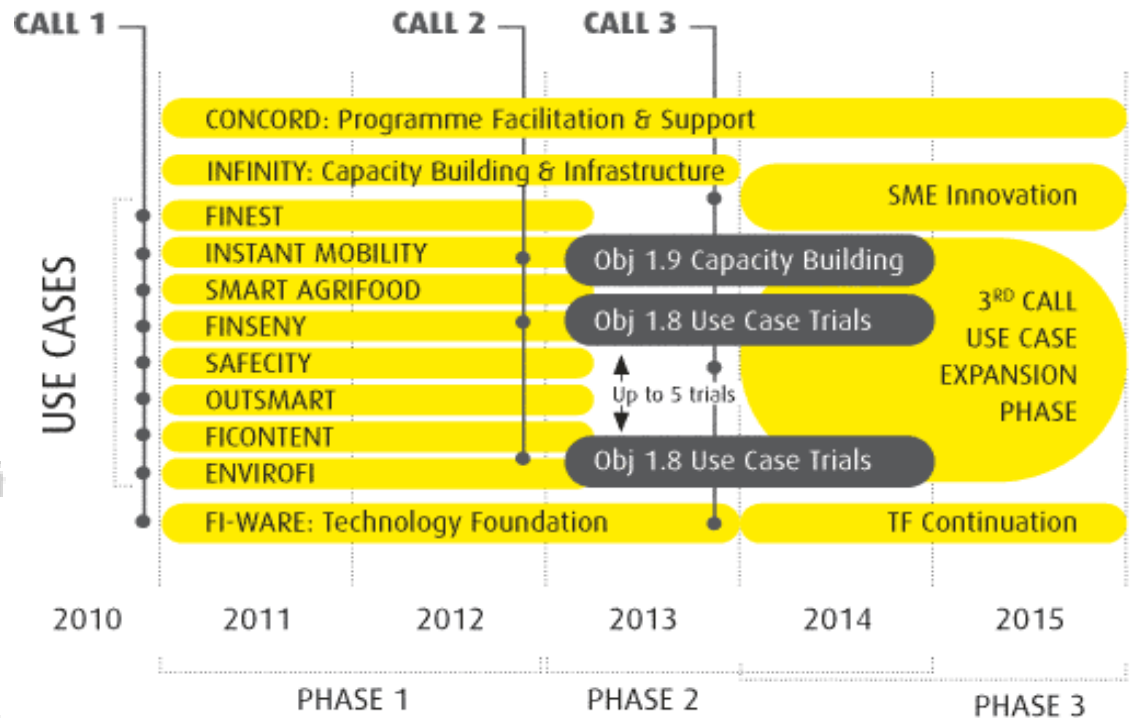
INVESTMENT BY THE EUROPEAN COMMISSION & PROGRAMME PARTICIPANTS

**158** PARTNER ORGANIZATIONS AND COMPANIES

INDUSTRY SHARE IN THE PROGRAMME **68%**

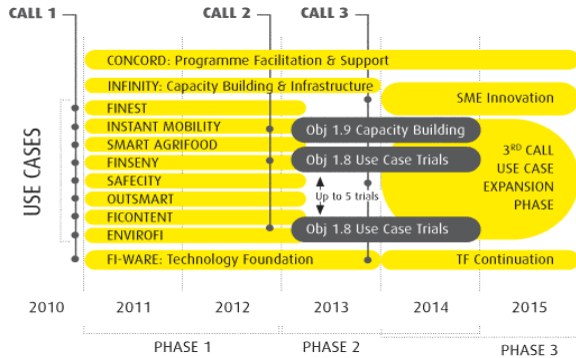
**23** COUNTRIES REPRESENTED (2 FROM OUTSIDE EUROPE)

**18** ACADEMIC INSTITUTIONS



[www.fi-ppp.eu](http://www.fi-ppp.eu)

# Future Internet Public Private Partnership



## Main data

26 partners  
 5 Universities  
 4248 Person Months  
 (excl. open calls)

Total Funding 41 M€  
 Open calls 12,3 M€  
 Total budget 66,4 M€

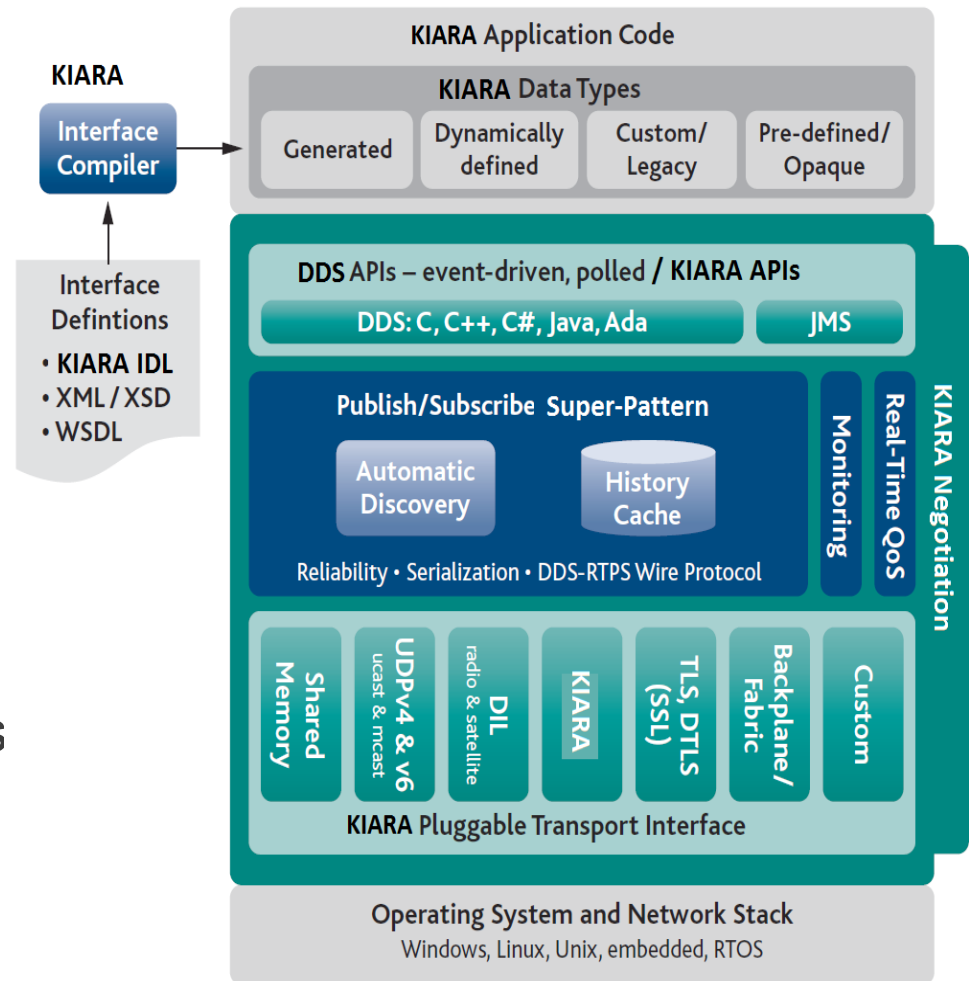
Three years duration



# Future Internet Public Private Partnership

- KIARA

- Middleware for **efficient and optimised** service communications
- **QoS/Security**-aware invocation of services and
- **Interoperable** exchange of messages
- **Binds Generic Enablers** together



SDN/OpenFlow. Delay-Tolerant. Content-Centric **FI-WARE I2ND**

# Future Internet Public Private Partnership

- <http://www.fi-ware.eu/open-call/>
  - Advanced Web-based User Interface Ges
  - Stream-oriented GEs
  - Cloud Proxy Extended Development and Management Platform GE

# Future Internet Public Private Partnership

Call publication on the project web site 1st August 2012

Deadline for proposals submission 7th November 2012

| <b>Activity/Milestones</b>  | <b>Start</b>                                       |
|---|--|
| Call publication on the project web site                          | 1st August 2012                                    |
| Deadline for proposals submission                                 | 7th November 2012                                  |
| e-mails for acknowledgement of receipt                            | 8 <sup>th</sup> – 9 <sup>th</sup> November 2012    |
| Proposals evaluation  | 8th November 2012 – 23 <sup>th</sup> November 2012 |
| Sent report of the consensus view of the experts to all proposers | 26 <sup>th</sup> November 2012                     |
| Negotiation   | Last week November 2012 –<br>Mid December 2012     |
| Acceptance by FI-WARE Consortium                                  | Mid December 2012                                  |
| Acceptance by the Commission                                      | January 2013                                       |
| Signature of the Consortium Agreement                             | January-February 2013                              |

# Future Internet Public Private Partnership

- **2nd FI-PPP Call**
  - **Very close (Oct 2012)**
- **3rd FI-PPP Call**
  - **Interesting opportunity to exploit FI-PPP**

# ICCLab Community



Swiss OpenStack User Group!  
Meetup soon to be announced

 @openstackch

 <http://linkd.in/os-ug-ch>

**Join in!**

# Backup