



## Breakout 2: Internet of Services & heterogeneous clouds

**Franck Fleurey**, SINTEF & Technical Coordinator, HEADS  
**Marc Shapiro**, INRIA & LIP6 & Coordinator, Syncfree

# Projects & presenters

## Call 8 Lightning Talks

- ◆ **ARTIST** - Karim Djemame, University of Leeds
- ◆ **BETaaS** - Luca Cucchi, INTECS
- ◆ **Broker@Cloud** - Ewald Quak, SINTEF
- ◆ **CloudScale** - Richard Sanders, SINTEF
- ◆ **SUCRE** - Eleni Toli, University of Athens

## Call 10 Lightning Talks

- ◆ **FELIX** - Bartosz Belter, PSNC
- ◆ **Heads** - Franck Fleurey, SINTEF
- ◆ **HTML5Apps** - Daniel Dardailier, WC3
- ◆ **Panacea** - Dimiter Avresky, International Research Institute for Autonomic Network Computing - IRIANC
- ◆ **SeaClouds** - Francesco D'Andria, ATOS Spain
- ◆ **SyncFree** - Tyler Crain, INRIA,

**Call 5 Lightning Talk: SOCIETIES** - Micheal Crotty, TSSG, Waterford Institute of Technology

# Top 5 Cross cutting themes

- ◆ Portability, no lock-in
- ◆ Too many clouds, too many APIs
- ◆ “Transparent” 1 = like a centralized system
- ◆ “Transparent” 2 = show what's really happening (location, availability, information flow, costs)
- ◆ Transformative: not just porting, re-think the way we do things

# Top 5 R&D Challenges

- ◆ Data portability
- ◆ Security
- ◆ Transparency 2
- ◆ Middleware vs. Adapting to platform
- ◆ Heterogeneous infrastructures, devices

# Top 5 New collaboration opportunities and new ideas

- ◆ Comparative platforms for service provider offerings



# A view to the future: A vision of what the interoperable cloud ecosystem will look like in 2016

- ◆ State-of-the-art European providers
- ◆ State-of-the-art European experimental facilities
- ◆ Users can trust their data & computing to the cloud (like they trust their money to the bank)
- ◆ My cloud works with your cloud  
“transparently” 1+2