



**WP3**

# **RINGGrid**

**REMOTE INSTRUMENTATION IN NEXT-GENERATION GRIDS**

**Thomas Prokosch, GUP**

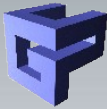





<http://www.ringgrid.eu/>

# WP3 Achievements and Roadmap

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# Partners Involved

partner	PMs
 GUP	8
 GRNET	5
 CLARA, now: REUNA+RNP	5
 CNIT	5
 CNR/ISTI	5
 PSNC	3
 TUI	3
 UniS	2

# WP3 Achievements and Roadmap

- workpackage objectives
- content of deliverables
- workplan/next period
- dissemination
- management aspects
- assessment of foreseen project outcome

# WP3 Objectives

1. evaluation of existing **network/grid infrastructures** for RI
2. analysis of scientific **instrument requirements** with respect to
  - research network infrastructure
  - state of the art of grid middleware
3. **requirements def.** for RI systems
4. **information system** with results

# Fulfillment of Objectives 1/3

1. evaluation of existing network/grid infrastructures for RI

*D3.1: "State of the Art in Networks and Grid Infrastructures"*

This deliverable will provide the state of the art of current networks and grid infrastructures with respect to remote instrumentation.

# Fulfillment of Objectives 2/3

2.analysis of scientific instrument req. with respect to

- research network infrastructure
- state of the art of grid middleware

*D3.2: "Status of Grid Middleware and Corresponding Emerging Standards for Potential Usage in Sharing Scientific Instruments via (International) Networks"*

This deliverable will define and evaluate user requirements in terms of grid infrastructure and software in networks.

# Fulfillment of Objectives 3/3

3.requirements def. for RI systems

4.information system with results

*D3.3: "Summary of requirements and needs to be currently fulfilled to efficiently introduce the remote instrumentation idea into practice"*

Final report will present the summary of the guidelines, practices, requirements needed for the deployment of infrastructures for remote instrumentation systems.



# Deliverables: D3.1

## "State of the Art in Networks and Grid Infrastructures"

already delivered in time (due at Jan-2007)

- introduced networking technology taxonomy
- covered: high-speed networking base technologies (WDM, Lambda, ODU)
- switching (OBS, GMPLS, DRAGON, RPR, PoS)
- network layer (IPv4, IPv6)
- transport/application layer (DCCP, SCTP, UCLP, error correction, performance, ...)
- RI infrastructures (Globus, Gridge, VLab, ...)
- testbeds (GRIDCC, EXPRoS, GEANT2, EGEE, ...)

# Deliverables: D3.2

## **"Status of Grid Middleware and Corresponding Emerging Standards for Potential Usage in Sharing Scientific Instruments via (International) Networks"**

in the works, finished when due (Apr-2007)

- definition of middleware
- supporting technologies (OGSA, workflow, resource/data mgmt., web services, ...)
- middleware (Globus, CIMA, SRM, SRB, gLite, ...)
- infrastructure (VLab, GRIDCC)
- user req. (based on the examples: MC&A, astronomy, spectroscopy, sensors, ...)
- use cases (SOAR, NOAO, NMR spectrometer)



# Deliverables: D3.3

**"Summary of requirements and needs to be currently fulfilled to efficiently introduce the remote instrumentation idea into practice"**

to be started in a few days

- all preparatory works have already been completed

# WP3 Input/Outcome

- input from WP2
- outcome: content of **deliverables**
- serve as basis for **WP4, WP6, WP5**
- content: study of **networks and grid infrastructures**
  - state of the art with respect to RI
  - status of grid middleware and standards
  - summary of req. for introducing RI

# Project Work Plan for WP3

- D3.2
  - content is written right now
  - will be finished and submitted right after this review
- D3.3
  - start work beginning of **May-2007**
  - fix table of contents by **mid May-2007**
  - write chapters until **beginning Jun-2007**
  - until end of June: proofreading as well as
  - web-based **database** for RI requirements

# WP3's Next Period

- lasts from Apr-2007 to Jun-2007
- WP3 ends at the **end of June**
- finish deliverables, database
- help **WP5** with dissemination, standardization
- cooperate with **WP4** so that they can efficiently achieve their goals (communication: joint meeting, provide deliverables describing state of the art)

# Dissemination 1/2

- what we **currently** have:
  - brochure describing WP3
  - public deliverable (web page)
- what we still want to **achieve**:
  - finish outstanding **deliverables** (public)
  - create a **database** with our results
  - **lecture** at IMEKO and RINGrid meeting Sep-2007 titled: "Requirements to Efficiently Introduce the Remote Instrumentation Idea into Practice"
  - (continued...)



# Dissemination 2/2

- what we still want to **achieve** (...continued):
  - create a web page after the lecture web page gives **transcript** as well as **Q&A**
  - **keynote** speech at INGRID conference (2008)

# Management Aspects

- main **communication** channel:  
mailing list, personal emails
- deviation from the "standard"  
teleconferencing solution VRVS:  
**Marratech**
  - **whiteboard** feature  
essential for drafting deliverables
  - ability to **record meetings**  
write minutes later
  - better **user interface**

# Work Coordination

- 3 teleconferences via VRVS
- 2 teleconferences via Marratech
- 4 face-to-face meetings in St. Margherita
  - status presentation
  - 2 WP3 work meetings
  - roadmap and planning presentation
- WP3 part of kickoff meeting in Poznan, Oct-2006  
Martin Polak joined via Skype phone

# Likelihood of Project Success

- Achieving **objectives**
  - only D3.3 has not started
  - quite confident that all objectives will be achieved
- Achieving **project results**
  - we have to cooperate with other WPs
  - no risks described in "Risk Assessment" have occurred
- Achieving **impact** originally foreseen
  - depends mostly on WP5

# Conclusion

- we have reached our goals according to the project plan
- there were no major obstacles
- work was smoothly, we did not exceed the time foreseen

**Thanks for your attention!**