

A Summary

by

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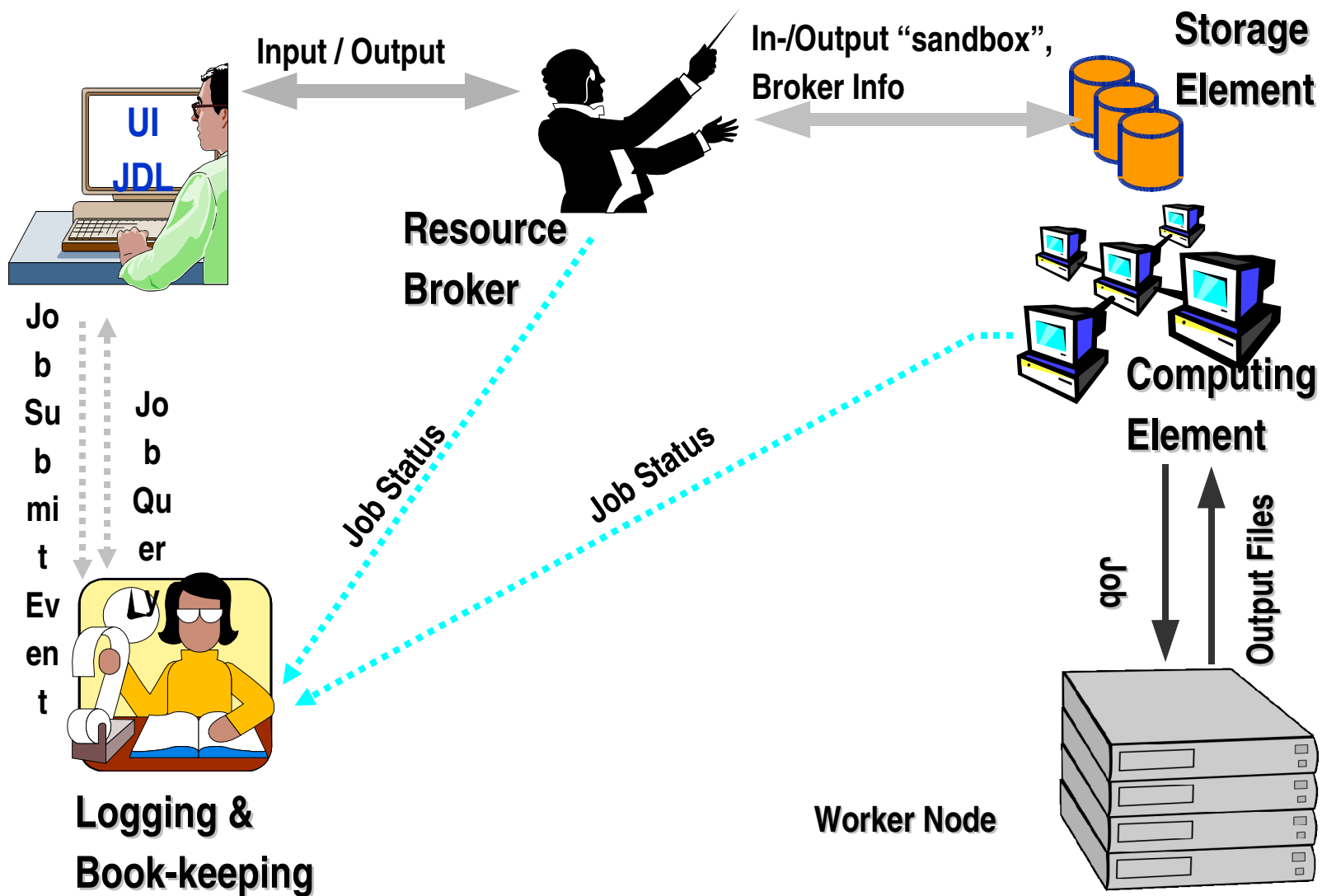


Bundesministerium
für Bildung
und Forschung

- Why monitoring is important
- Goals of AP2
- Prototype implementations
- Integration in LCG
- Summary

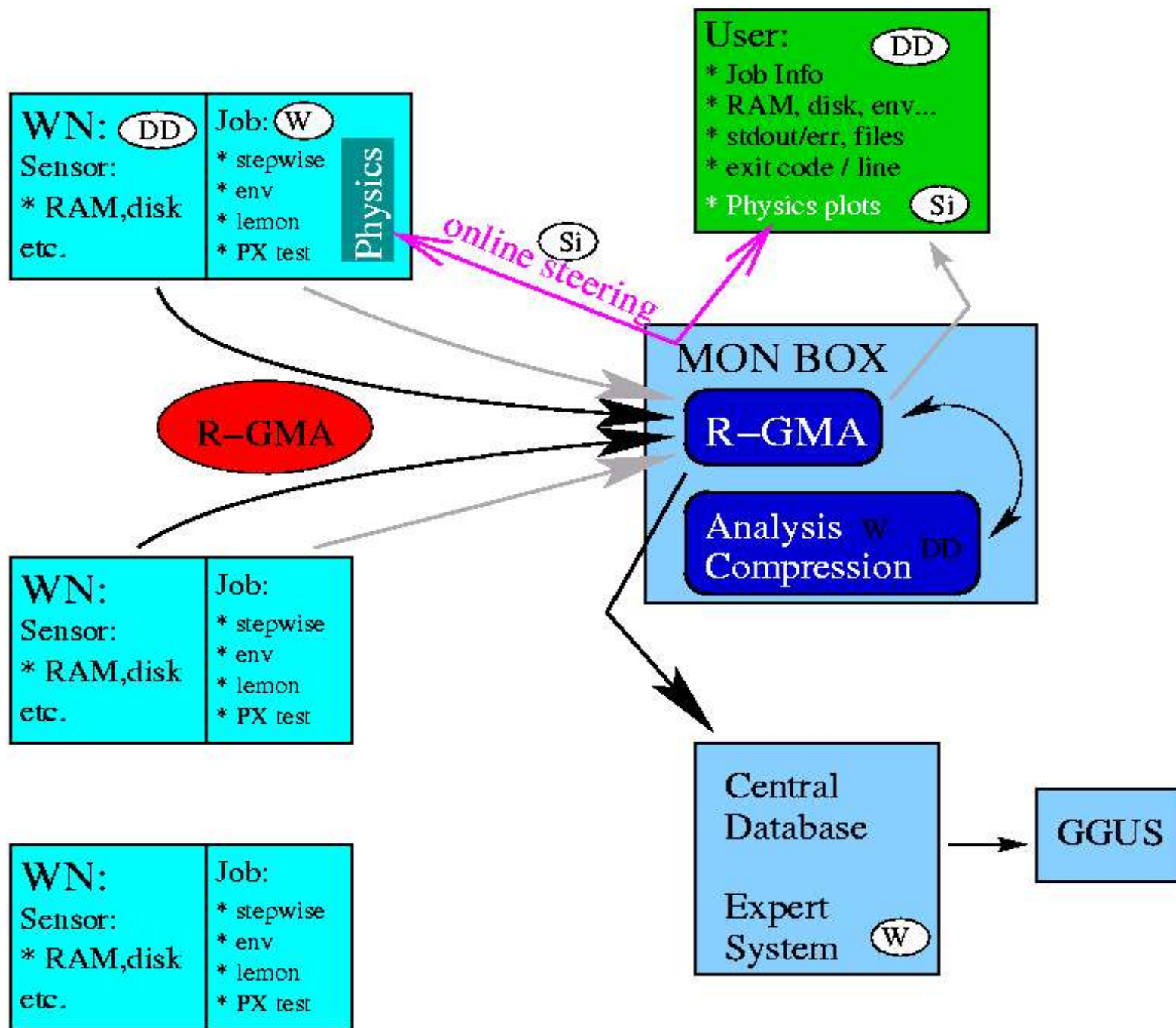
Why monitoring is important

- Grids are large inhomogeneous systems
- Failures can have many different reasons:
 - Grid middleware configuration
 - WN configuration
 - WN problems (disk, network, firewall...)
 - Missing software (e.g. required libs)
 - User Software
- User:
„Why are some/many/all of my jobs failing?“
- Proper monitoring helps finding the reasons

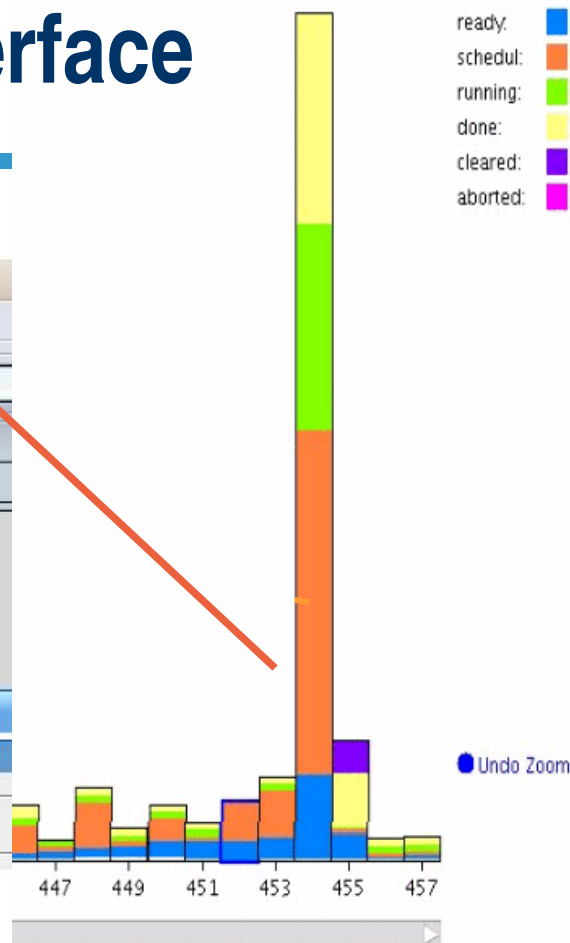
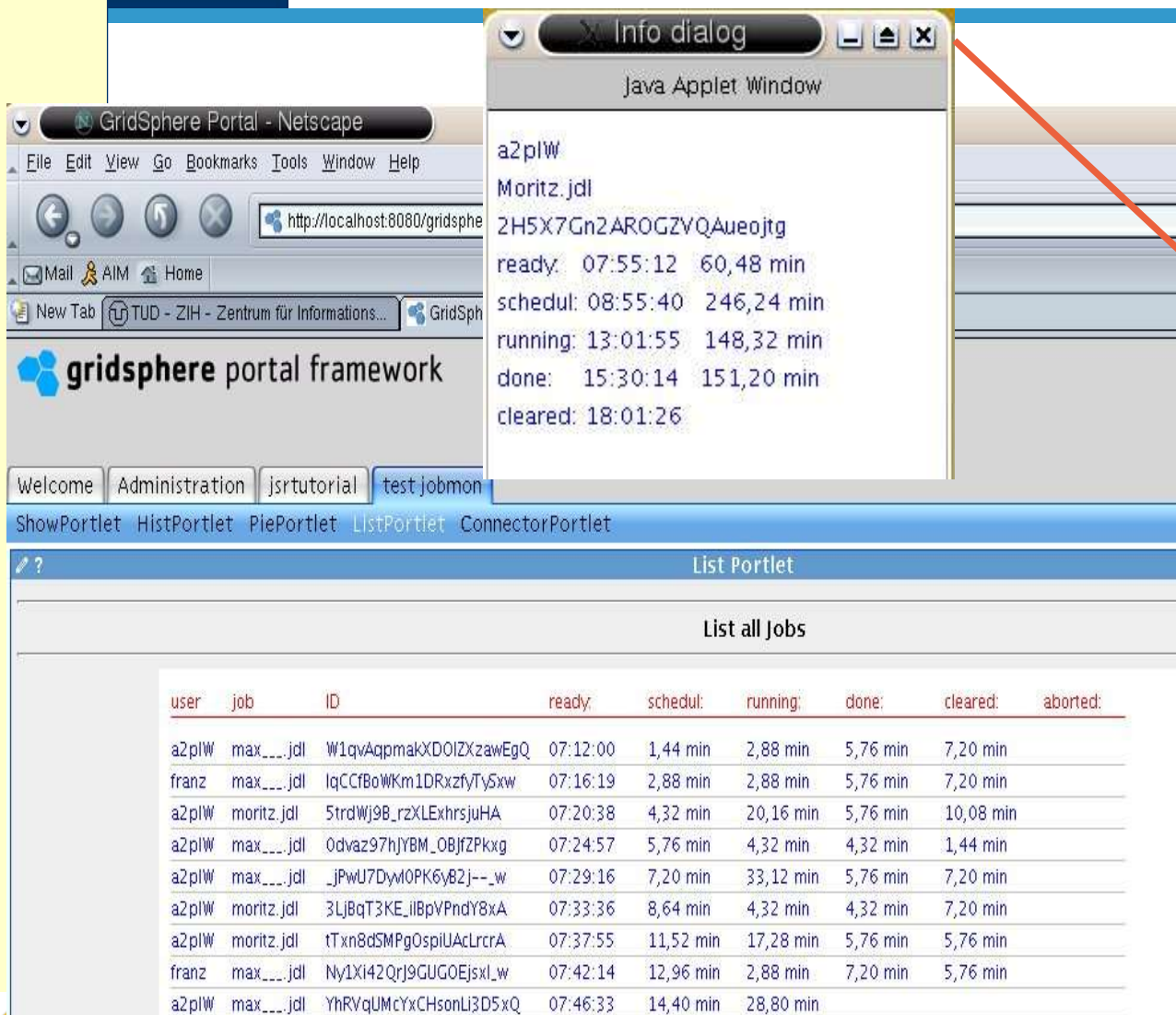


- „Fill the gaps“ in LCG concerning monitoring
- Provide user tools
- Collect system- and job-level information
- Provide this information to the user (Web-Portal)
- Automatic analysis for error detection (expert system) and recovery (job wrapper)
- Provide means for non-destructive user intervention/interaction

- TU Dresden
 - Job-/resource-usage monitor, user interface (Web portal)
- Universität Siegen
 - Online steering, interactive communication
- Bergische Universität Wuppertal
 - error detection/prevention, expert system

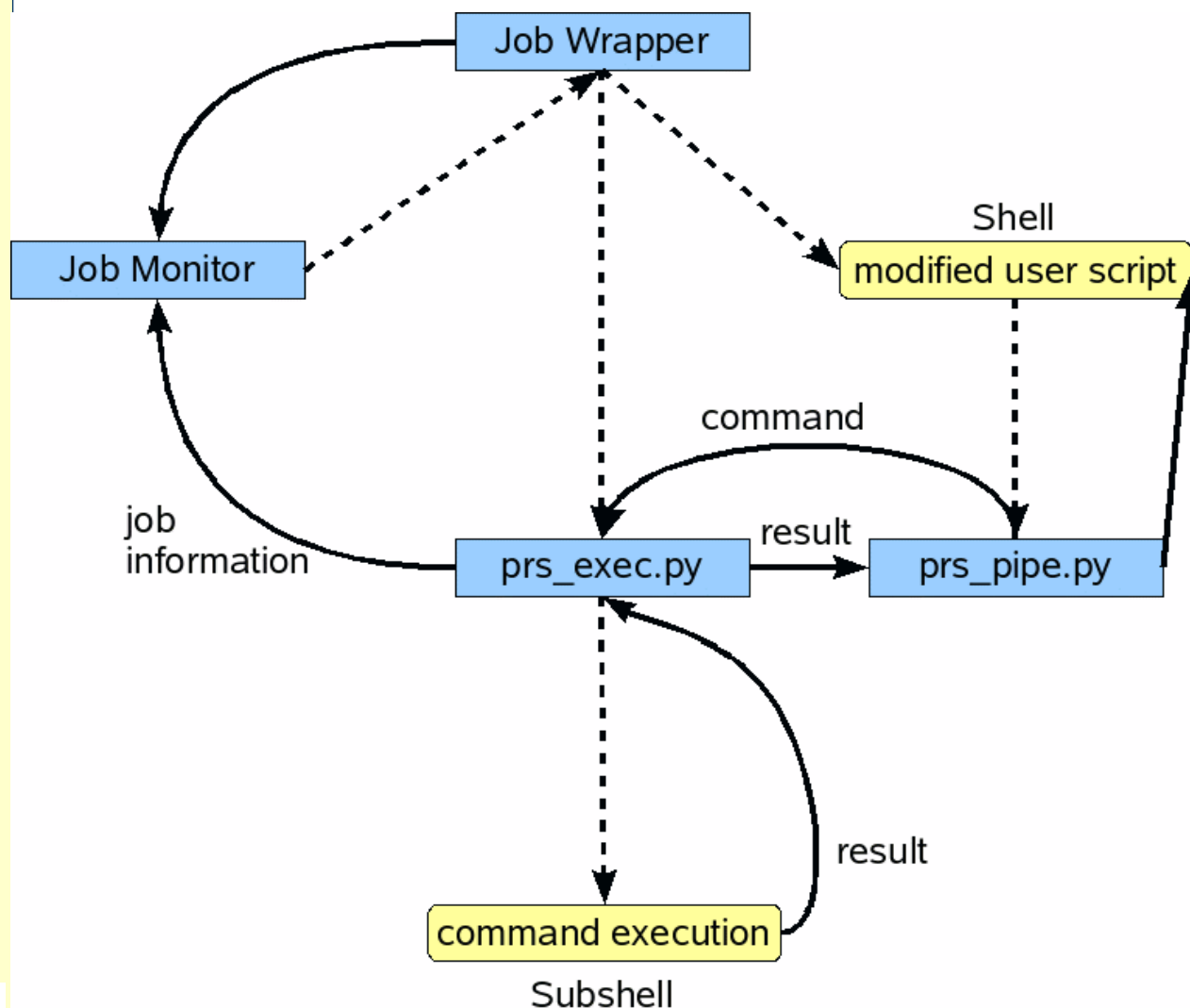


Prototypes: The Web-Interface



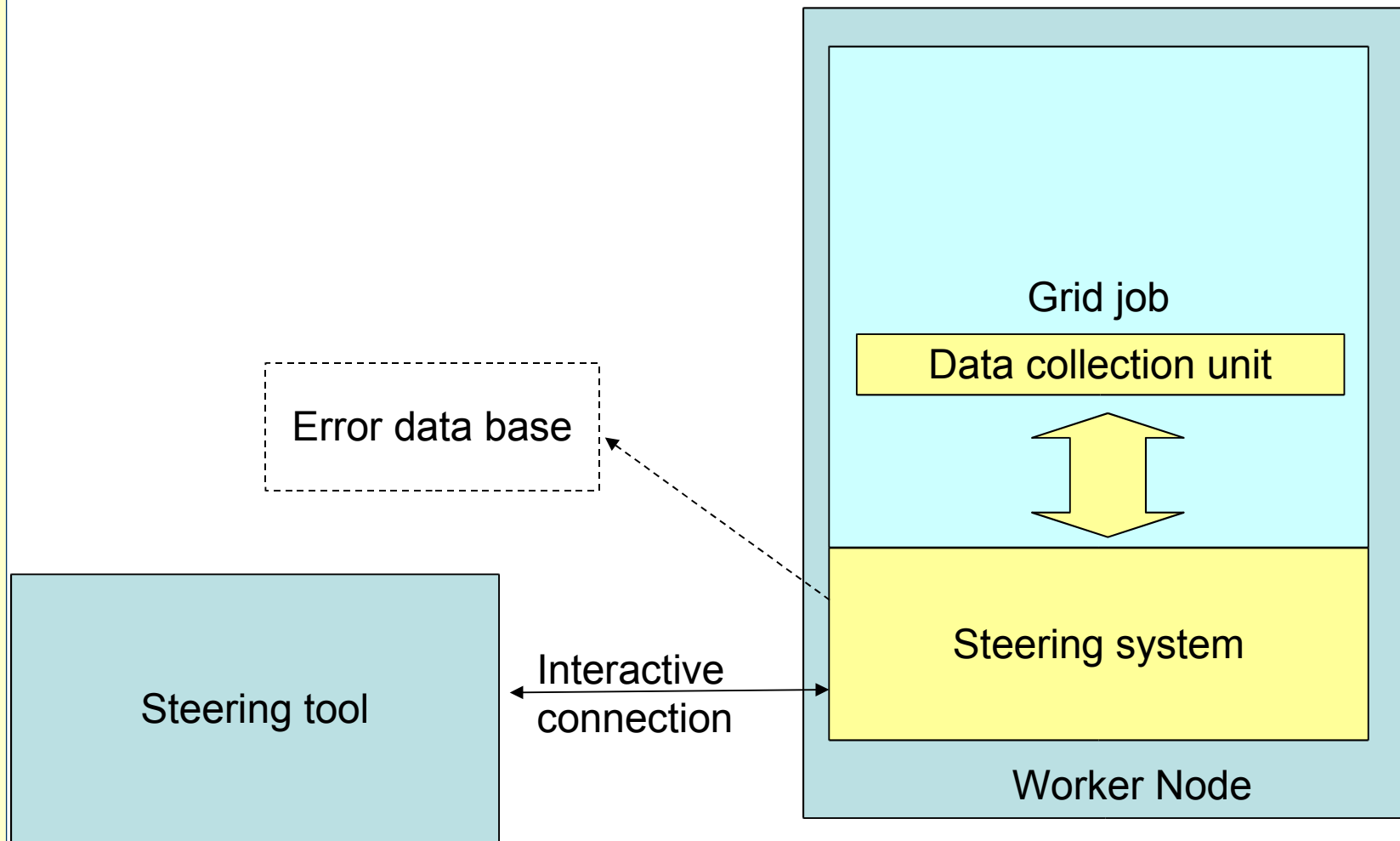
Undo Zoom

Prototypes: Job-Wrapper



- Runs on WN
- collects information on job
- puts monitoring data into R-GMA

Concept: Online Steering



- First meetings in January
- Information collection
 - can be put in LCG/gLite release soon
 - only run at user's request
- Job-Wrapper integrates seamlessly in LCG
 - could enter LCG/gLite release now/soon
- other components later
(as they become sufficiently mature)
- First full release planned for Q4/06



- Job Monitoring in Grids is required for locating and classifying failures
- D-Grid HEPCG AP2 aims to provide:
 - Job- and system-level monitoring
 - Convenient user tools (e.g. Web GUI)
 - Pseudo-interactive user intervention
- Prototypes of several components available
- Contact to LCG has been established
- Will provide „releasable“ packages soon