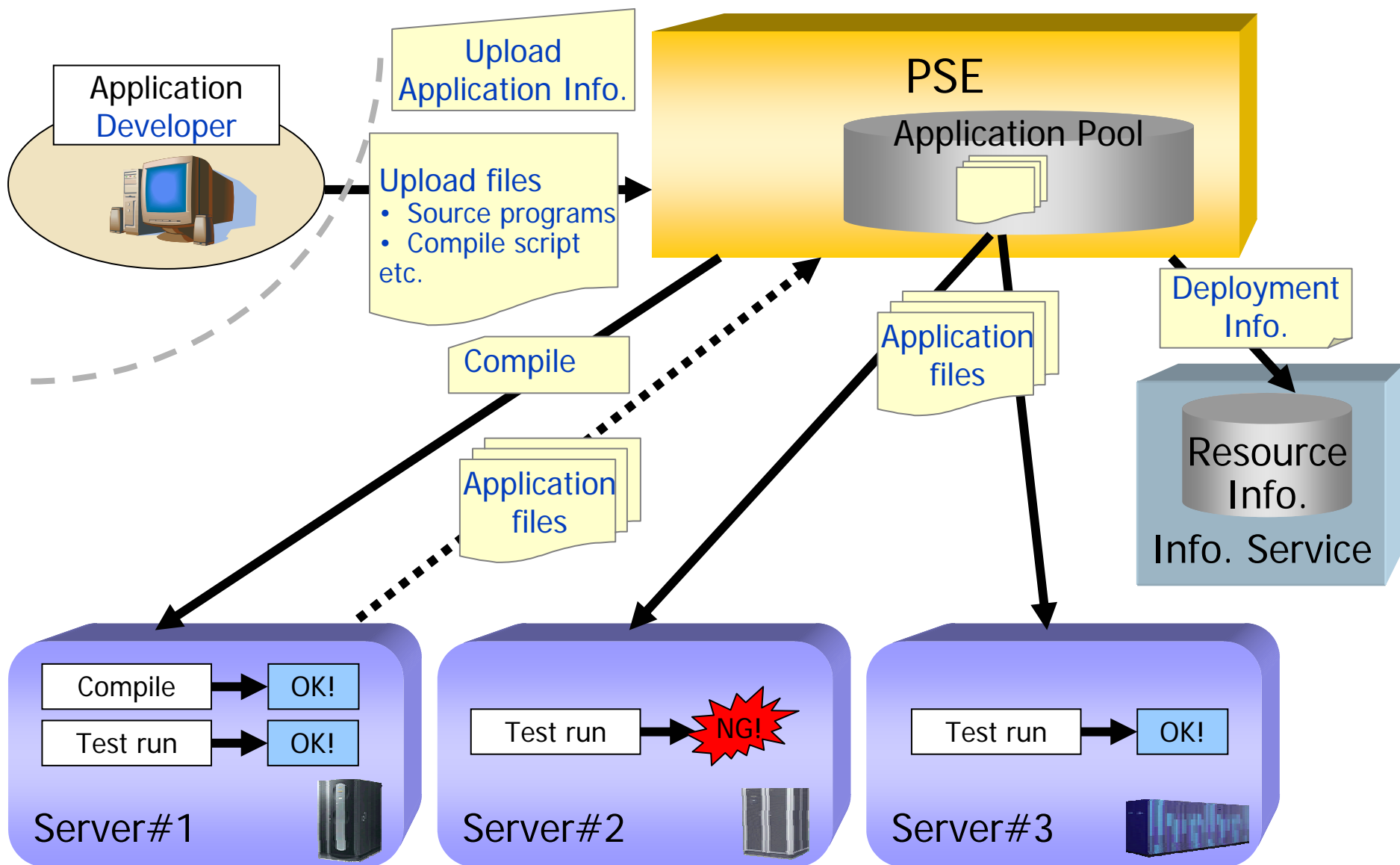


NAREGI PSE with ACS

May 24, 2005
NAREGI PSE team

- NAREGI PSE usage scenario
 - Registration, Compilation and Deployment
 - Retrieve and Execution
- Use case scenario relating to NAREGI PSE and ACS
 - Application Pool using Application Repository
- Status for issues presented at GGF13



■ Registration

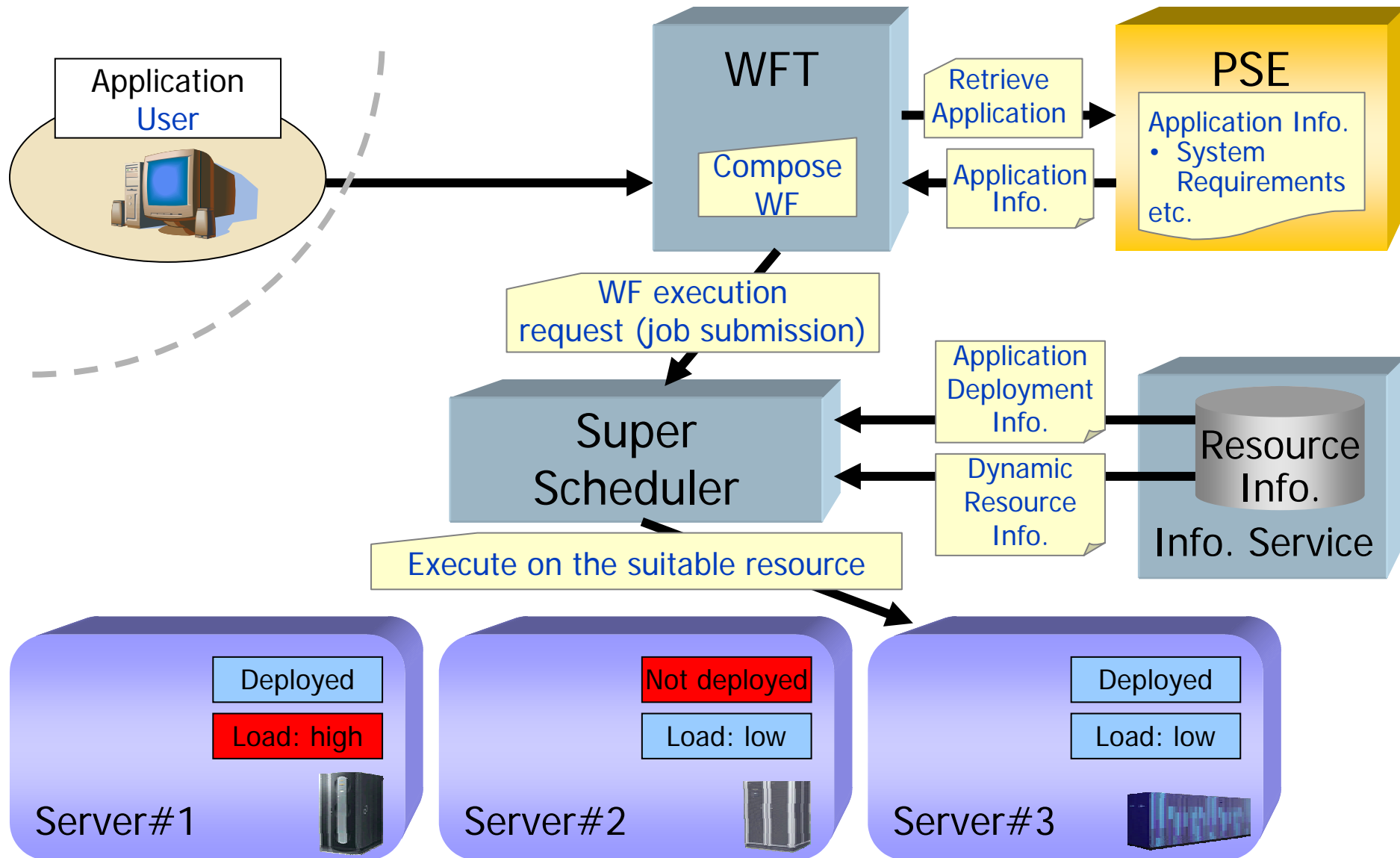
1. Upload files (e.g., source code/executables, compile script, test run script, initial input files, etc.) to the PSE application pool
2. Upload information (e.g., description, system requirements, etc.) associated with the uploading application to the application pool

■ Compilation (if needed)

1. Select an application and a server for compilation
2. PSE transfers necessary files (e.g., source code) from the application pool to the server
3. PSE compiles them on the server
4. (Optional) PSE performs a test run to verify the compilation
5. PSE transfers files (e.g., executable) from the server to the application pool

■ Deployment

1. Select an application and servers that meet the system requirements for application deployment
2. PSE transfers the executable in the application pool to the selected servers
3. (Optional) PSE performs a test run to verify deployment on each servers
4. PSE registers information on the deployed servers to the information service



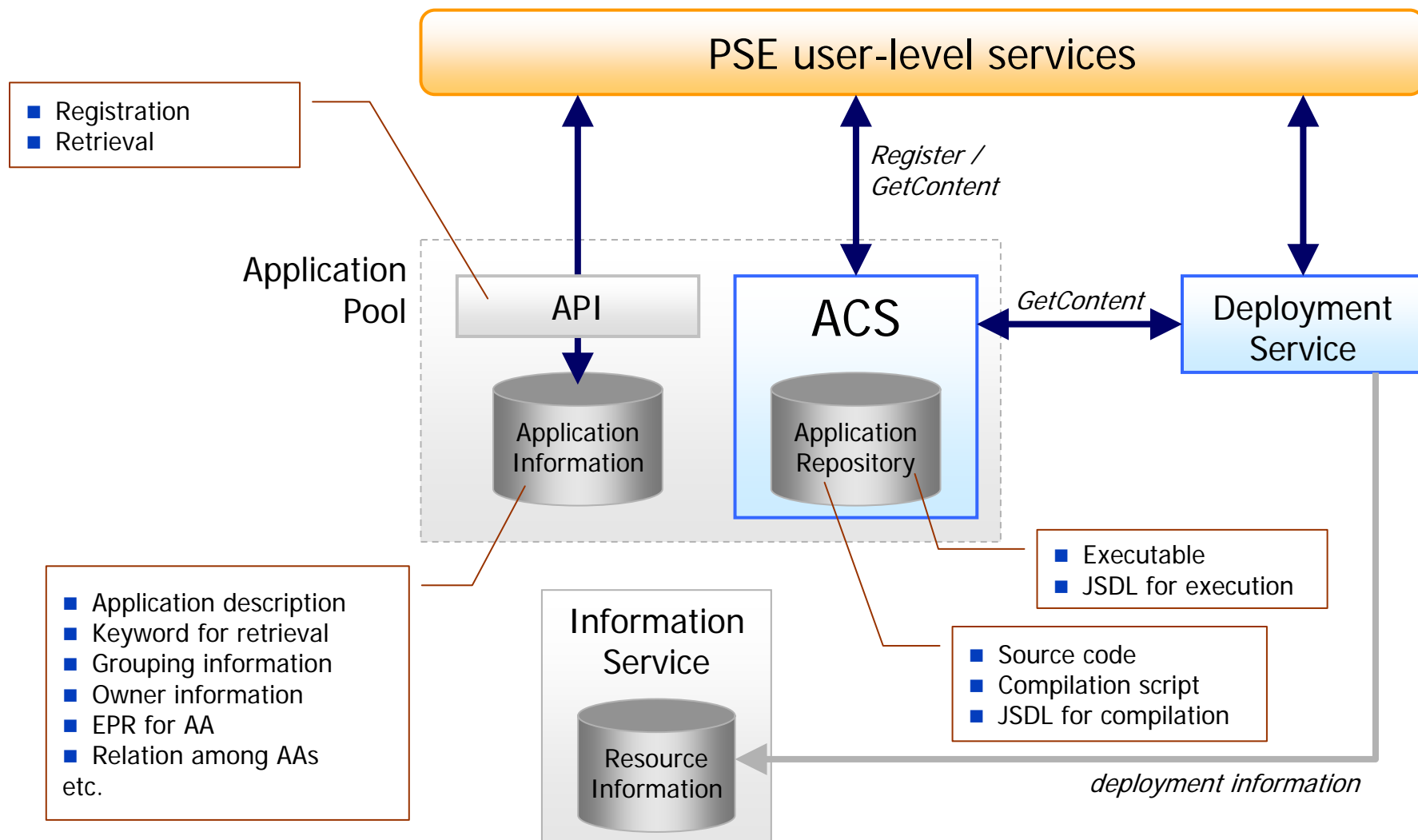
■ Application Retrieval

1. Retrieve application using GUI
2. Import the information of selected application (system requirements - JSDL, etc.) from application pool to workflow icon of Workflow Tool (WFT)

■ Execution

1. Compose a workflow job from the registered workflow icon
2. Submit a job to Super-Scheduler using WFT
3. Super-Scheduler dispatches resources referring the resource information provided by Information Service

■ Application Pool = Application Repository + Application Inf. DB



- “Not only static contents in NAREGI PSE (e.g., compiled binaries for multiple specific targets, output files, etc.)”
 - Compiled binaries for multiple specific targets
 - NAREGI PSE will manage them outside of Application Repository.
 - One Application Archive has a set of files for one target (source files with compilation script or compiled binary for one specific target).
 - Output files
 - NAREGI PSE does not manage output files.
 - History of executions (e.g., output files, etc.) will be managed by NAREGI PSE in the future.
- “How do we express a set of single applications such as coupled simulations on heterogeneous resources?”
 - We assume that a set of single applications is represented as a NAREGI workflow.
 - NAREGI workflow is composed by using application information registered in NAREGI PSE. NAREGI workflow is also stored in the application pool.