Integration of Advance Reservation in WMS

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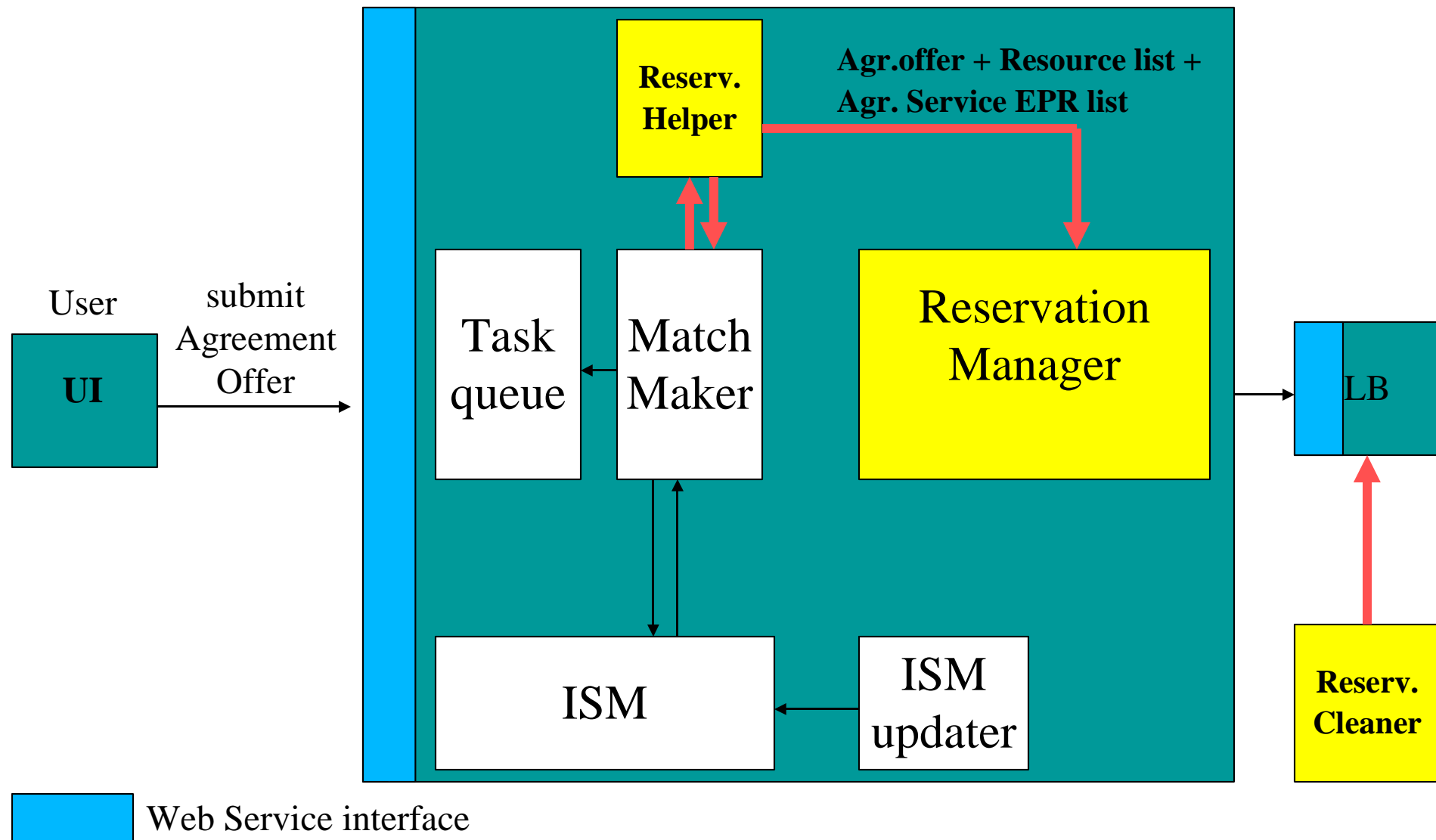
CNAF INFN

JRA1 IT-CZ meeting

(Co-)Allocation and the WMS (1/2)

- Reservation Manager: a proposed component of the WMS; it should handle:
  - Simple agreements (to start with)
  - Compound agreements (next in development roadmap)

- Why integrated in the WMS?
  - Agreement offer submission: similar to job submission
  - Agreement status: information from Logging and Bookeeping
  - Agreement Service discovery: a list of Agreement Services is tried (more powerful than submission to a single Agreement Service)
    - based on matchmaking library
    - takes advantage of the ISM
  - Agreement offers can be re-submitted periodically in case of failure

(Co-)Allocation and the WMS (2/2)

Report: Advance Reservation and Allocation

- JRA1 – JRA4 meeting, 2nd EGEE Conference in Den Haag:
  - In-depth discussion of the GRAAP Agreement architecture (Agreement Service and Reservation and Allocation Service Provider)
  - Agreement to follow the two-layer GRAAP architecture
  - Network Element definition (ongoing): two opposite possibilities
    - Path-oriented (following the DataTAG approach) - preferred
    - Service Provider-oriented (one NE per Service Provider)
  - No true support of bandwidth guarantees during the EGEE project due to a roadmap between JRA4 and GN2
    - ↙ no resource allocation, only admission control
  - Actions:
    - Tiziana: to provide the (Network) Agreement Service WSDL (no WSRF)
    - JRA4: to provide the "Bulk transfer" and "Virtual Leased Line" agreement templates
    - JRA4: NE definition (with joint phone call as soon as possible)

Developing phase

- jdl attributes have been updated

```
ServiceCategory   NetworkElement/StorageElement/...
Functionality     VirtualLeasedLine/SpaceManagement/..

AverageBandwidth [Gbit/s]
SourceDomain
Source                                          NetworkElement
DestinationDomain
Destination


SpaceSize              [Gbyte]        StorageElement
StorageTransferProtocol
```

- submission is under development