AP2 : Job Monitoring

ursprüngliche Ziele

- Entwicklung eines Monitoring-Tools, welches job-basierte Informationen zum Zustand des Rechensystems gibt
- Entwicklung eines Job-Monitoring-Tools, welches die Ausführung von Jobs (Shell, Python) überwacht (im Gegensatz zum Systemmonitoring)
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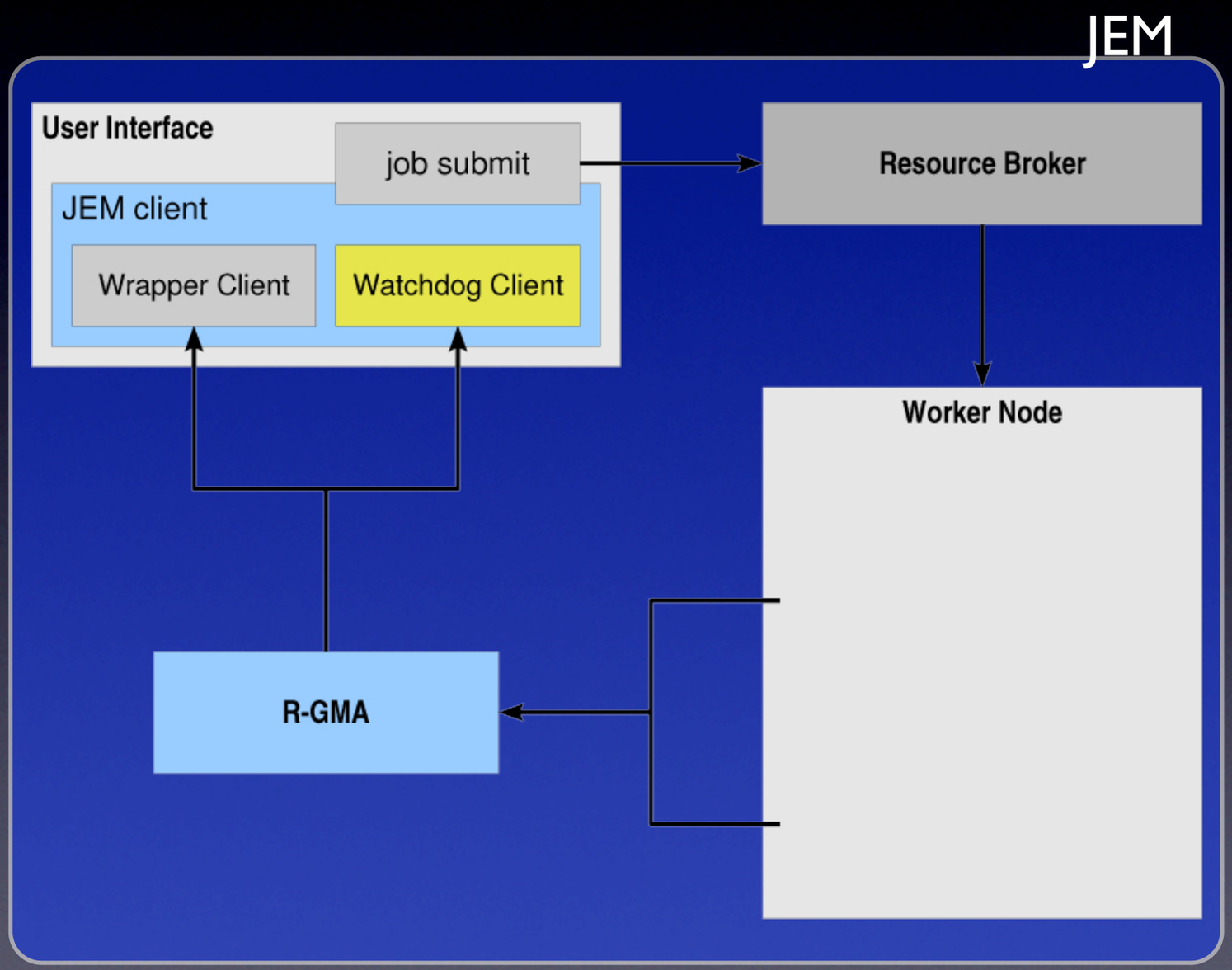
① Monitoring Tool: JEM

- Hintergrund:
  - Erfahrung von DØ: Probleme in verteilten Systemen für den Benutzer schwer zu identifzieren
  - Grid-Systeme (EDG, LCG) geben zu wenig Rückmeldung an den Benutzer

Aufbau von JEM



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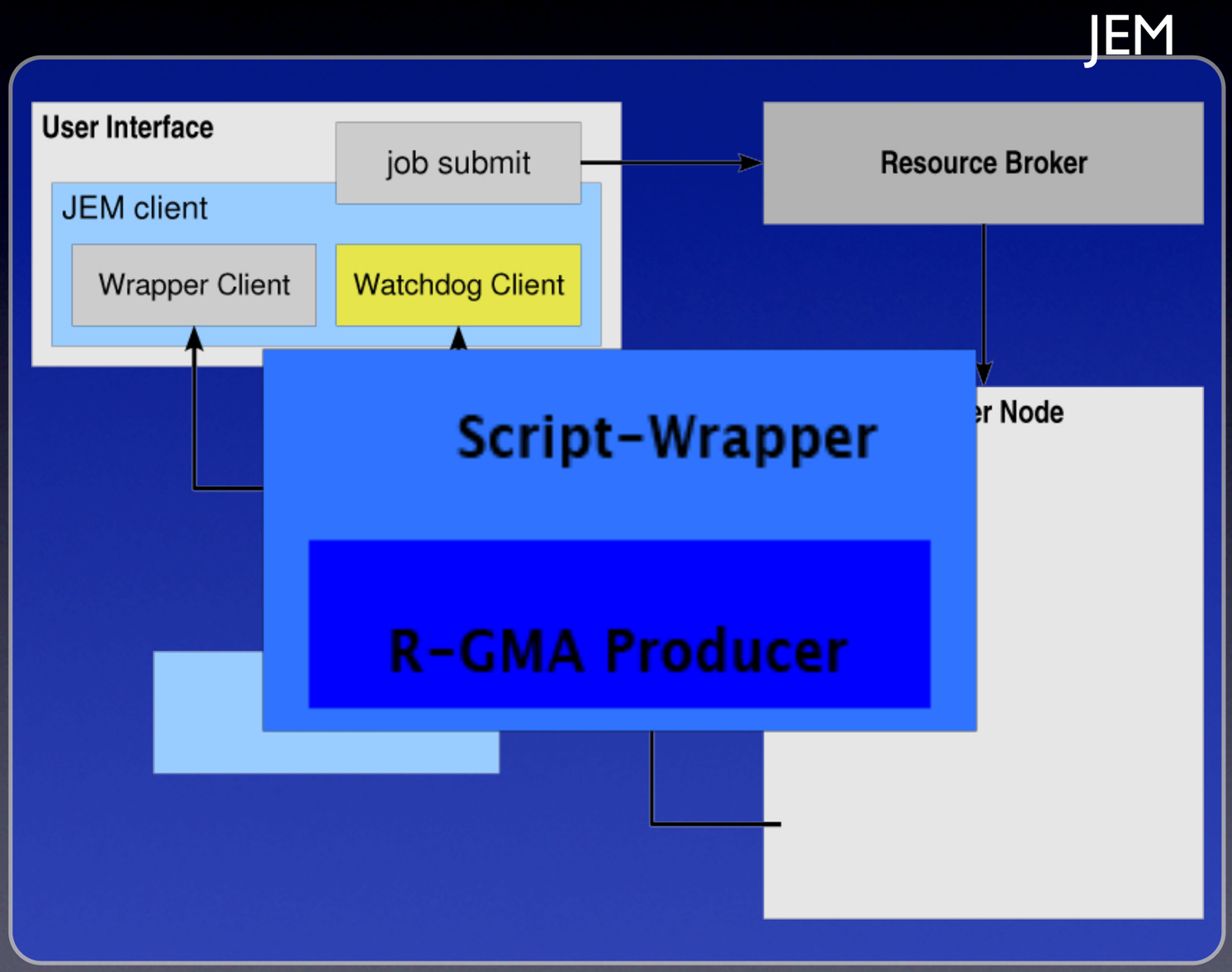

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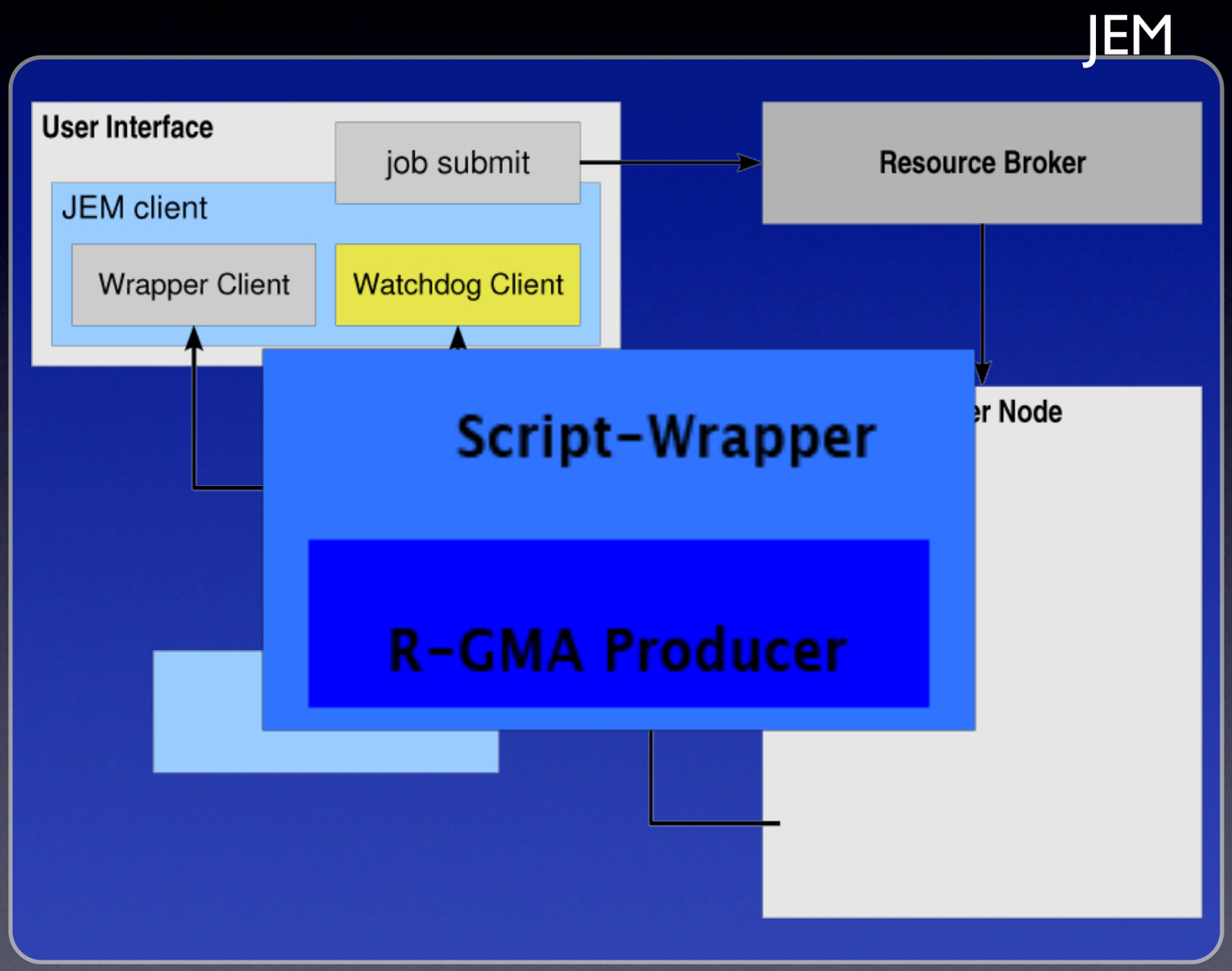

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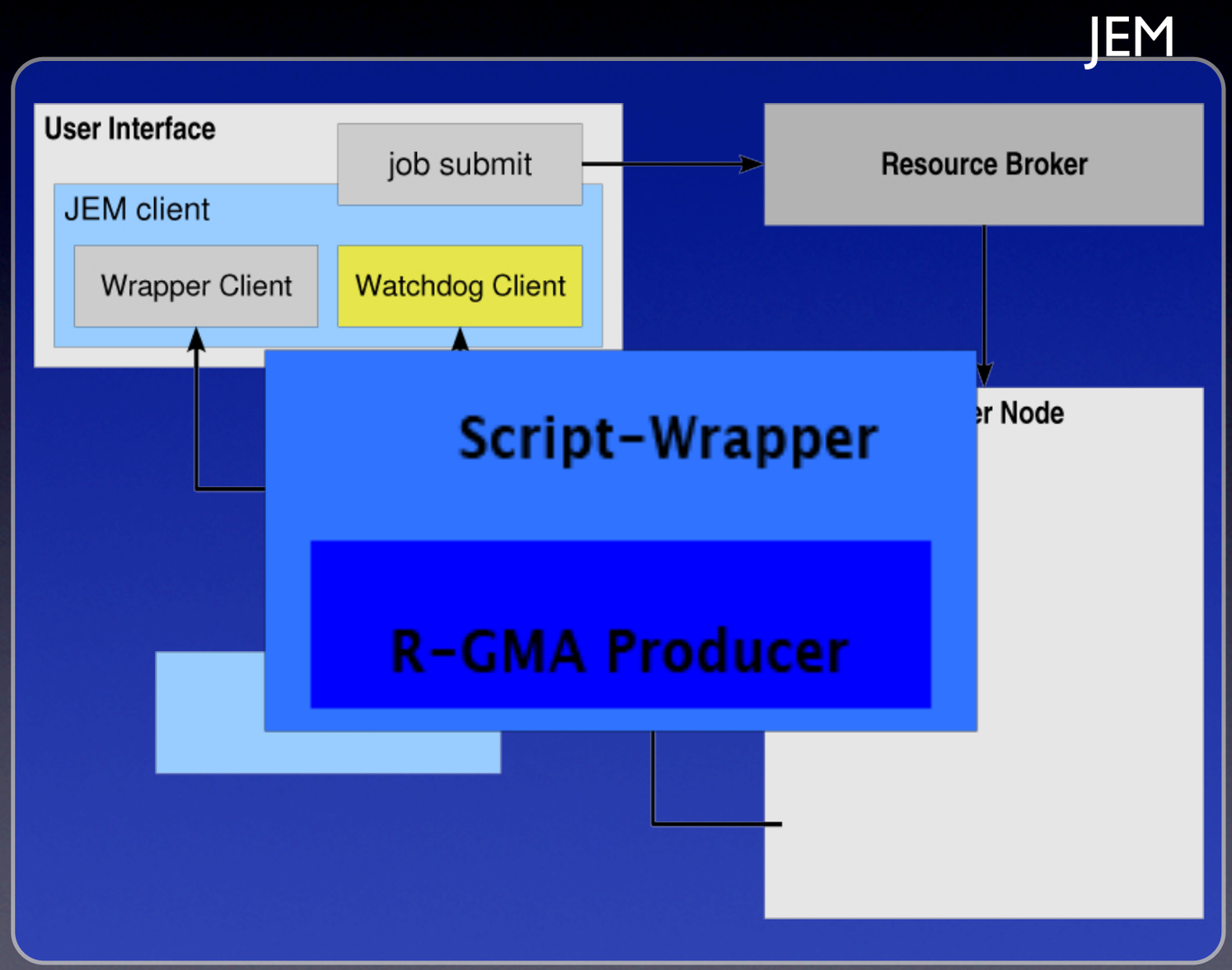

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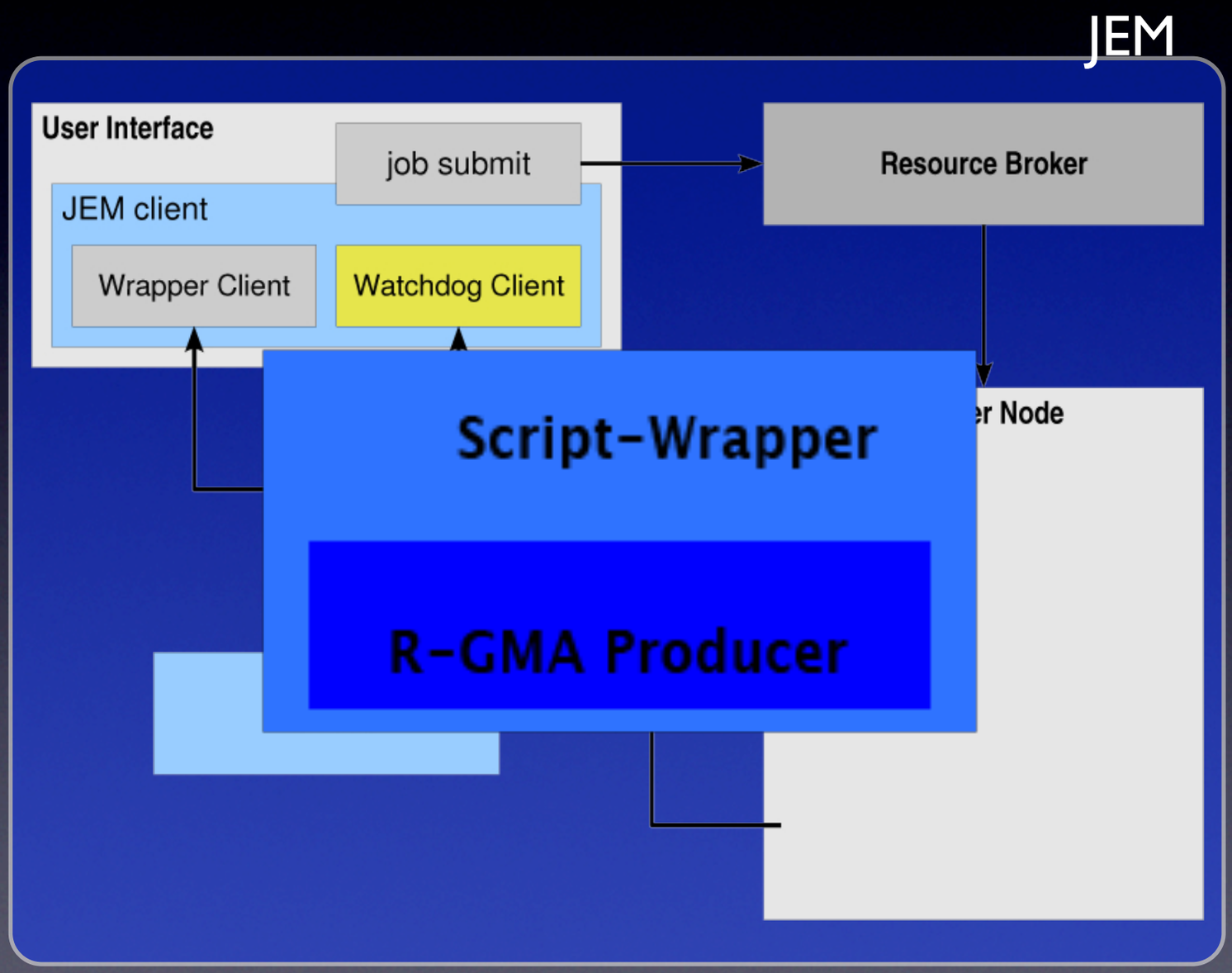

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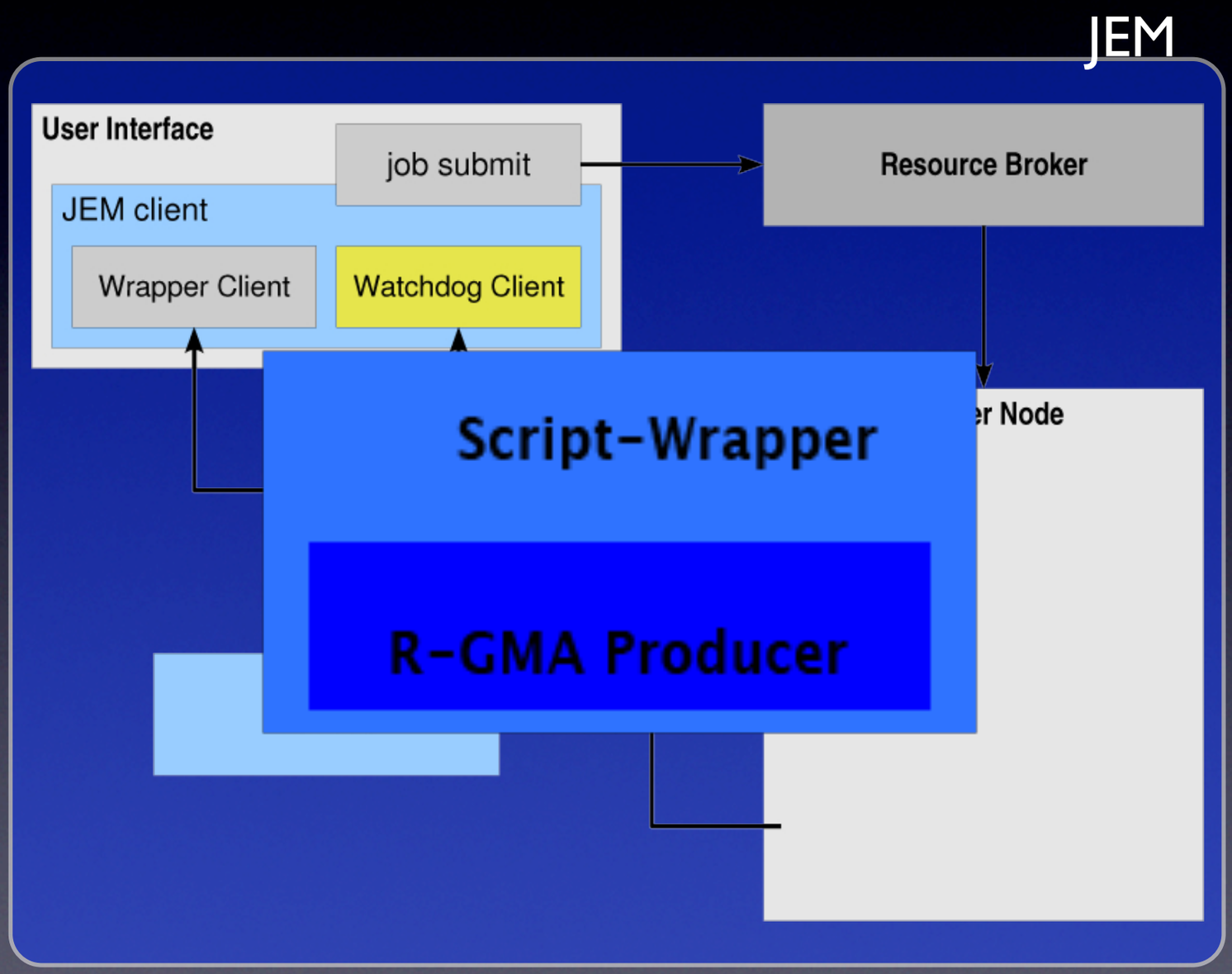

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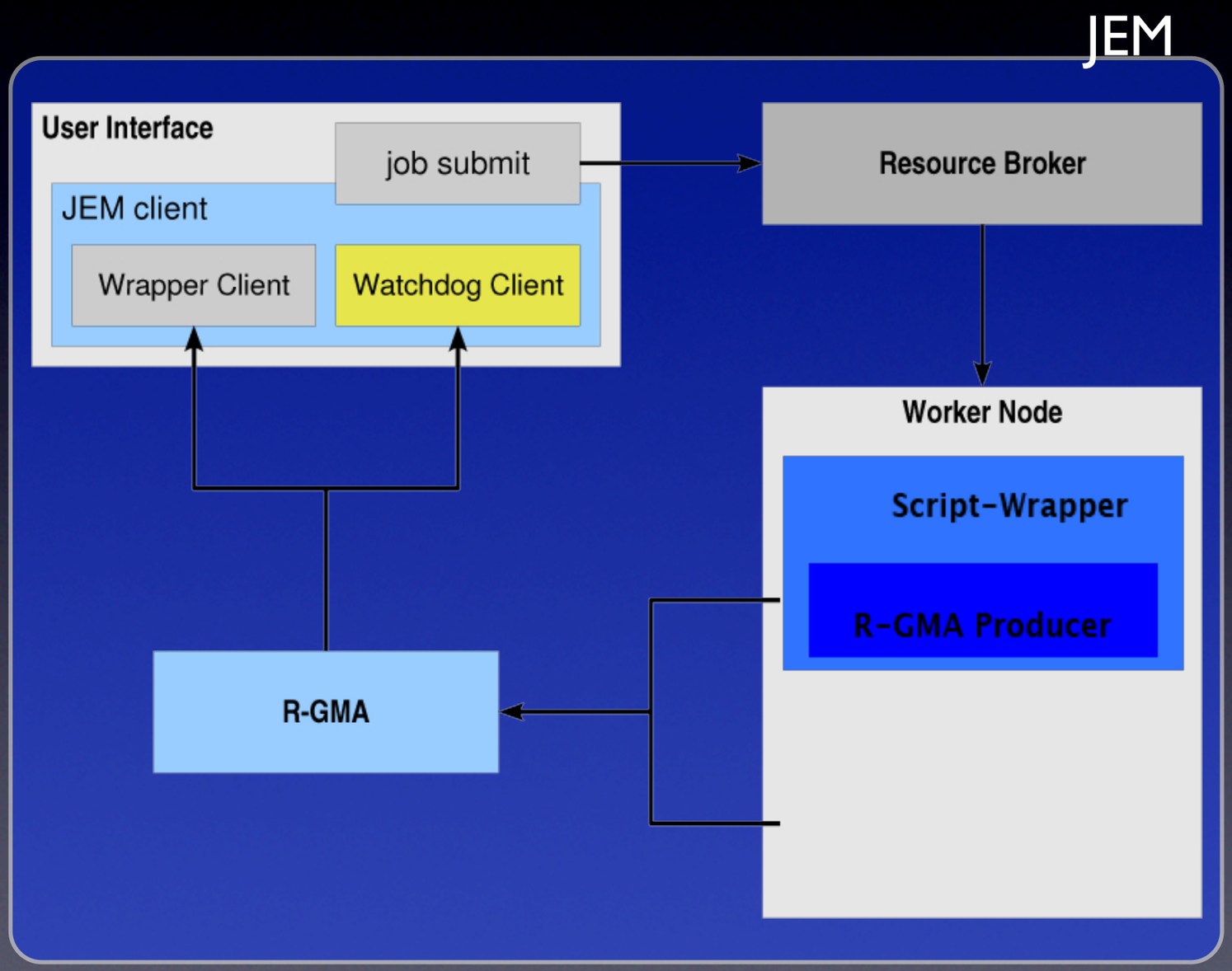

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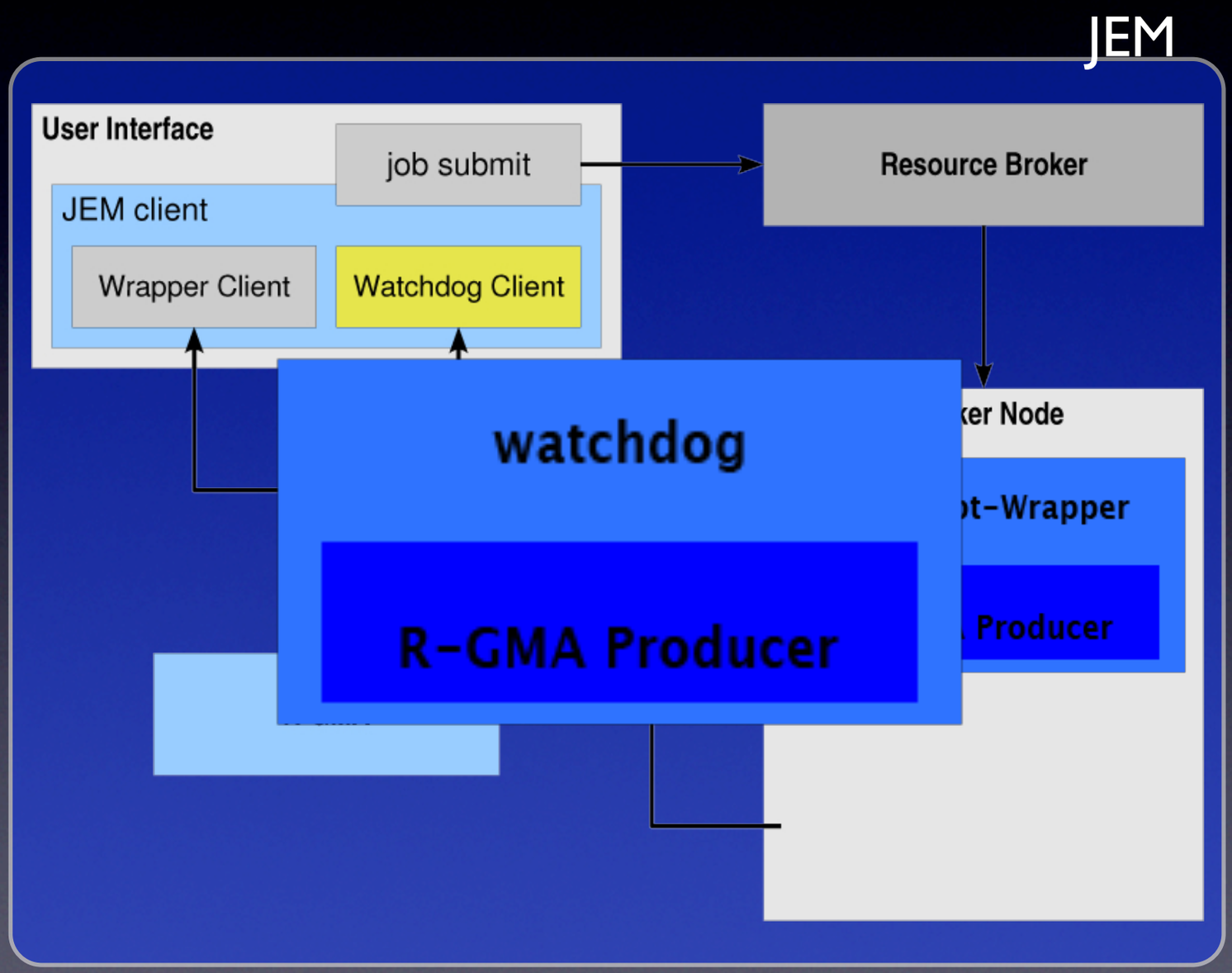

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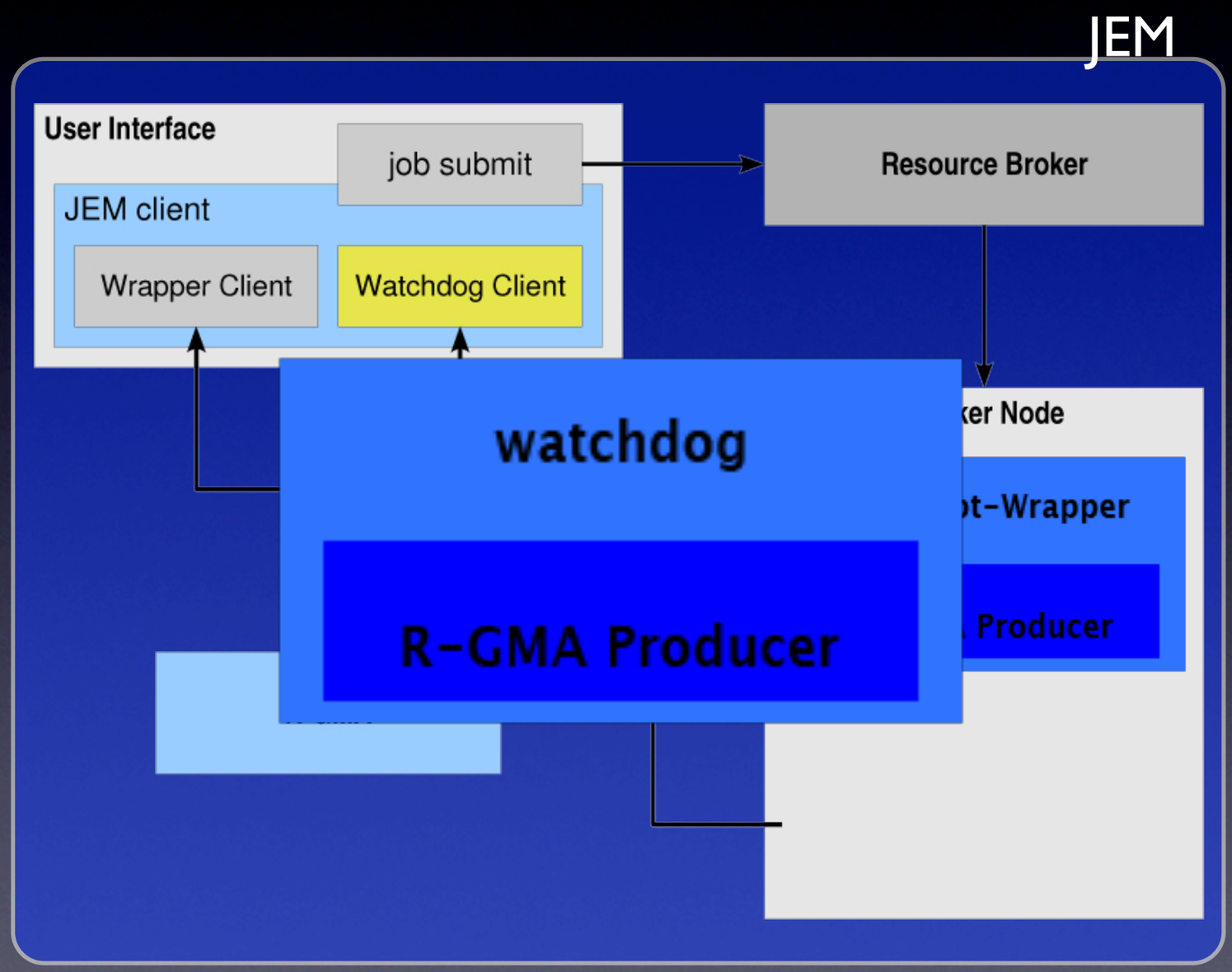

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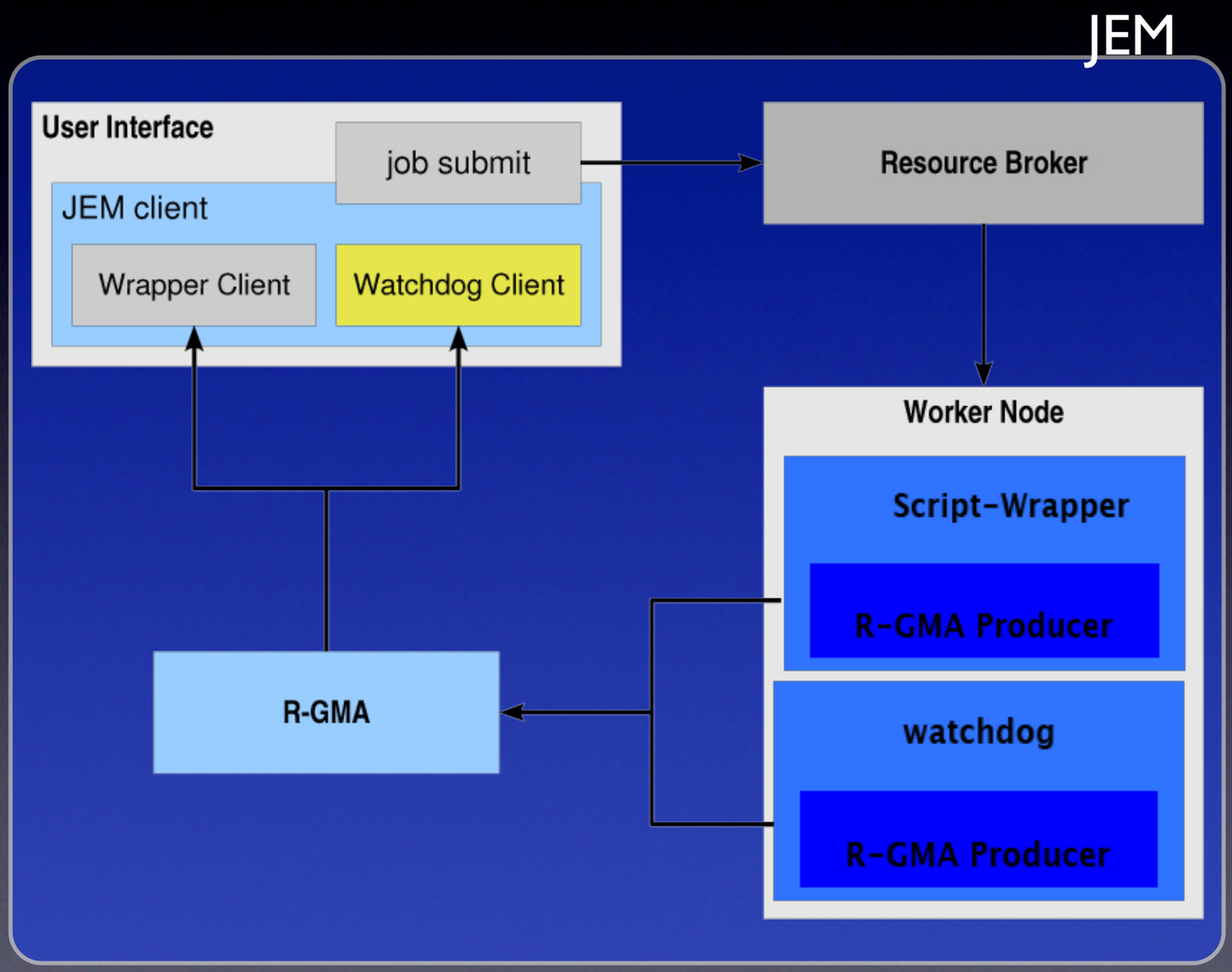

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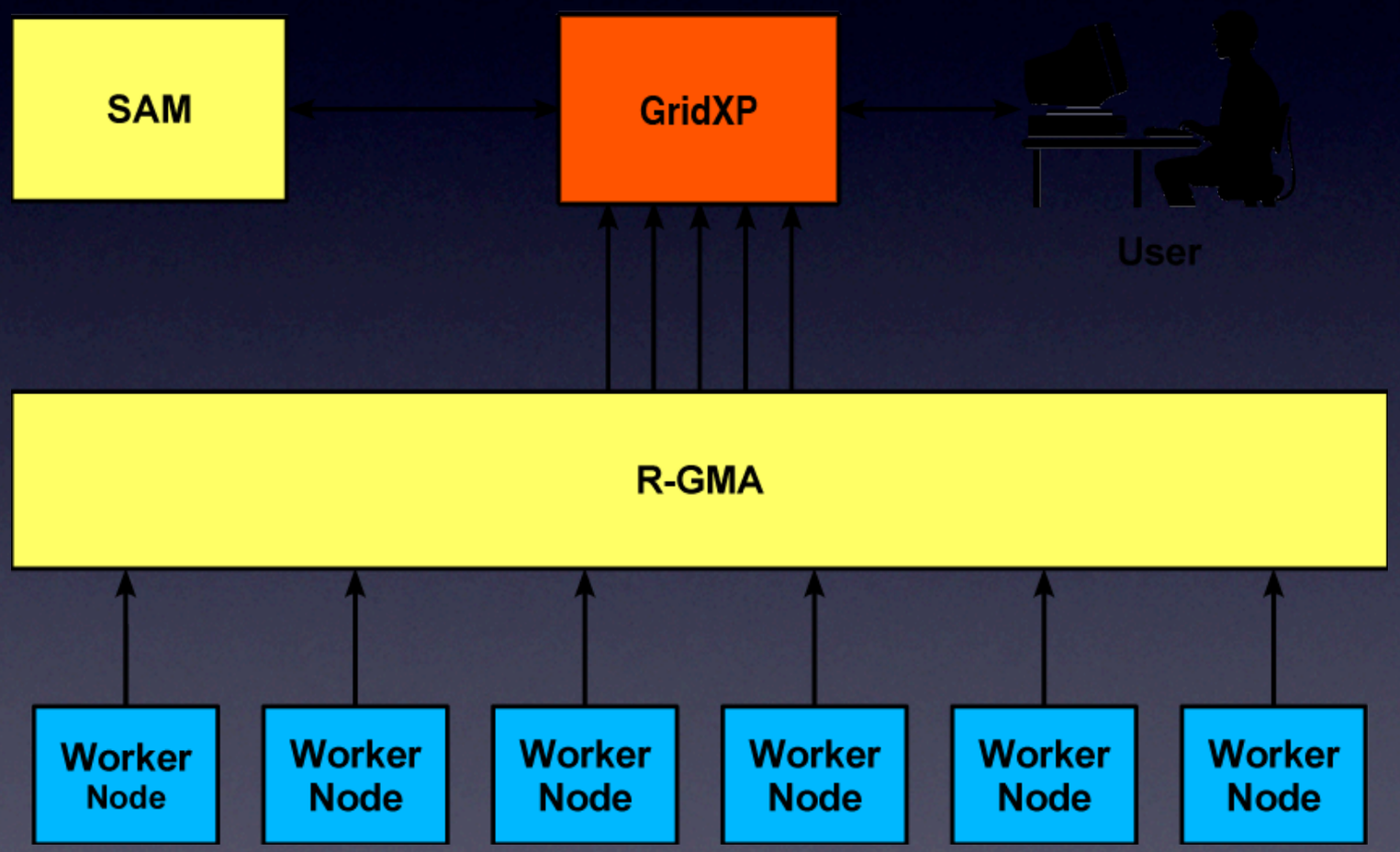
  - access to stdout / stderr and exit codes.

② GridXP


SAM
GridXP
User
R-GMA
Worker Node
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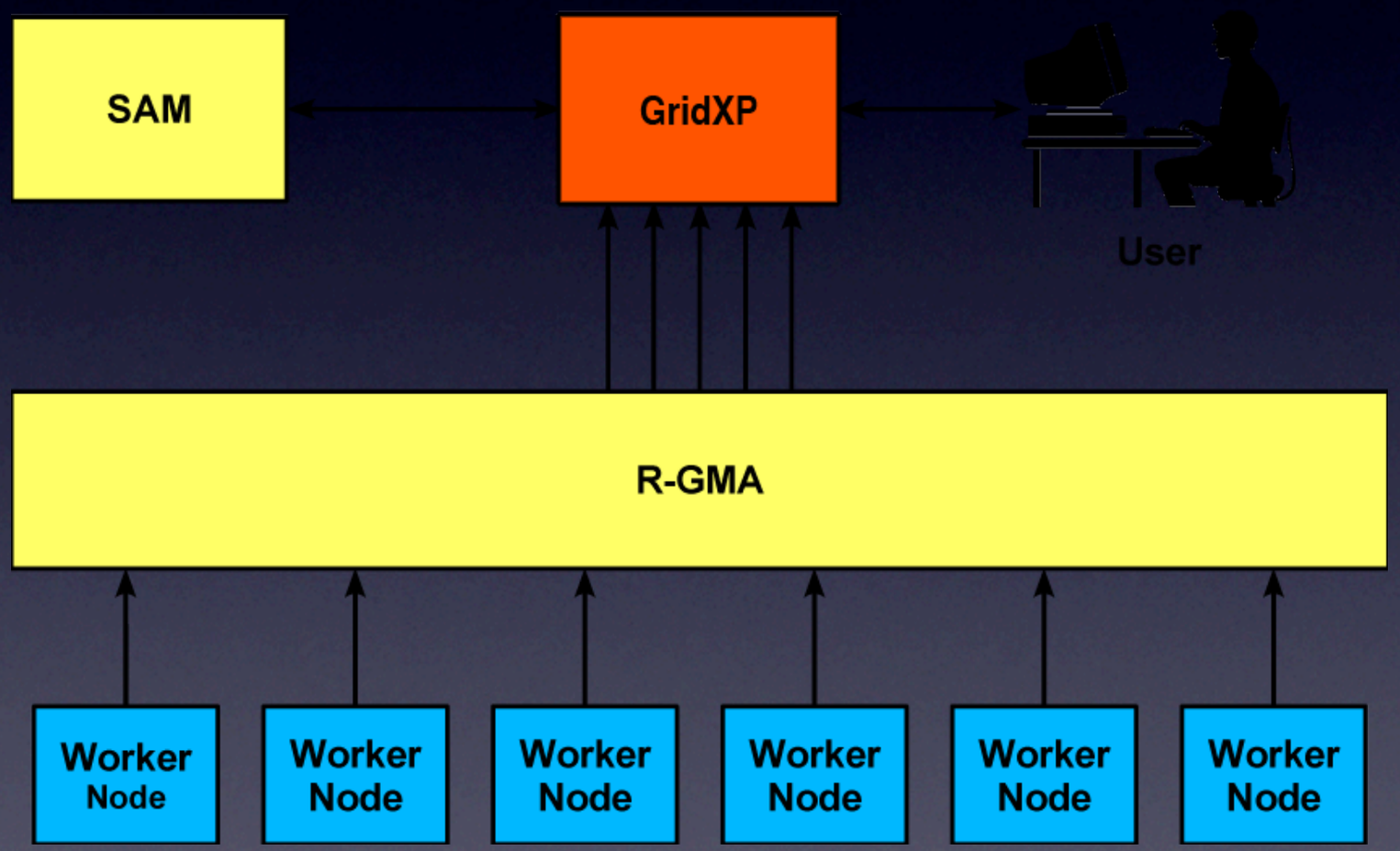

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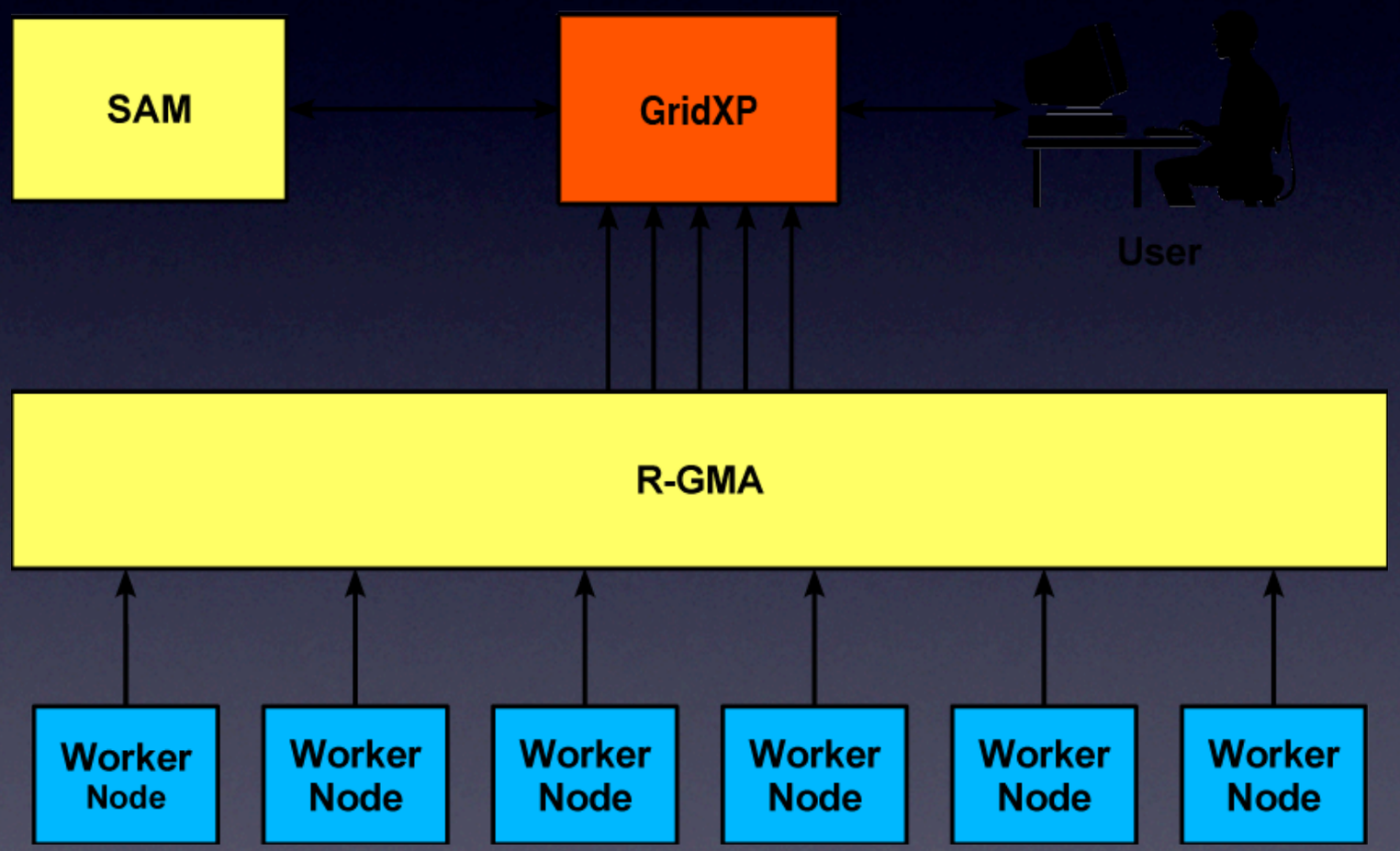

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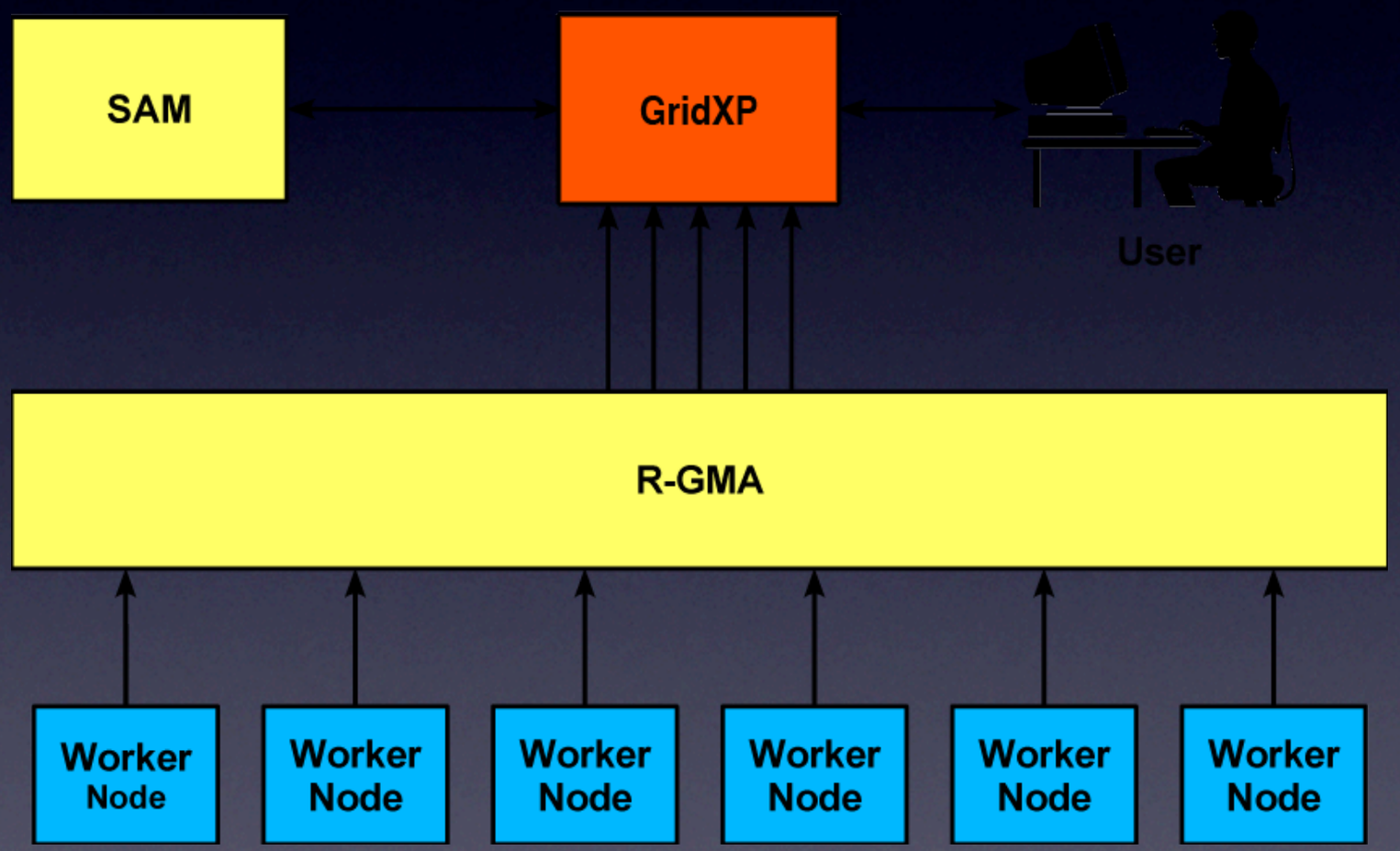

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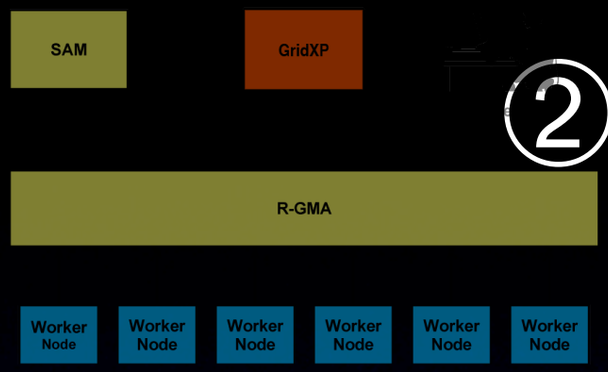

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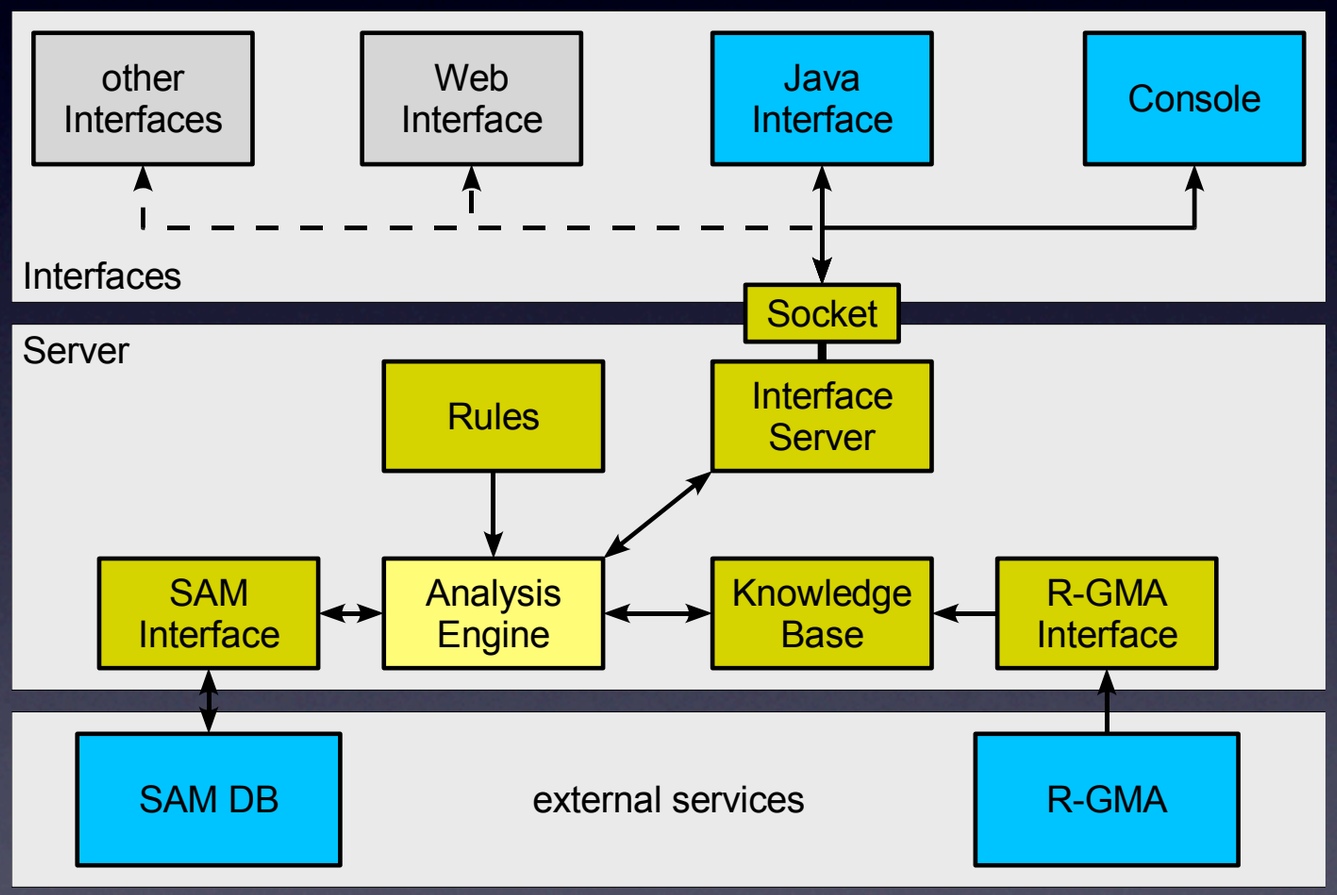

- Server collects informations from R-GMA.
- dynamically queries SAM-DB.
- matches informations against rules.
- provides result to user.

Status

- JEM:
  - Monitoring Programm fertig, „in production“, stabil und dokumentiert
  - Integration in Ganga quasi abgeschlossen
- GridXP:
  - Grundgerüst Expertensystem fertig, erste Regeln implementiert.
  - Z.Zt. laufen noch 2 Master-Arbeiten
    - Codeverbesserungen
    - Fehlerklassifizierung

Status

- http://www.grid.uni-wuppertal.de/grid/jms/

- http://www.grid.uni-wuppertal.de/grid/expertsystem/

weitere Pläne

- JMS:
  - Pflege des Codes, evtl. Bugfixing, falls durch Ganga-Produktion noch Fehler auftauchen
- GridXP:
  - Kooperation mit FH Münster/Köln/ Niederrhein:
    - automatische Klassifikation von Fehlern
    - Benutzerschnittstelle (Wissenserwerb)
    - Integration in GGUS?