

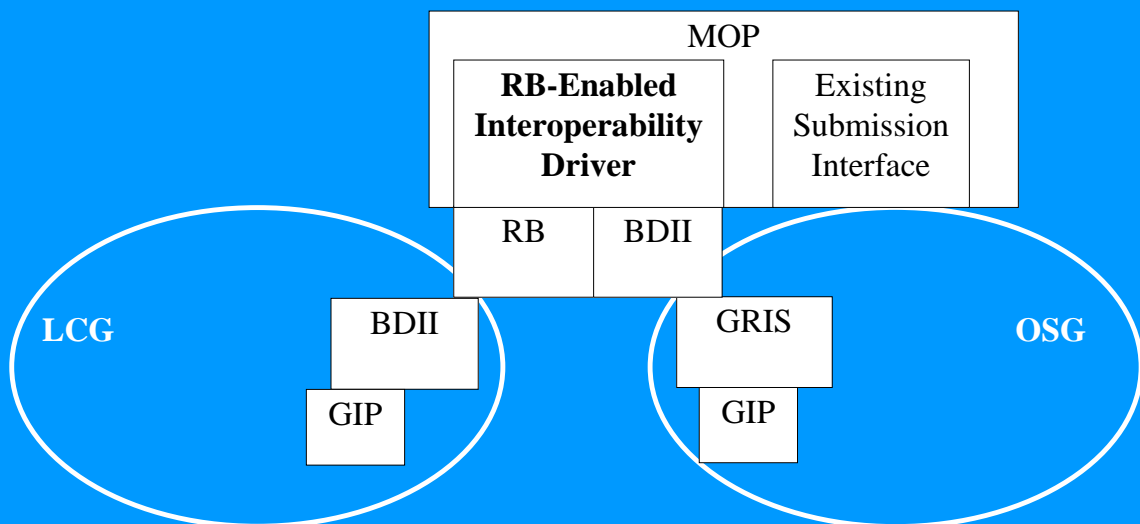
# Interoperability of The LHC Computing Grid and Open Science Grid: A Case Study of US CMS MOP

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## Summary:

- ◆ Demonstrated the feasibility of enhancing MOP to support job submission and monitoring across the LCG and OSG
  - Prototyped a MOP interoperability driver to access both the LCG and OSG
- ◆ Programmed the LCG RB (Resource Broker) as well as configured the LCG BDII (Berkeley Database Information Index) and GIP (Generic Information Provider) that collectively enable MOP to access both LCG and OSG resources simultaneously
  - Automatic configuration of GIP in the OSG/VDT context



## Development Environment (at The University of Iowa)

- ◆ LCG
  - A Xeon cluster - part of the LCG TestZone
- ◆ OSG
  - A Pentium cluster - part of the OSG-ITB (Integration Testbed)
  - An Athlon cluster - part of the OSG production environment

## Future Work

- ◆ Implement a production-level MOP submission interface that supports LCG/OSG interoperability based on this prototype work
- ◆ Improve automatic GIP configuration and verification in the OSG/VDT context
- ◆ Address the heterogeneity in data handling methods between the LCG and OSG
- ◆ Investigate new resource brokering solutions and study BDII/RB performance and scalability