



# VOM(R)S Convergence

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# **VOMS Status**

# Production release (gLite 3.2)

- VOMS 1.9.19
  - Globus-free client
  - Bug fixes and enhancements
- VOMS Admin 2.5.5
  - Multiple certificate support
  - AUP management
  - User suspension/expiration

# Upcoming release (EMI 1)

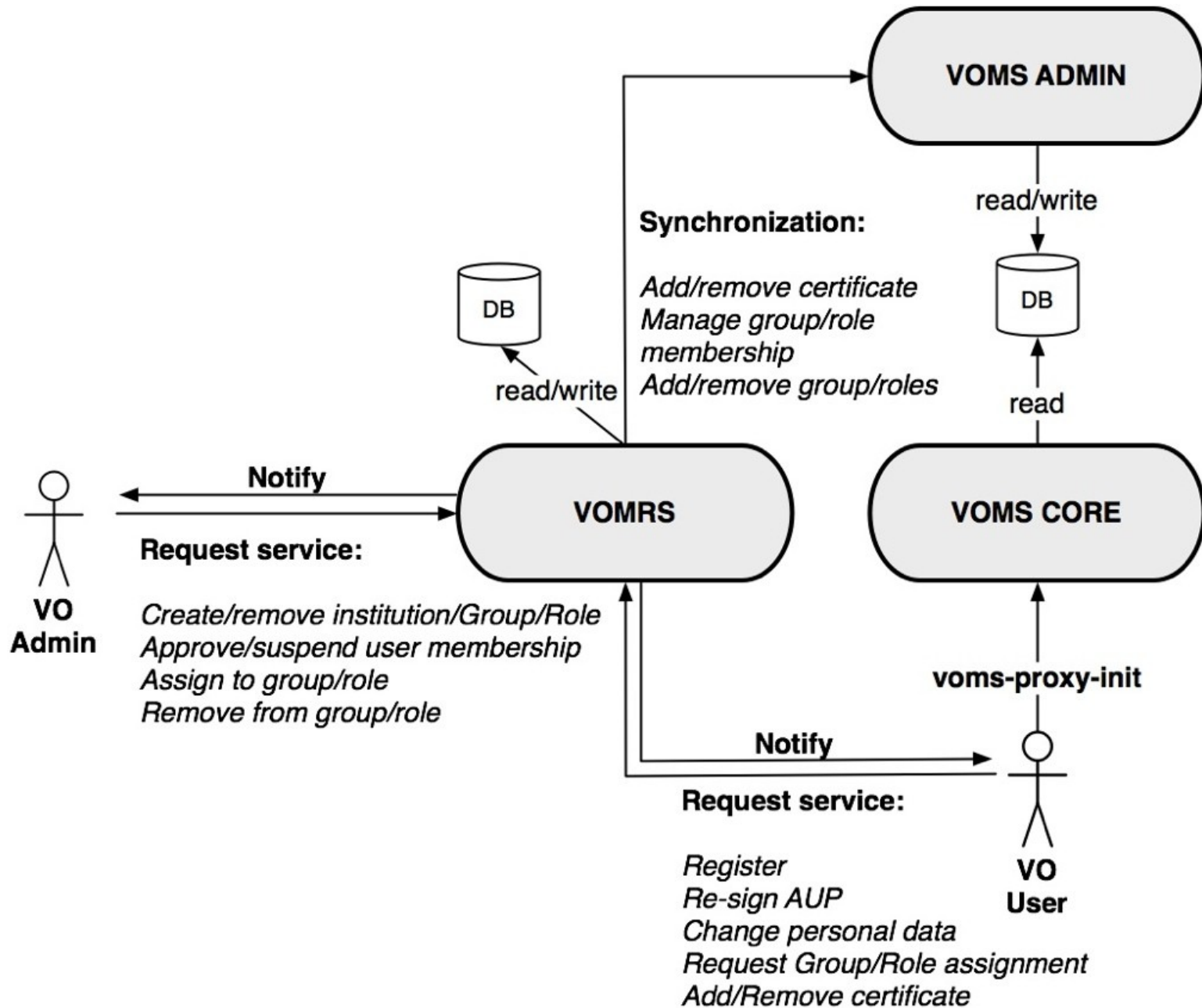
- VOMS 2.0
  - Globus-free server
    - Lighter installation...without breaking existing clients
  - REST interface for AC creation
- VOMS Admin 2.6
  - CERN HR db integration plugin
  - Bug fixes and enhancements
- EMI packaging

# VOMS: gLite vs EMI

- EMI
  - Official VOMS distribution
  - New features and bug fixes
- gLite 3.2
  - Now → October 2011
    - Important bug fixes
  - October 2011 → April 2012
    - Security updates

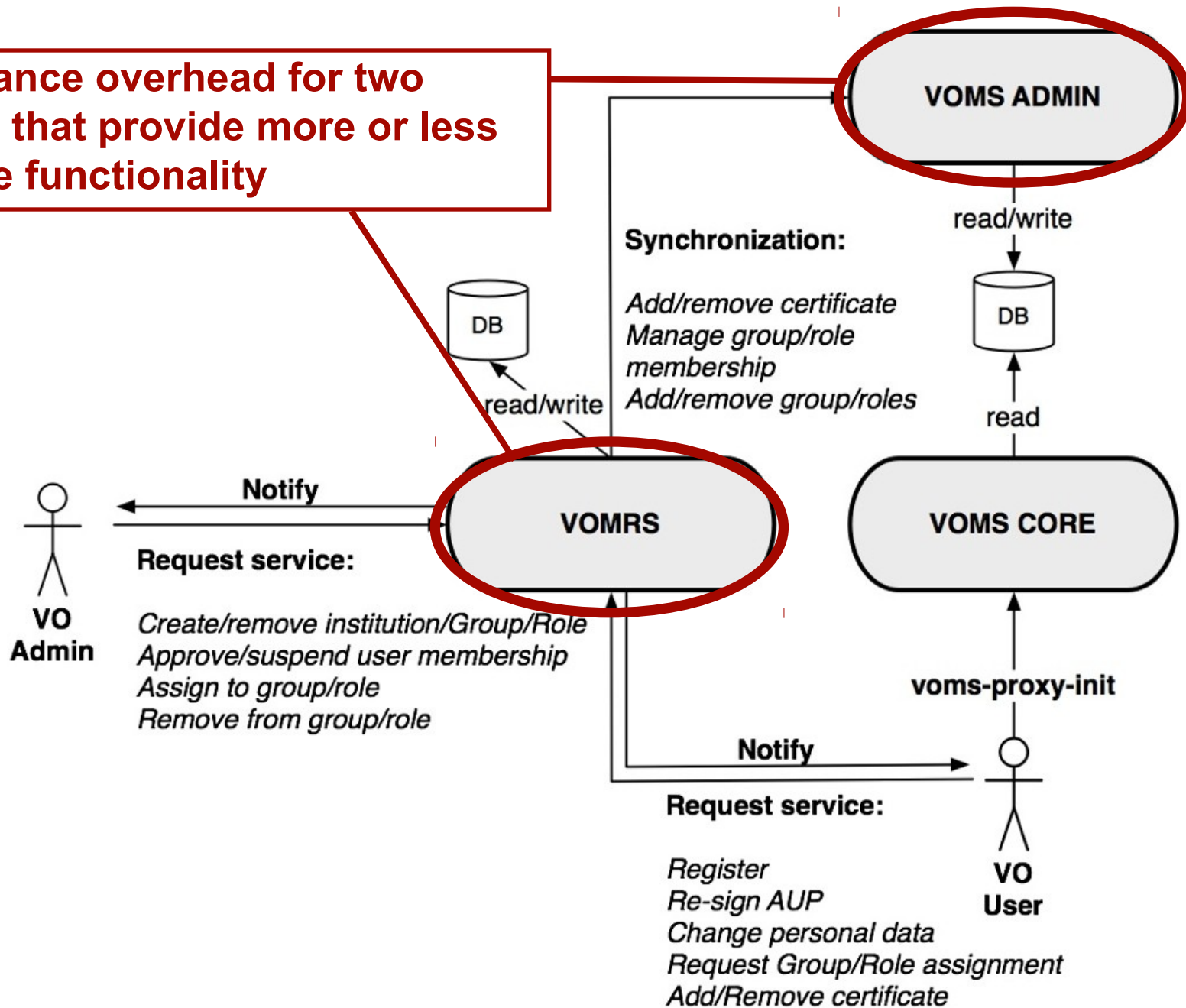
# **VOM(R)S Convergence**

# Typical VOMS/VOMRS setup



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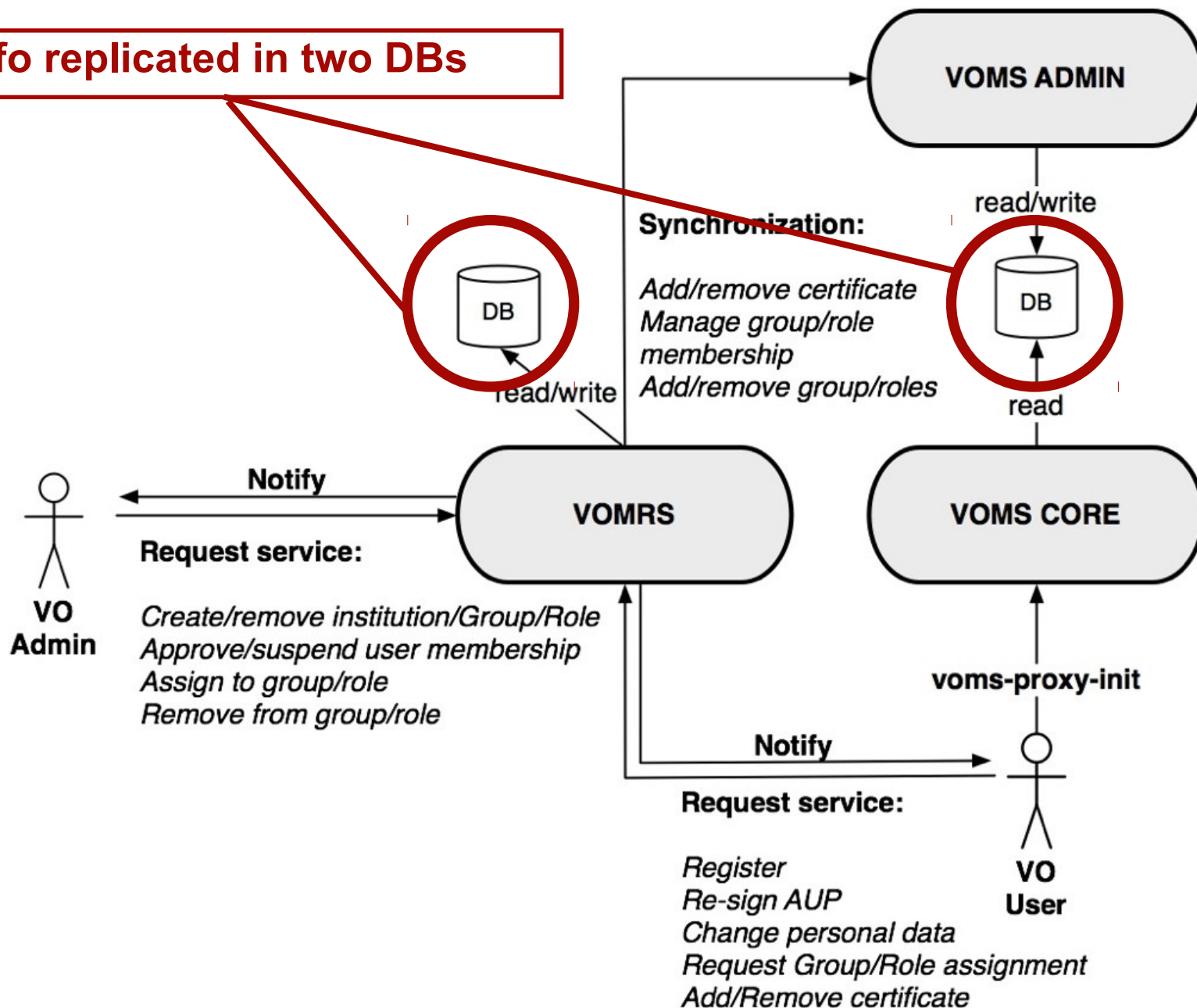
Maintenance overhead for two services that provide more or less the same functionality





# Typical VOMS/VOMRS setup

Same info replicated in two DBs



# VOM(R)S convergence

- Goal:
  - extend VOMS Admin functionality so that all the main VOMRS features are implemented
- Why?
  - VOMS Admin and VOMRS share a large set of common functionality
  - Converge on a single solution that satisfies all user requirements
  - Easier service deployment, maintenance, evolution
- When?
  - work started at the beginning of EGEE III
  - detailed schedule presented at CHEP 09
  - convergence is now reaching the final phases

# The Convergence Schedule

<b>Phase I</b>	Implement JSPG requirements in VOMS Admin	<b>Done</b>
<b>Phase II</b>	Migrate essential VOMRS features to VOMS Admin	<b>Done</b>
<b>Phase III</b>	Interface with third party directory services (CERN HR db)	<b>Done</b>
<b>Phase IV</b>	Validation and certification tests	<b>Ongoing</b>
<b>Phase V</b>	Data migration from VOMRS to VOMS Admin	<b>Ongoing</b>

# This Workshop Objectives

- Introduce VOMS Admin 2.6 to VO manager
  - Gather feedback on new features
  - Assess that all needed functionality has been migrated
- Discuss CERN VOMS upgrade plan
  - gLite 3.1 → gLite 3.2 → EMI 1
- Discuss VOMRS → VOMS Admin data migration
  - Strategies and tools

# VOMS Admin 2.5

- Covers convergence phases I-II
  - Released on May 2010
  
- Main new features
  - Support for multiple user certificates
  - Support for versioned AUP management
  - Membership expiration, suspension, renewal
  - VO members can request group membership/role assignment
  - VO members can request membership removal
  - Support for multiple member operations (deletion, suspension)

# Multiple certificate support

- Multiple certificates can be linked to the same VO membership
- These certificates share VOMS attributes information
  - Groups
  - Roles
  - Generic attributes
  - VO AUP acceptance records
- Users, once registered, can request the addition of other certificates to their membership
  - These requests require VO admins approval

# AUP management

- AUP acceptance records are linked to each VO membership
- AUPs have a re-acceptance period
  - Each user's acceptance record is checked against this period and if the record has expired the user is requested to sign again the AUP in a configurable amount of time (24 hours is the default)
  - If the user fails to sign the AUP in time, he/she is suspended
- VO admin can request AUP re-acceptance from users at any time

# Membership suspension

- VOMS membership can now be suspended
  - User is notified of the suspension reason by email and by voms-proxy-init
  - Suspended members will not get VOMS attributes out of voms-proxy-init
- When a membership is suspended, all the certificates linked to that membership are suspended



# Membership expiration/renewal

- An expiration date is linked to each membership
  - Default membership lifetime is configurable (default = 12 months)
- When a membership expires
  - The user is suspended (and informed of the suspension)
  - An administrator needs to take action to renew the membership
  - The user can be requested to sign the VO AUP again

# **VOMS Admin 2.6 Demonstration**

# VOMS Admin evolutions

- Institute representative selection @ registration time
- Multiple users group assignment operations
- Improved search functionalities
  - Search users that are about to expire
  - Search suspended users

# Backward compatibility remarks

- VOMS 2.0 is compatible with older clients
  - voms-proxy-init  $\geq$  1.6.16
- VOMS Admin 2.6 is compatible with older clients
  - voms-admin, VOMRS, MkGridmap, Replication scripts based on VOMS Admin WS, ...
  - Obviously new functionality is not covered by older clients (e.g., new certificate management WS)

# Conclusions

- Converging on a single, mature VO registration management solution that covers all user requirements has several advantages
  - Simplified deployment and service operation
  - Simplified software maintenance and evolution
- The VOMS/VOMRS convergence project, started at the beginning of EGEE-III, is now reaching its final phases
- The last phase of the convergence will focus on VOMRS/VOMS data migration tools and will likely be completed during the lifetime of the EMI project

# Useful links

- VOMS/VOMRS CHEP convergence paper
  - <http://bit.ly/iag205>
- VOMS Admin user's guide
  - <http://bit.ly/f76o31>
- Contacts:
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Thanks!

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