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Enabling Grids for E-sciencE

VOMS migration to SSL: Roadmap and Issues

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- **Both TCG and the dependency review asked us to remove Globus dependencies from VOMS.**

- **Easy to do (1-1.5 months of development), but:**
  - It would break cross-version compatibility with existing installation.
  - It would imply a simultaneous re-installation of both servers and clients worldwide.
    - Clearly untenable.

- **So, a step-by-step solution is necessary.**

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- **Phase 1:**
  - Provide a server capable of talking both GSI and SSL.
    - Everything remains compatible.
    - Scheduled for release 1.8.0

- **Phase 2:**
  - Provide clients speaking only SSL.
    - Will only speak to server >= 1.8.0
    - Scheduled for release 1.9.0

- **Phase 3:**
  - Provide server speaking only SSL.
    - Will only accepts clients >= 1.9.0
    - Scheduled for 2.0.

- **Plus, the API problem.**

- **Globus independency also means APIs without Globus dependencies.**
  - Already available in a reduced functionality since 1.7.0
    - Cannot be used to contact a server.
  - Simple to extend to use SSL.
- **However:**
  - Existing applications already use Globus, which brings about its own customized OpenSSL.
  - Mixing GT OpenSSL with System OpenSSL (usually more recent) is a bad idea.
    - They are incompatible at ABI level

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- **Short term:**
  - Both versions of the libraries will be made available.
    - Old applications may continue use the GT ones.
    - New applications should use the OpenSSL ones.

- **Long term:**
  - Is the drive to remove GT dependency serious?
    - If yes, other applications should also do it.
      - *Then, they could use the OpenSSL libraries.*
    - If not, why just for VOMS?

- **VOMS 1.8:**
  – Late October – Early November

- **VOMS 1.9:**
  – Late 2008

- **VOMS 2.0:**
  – Late 2009

- **Timescales for 1.9 and 2.0 are spaced to give time for deployment of the earlier version. They can be stepped up if needed**