



A portal for an easy access to the IGI grid infrastructure

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FEATURES

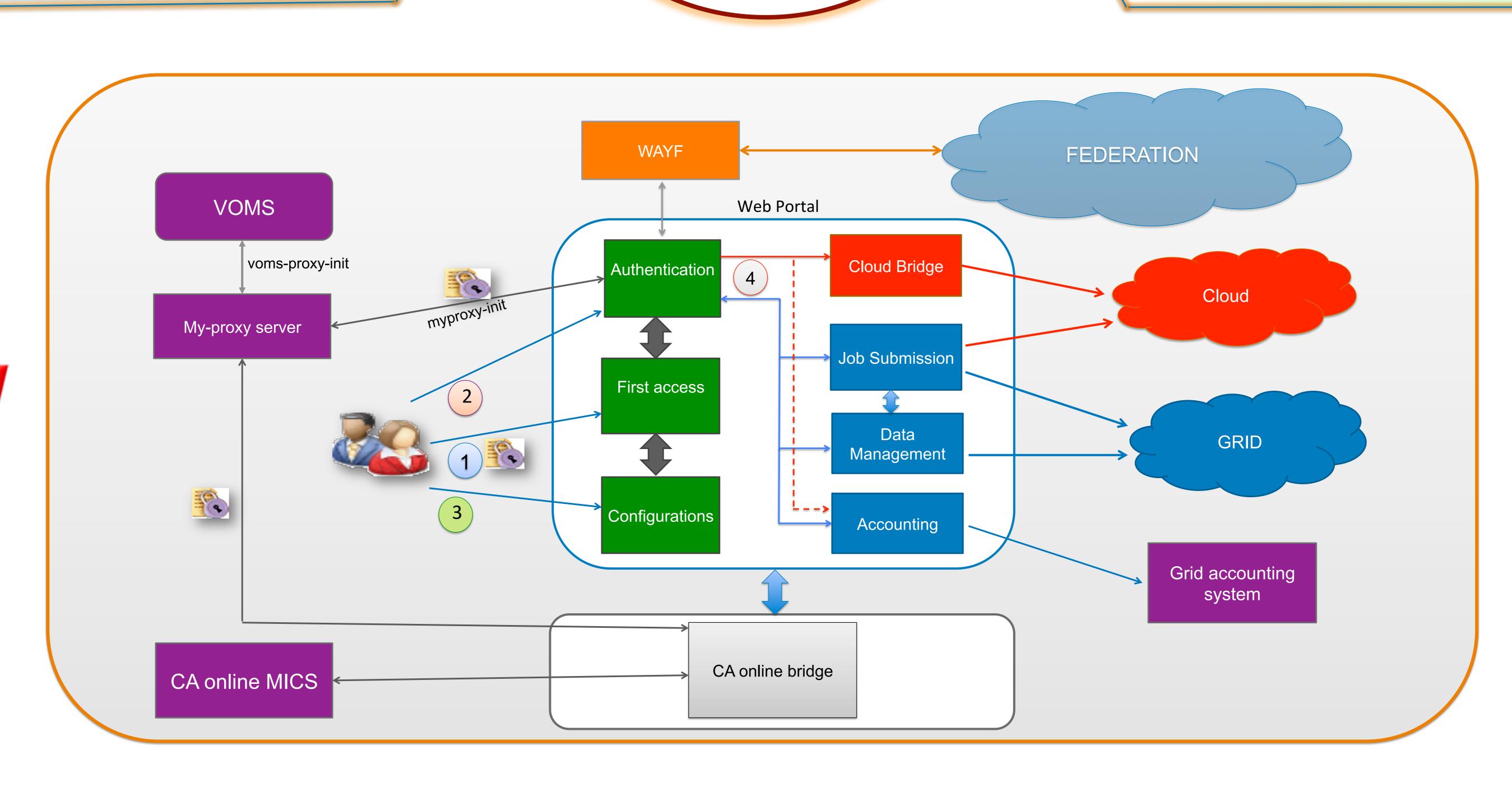
- Federated identity system for user authentication
- Interaction with ON-line CA to transparently request X.509 certificates on behalf of the user
- Personal certificates upload for users who already have one
- Possibility to select a VO membership or request new VO membership on behalf of user
- Community related portal views and JDL customization for job submission
- Implementation of workflow submission

GOALS

- Grid job submission via web.
- Provisioning of a Cloud environment via web.
- Making easier the request and management of X.509 certificates and the request for a VO membership.
- Minimizing the job failure rate

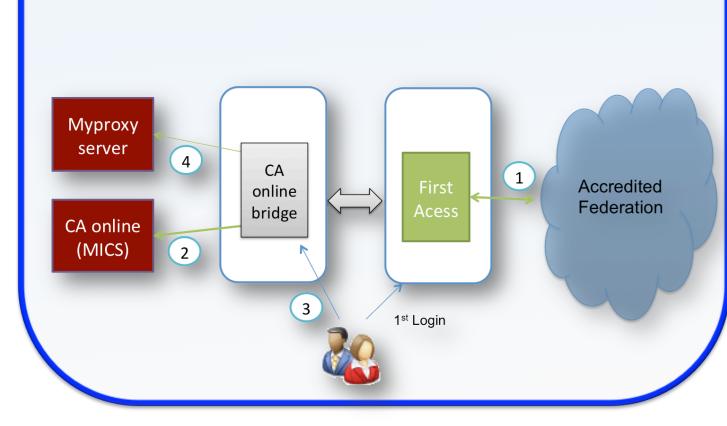
IMPLEMENTATIONS

- Web portal based on Liferay framework
- Services implemented by ad hoc portlets (JSR 168 – 286)
- Secure communications with external services using shibboleth and encrypted protocols
- SAML delegation mechanism for X.509 certificate request
- Integration with existing monitoring and accounting system



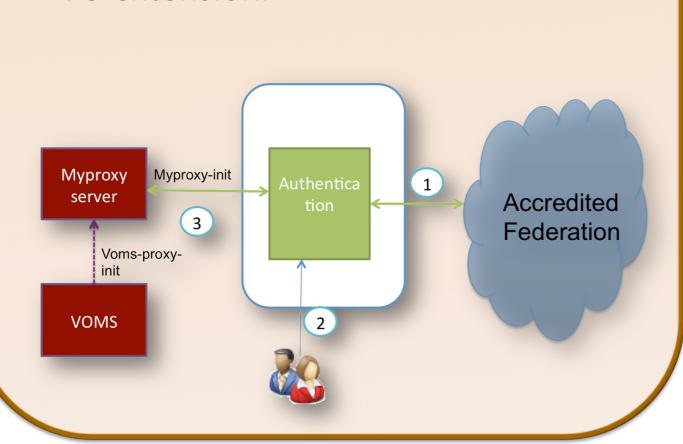
1 - FIRST ACCESS

- 1. The portal receive a delegation token
- 2. CA bridge module requests to a CAonline a certificate on behalf of the user
- 3. The user digit a passphrase for private key encryption
- 4. The certificate is used to store a longterm proxy on a my-proxy server (the private key encrypted will be stored on my proxy server and the passphrase will be not saved)

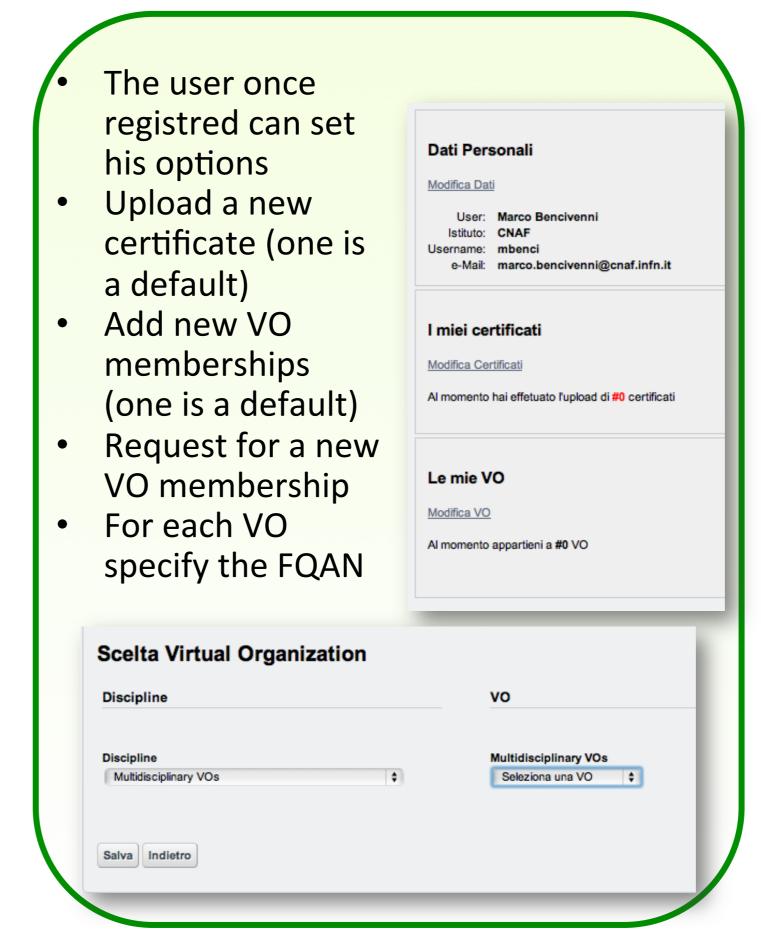


2 - AUTHENTICATION

- 1. The portal redirects user to the his IdP login page. Once the proper IDP has authenticated the user he will be automatically logged into the portal
- 2. The portal will ask him the passphrase in order to retrieve the proxy from myproxy server.
- 3. At the same time contact the VOMS server in order to sign the proxy with VO extension.



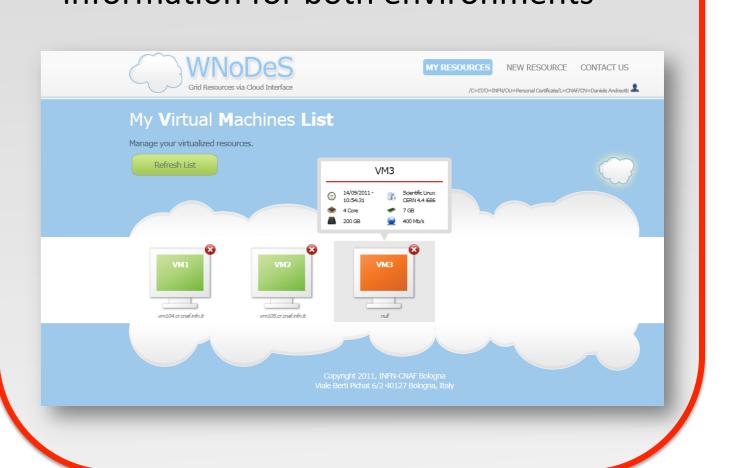
3 - CONFIGURATIONS



4 - GRID / CLOUD ACCESS

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- At the moment for job submission and data management the portal uses WS-Pgrade (SZTAKI)
- Other solution under investigation is JSAGA (IN2P3)
- For cloud resources provisioning the portal is interfaced with WNoDeS
- (INFN-CNAF) The accounting portlet provides information for both environments



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