

vl-e



virtual laboratory for e-science

Towards Production

VL-e PoC in 2008 and beyond

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VL-e Scaling and Validation “P4”

The **Proof of Concept Environment** reminder

- It is the *Experimentation environment for e-Science Infrastructure*
 - Reliable
 - Supportable
 - Secure

Implemented through **three actions**

- PoC Software Distribution
- PoC Infrastructure and Environment
(central facilities, distributed and contributed installations)
- Software engineering for scalability and supportability



BiG Grid

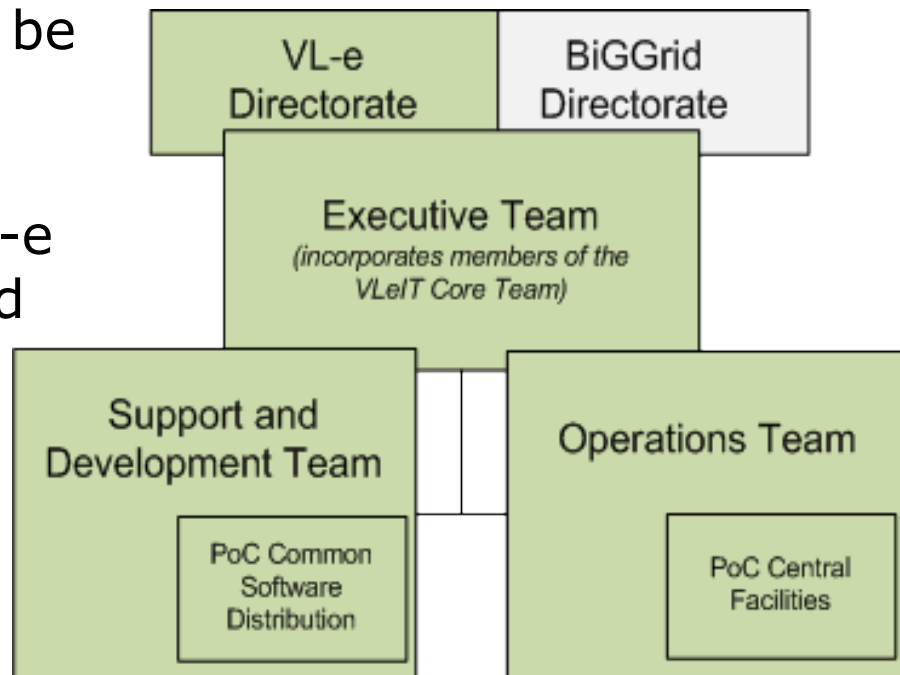
With the roll-out of the BiG Grid project the Netherlands gets a full scale e-Science environment

- Large-scale hardware infrastructure (cluster computing, HPC, mass storage)
- Support and Development (problem analysis, implementation of problem solving environments, systems and infrastructure standardisation)
- Operations Support (systems help desk, focus in stability, scalability and responsiveness)

VL-e P4 and BiG Grid: a Joint Strategy

Amalgamate P4 and BiGGrid operations

- Executive Team, with VLeIT core members, to oversee operations, support and development for both BiGGrid and VL-e PoC
- BiGGrid environment will be fully based on the existing VL-e distribution
- Applications using the VL-e PoC also 'join' the BiGGrid environment ...
*... and thus profit from larger resource base for hardware and support**





PoC and BiGGrid: Towards Production

PoC environment basis for the Infrastructure

- Virtually all services in PoC 'R3' are 'web services'
 - except: SRB – never
 - few hidden services – early 2009
- Promote use by applications of services through the GAT
- SRB: supported till end of VL-e project, but this 'vertical' will be split in components
 - Basic data storage through robust bulk services (GridFTP, or SRM for those applications that need that)
 - SRB-meta-data management (never used in VL-e!) using new components to be selected
- Adding simple but robust services for 'simple' applications
- *but also remain open for communities that favour complexity and functionality over robustness*



Towards production: stability and extensibility

`Core' PoC distribution focuses on stability

- managed software engineering track
- Components have designated maintainer and supporter
- Bug and vulnerability management

Contributed Software track

- interesting software that fit PoC distribution well
- Made available centrally, installed with minimal effort
- Possibility to extend to RESPECT (European equivalent)

Community Software Areas (`SGM')

- Community software area on each facility (site)
- Managed by the community
- *Interface and how-to will be more widely publicized*
- *And 'easier' management facilities added*



Towards production: central facilities

PoC facilities become integral part of BiGGrid

- Support at least at current levels guaranteed
- aim to improve reliability, availability and response

More support for 'hosting' environments

- Services, repositories, portals, &c
- Operation in collaboration with the user community
- e.g. life-science web service hosting



A Sustainable Infrastructure

Joint operation, development and support

- amalgamation of VL-e PoC and BiGGrid in 2008
- continuity after 2009
BiGGrid continues service as before
- With the goal of creating a
persistent, sustainable e-science environment



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<http://www.vl-e.nl/>