

EGN Workshop 3

Second EuroGeoNames Workshop
of the Consortium with the EGN Reference Group

Security Aspects

Palacio de Zurbano, Madrid

6 March 2006

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Security Aspects

- Protecting goods and services
- Protecting systems and infrastructures
- Put effort in protection instead of dealing with damages

Security Aspects

- Hacking and Malware (Viruses, etc.)
→ Firewalls
- Interfering with messages along network connections
→ https
- Unauthorized acces to service, unauthorized retrieval of information
→ user authentication, access control

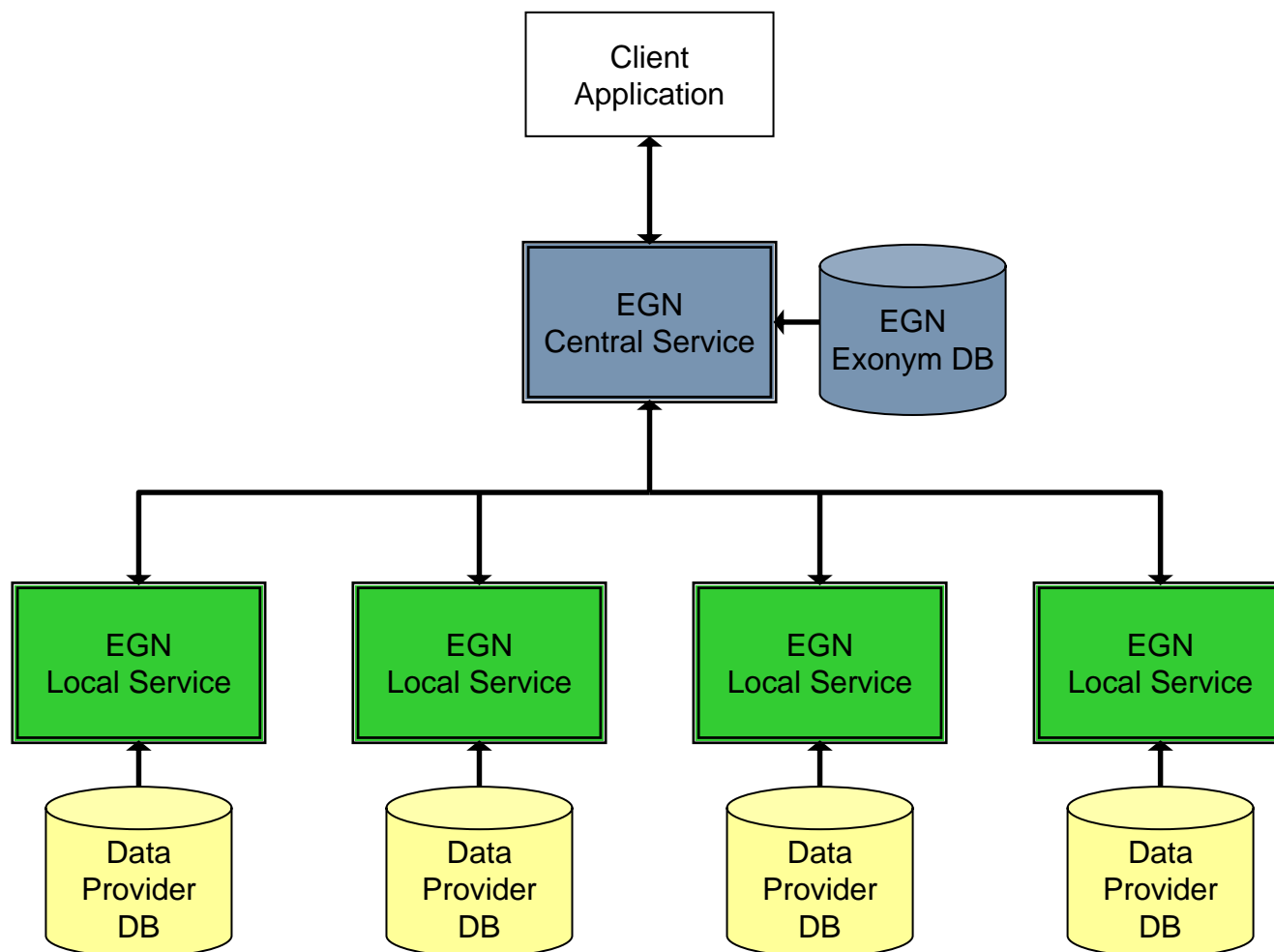
Measures in Use

- Firewall (13/15)
 - Application level gateway (5/15)
 - Packet filter system (8/15)
 - DMZ (11/15)
- Message encryption
 - At transport level (https) (10/15)
 - At message content (XML encryption, XML signature)
- User authentication, access loggin

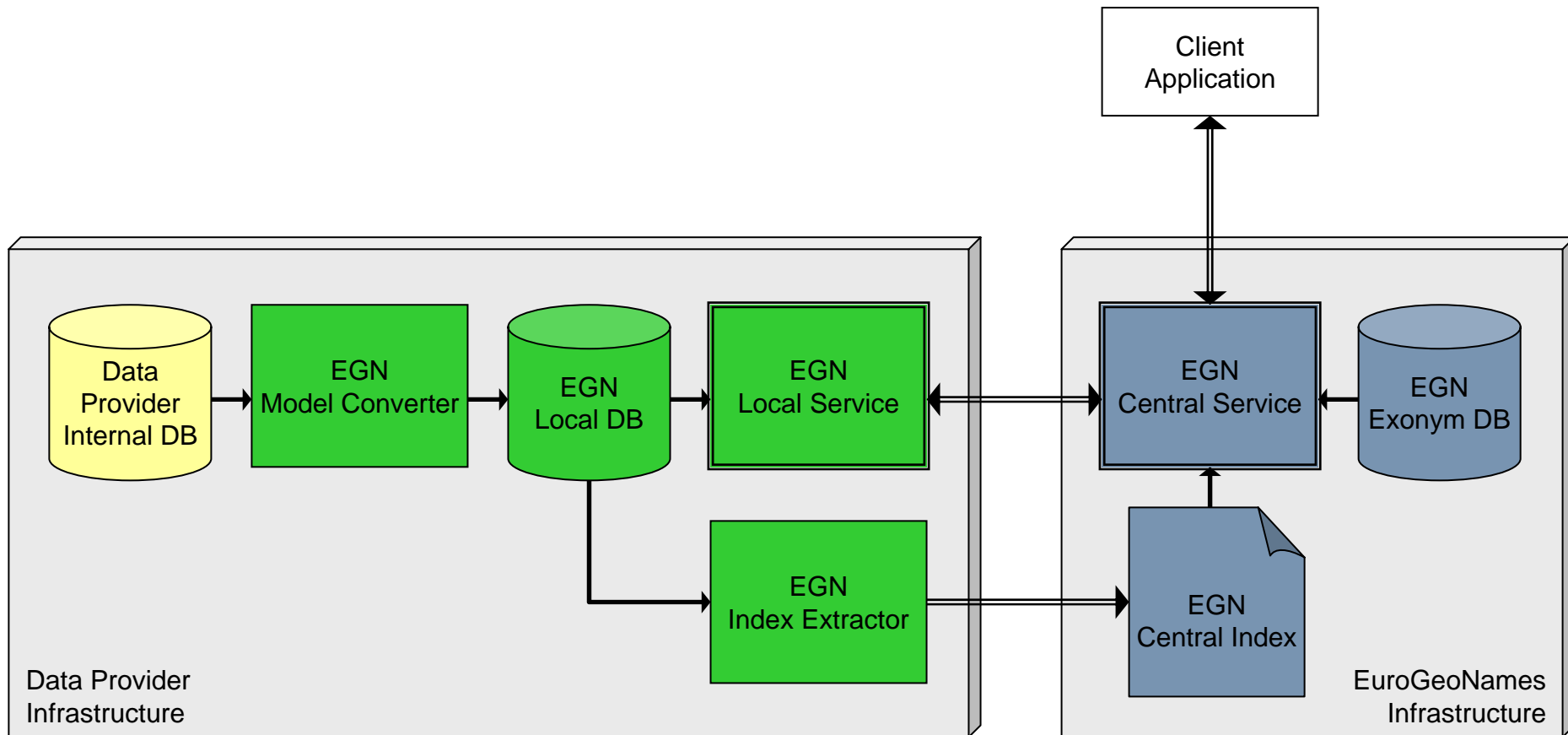
Measures in Use – Security Questionnaire

▪ <u>Firewall</u>	13
▪ <u>Applic.level gateway</u>	5
▪ <u>Packet filter systems</u>	8
▪ <u>dmz</u>	11
▪ <u>ssl</u>	6
▪ <u>https</u>	10
▪ <u>VPN</u>	2
▪ <u>Apache</u>	9
▪ <u>Tomcat</u>	6
▪ <u>J2EE</u>	1
▪ <u>Java</u>	5
▪ <u>ssh</u>	7
▪ <u>sftp</u>	6
▪ <u>high availability</u>	8

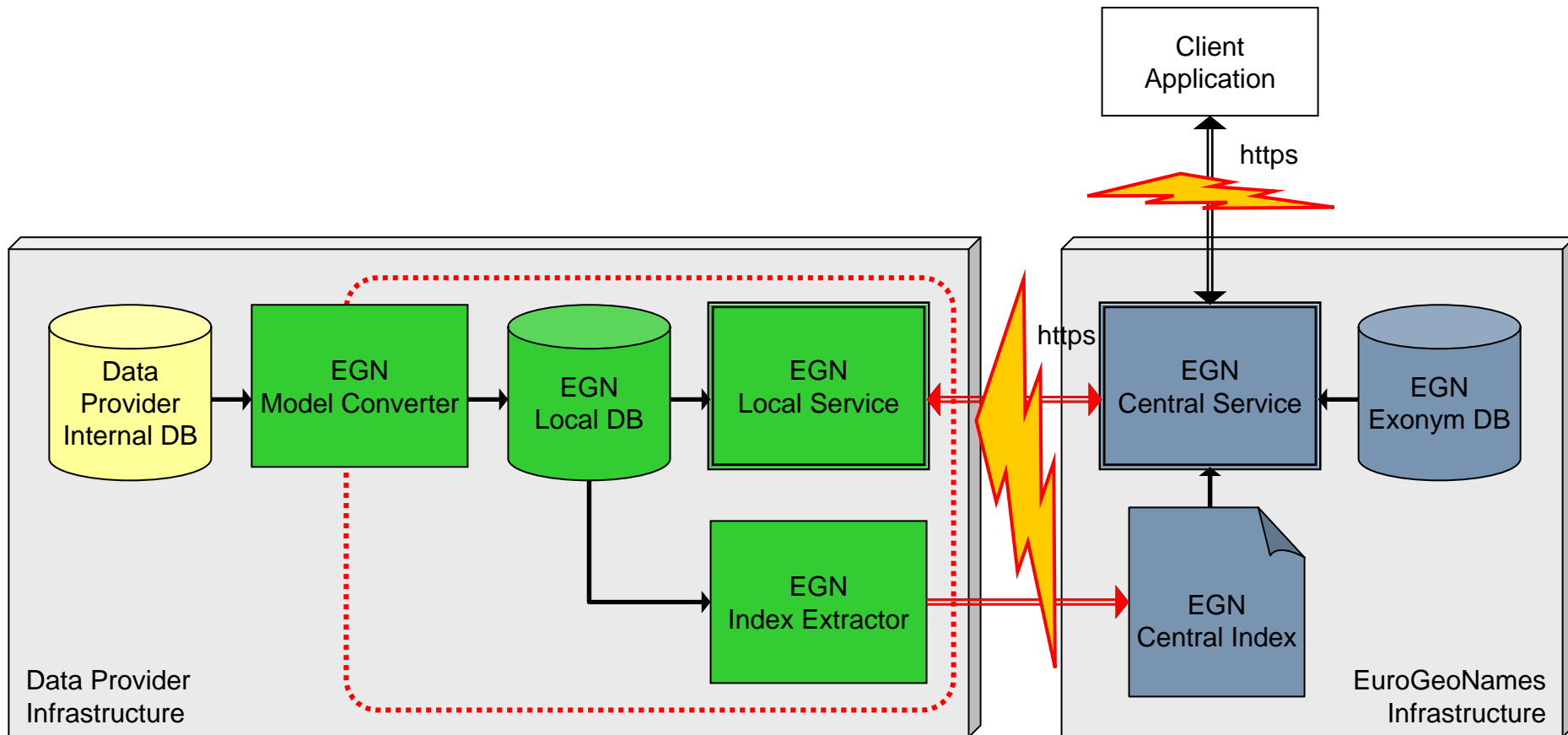
Proposed Architecture – Overview



Propose Architecture – Detail



Proposed Measures



Proposed Measures

- Using existing technology, successful strategies
- In agreement with all data and service providers
- Suggested security model as shown on previous slide:
 - Client application connects through https
 - Central service protected through Firewall
 - Closed connection between central and local services
 - Closed connection for EGN index extraction
 - Security to be ensured at central service

Proposed Measures

- Security measures depend on:
 - Base architecture and implementation
 - Business model
 - Service levels?
 - Different types of users?
 - Sophisticated user authentication and authorization
 - User access control mechanisms
 - Denial of service measures