

# Future of Internet: Design Perspectives

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# What is future (of) Internet

- The Internet would be backbone of all aspects of Citizen's life
  - The future is ony digital life
- Future Internet should be:
  - Scalable
  - Support high speed connectivity anywhere, anytime, and provide good throughput
  - Able to meet performance metrics of
    - Quality of service, security and privacy
  - Self adaptable for demands

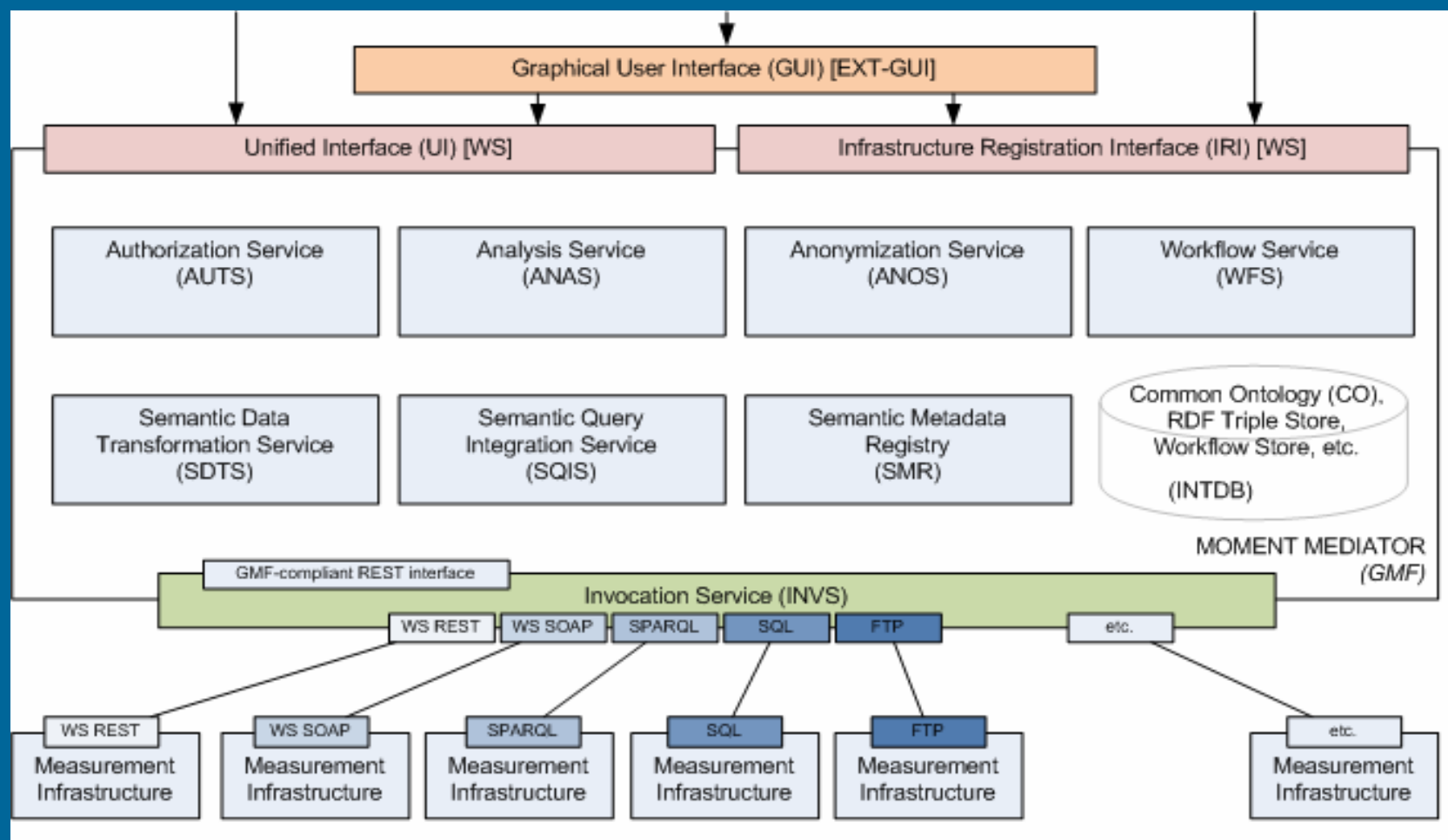
# How to design ?

- Designing the Internet of the Future needs information on the usage characteristics and performance metrics of present Internet
  - Monitoring and Measurement of different data
  - Unified interface to access data from different infrastructures
  - Analysis of data acquired through passive and active probes
  - Legal and regulatory issues in the network monitoring and measurement
  - Privacy enhancement and protection
  - Strong role in standardisation

# What is going in FP7

- MOMENT: Monitoring and Measurement in next generation technologies:
  - Developing `Unified Interface` to access traffic monitoring data from different infrastructures
  - Uses ontology based tools and methods and semantic data format for data representation and retrieval of measured data
  - Has developed a Mediator framework, so that any new infrastructure can be easily integrated to the system.
  - These can support new management concept for the future Internet for real time cognitive management
    - The details of Project activities will be presented today by experts in the project.

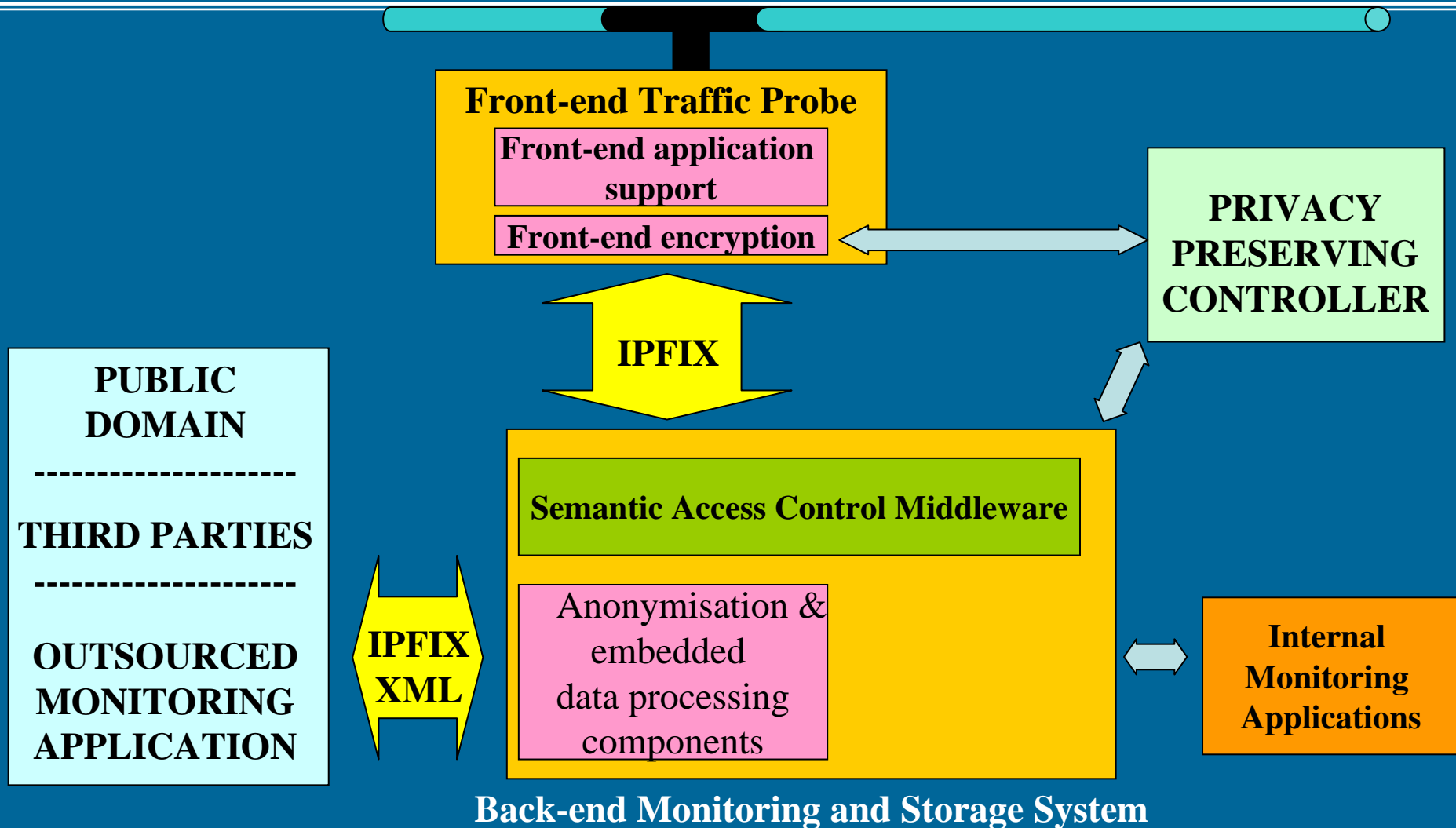
# MOMENT Architecture



# PRISM

- PRISM: `Privacy aware secure monitoring` project has developed system architecture for privacy preserving network monitoring
  - 2 tier monitoring architecture: Front end for high speed data access, Backend for selected traffic analysis with Privacy preservation controller to issue privacy certificates
  - Has taken into account EU legal guidelines in data monitoring
  - Has accomplished number of IETF standards on IP flow (IPFIX).
    - The issues addressed are presented in this workshop

# PRISM System Architecture



# Other Projects participating

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- TRAMMS: CELTIC project on traffic monitoring
- CAIDA (U.S.A) and RIPE (Europe) activities
- WOMBAT
- TMA- COST project on Traffic monitoring