

MOME – MONITORING AND MEASUREMENT CLUSTER

CO-ORDINATION ACTION: EUROPEAN IP MONITORING AND MEASUREMENT



The MOME cluster offers a platform for knowledge and tool exchange and for co-ordination of activities in the field of IP monitoring and measurement between IST projects and other European partners.

Technical Approach

Monitoring and measurement functions are often needed for applications like accounting, QoS-based admission control, traffic shaping, network planning, or incident detection. To make efficient use of existing tools and integrate them it is im-

portant to learn about the functions they can provide, the input they work on, the output data they generate and the associated data formats and data transmission protocols. Only with knowledge of these an informed decision can be made. Often more than one tool needs to be used to cover a specific goal. In that case one needs to understand, which protocols are available to exchange control information and measurement results between tools and which tool supports these so they can be used in conjunction. In order to increase interoperability it is vital to understand and support the related and upcoming standards in this area and to support them in case of newly developed tools within projects. To promote the exchange of measurement data, MOME has identified two aspects which need a thorough explanation to potential contributors:

Control over data: The publisher wants to remain in control of the data, possibly limiting the people who can be granted access to them. Controlling when the data are published and

having the possibility to withdraw those data from public access are critical to many people.

Anonymisation: Due to legal constraints, published data have to be anonymised in such a way, that the source and destination can't be traced back. This requires to restrict the traces to IP packet headers with anonymised source and destination IP addresses.

Project Objectives

- | To evaluate the interoperability of different active and passive measurement components, tools and interfaces.
- | To promote interoperability at FP6 projects.
- | To select a data format for satisfying the needs of the different tools.
- | To collect measurement data of different kinds, convert and store it into a common format and to allow access to their measurement results via a unified interface.
- | To disseminate gathered measurement data and tools knowledge to the community via an easy-to-use web-based interface to enable statistical data analysis.
- | To co-ordinate standardisation activities in the field of IP monitoring and measurement.
- | To organise workshops and conferences to build a monitoring and measurement knowledge exchange platform.

Facts

Reference: IST-2003-001990, MOME
 Project Type: Co-ordination Action
 EU strategic objective: Broadband for all
 Partners: 8
 Duration: 27 months
 Volume: 65 person months
 Total Costs: EUR 714.200
 EC Funding: EUR 529.880
 Web-site: <http://www.ist-mome.org>

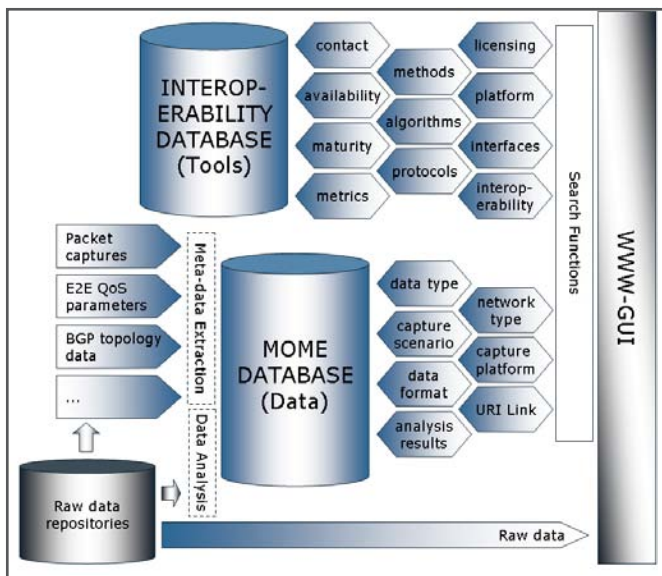
MOME



Key Issues

MOME covers four different aspects in co-ordination of IP monitoring and measurement activities in IST projects.

- 1. Synchronise relevant efforts in FP6:** Data collection about interoperability of measurement tools, evaluation of these tools and supporting standardisation activities.
- 2. Recommend measurement tools - MOME database:** Current and upcoming projects have the possibility to search for existing measurement tools which fulfil their needs. The built taxonomy allows to quickly search for the fitting tools.
- 3. Exchange measurement data:** Other projects are enabled to search for datasets and perform their research studies on them. Analysis tasks can be scheduled on the collected datasets, in order to filter out the most interesting datasets for a specific research question. The database can be searched using the public web interface without registration. A public experts mailing list supports knowledge exchange.
- 4. Organisation of events:** Workshops, conference sessions, interoperability and standardisation events are organised to bring experts together.



Expected Impact

Co-ordinating the measurement activities and providing assistance for projects helps to develop components in different projects with interfaces to already existing tools and architectures. Future projects can base on existing technology by adding their building blocks. MOME supports current and upcoming research issues by providing real, recent measurement data in a standardised format for the public or to other projects as common base material. This measurement data can be used as input to new algorithms for statistical analyses for data reduction and result evaluation for network operation purposes like admission control, network re-provisioning, operation and maintenance, intrusion detection, etc. MOME contributes also to the European innovation policy. The project results will lead to effective contributions for standardisation and regulation of the proposed approaches.

Project Partners

Salzburg Research | NEC Europe Ltd | Telefónica, Investigación y Desarrollo, S.A. Unipersonal | Université Libre de Bruxelles | Budapest University of Technology and Economics | Warsaw University of Technology | Fraunhofer FOKUS | Trans-European Research and Education Networking Association (Terena)

MOME Events

- | March 2004: IPS2004 Workshop, Budapest
- | June 2004: MOME Session at TERENA Networking Conference 2004, Rhodes
- | December 2004: MOME Session at BroadBand Europe Event
- | March 2005: IPS-MOME 2005 Workshop, Warsaw
- | June 2005: MOME Session at TERENA Networking Conference 2005, Poznan
- | July 2005: MOME Cluster Event at IETF63, Paris - Interoperability and Standardisation Event
- | February 2006: IPS-MOME 2006 Workshop, Salzburg

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