



Why a large scale content delivery platform is needed?

- Services create demands for efficient platform:
 - Cloud services and social media including also music/video services have already broken into markets putting also the networks under strain.
 - The demand of 3D content creates challenges for communication infrastructure already in the near future.
- In order to enable the penetration of the new content delivery services it is required to integrate the developed delivery platforms for everyday use.
 - This requires support also from Future Internet networks
- There is a lack of large scale pan-European content distribution and cloud service environment.



Technological innovations and enablers

- Main requirements for the platform
 - Security, trust and data integrity, Capabilities of handling and transporting huge amount of data, Efficient data discovery and access, Billing and handling access rights, Energy efficient operations etc.
 - Since the different application areas are mainly developed separately, an unified interfaces are needed to provide
 - means of access the information, modify and manage the content and services and handle the content production chain in secure way.
 - In addition it is necessary that the backbone network including the wired core and wireless edges are integrated to support these operations.
- FI core technology platform would enable:
 - New content-aware dissemination and discovery mechanisms improve the data access and discovery as well as security and trust.
 - Advances in the core network routing and especially wireless broadband solutions provides good basis for connectivity and service penetration.
 - Cognitive network solutions can enable the intelligent and energy efficient utilization of resources.



VTT's role

- Multidisciplinary research institute, which has a wide expertise also on ICT technologies and implementation.
- As a research institute VTT's main role in the FI-PPP would be in defining and implementing the network solutions for large scale experiments.
- In the Content Usage Area our research and development has focused on
 - content management and discovery and delivery,
 - solutions for utilizing social networks in media delivery,
 - cloud computing solutions (e.g. energy efficiency, cloud software and network infrastructure for federated data centres),
 - network solutions of information and content centric networking (e.g wireless and wired P2P solutions for media delivery, NetInf, CCN, CDNs,...)
 - wireless and wired multimedia communications (streaming, multicasting, scalable video coding,...).

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