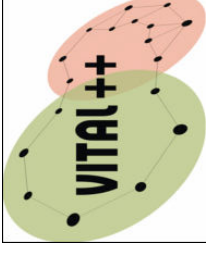


Panlob



2nd Usage Area Workshop Content Area

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A Key Requirement & Candidate Content Use Cases

- **Multiple manifestations of scalability**
 - Large numbers of Users
 - High volume for resources – computational & communication, contributed by
 - Content provider
 - Prosumer
 - Strict QoS level and QoE
- **Candidate areas for Use Cases**
 - Social Networks
 - Network games
 - They both may stretch the network to its limits

Innovative Functionality to address scalability

- Scalability is closely related with large volumes of distributed operations
- Recent advances in overlay technologies, like P2P, will and should play an important role in content distribution
 - By applying autonomic resource management and optimization that involves communities of users and all kinds of providers.
- Cloud computing and its extension to cloud networking (IaaS, PaaS etc) should build mechanisms for on-demand resource provisioning
 - To ensure availability and access to ubiquitous resources thus providing uninterrupted and timely content services and user interactions.

University of Patras offerings

- We have devised and implemented **an innovative framework for dynamically and optimally deploying different types of self-organised overlays using a modular and customisable P2P client architecture** that .
- Experimentation with actual peer-to-peer client for live streaming and video on demand developed exclusively by our team
- Involving **real users of the university campus**.
- This know-how and its “products” along with the user’s environment can be readily available in any content-based scenario and provide one of the ingredients of the Future Content Internet.
- Regarding **infrastructure provisioning mechanisms** we have also co-designed and co-developed a framework with the appropriate tools that allows the dynamic provisioning of technologies and services according to user/experimenter’s requirements.