

PeCMan

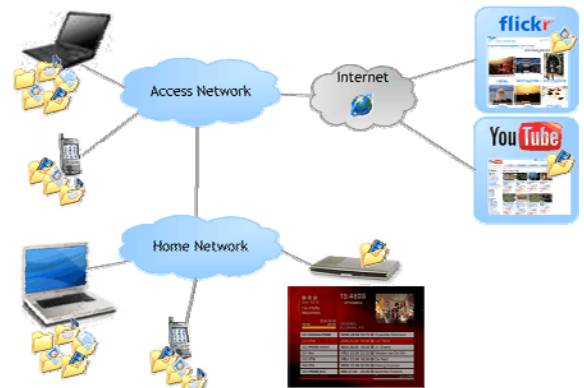
Personal Content Management



The Vision

We observe a personal content explosion (digital stills, home videos, blogging, etc.), with a growing and sustainable desire to share and discuss this personal content. We also observe more powerful connected digital appliances supporting these trends and an increasing number of such digital appliances within a single household. Add an ever growing number of online storage providers to this picture and the result is a highly distributed personal content environment in which it becomes a real challenge to keep track of where to store and where to find back your personal content.

We observe the end user need for more intuitive personal content handling and sharing (with the individual social networks), to find and share personal media at any time, on and across any device, anywhere; a need to create pictures without worries about local disk capacity or explicit synchronization; a need to find documents stored remotely and email them; to take memo notes on the road and use them at work; and to secure critical data without performing a manual backup process.

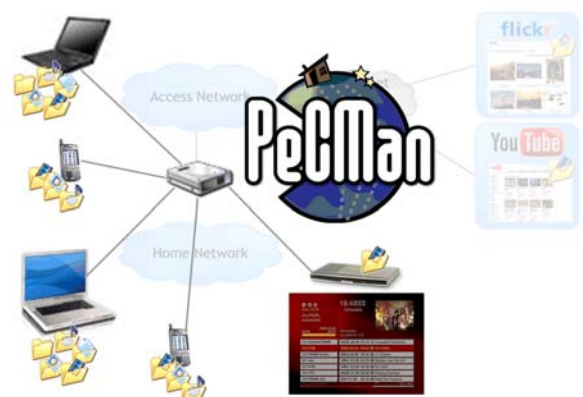


The Objectives

The overall project goal is to make accessing your personal content as easy as accessing your local file system, by offering a virtualization layer on top of your highly distributed personal content.

The main objective of the PeCMan project is to define, specify and study an architecture that unlocks the potential of managed personal content at three levels:

- Ecosystem innovation - the platform level. The open systems approach of PeCMan is reflected by the goal to realize an Open Distributed Content Network. Within this open system, content services, content workflow and content addressing, data tagging, federated identity management and user-centric security are key hurdles we plan to tackle.
- Content Services innovation - the provider level. Content services are network services running preferably in a Service Oriented Network. Examples are content enrichment services and longevity services, terminal and bandwidth adaptation services, etc. Within PeCMan we plan to make an overview of existing technologies that can be repurposed as service oriented content services, define new content services and evaluate them via a proof-of-concept, and design an infrastructure and environment for those Content Services to 'live' in.
- Application innovation - empowering the end-user. It is the total offering of the iTunes application with iPod and music compression technology that enabled the new emerging business for online music. Similarly, we plan to innovate at the PeCMan interfaces in the areas of secure metadata-based browsing, searching, storing/uploading and sharing of personal content. Further it is known that application innovation needs to be supported by in-depth





usability research in order to guarantee easiness and user friendliness of the interface and, in this specific case, to support a feeling of trust and security for the user.

Applied and basic research is required addressing advanced topics in the fields of user-interaction, security, metadata and system design that we consider key elements of a managed personal content environment.

In collaboration with



IBBT Research Groups

KU Leuven – CUO	http://www.kuleuven.be/cuo
KU Leuven – Distrinet	http://www.cs.kuleuven.ac.be/cwis/research/distrinet
UGent – IBCN	http://www.ibcn.intec.ugent.be
UGent – MMLab	http://www.mmlab.be

Project website	http://projects.ibbt.be/pecman
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