ICN Management Considerations
draft-corujo-icn-mgmt-02

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-02 in a nutshell

• At IETF 87, the need for broadening the scope of the document dealing with ICN management considerations was identified.

• Since then, two new topics were added:
  – Video Adaptation Management (S. Lederer)
  – Content Management (S. Spirou)
Video Adaptation Management

- Importance of video for ICN discussed at the Interim
  - Video streaming split into different segments
  - Adaptive media streaming and MPEG-DASH
- Segments are sent in an “optimized way” (best-connected, anycast-like, etc.)
- ICN video delivery could be assisted via management procedures, for example:
  - In case of changes in current link/traffic conditions (i.e., event service?)
  - Identifying new/better connectivity opportunities (i.e., multihoming)
  - Triggering video content request/response procedure and adapting it to the new conditions and/or available links
Content Management

• Using Network triggers, information and primitives to
  – Update/relocate in-network storage
  – Add/remove/delete content

• Integrate with accounting services
  – Manage how users get content with respect to their service agreement

• ICN management could integrate different ecosystems in order to optimize the operation of content dissemination
Towards -03

• Further editing to be done, to accommodate the new content
  – Re-writing of previous sections (NDN Management, NetInf Management)
  – Extend new sections

• We are also open to contributions in other areas impacted/impacting Management
Contributions Welcome

• Management can interface with secondary and tertiary systems (network, content and/or users)
• Evaluate different inputs and act for optimization
• How does security impact this design?
  – Which enhancements would be necessary for both sides of this coin?
  – We welcome contributions on this to the draft!
THANK YOU!