

Identity and DRM for IP Services (Digital Music, IPTV, etc.).

Rakesh Radhakrishnan
Sr. IT (Engagement) Architect
Communications Practice
US Client Solutions



Background

- IP Convergence
- Core packet network capable of delivering IP Services & Digital Content (health records, educational materials, paperwork (real estate), etc.).
- To multiple end points (STB/TV, Handheld/PDA, Laptop/DT, Home Network, and more)

Background

- Identity as the Core SBB in a SOA/SDP
- Identity Systems tightly aligned with ESB
- Identity enabled IMS, IN and OAM Services + Web Services
- Identity enabled Media Services (Mobile music, IPTV, VOD, etc.)
- Identity enabled Secure Profile sharing (federated)

Background

- Identity enabled Networks (Programmable and Sensory)
- Identity enabled Secure Profile sharing between Access Networks- ENUM, GUP, RADIUS/TACACS, AAA, etc.
- Federated Authentication and Context
- ID based Services (location, payment, presence and dig. rights management.)

Current Issues

- DRM tied to Silo's (Cable Operators use alone, DRM for wireless CDS, etc.)
- Not tied to User and Content alone (delivery agnostic to devices and networks)
- Multiple DRM standards
- Specific to Content type (movies, music, docs)
- Needs to expand to all digital content -user centric (not just media) – such as health records, educational content, personal photo albums, legal documents, books, etc.)

Current Issues

- DRM not as a Service that acts as a Building Block for SOA and SDP
- No Alignment with Identity Initiatives (Liberty/OASIS) and an IDS as a Core SBB
- Contextual DRM (sensors reporting a problem – event triggering a report and health record visible to authorized health personnel remotely -reporting on the change in condition and relevant docs)

What's Needed?

- Inter-operable Framework – DRM-Opera, CAS, Coral Consortium, and more.
- Disintermediation – separation of DRM/DAM functional components (authentication, licensing, content protection systems, digital asset workflow, packaging, key/license distribution, contracts manager and more) – treating each as a SBB
- Dynamic and Session based -to add context within a Session

What's Needed?

- Content-Centric + User-Centric (any-device any-network & role-based)
- ODRM based (XrML, DRML, Federated DRM-SAML, etc.)
- Builds on SOA and Identity System as a Core SBB
- Basis for the same Content/Media distribution over IP networks and devices (STB, Laptop, PDA, and more).
- Agnostic to content (music, video or legal document)

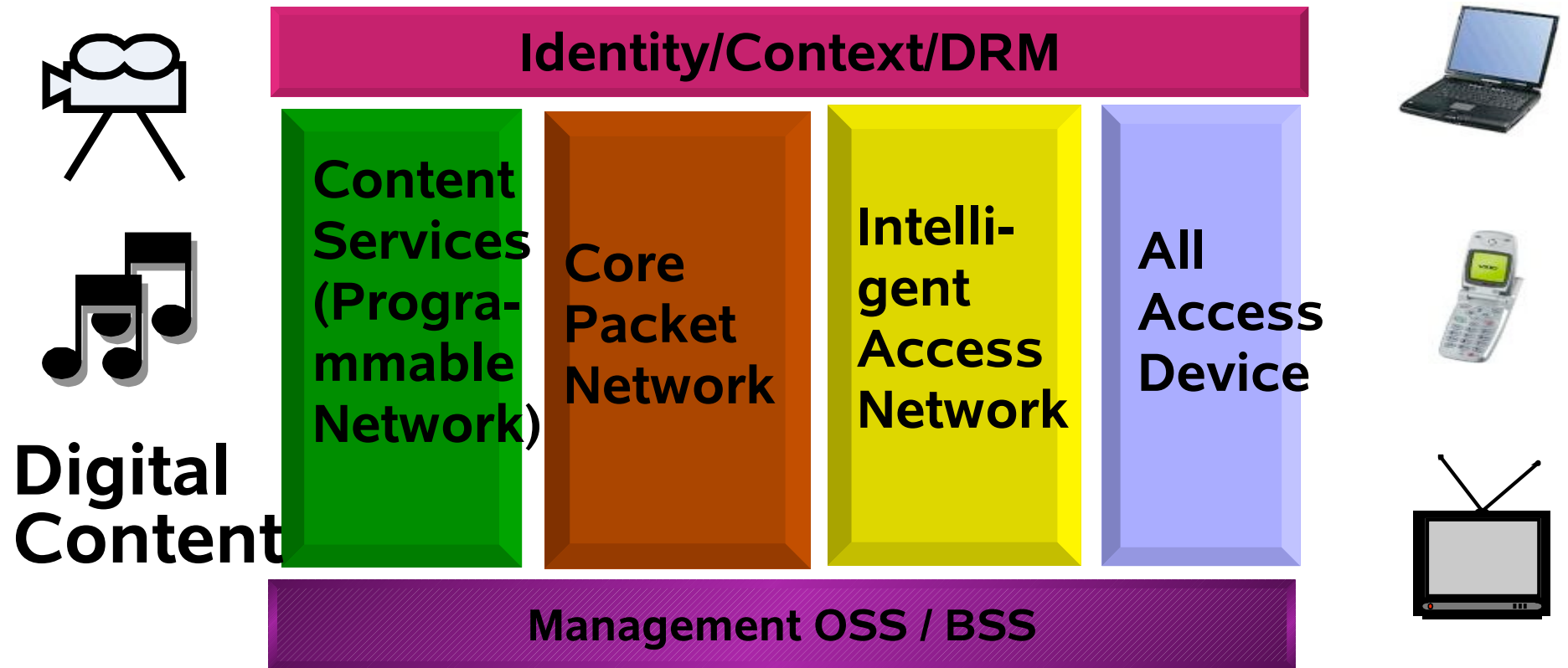
Project Liberty & Project DReaM

- Identity Based DRM as a SBB for SOA/SDP
- User can pause a VOD in a Plane continue in a SUV on his/her way home (User and Service Session aware)
- Federation of DRM profile will allow for access of content via multiple Network Service Providers
- User interventions possible – Notification when health record is accessed with request for approval (allowing for DRM and IDM workflows)

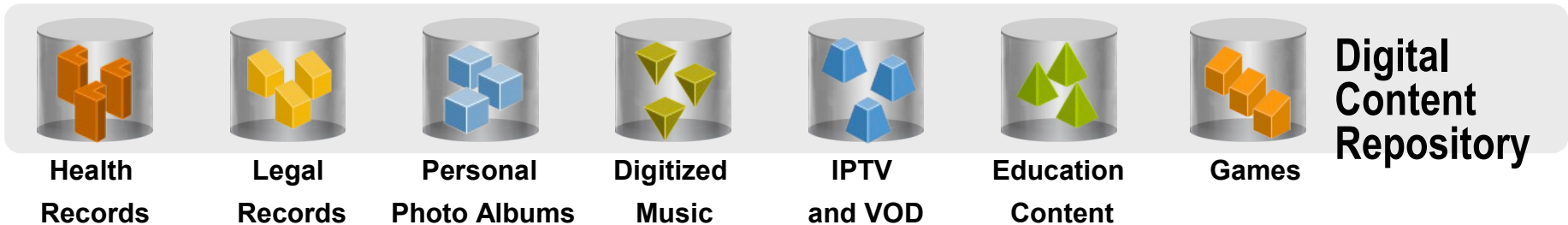
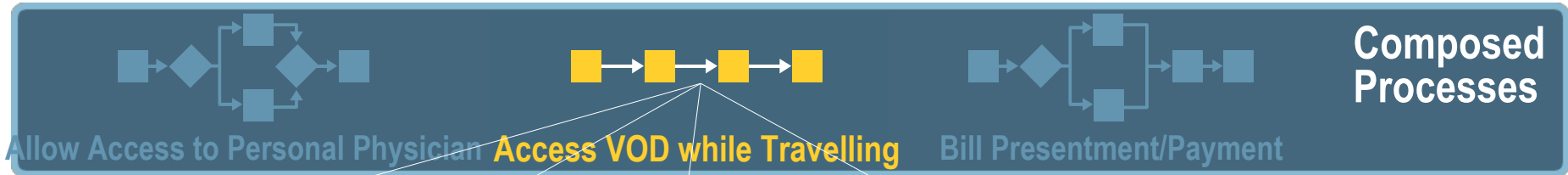
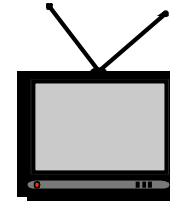
Project Liberty & Project DReaM

- Ties rights management to User activities/context
- Tightly Aligned DRM and IDS allows for user centric security framework for a Real-time Service Bus
- Identity enabled event Containers + DRM allows for Multi-media Communications with secure Content exchange
- Alignment of Project Liberty, DReaM & Looking Glass

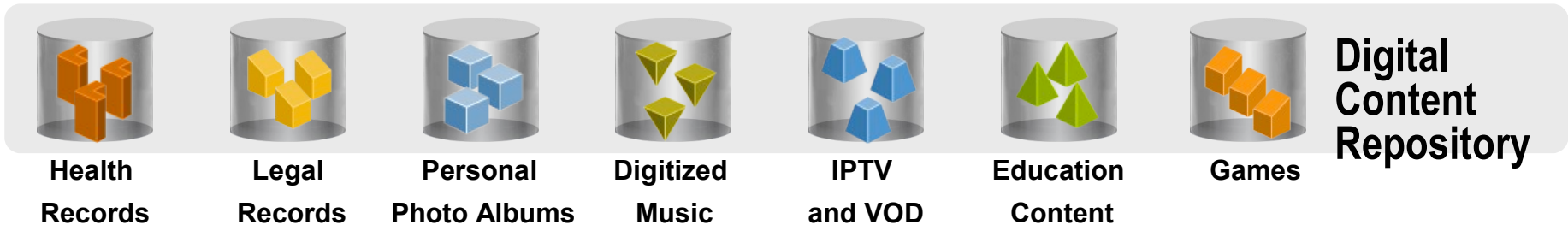
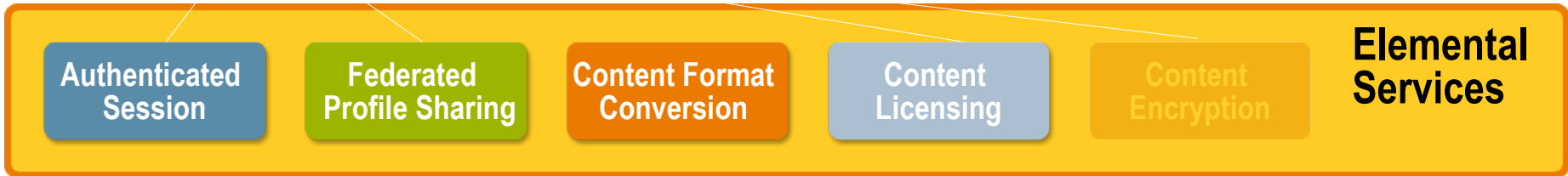
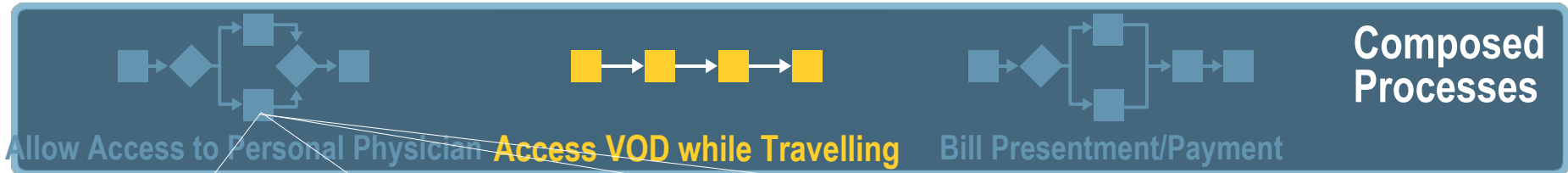
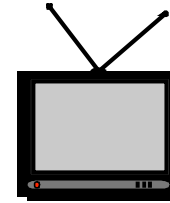
Reusable DRM as a SBB



Access VOD while Travelling



Allow Content Access to Physician



Q & A