

Status of draft-ietf-ipdvb-ar-01

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Address Resolution Scope

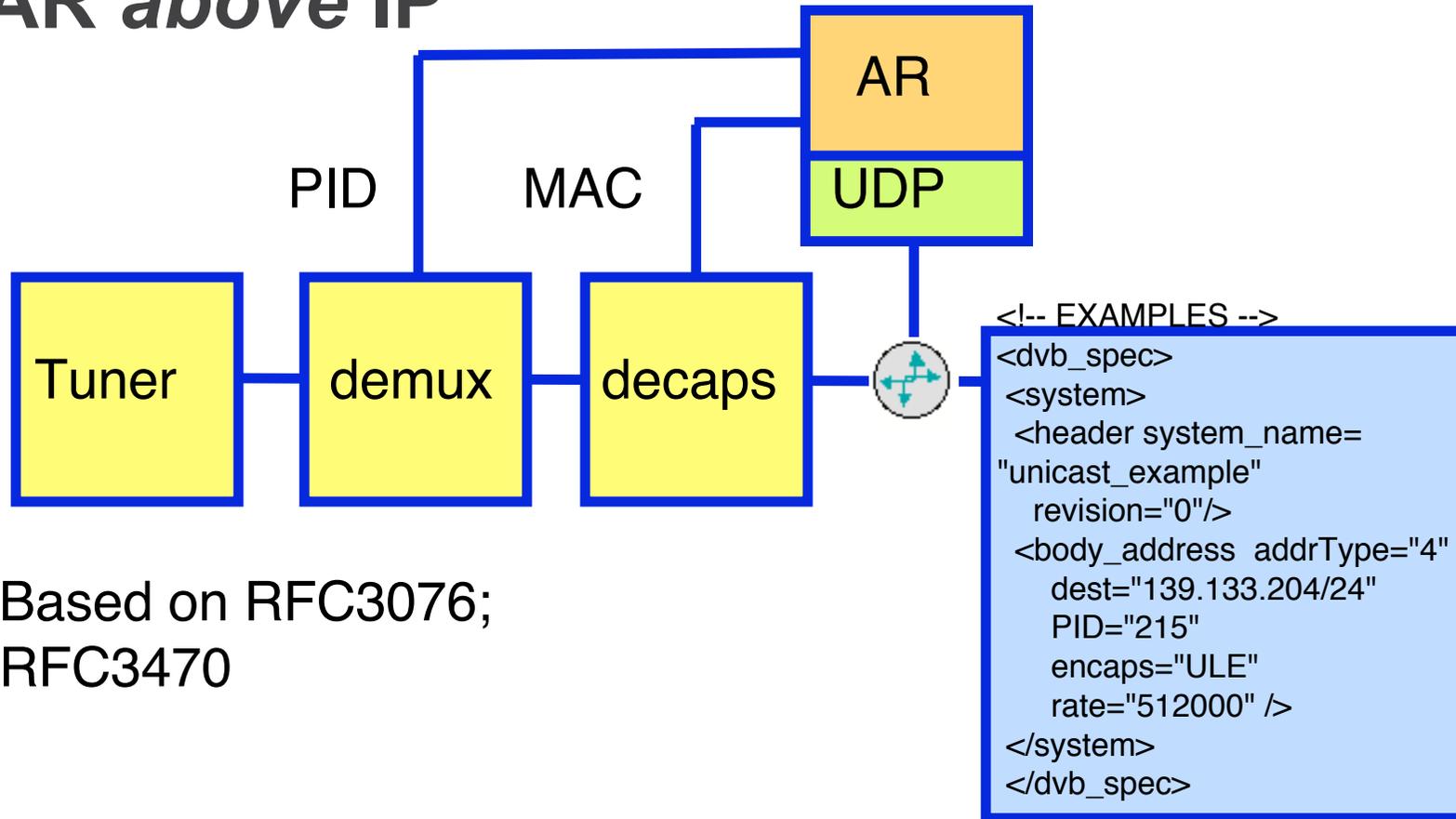
- Chapter 1:
 - Review ARCH requirements for AR
- Chapters 2 and 3: Define Binding/associating IPv4/IPv6 addresses with:
 - Packet ID (PID)
 - L2 frame MAC/NPA address
 - Transmission Multiplex
- Chapter 4: Review table-based (INT,AIT,MMT) mechanisms to resolve:
 - IP addresses to MPEG-2 addresses
 - IP addresses to MAC addresses
- Chapter 5: Describes interaction with well-known protocols:
 - DHCP, ARP, and NDP
 - Guidance on usage in various scenarios
- Remainder of document:
 - Review known implementations and solved/known issues
- Goal:
 - Set the basis for a coherent view of AR in MPEG-2 based networks and define potential future protocols

Purpose of Draft

- Establish terminology and common understanding
- Review implementation scenarios
 - **Table based:**
 - INT: DVB-H
 - AIT: MHP
 - MMT: DVB-RCS
 - Cable?
 - **Configuration/scenario based:**
 - ATSC
- Relationship to existing work in ATSC, DVB, ISO, etc
- Informational RFC



AR above IP



Based on RFC3076;
RFC3470

Addressed Issues (1)

- Ensures a technology agnostic solution
 - **Applicable to wireless, cable and satellite MPEG-2 based networks**
 - **Portable driver code, text based approaches, middleware integration**
 - **“seamless mobility”**
- Integration into multiple signaling paradigms for example
 - **DVB/SI**
 - **IMS/SIP**
- Can resolve other relevant and important parameters
 - **Encapsulation methods**
 - **MTU**
 - **Policy/Priority/QoS**
 - **Security/authentication/DRM**
 - **Packing Threshold**

Addressed Issues (2)

- Closer integration to current trends in IP networking
 - **Sipping - config**
 - **autoconf**
- Closer integration to other standardization efforts
 - **ATSC**
 - **PacketCable/CableLabs**
 - **TISPAN/NGN**
 - **etc.**

Updates Since Last Version

- Current rev: v01 WG Document
 - Authors: Marie-Jose Montpetit and Gorry Fairhurst
<http://www.ietf.org/internet-drafts/draft-ietf-ipdvb-ar-01.txt>
 - Changes are at:
 - <http://tools.ietf.org/wg/ipdvb/draft-ietf-ipdvb-ar/draft-ietf-ipdvb-ar-01-from-00.diff.html>
 - New authors welcome
- Added description of use of SI (PMT) to Chapter 4.
 - Based on discussion on the list.
 - Minor fixes (mainly to reference citations)



Proposed for v2

- Chapter 4:
 - **ATSC inputs (e.g. On A/92)**
 - **DOCSIS (& SCTE DVS-311 and others) references**
 - **Reorganize to add a section on "several PIDs for same IP service"**
- Chapter 5:
 - **SEND (Secure Neighbor Discovery – RFC 3917) impact of cryptographically generated addresses to secure ND (Neighbor Discovery)**
 - **UDLR inputs**
 - **SIP/IMS and new DVB-H developments**
 - **Link to config ID**
 - **Reorganize section on ARP into a separate section**
- Potential topics
 - **Effects of mobility**
 - **Other/new IP-based solutions**

Inputs needed

- From the ULE and UDLR communities:
 - Current usage and use cases
- From the cable/broadcast community:
 - PacketCable Multimedia and ATSC strategy, current usage and use cases
- From in IP streaming over MPEG2 community:
 - Evolution of AR and configuration strategies