IETF MIF & IEEE 802.21

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Future IETF MIF work (from OMA-MIF Workshop at IETF83)

1) Extend current MIF API to add additional messages for notifications.

2) Write a draft to define requirements for an abstract notifications API.

3) Write an informational draft that provides recommendations about using the MIF API in order to handle interface changes.

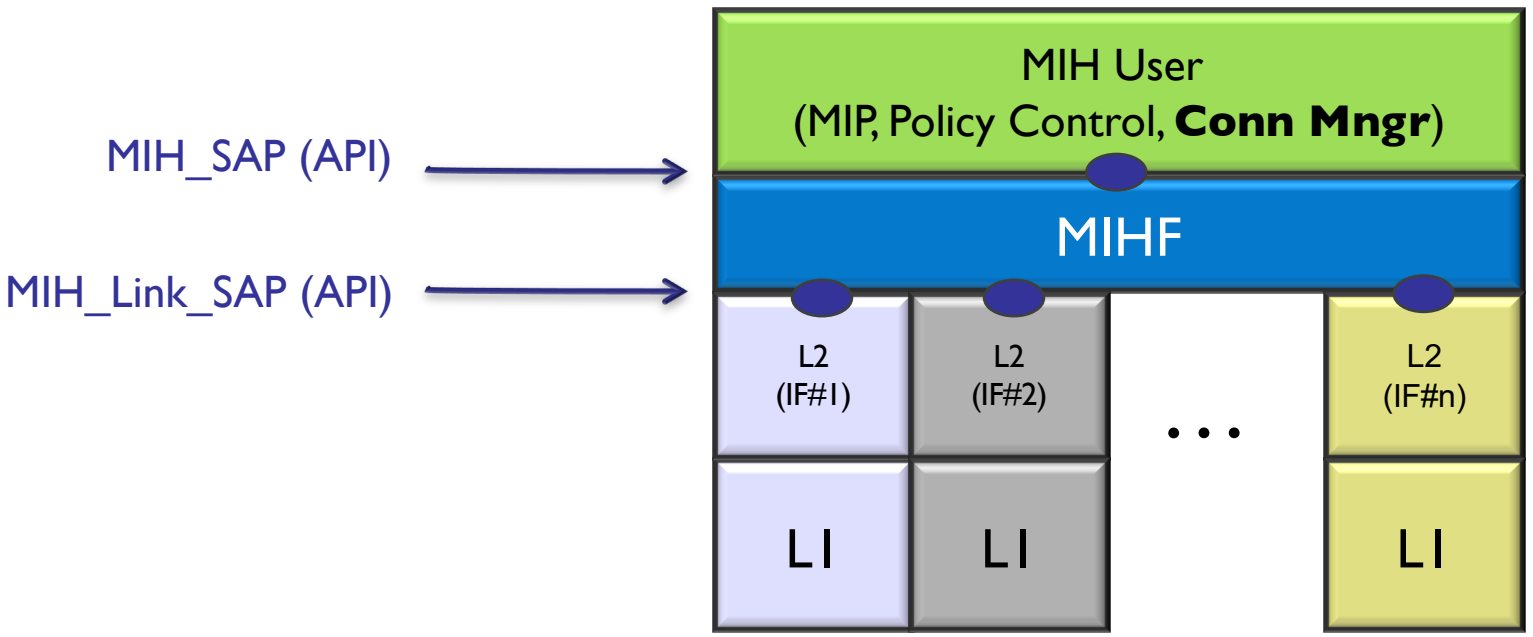
IETF MIF API

Application Connectivity Management

- Application hints that it wants to connect
- Application hints that connection is idle
- Application hints that connection can be broken
- API hints that Interface/PD is going away
- API indicates that interface is going away
- API indicates that interface is expensive
- Etc?

IEEE 802.21 MIHS (Control Plane)

- Provides predictive signaling that can proactively trigger handovers or flow mobility and hence enhance QoE (ES)
- Allows a better control of lower layers to enforce Operator and User's policies (CS)
- Provides information about available access networks (IS)



IEEE 802.21 MIH_SAP

Media Independent Services (partial list)

- MIH_Capability_Discover
- MIH_Register
- MIH_Event_Subscribe
- MIH_Link_Parameters_Report/Get
- MIH_Link_Detected/Up/Down/Going_Down
- MIH_Link_Handover_Imminent/Complete
- MIH_Link_Configure_Thresholds
- MIH_Link_Actions
- MIH_MN_HO_Commit/Complete/Query
- MIH_Get_Information

Recommendations

- IETF MIF should not re-do the work that 802.21 has already done
  - 802.21 defines a Media Independent Services SAP (API) that provides most of the functionalities that MIF is looking for
  - 802.21 also defines low level Media Specific SAPs for the underlying access technologies
- IETF MIF should identify requirements and make references to 802.21 SAPs where appropriate
  - If non-existing functionalities are identified both MIF and 802.21 should work together