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Telco Workgroup - Building Bridges Between Standards Communities

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Disclaimer

- The information in this presentation represents a snapshot of work in progress within the DMTF.
- This information is subject to change. The Standard Specifications remain the normative reference for all information.
- For additional information, see the Distributed Management Task Force (DMTF) Web site.



The Telecommunications Working Group

- The Telco WG is aiming to bring together collaboratively different standards from Enterprise Space and Service Provider Environments and various SDOs
- There are two related thrusts in the Group's charter:
 - To define new models of devices, networks and services of interest to the telecommunications sector
 - To facilitate the work on harmonization of management architectures between DMTF and other Standard Defining Organizations (SDO)



Workgroup Objectives

- Augment the existing Common Information Model (CIM) to encompass the components and services traditional to the telecommunications arena
- Facilitate enhancements to DMTF Management Architecture to help integration of DMTF management components into Telecommunication Service Providers' Operation Support Systems (OSS)
- Facilitate the work on harmonization of the CIM and Management Interfaces developed and maintained by DMTF with Information and Data Models developed by other SDOs (ITU-T, TMF, 3GPP, IETF, SAF, etc.)
- Collect and prioritize use cases, model resources and services required to support Service Providers' operations
- Establish profiles for the above modeling efforts in order to establish extensible schemata that meet the known requirements of today's and future industry implementations
- Work in conjunction with other DMTF working groups as appropriate to develop common models and protocols related to highly-available telecommunications concepts



Supporting Companies

- The companies are involved with the in the formation of the Telco Working Group
 - Cisco
 - Harris Stratex Networks
 - HP
 - IBM
 - Intel
 - Nortel
 - Sun



Alliance Partnerships

- Existing partnerships:
 - TeleManagement Forum (TMF)
 - Service Availability Forum (SAF)
 - International telecommunication Union (ITU-T)
- Other alliances with telecommunications organizations may be created in the future
 - There are many existing initiatives we can liaison to:
 - ATIS/TMOC, DSLF, DVB, ETSI/TISPAN, ITU, ISMA, DLNA, CEA, IPDR, 3GPP, ANSI/SCTE, Cable Labs, Open IPTV Forum, WIMAX Forum...



Current Work

- CIM/HPI mapping guidelines
- DMTF/TMF Model Harmonization and Mapping Methodology
- IPTV Services Management standards analysis and Liaison Development
- IPTV Services Management Profiles

Future Plans

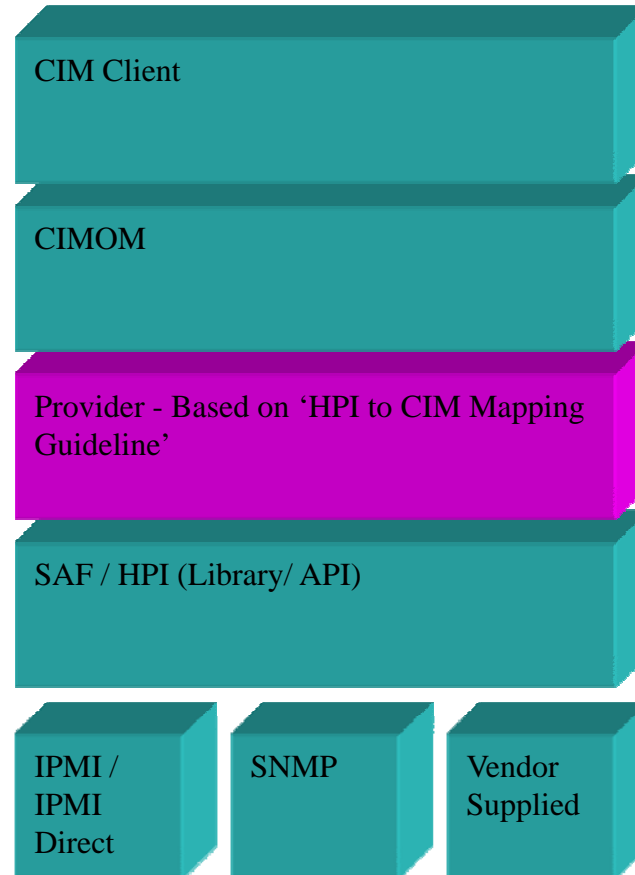
- Management Interface harmonization
 - WebServices across different standard bodies
- Networking Profiles
 - IP Topology Profile
 - VLAN Profile
 - MPLS Network Profile
- Resource naming harmonization
- Alarm information harmonization
 - ITU (X.733)
 - TMF
- Development/adoption of the modeling patterns and templates in CIM in addition to the management profiles



CIM to Service Availability Forum (SAF) Hardware Platform Interface (HPI) Mapping Guideline

- CIM-HPI mapping guideline.
 - The mapping guideline is intended to provide HPI and CIM developers a clear understanding on how to implement a CIM provider interfacing with an existing HPI interface.
 - Additionally the mapping exercise will identify system management domains of the CIM Schema not fully representative of those areas covered by HPI (e.g. Alarms) and will drive changes to the schema.
 - Based on Modular System implementation contributed by Sun.
- Participants
 - HP, Sun, IBM.

Management Stack Utilizing an HPI enabled CIM Provider



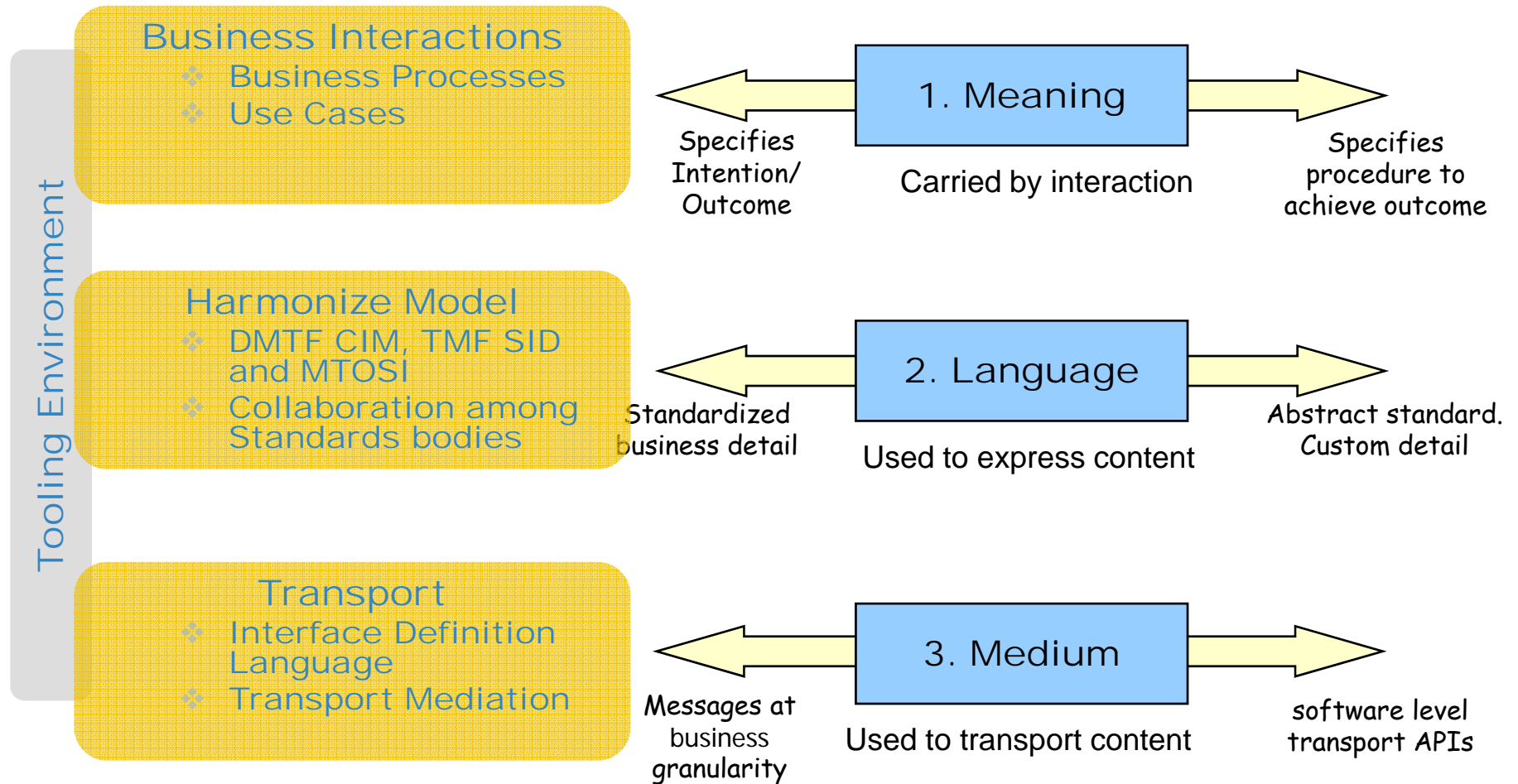


Strategic Harmonization Alliance between TMF and DMTF

- Was established in 2005 to address harmonization issues primarily between CIM and SID
- Overall goal – **to harmonize management architectures** in order to simplify management of Next Generation Networks and Services
- Mutual benefits
 - Broader adoption of specifications by the industry
 - Assisting the development of industry-wide shared information and data models
- Benefits to TeleManagement Forum
 - Providing the ability to reuse information in the DMTF's CIM in NGOSS environments.
 - Joint positioning with the DMTF on TMF's Enhanced Telecoms Operation Map (eTOM) business models and the DMTF's technology oriented models
- Benefits to Distributed Management Task Force
 - Suggesting updates to CIM Core and Common Models
 - Providing the ability to reuse information in the TMF SID model in CIM environments
- Customers and vendors of both organizations benefit from this effort by having a consistent model from technology through business perspectives.

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Architecture Harmonization Framework





IPTV Services Management

- Many SDOs are already working on a number of IPTV related standards
 - ATIS/TMOC, DSLF, DVB, ETSI/TISPAN, ITU, ISMA, DLNA,CEA,IPDR,3GPP, ANSI/SCTE, Cable Labs, Open IPTV Forum, WIMAX Forum...
- The specification produced by various standard bodies need to be analyzed for
 - Identification of semantic and implementation similarities
 - Gaps
 - Selecting the common Use Cases
- This work should provide a direction to the Working Group where to go and what to focus on first in terms of more specific modeling of customer-facing IPTV Services



Example IPTV Services Classification

- IPTV services can be classified into 4 major categories (ITU-T)
 - Content service
 - *Channel service*
 - *Content-On-demand service*
 - *Navigation service*
 - *Interactive service*
 - Commerce service
 - Communication service
- IPTV Channel Management Profile focuses primarily on the Content Service and deals with management of IPTV-Channels.



IPTV Channel Management Profile

- An autonomous profile that provides the capability to manage a general purpose IPTV Channel Service
- IPTV Channel is the IPTV-based channel service that provides video, audio and data linear broadcasting service
- It is an appropriate target for performing management tasks that are common across diverse IPTV systems and supporting platforms



Questions?