The Problem/Need

- **Increasing demand for systems and applications management**
- **MIBs Developed Independently by different working groups**
- **MIBs developed in different IETF Areas**
- **MIBs at Different Levels in standardization process**
- **Need for increased modularity of MIBs**
- **MIBs developed at different times**
- **Evolving Nature of WG Charters**
- **Concern about having too many MIBs as pre-reqisites to a new MIB.**
- **Interrelationship between elements such as physical resources of a host and the applications which use them and the networks they use.**

The MIBs

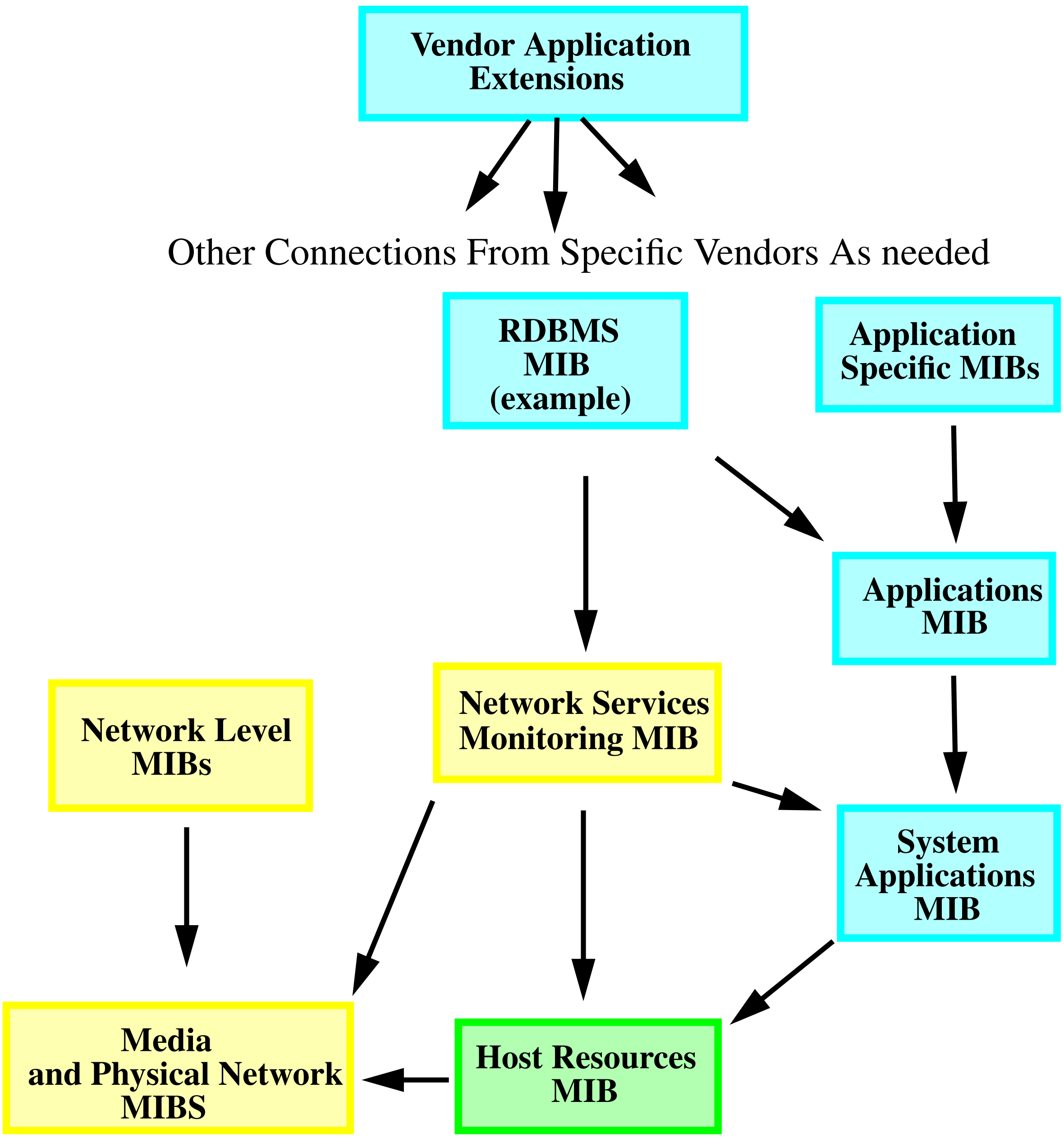
- Host Resources MIB - RFC1514
- RDBMS MIB - RFC1697
- System Applications MIB - draft-ietf-applmib-sysapplmib-02.txt
- Applications MIB Activity
- Entity MIB - draft-ietf-entmib-entmib-05.txt
- Network Services Monitoring MIB - RFC1565 - revisions in progress
- Discussions about MIB for WWW Management
- MIBs for other Applications

Current Relationships

MIB	Area Of Focus	Overlaps With
RDBMS	General Relational Database Mgmt. Installed Servers & databases	There is no functional overlap - This is the first ‘application specific’ standard MIB. It is connected to the Network Services Monitoring MIB via applIndex in the rdbmsSrvInfoTable, rdbmsSrvLimitedResourceTable & rdbmsRelTable.
Host Resources	Management of all types of computing and interconnect devices.	Optional Groups - Running Software and hrSWRunPerf Grp. - have some overlap with System Applications MIB.
System Applications MIB	Basic fault, configuration and performance information for generic applications. Does not require additional application level instrumentation.	This MIB currently has some overlap with Network Services and Host Resources MIB. See recommendations.
Application MIB	Provide generic applications information which will require application level instrumentation.	Should augment HR, Network Services and System Application MIB

MIB	Area Of Focus	Overlaps With
Entity MIB	To present standardized representations of agents which support multiple instances of one MIB.	No functional overlap with any other MIBs discussed here. Could be used as a 'glue' for all other MIBs. Not intended as glue for general purpose computing systems.
Network Services Monitoring MIB	Networked Applications.	Has some overlap with System Applications MIB and Applications MIB. See Recommendations.

Proposed Relationships



Changes to Existing MIBs

1. Connect sysAppl MIB to Host Resources Running Software and Host Resources Running Software Performance Groups .
2. Connect System Applications MIB to Network Services MIB by changing sysApplElmtRunNumTCon to be a pointer to the Network Services Monitoring MIB (applTable).
3. Connect the System Applications MIB to the Host Resources MIB, by adding entries for the installed and running groups to the devices tables in the HR MIB where necessary.
4. applDirectoryName in the Network Services Monitoring MIB should be changed to not require/suggest config information comes for directory services. Configuration information should allow for pointers to MIB objects like those found in the System Applications MIB, HR MIB and RDBMS MIB.
5. There are a number of elements in the Network Services Monitoring MIB which are not related directly to network services, but are general applications information which should be moved to other appropriate MIBs. These include: applVersion, applUptime, applOperStatus (this is also duplicated in HR MIB), applLastChange. The applDescription and applURL probably should move to a generic applications MIB.
6. Connect RDBMS MIB to System Application MIB in next revisions.
7. A way to connect Network Services to the Interface should be created.

Changes to Procedure/Recommendations

1. For software tables in new MIBs, formalize requirement for examination of interactions with HR, System Applications, Application (when available) and Network Services MIBs.
2. For new application specific MIBs such as extant RDBMS and planned WWW activities, ensure connections to 'infrastructure' MIBs where necessary (e.g., HR, sysAppl, Appl, Network Services).
3. Suggestion from Bob Stewart: "it's about time we had an explicit overall information hierarchy for all of our MIBs. Given that, it should become more mechanical to sort out which things go in which MIBs." A preliminary suggestion is on previous page.

Special Thanks/Acknowledgements:

Carl W. Kalbfleisch

Keith McCloghrie

Harald T. Alvestrand

Bob Stewart

Jeff Case

Cheryl Krupczak