

MIF API

draft-liu-mif-api-extension-06

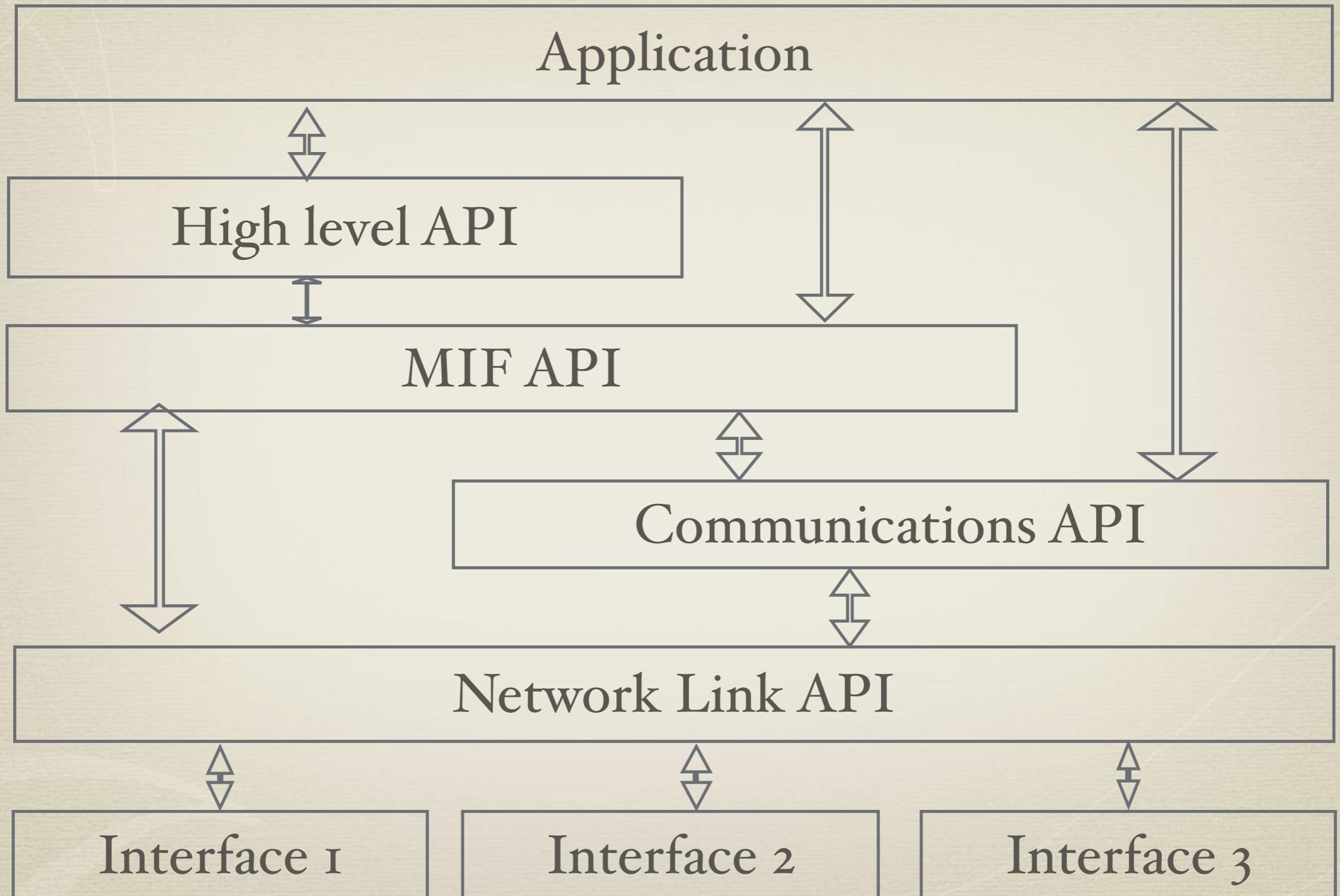
Status

- * Previous version was sketchy and incomplete
- * Current version is an attempt at a complete API
- * No review yet
- * Would like some review

Provisioning Domains

- * API exposes interfaces
- * All actions are in terms of provisioning domains
- * Need more clarity: what is a provisioning domain
 - * Is link local addressing a separate pd?
 - * Is IPv4 a separate pd?
 - * What about RA vs stateful DHCP?

API Model



Application

- * The ultimate customer of the API
- * Can use API directly as well
- * May receive connections as well as originating
- * Web browser, peer-to-peer app, etc

High level API

- * E.g. connecttoname()
- * E.g. happy eyeballs
- * Easy for app implementors to use
- * Requires some or all features of MIF API
- * Not used after connection established

MIF API

- * Abstract API, no language bindings
- * Too low level for most apps
- * Provides sufficient tools to implement HL API
- * Does not constrain HL API implementations
- * Message-passing, not synchronous
- * Analogous to unix routing socket

Communications API

- * How application communicates after connecting
- * MIF API and HL API yield a handle that is then used with this API
- * Not otherwise used directly by MIF API
- * Must be possible to do MIF API and communication API at the same time without interference
- * e.g. BSD Socket API

Network Link API

- * This is typically the OS IP stack
- * Controls interfaces
- * Sends and receives packets
- * Handles routing
- * I've also stuffed DHCP and ND in here for brevity
- * Should I make that more explicit?

What's next?

- * Is this working group work?
- * How much should we flesh out what's happening under the covers, if at all?
- * Comments, flames, suggestions, offers of help?