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CCNX ATHENA FORWARDER

OVERVIEW: CCNX ATHENA FORWARDER DESIGN

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Content-Centric Networking
PARC - CSL

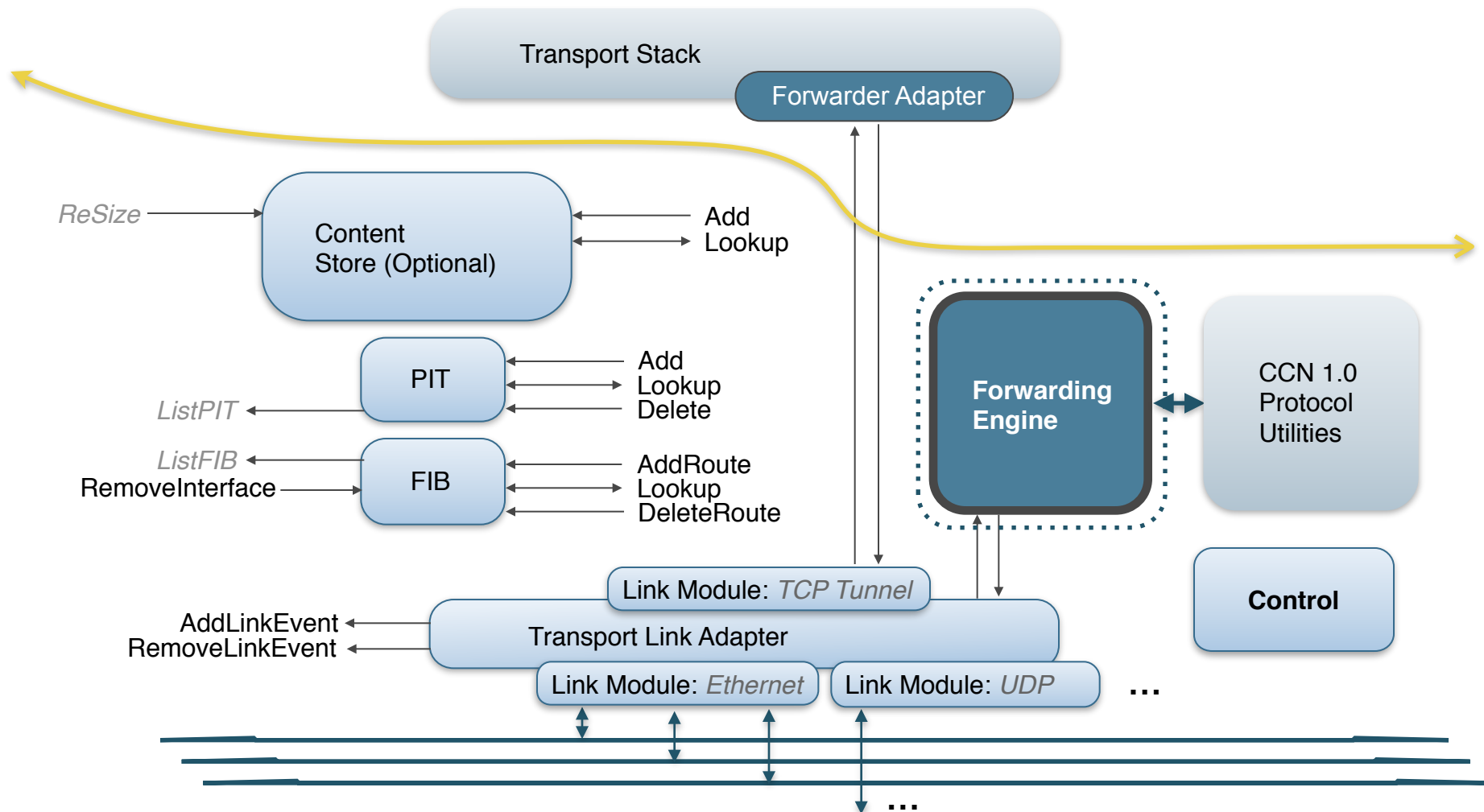
CCNX FORWARDER API REQUIREMENTS

- Research and development platform
- Modular and stable component interface specifications with well defined scope of responsibilities
- Message interception between components
- Component modules provide incoming/outgoing hooks
- Administrative interfaces via command line and messaging
- Metrics
- Developer documentation

CCNX FORWARDER API CONTEXT

- Forwarder components
 - Forwarding Engine
 - PIT
 - FIB
 - Content Store
 - Control
 - Transport Link Adapter
 - Transport Stack Adapter
- Bootstrap configuration
- Control message interfaces

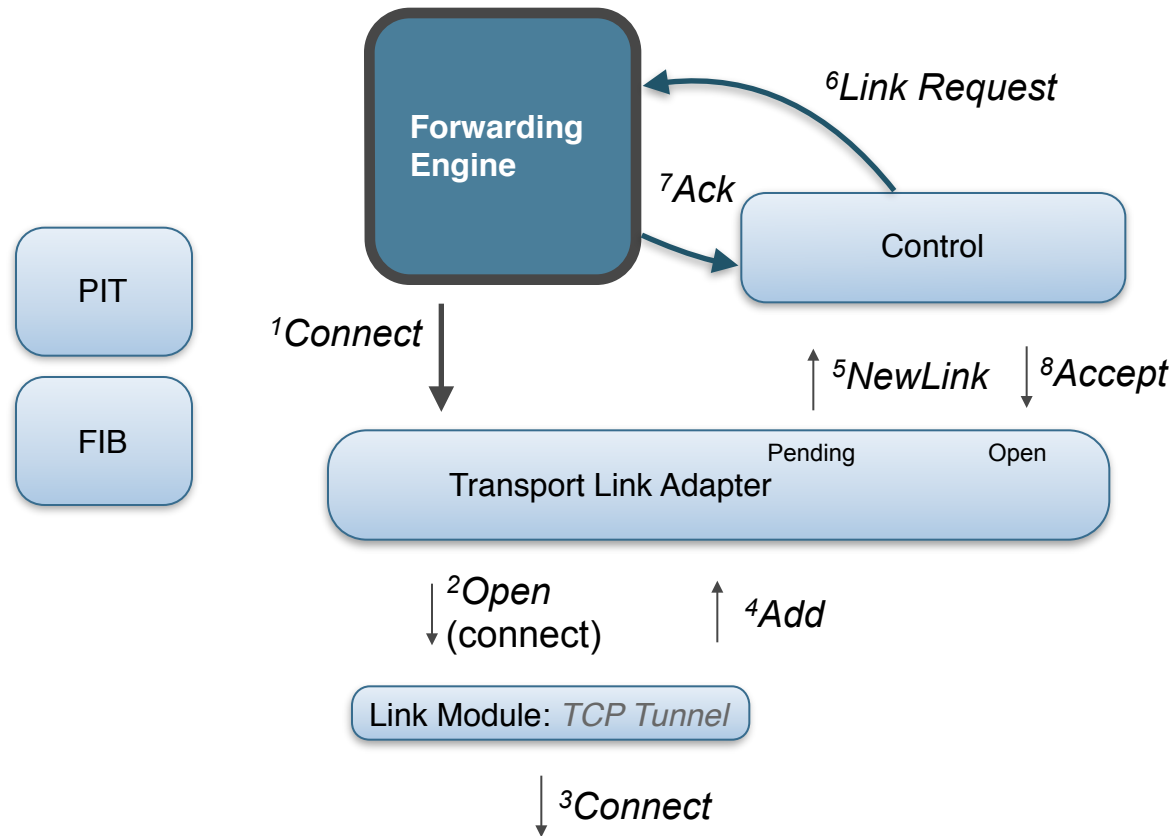
CCN FORWARDER CONTEXT



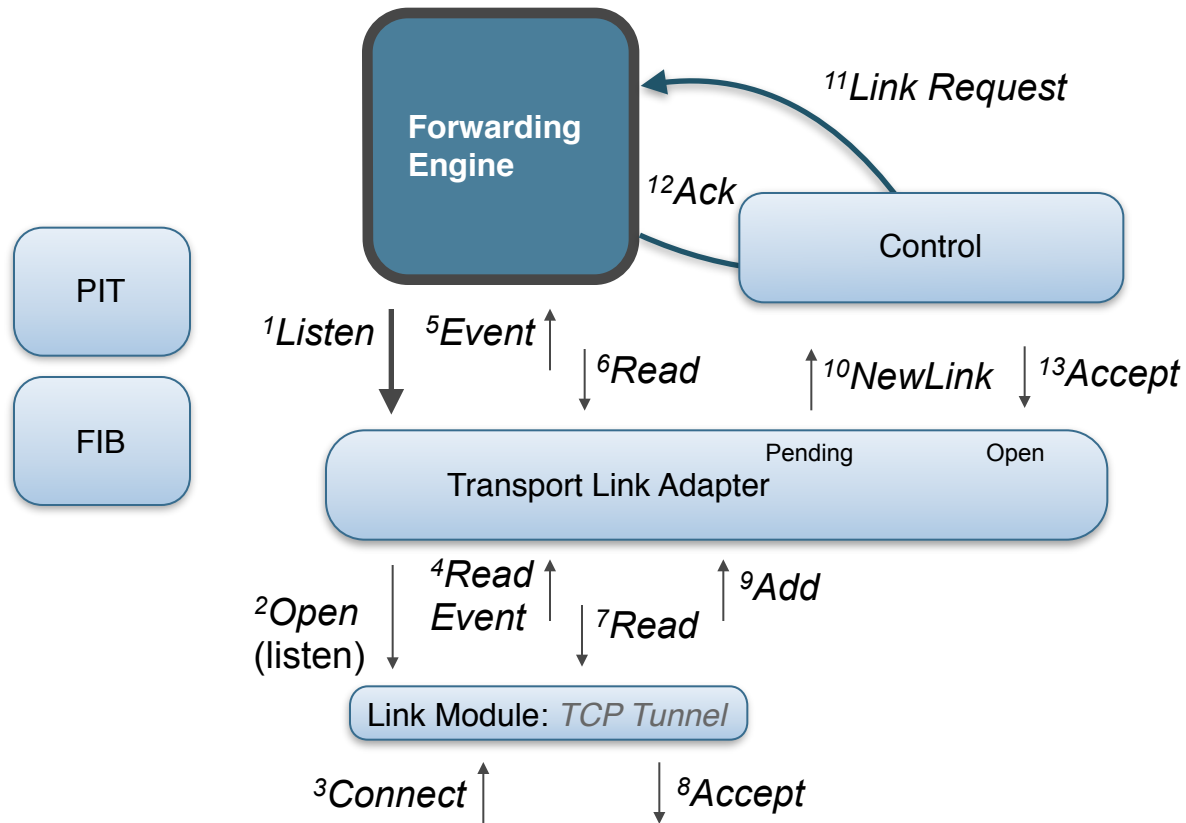
BOOTSTRAP CONFIGURATION

- Initial link establishment
- Configuring additional runtime links
- Link teardown and recycling

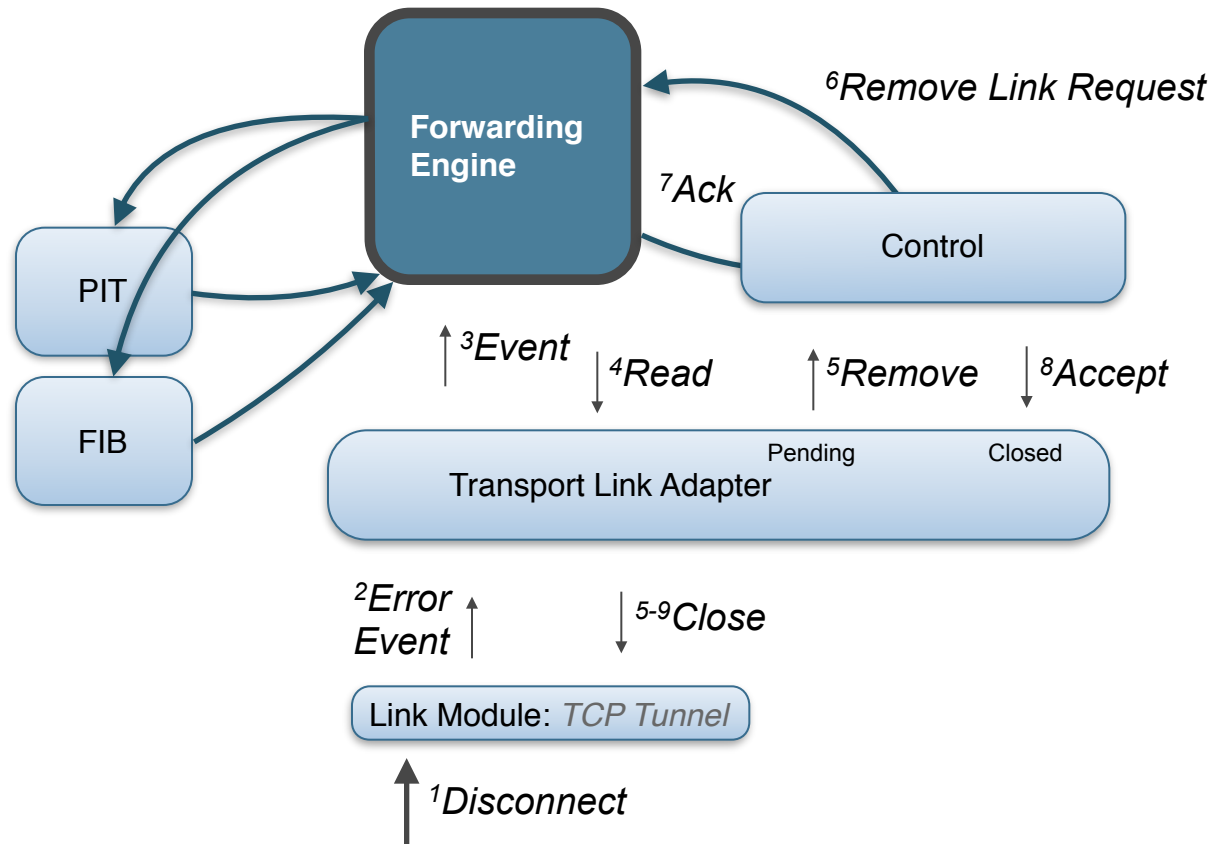
CCN FORWARDER LINK ESTABLISHMENT



CCN FORWARDER LINK ESTABLISHMENT



CCN FORWARDER LINK TEARDOWN



CONTROL MESSAGE INTERFACES

- lci:/local/forwarder/fib/addRoute
- lci:/local/forwarder/fib/removeRoute
- lci:/local/forwarder/pit/listPITEntry
- lci:/local/forwarder/link/addLink
- lci:/local/forwarder/link/removeLink
- lci:/local/forwarder/contentStore/size

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THANK YOU.

CCN FORWARDER MESSAGE FLOW

