Building a Strawman

- An Example Control Architecture -

Sean Rooney, May 29, 1996

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Open Switch Control

The Problem

- Out of band control
- distribution
- hetrogenous platforms/switches
- efficient
- scalable

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Motivation for Strawman

- increase understanding
- test-bed
- real-problems ?

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Distributed Processing Environment

- Need a DPE
- CORBA is trendy
- But ...
- Using APM's DIMMA

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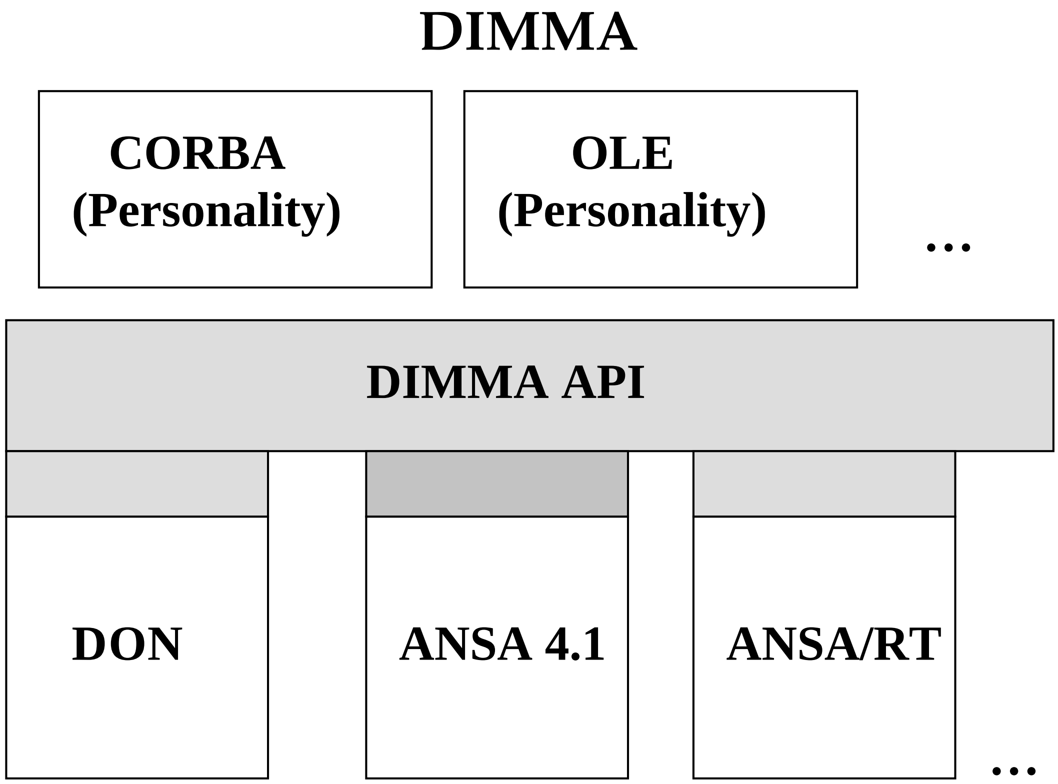
Distributed Processing Environment



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Definitions

Service Offer

Indication of the availability of a service

Trading

Process of matching an offer to a request

Reification

Process of creating a service access point from an offer

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Strawman

Architecture (I)

- Local Trader
- Global Trader
- Local Resource Manager
- Global Resource Manager
- Soft Switch

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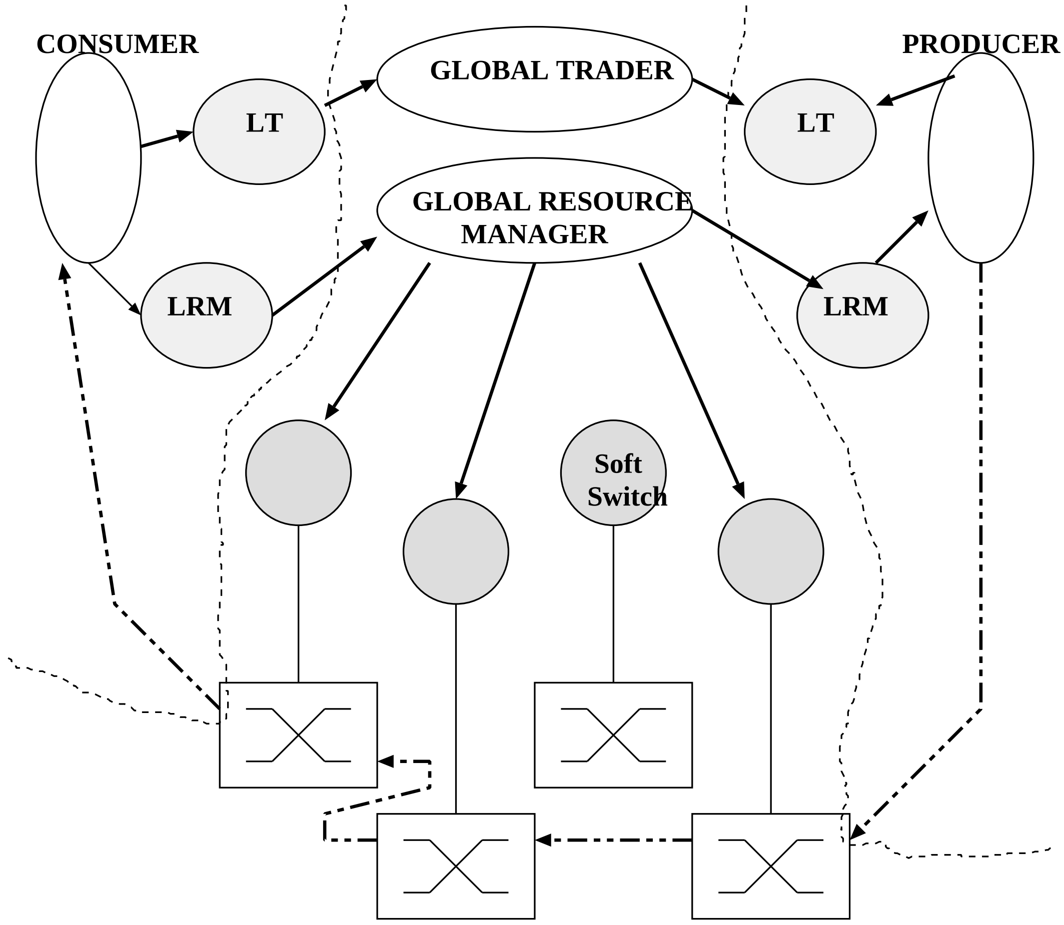
Strawman

Architecture (II)



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Strawman

Interesting Stuff To Do

- Boot Strapping
- Best path routing ?
- Latency
- The Tempest: Ariel, Prospero et al
- Multiple control architectures

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Strawman/Nemesis

Motivation

- End-to-end QoS mumbles
- Strawman model require Nemesis type support
- We like Nemesis

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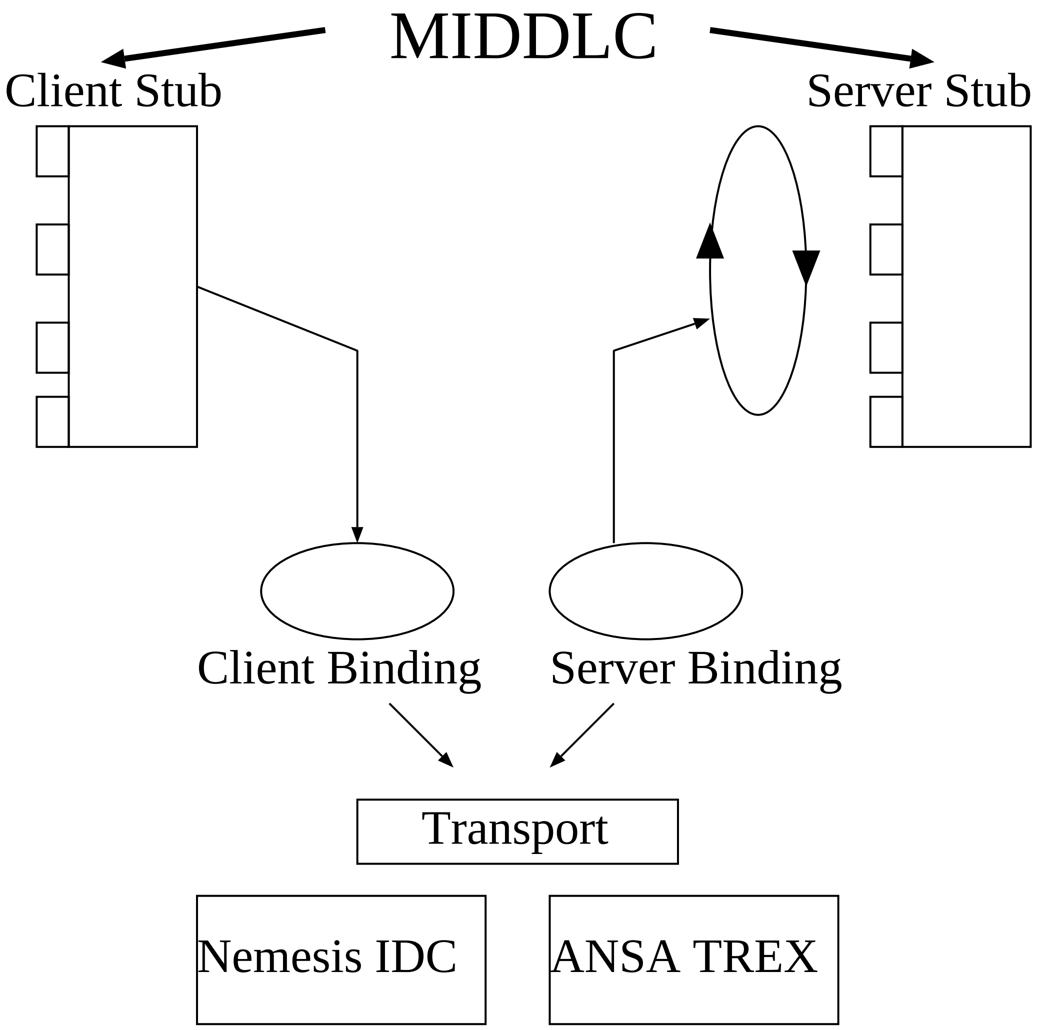
Strawman/Nemesis

First Step

- Integrate Nemesis with ANSA/RT
- Note integrate NOT Port
- There is no such thing as "Middleware"

Strawman/Nemesis

Communications



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Summary

- Strawman first-cut of working control architecture
- Convenient for trying out ideas
- No single correct architecure
- Lots of interesting stuff to do ...