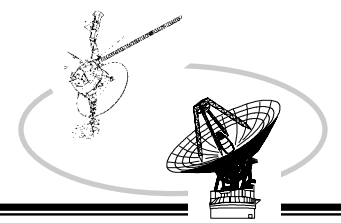


# **JPL Space Link Extension Service Management Prototype Effort An Overview**

**Erik Barkley, Jet Propulsion Laboratory**

**GSAW 2003  
Manhattan Beach, CA  
4-6 March, 2003**

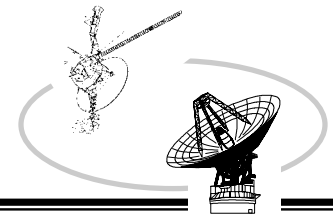


# Agenda



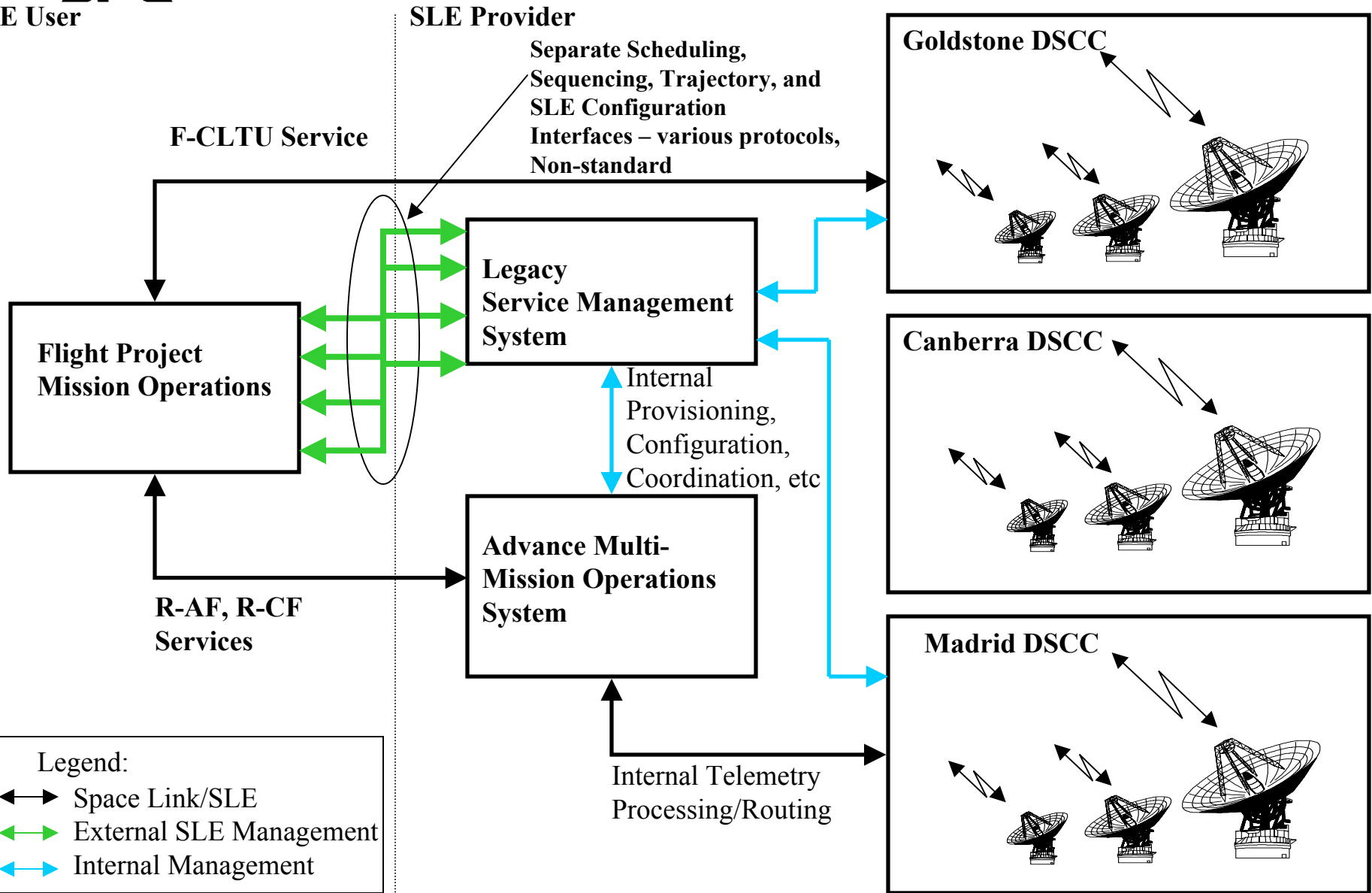
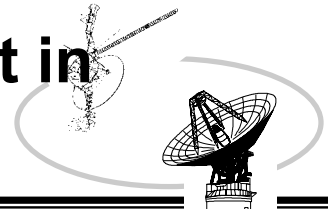
- **Brief DSMS Overview**
- **Overview of Prototyping Effort**
- **Current Status**

# Very Brief DSMS Overview



- **DSMS composed of Deep Space Network (DSN) and Advanced Multi-Mission Operations System (AMMOS)**
- **DSN stations are bind points for SLE F-CLTU service**
- **AMMOS is bind point for SLE R-AF, R-CF services**
- **Large base of current mission users, utilizing legacy methods/protocols for obtaining services**
  - **24 Active Deep Space Missions; ~14 more slated for launch by July '05**
  - **28 Near earth missions either routinely supported or on contingency/emergency basis**

# Brief Overview of Current SLE Management in DSMS

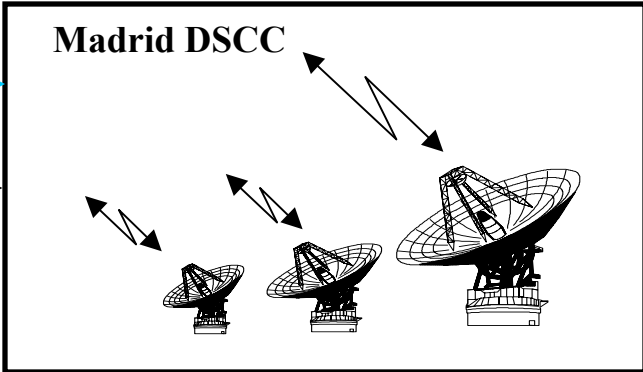
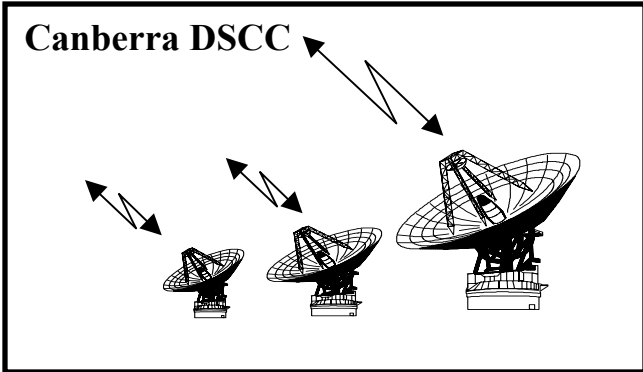
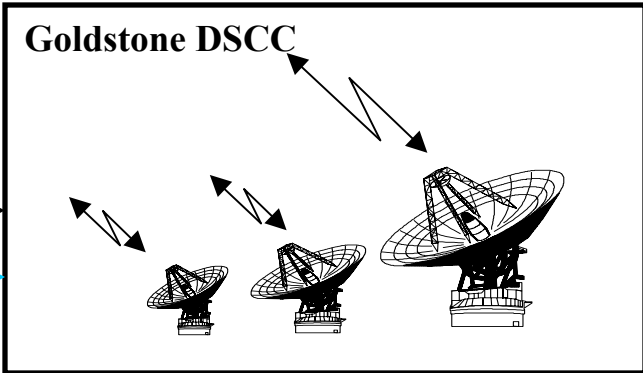
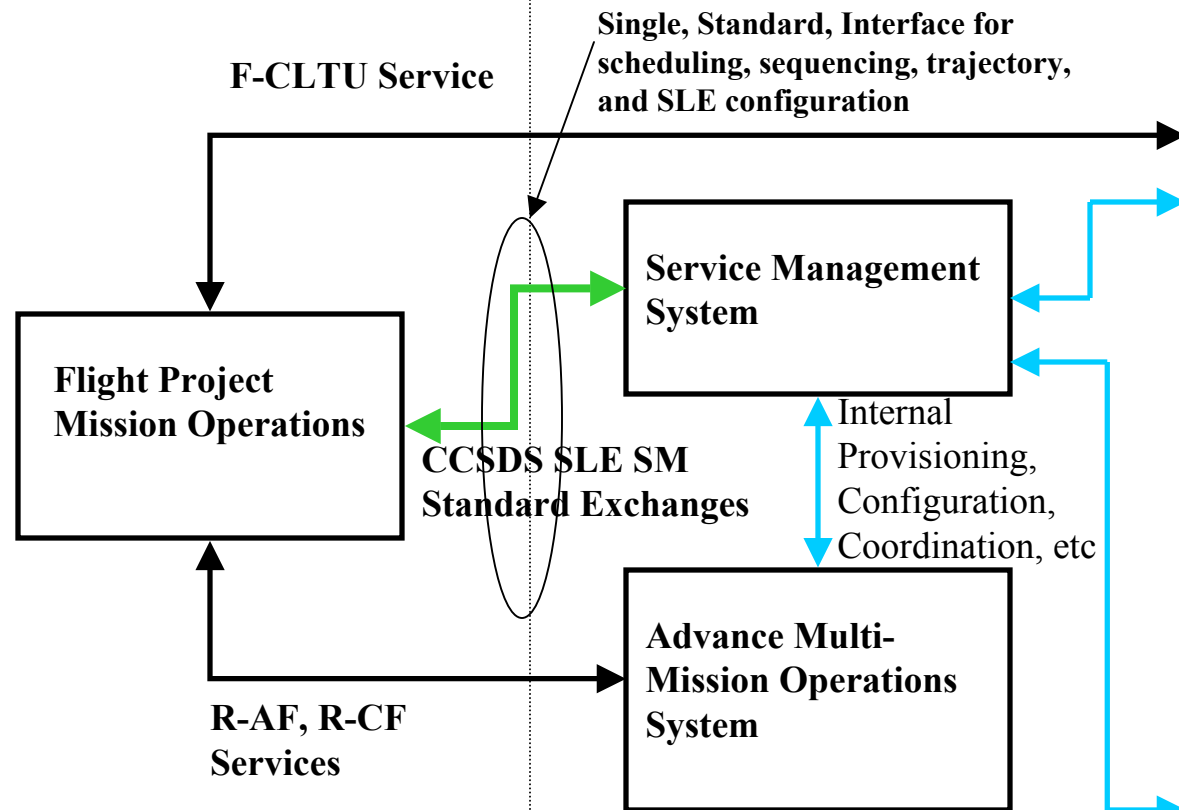


# Brief Overview of Future SLE Management in DSMS



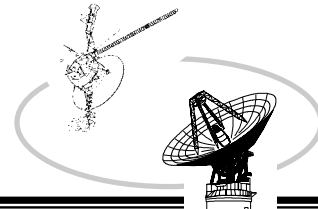
SLE User

SLE Provider



**Legend:**

- ↔ Space Link/SLE
- ↔ External SLE Management
- ↔ Internal Management



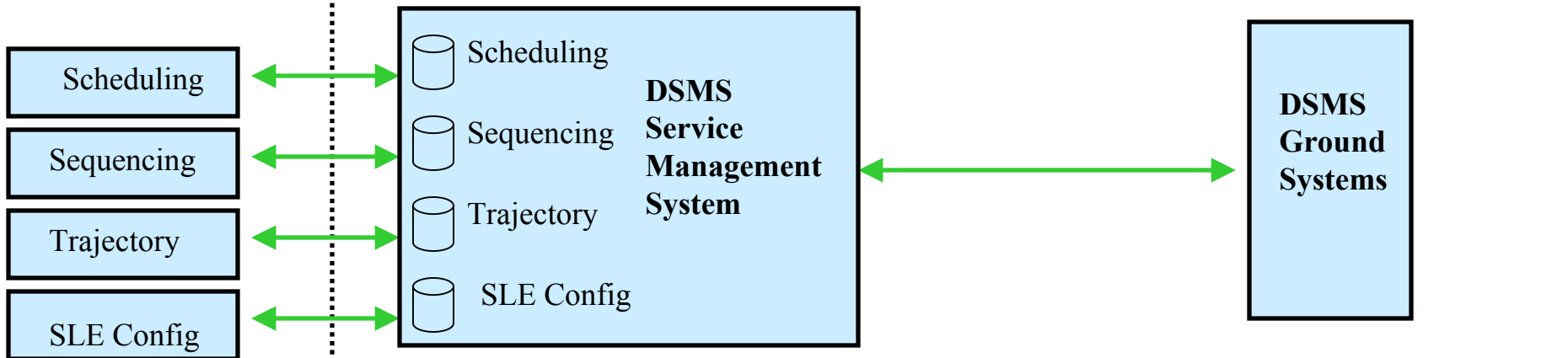
# CSSXP\* Prototype Overview



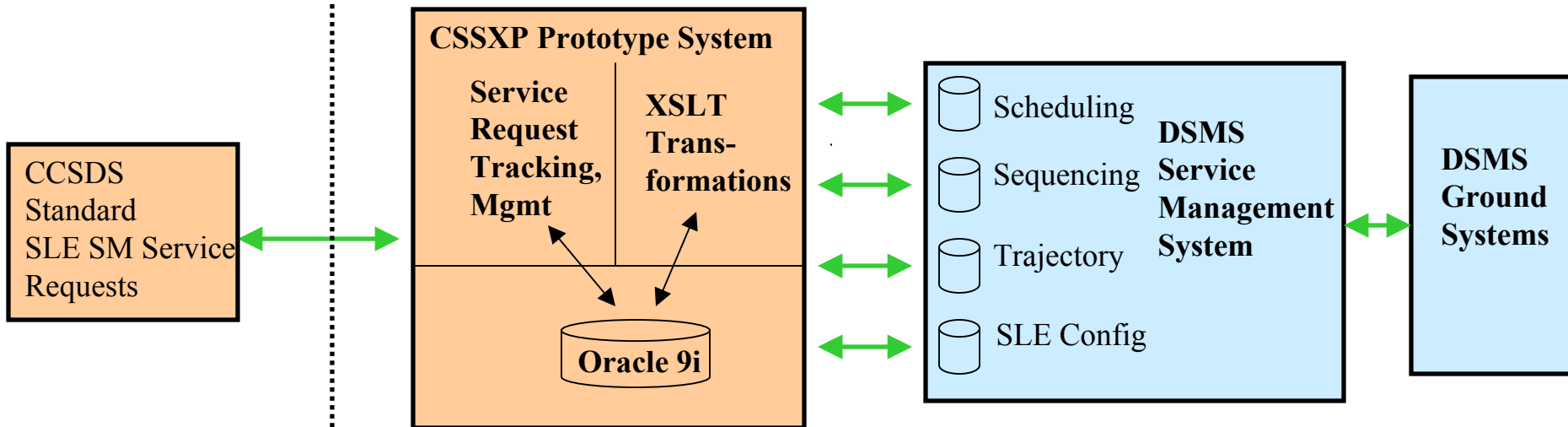
ISAS/MUSES-C  
ESA/ROSETTA  
JPL/TBD

LEGACY

SLE Provider

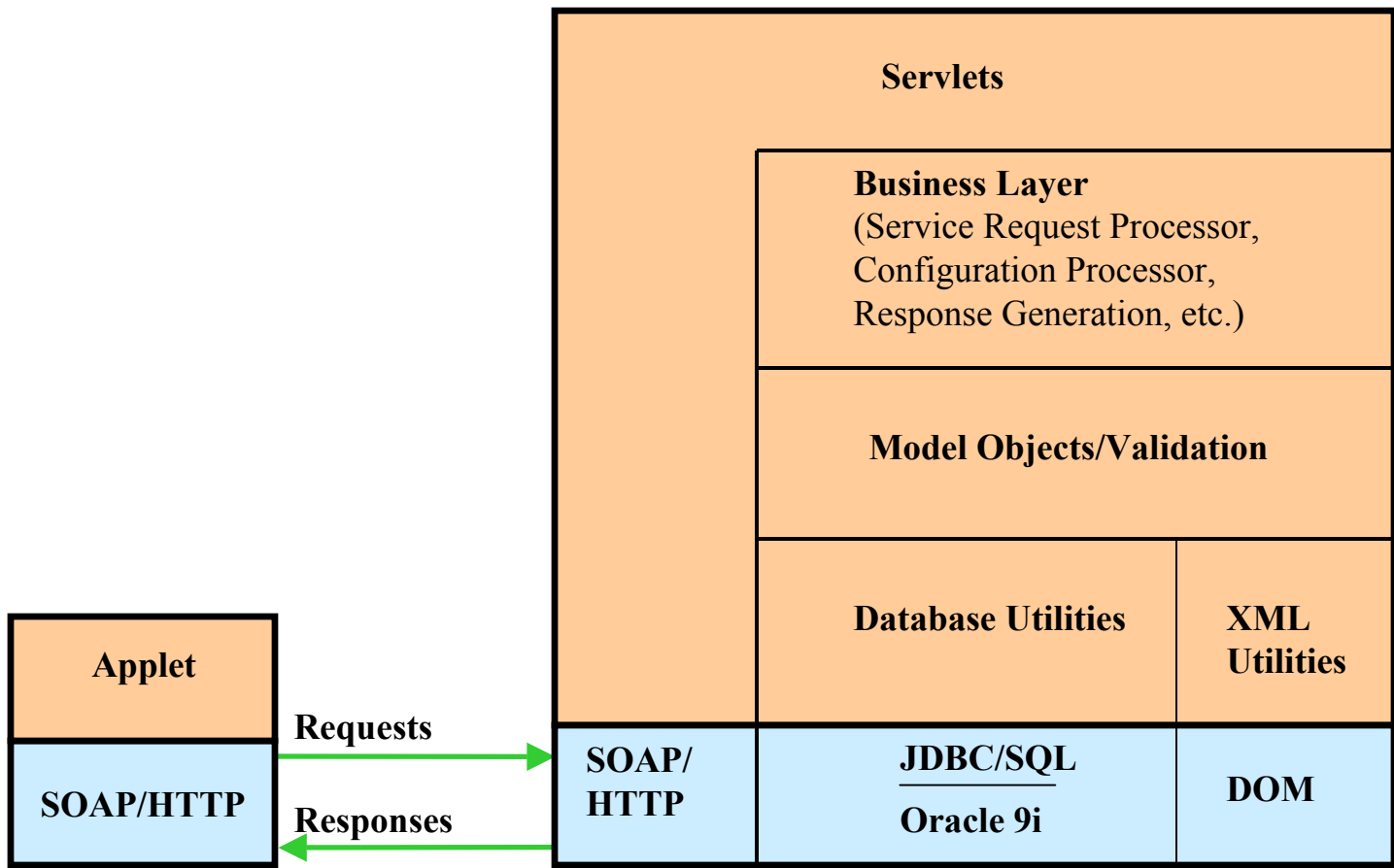
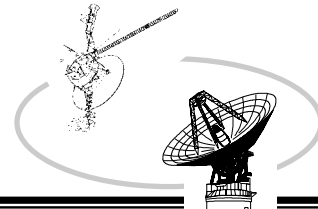


PROTOTYPE



\*CSSXP = CCSDS SLE Service management XML Prototype

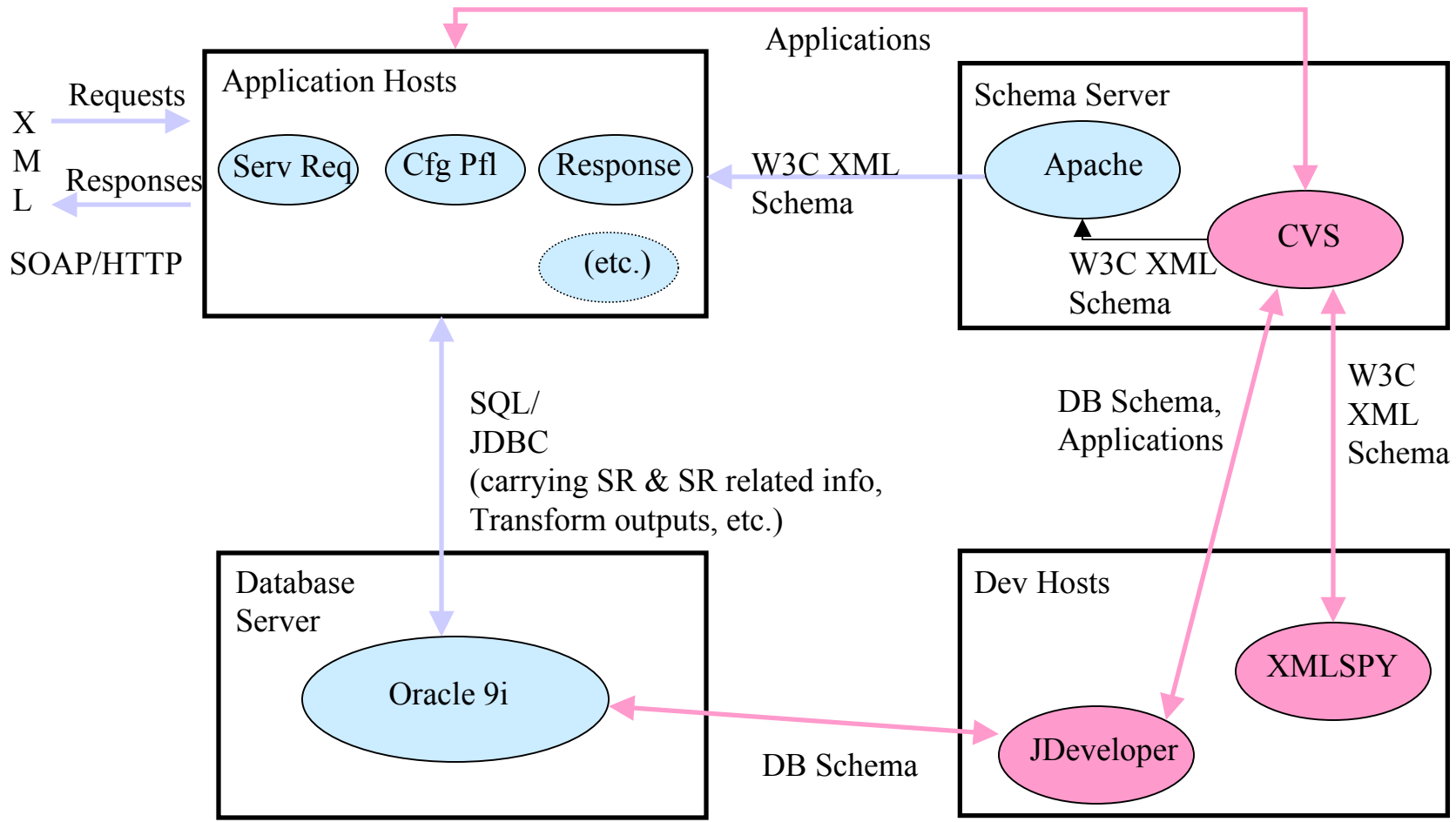
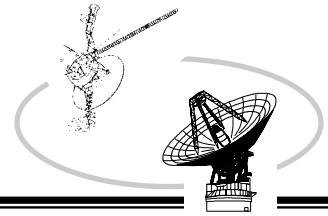
# CSSXP S/W Architecture



Legend:

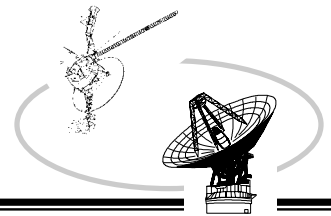
CSSXP Java code
COTS/Public Domain Code

# CSSXP Environment





# Current Status



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**JPL**

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- **XML/SOAP/HTTP/SQL/JDBC/Oracle architecture in place in prototype system**
- **Reception, tracking/management in place for**
  - Configuration profile
  - Service request (later this month)
- **Effort for transformation for Service Request → Schedule request has started**
- **Plan to have prototype available for ESA/ISAS/JPL missions by May 2004**