So what is Target Management all about?
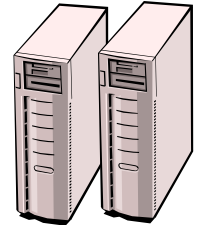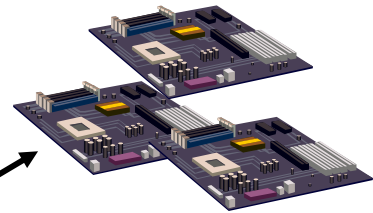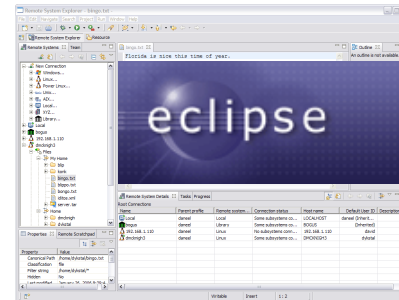
Remote Computer Systems…

- Targets (Locally connected, shared, fielded)
- Hosts (Grids, farms, nodes)

… and developing software on them

- Build, connect, get status
- Download, run, debug, test
- Upload

An Eclipse Project under DSDP since June 2005.
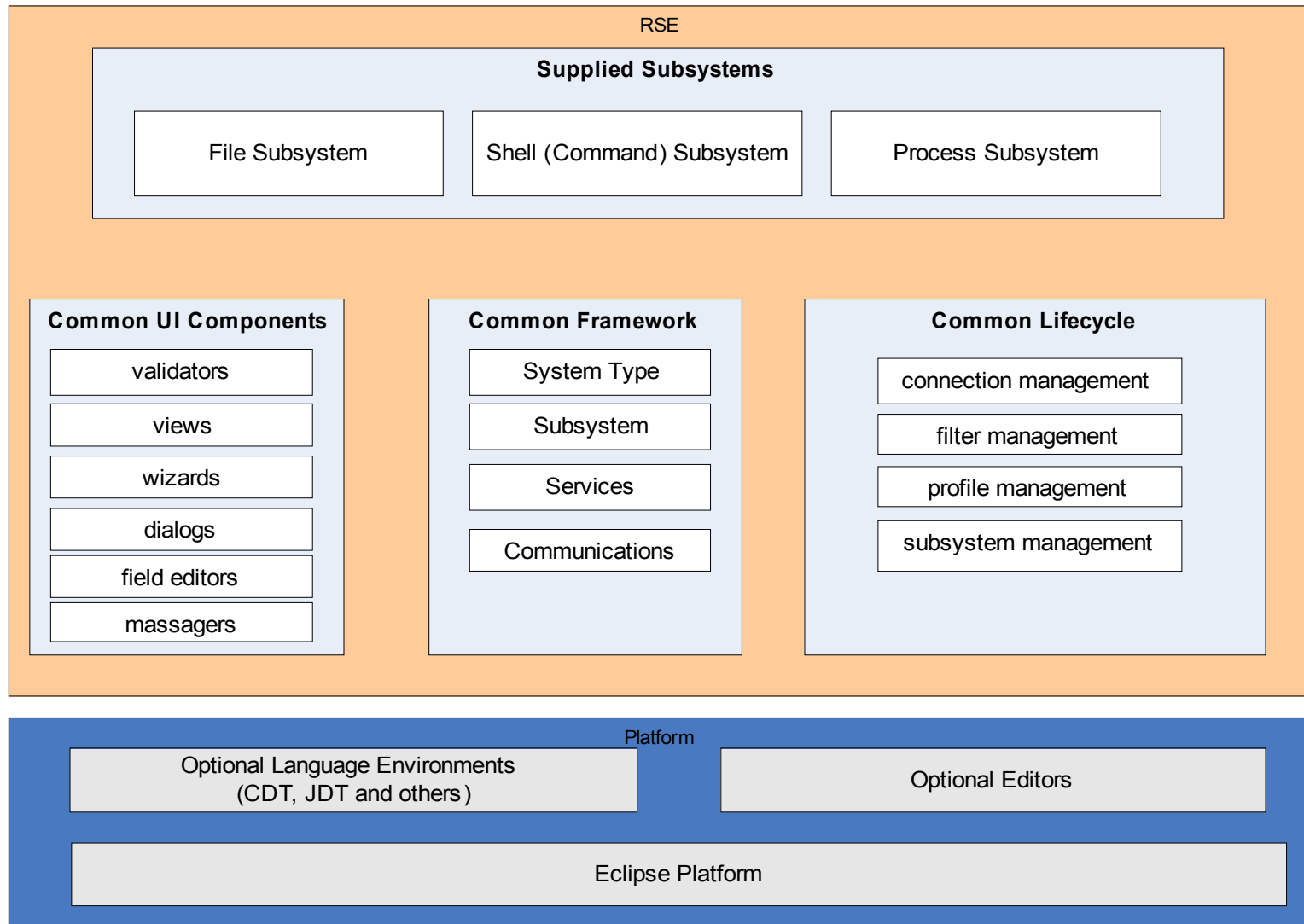Release 1.0 planned for October 22, 2006.

Subsystems manage resources of a particular kind

Filters select resources dynamically

Remote System Explorer (RSE) today

RSE

Supplied Subsystems

File Subsystem	Shell (Command) Subsystem	Process Subsystem

Common UI Components

- validators
- views
- wizards
- dialogs
- field editors
- massagers

Common Framework

- System Type
- Subsystem
- Services
- Communications

Common Lifecycle

- connection management
- filter management
- profile management
- subsystem management

Platform

Optional Language Environments (CDT, JDT and others)	Optional Editors

Eclipse Platform

Target Management Architecture

Services
- Actions (Download, Reset, Debug, Flash, …)
- Launch Sequencer (CBL)
- Remote File system
- Remote Process List
- Remote Shell

Predefined Elements
- Filters
- Views
- Reusable Widgets

Connectivity
- Predefined connection types (connector chains)
- Connection Configuration (Plumbing)
- Property Pages
- Wizards
- Autodetect
- Target Connection Adaptors (aka Connectors)

Data Models
- Target Definitions
- Connection Groups
- Access Control
- Persistency
- Profiles
- Team Sharing

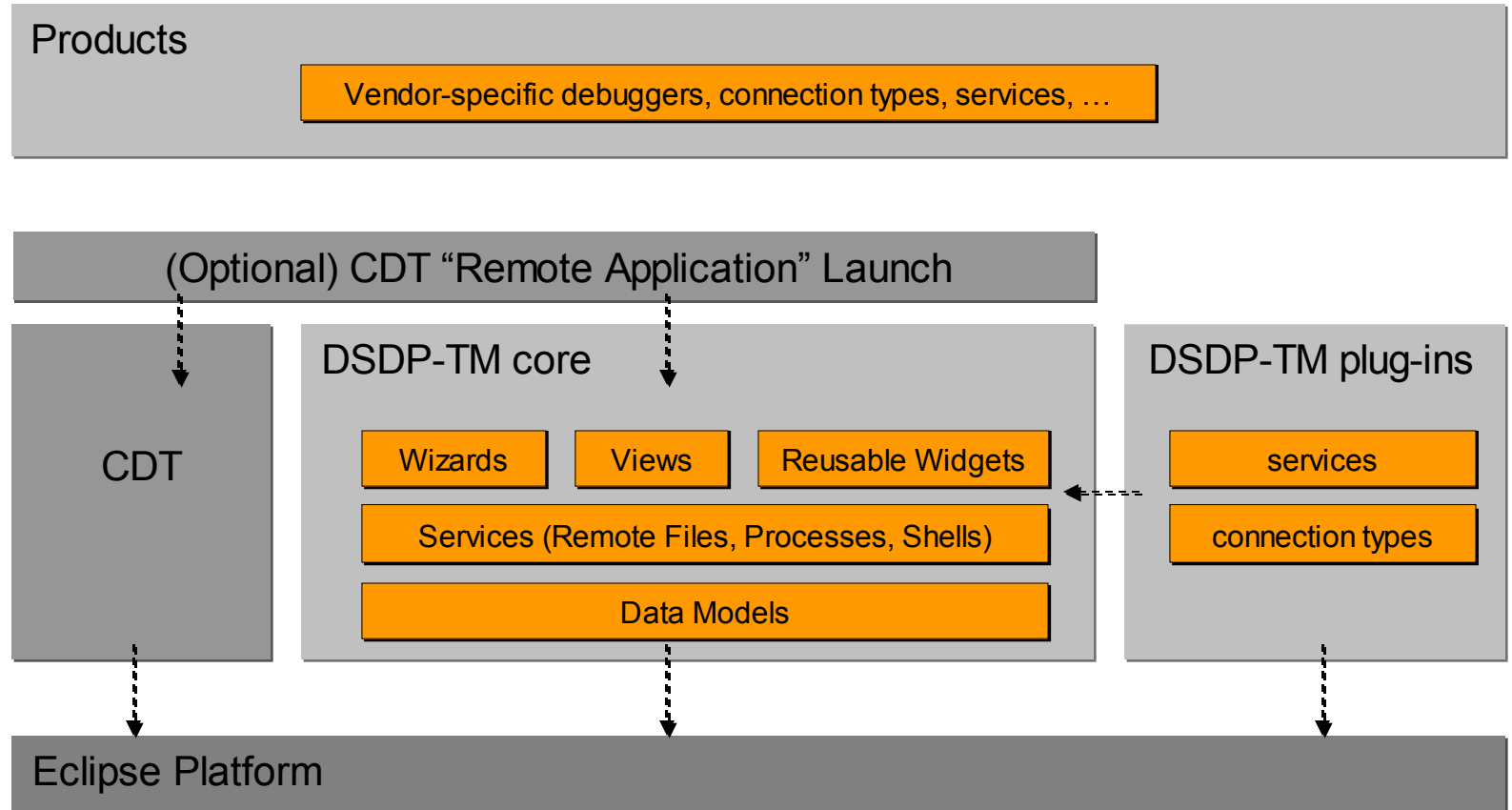Legend: ■ Existing components in RSE, ■ Design TBD, ■ Analysis TBD, ⬚ Extension Point, ⊟ fixed implementation

CDT Remote Launch: Plug-in dependencies

Products

Vendor-specific debuggers, connection types, services, …

(Optional) CDT "Remote Application" Launch

CDT

DSDP-TM core

Wizards | Views | Reusable Widgets

Services (Remote Files, Processes, Shells)

Data Models

DSDP-TM plug-ins

services

connection types

Eclipse Platform

Summary: Plans and Timings

First Release (October 22, 2006 - on Eclipse 3.2)
- RSE – Release 1.0
    - Includes dstore, ssh, FTP connection types
    - UI tested on Windows, Linux, Solaris, Mac; targets also AIX, any FTP or SSH server
- CDT Remote Launch Integration – Release 1.0
- Zeroconf Discovery, EFS Integration – Preview Release

Milestones 2006-2007 (Proposed – plan not yet finished)
- More Standards based target connections (Telnet, ECF)
- Terminal Emulation Framework and View
- User-Defined Actions, Import/Export
- Component-Based Launching (CBL)
- Multi-core / Multi-target support through connection groups
- Connection Model for HW Debugging (complex connector setup)

Future
- Flexible Target Connector framework, Connector plumbing algorithm
- Adapters for Target access control (shared board labs)
- SSH tunneling connector

Getting Involved

- **RSE is very flexible, with good basic abstractions**
  - An option for your Project?

- **RSE is a well established product**
  - Still, a lot of community feedback will be needed

- **Join the dsdp-tm-dev mailing list -** http://www.eclipse.org/dsdp/tm

- **Q & A**