Boundaries

Drawing lines between things that matters and things that don’t

- Boundary lines between the core business rules and irrelevant plugins
  - the GUI and the business rules
  - the GUI and the database
- Boundary is often drawn across the inheritance relationship
- Dependency arrows across boundary lines
  - From lower-level details to higher-level abstractions
  - Always toward the core business

Boundary Anatomy

Separate components in different forms

- Boundary crossing
  - Function calling the APIs implemented in the other components
  - Managing the source code dependencies
- Forms
  - Monolith - delivered as source code
    - A function call from low-level client to a higher-level service
    - Both runtime and compile-time dependencies are toward the higher-level component
    - Communications between components can be chatty, but very fast and inexpensive
  - Dynamically linked library (DLL) - delivered in binary
    - All functions exist in the same processor and address space
    - Communications between components can be chatty, but very fast and inexpensive
  - Local processors - built based on monolith or DLL
    - Running in different address spaces, sharing nothing,
    - Communication among processes through sockets or message queues or mailboxes, can be moderately expensive
  - Services - strongest boundary
    - All communications are over the network, so it is very expensive