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

Policy and Level
Software systems are statements of policy

- Policy

  - A computer program is a detailed description of the policy by which inputs are transformed into outputs

  - Policy can be broken down into smaller policies

  - Policies regroup (into components) based on the ways that they change (e.g., reason, time, *level*) - SRP and CCP

- Level - measure the distance of policy from inputs and outputs

  - The farther a policy from inputs/outputs, the higher its level

  - Higher level policy tends to be stable