

| Model | Advantages | Disadvantages |
|---------------|---|---|
| Repository | <ul style="list-style-type: none"> • Efficient for sharing large amounts of data • Subsystems can store and retrieve data without concern for other subsystems • Data control tasks (backup, access control, etc) are centralized • Adding new subsystems is easy | <ul style="list-style-type: none"> • Data model is common, and must be used by all components • Data model is hard to change • Data control needs to be fine-grained enough to serve the needs of every subsystem • Distributing the repository over multiple machines is complex |
| Client-server | <ul style="list-style-type: none"> • Can use multiple machines effectively • Adding new clients or servers is easy • Upgrading servers is easy | <ul style="list-style-type: none"> • Changing installed clients is difficult • No shared data model between servers • Converting data formats is inefficient |
| Layered | <ul style="list-style-type: none"> • Allows incremental development • Easy to change layer internals • Interface changes only affect adjacent layers • Killer app: multi-platform systems | <ul style="list-style-type: none"> • Difficult to architect • Jumping layers is prohibited, so lots of pass-through functions • Can be low-performance |