

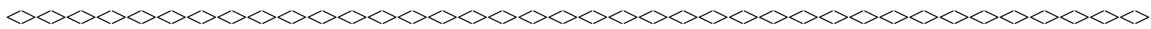
- A server platform should be purchased that will accommodate the current demand as well as support anticipated normal growth without requiring the purchase of a new server chassis.
- Rather than purchasing a fully configured server, purchase the next larger size platform to allow for expansion. This will permit upgrades to an existing platform to accommodate growth rather than forcing the purchase of another machine.

Best Practice 4: Balance business adaptability and ease of systems management with server platform choices. However, when there is a conflict between business adaptability and ease of systems management, the business requirement for providing adaptability should have the highest priority.

Rationale

- These two goals will always be in conflict.
- The primary design point of the technical architecture is to provide for change in business operations and its supporting applications. Therefore, even though it is easier to manage a large server rather than multiple smaller servers, the business need to provide flexibility should take precedence over any marginal increases in operational costs.

Implementation Guidelines

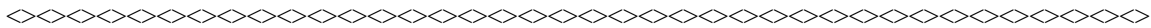


Implementation Guidelines in the Statewide Technical Architecture document:

- Apply to the technical topic under which they reside
- Are specific suggestions on “how or what to do” implement the architecture
- May be introduced in a three-column summary table with headings:
 - *Avoid New Deployment / Migrate From Technology* – these technologies are becoming obsolete or unsupported; plan to migrate to newer, emerging technologies
 - *Current Technology Direction* – existing technologies; if you are implementing now, these are the ones to consider
 - *Emerging Technology* – technologies on the horizon; consider use if implementation not immediate, or consider currently available technologies that would easily migrate to these
- Are desirable (as opposed to mandatory) RFP items

The structure of the Implementation Guideline section is:

- The optional Implementation Guideline Summary table
- The stated Implementation Guideline (should be one sentence, and start with “Implementation Guideline #:”)
- An optional paragraph to clarify the Implementation Guideline, only if necessary (may be expressed in terms of paragraphs, graphics, bullets, or tables)
- A title line, “Rationale”
- Bulleted rationale items



Avoid New Deployment/ Migrate From Technology	Current Technology Direction	Emerging Technology
<i>File and Print Servers</i>		

Avoid New Deployment/ Migrate From Technology	Current Technology Direction	Emerging Technology
NOS that are unable to connect to the enterprise directory using the standards defined in the Directory Services section of the Groupware chapter.	Novell NetWare, Unix, Windows NT	
<i>Application Servers</i>		
Any server with a proprietary operating system that can only run on that same vendor's hardware	UNIX, Windows NT	Java Virtual Machine (JVM)
Any 16-bit operating systems	32- or 64-bit operating systems	
<i>Database Servers</i>		
Any 16-bit operating systems	32- or 64-bit operating systems	
Any platform that does not support relational database management systems	Utilizing existing data on mainframe machines in a client/server environment. UNIX, Windows NT	Platforms that support object databases

Table 9-1. Server Platform Implementation Strategies

The following implementation guidelines pertain to the server platform.

Guideline 1: Make server platform decisions after the business makes some basic determinations regarding growth, scalability, portability, and openness.

Rationale

- *Growth*: Must the technology accommodate substantial growth beyond present data and transaction volumes?
- *Scalability*: In accommodating growth, must the technology be able to start small and grow by continuous small increments? Alternatively, is it acceptable for the technology to grow in major, discontinuous steps?
- *Portability*: Will it be necessary to move software across server platforms at some point in the future?
- *Openness*: What are the business implications if a proprietary system is used, thus eliminating the option to choose system components from many vendors?

Guideline 2: Consider several criteria when selecting a server platform.

Rationale

- *Financial viability* of the vendor.
- *Packaged software* availability.
- *Ability* to meet business (agency) needs.
- *Adherence to state standards and direction*.
- *Cost*.
- *Availability of skill sets* for development on the appropriate platform and for management following implementation.
- *Availability of technical support*.
- *Availability of systems management tools for the platform*.
- *Service terms* and conditions.