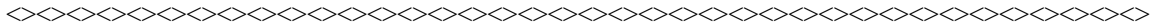
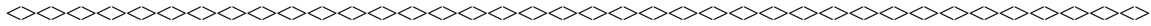


Recommended Best Practices

Recommended Best Practices in the Statewide Technical Architecture document:

- Apply to the technical topic under which they reside
- Serve to direct or guide the detailed design, selection, construction, implementation, deployment, support, or management of the architectural framework
- Are based on the success story of one or more other clients, or the industry as a whole
- Are of the nature, "If you're going to do it, this is the recommended way"
- Are desirable (as opposed to mandatory) RFP items

- The structure of the Recommended Best Practice section is:
- The stated Recommended Best Practice (should be one sentence, and start with "Recommended Best Practice #:")
- An optional paragraph to clarify the Recommended Best Practice, only if necessary (may be expressed in terms of paragraphs, graphics, bullets, or tables)
- A title line, "Rationale"
- Bulleted rationale items



Recommended practices that assist in the selection, maintenance and expansion of an interoperable statewide server platform architecture are listed below.

Best Practice 1: Run mid-range application and database servers on a 32-bit multi-tasking, multi-threaded operating system, at a minimum.

Rationale

- Migration from 16-bit operating system platforms to 32- or 64-bit operating system platforms will support faster processing, access to more memory, and better memory and process management.
- In an *N*-tiered, client/server environment, speed, memory capacity, and memory and process management become increasingly important as processing is distributed across platforms.
- The 32- and 64-bit operating systems provide more stable, reliable platforms in an *N*-tiered, distributed client/server environment.

Best Practice 2: For reliability and ease of support, place each major application on a uniformly configured server. This may require that each major application be implemented on its own server.

Rationale

- Use the same reference configuration on these servers. Important items to consider when planning for consistency include using the same versions of network software, using the same network hardware cards, etc.
- Tuning performance through configuration changes can make overall maintenance more difficult. In the long run, it may be less expensive to buy more powerful hardware than it is to spend time on individualized tuning and maintenance.
- The Network Operating System should be considered a major application and run on its own platform.

Best Practice 3: Consider normal anticipated future application growth when determining capacity requirements for server platforms.

Rationale

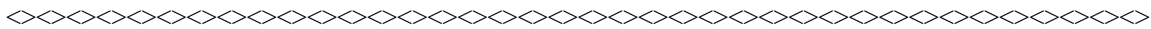
- A server platform should be purchased that will accommodate the current demand as well as support anticipated normal growth without requiring the purchase of a new server chassis.
- Rather than purchasing a fully configured server, purchase the next larger size platform to allow for expansion. This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

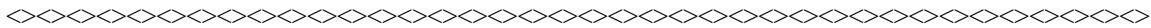


Implementation Guidelines in the Statewide Technical Architecture document:

- 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>		