

AOSOS Infrastructure

Powerful, Flexible, Cost Effective



The AOSOS Consortium has implemented an ongoing and successful program of infrastructure and operating cost reductions. All third-party hardware, network and software components have been evaluated and rationalized. AOSOS has significantly reduced the cost of installing and operating the system. This data sheet summarizes the necessary technical infrastructure for AOSOS, as well as how these costs have been reduced or eliminated.

Hardware

AOSOS operates on Sun UltraSPARC servers running Solaris version 9 or 10. States implementing AOSOS have used several Sun models, including the V240, V440 and V880 models. Most recently AOSOS states have begun using Sun's multi-core "Cool Threads" servers. These are fast, powerful, energy efficient and offer dramatic cost savings compared to earlier models. AOSOS is also certified to run on x64-based systems from Sun, IBM, HP and Dell running Solaris x86 as the operating system, giving states more options to reduce their hardware investment. AOSOS will continue to evaluate new server offerings to identify additional cost savings.

Typical large state production installations may have separate servers for OLTP and Warehouse database functions. AOSOS application functions are spread across multiple servers targeted for web, application and search/utility functions. AOSOS supports multiple servers at all tiers and provides embedded programmatic load balancing between tiers to eliminate the need for a separate hardware-based load balancing.

AOSOS provides for consolidating the functions of multiple tiers onto a smaller number of machines as well. This benefits those smaller states that do not require separate or multiple servers per tier. Web, application and search/utility tiers may be housed on a single server. Likewise, database functions can be consolidated to a single server and AOSOS supports consolidating all functions onto one server.

Using Solaris 10 Containers, Sun's virtualization technology gives states even more options for reducing the number of servers while maintaining better control over resources allocated to each tier. Containers enable states to consolidate testing and production installations onto the same set of servers.

As an illustration, the State of Rhode Island is configured to operate both test and production AOSOS sites on a single Sun T2000 server. The State of New York is also runs a T2000-based configuration. Its production site operates on four servers.

AOSOS Infrastructure

Powerful, Flexible, Cost Effective



Network

AOSOS uses a simple network architecture comprised of a front-end network on the web server for public traffic and a private back-end network to support application traffic. States may add additional networks for backup and administration purposes according to their network policies. A private VPN connection will usually be set up for remote Service Center support. A firewall is required to provide network security. States typically utilize their existing network / security infrastructure when installing AOSOS.

Software

AOSOS was designed to utilize open source or free third-party software whenever feasible. The only required software licensing is the database management system, Oracle. AOSOS supports Oracle versions 9i and up, using Extended Edition, Standard Edition or Standard Edition One (SE1). New installations operating on Sun T2000 servers require only one or two licenses of Oracle SE1 per database server based on Oracle's multi-core licensing policy. This significantly reduces initial and ongoing infrastructure costs

AOSOS supports the O*NET-SOC AutoCoder program. States may elect to use either the free ITSC version or the version provided by R. M. Wilson Consulting, Inc. States may also elect not to use AutoCoder at all.

Many states utilize Crystal Reports for ad hoc reporting. However, AOSOS provides an extensive and growing list of state and local management reports. The AOSOS Reports module includes a robust ad hoc report generator that was designed to support most typical state reporting needs, eliminating the need to purchase and administer a separate ad hoc reporting solution.

Finally, AOSOS was designed from the ground up to be flexible, adaptable and extensible in order to reduce total costs over the lifetime of the system. Capabilities such as Flexible Data Screens and Federal Report Views enable state administrators to extend system functionality without requiring time-consuming and expensive coding modifications.

AOSOS Infrastructure

Powerful, Flexible, Cost Effective



Hosted Option

AOSOS provides states the option of operating their own AOSOS installation or of hosting with the Consortium's hosting vendor. The hosting option is ideal for states that do not have the necessary in-house technical expertise to operate the system. With the hosted option, everything is covered: power, cooling, fire-suppression, network and facility security, backup, monitoring and support, DBA services, security patches, etc. Hosted installations also benefit from significantly reduced infrastructure costs and available Disaster Recovery options.

Summary

Whether a state manages their own AOSOS installation or elects to host their installation, the AOSOS commitment to ongoing cost reduction enables states to realize significant cost savings compared to earlier AOSOS installations. This includes acquisition and licensing costs as well as ongoing maintenance. The hardware, network and software architectures work together to minimize the state's investment in third-party infrastructure. AOSOS is adaptable and extensible to minimize the cost impact of new programs and mandates.

Contact Us

Visit the AOSOS Info Site to view detailed information about AOSOS and the Consortium at: <http://www.ososinfo.org>.

To make arrangements for a demonstration of AOSOS to your organization, please email us at: ososinfo@ososinfo.org.

The AOSOS Consortium invites states to take advantage of this application designed by and for workforce and economic development professionals.