



When the need arises to migrate away from iPlanet / SunONE, porting your NSAPI applications will be a costly and disruptive affair. Zeus provides you with a better alternative

NSAPI Migration Solutions



Migrating NSAPI from iPlanet / SunONE to Zeus

Making the Move

Enhanced security, scalability and reliability are just a few of the many compelling reasons to migrate applications from iPlanet / SunONE to Zeus Web Server. With Sun withdrawing support for an increasing number of platforms (Compaq Tru64, SGI IRIX and SCO UnixWare, for example), more and more iPlanet / SunONE web server users are making the switch.

The Challenge

Migrating large and mission-critical applications from one platform to another is not a trivial task, especially if your applications are based on NSAPI. If they are, it will seem like the only possible solutions are:

- to port all your NSAPI web applications to a supported platform, negating your original hardware investment and requiring a large additional investment in the new, supported hardware, or
- to migrate away from SunONE web server and NSAPI altogether on your existing hardware, requiring significant application redevelopment effort and costs.

Thankfully, these are not the only solutions. Zeus Technology has put together a software and services bundle that will allow you to retain the investment in your existing hardware and applications and move away from iPlanet / SunONE for minimal cost and disruption.

Solution Components

Zeus Web Server

Zeus Web Server (ZWS) is a mature, enterprise-ready, web serving solution. Now in its fourth major iteration, ZWS

has evolved over the eight years it has been in active development to become the preferred web server of many financial institutions, US Federal Agencies, ISPs and high profile e-commerce companies. Our customers choose Zeus because it can offer them higher return on their existing hardware investment, significantly increased security, scalability and usability.

Zeus Web Server:

- provides all the common features and APIs supported by other web servers;
- supports a broad range of UNIX platforms and hardware; and
- comes with native clustering support.

As a result, it is often the platform of choice for consolidation of web infrastructure. Zeus is straightforward to deploy even over large clusters, and once deployed, IT staff will quickly acquire the only set of skills that they will need to manage your web infrastructure.

In particular, Zeus Web Server includes support for the NSAPI interface. This allows ZWS to run the vast majority of applications developed for SunONE,

NSAPI Migration Solutions Who are these for?

Companies:

- Whose application environment is based on NSAPI
- Whose hardware platform is, or will no longer be supported by Sun Microsystems for iPlanet / SunONE web server
- Who are facing a costly and time-consuming redevelopment of their applications to port them to a new API
- Who want to safeguard their existing hardware investment

Key Benefits

- **Reliability:** Zeus Web Server (ZWS) sandboxes NSAPI applications to insulate the main web server from failures
- **Security:** ZWS's track record is unrivalled in the industry
- **Ease of Development:** ZWS provides comprehensive NSAPI debugging tools
- **Performance:** ZWS leads the field in web server performance, as attested by record-breaking results on SPEC

Solution Elements

- **Zeus Web Server:** the only alternative enterprise-grade solution which supports NSAPI
- **Zeus Migration Services:** from single machines to complex application clusters, our experienced consultants will make the path of migrating to Zeus Web Server a smooth one

iPlanet or Netscape Enterprise Server. ZWS's NSAPI support was developed by extensive testing against a range of third-party and custom applications in real-world deployments through our enterprise partnerships.

This means that you can safeguard

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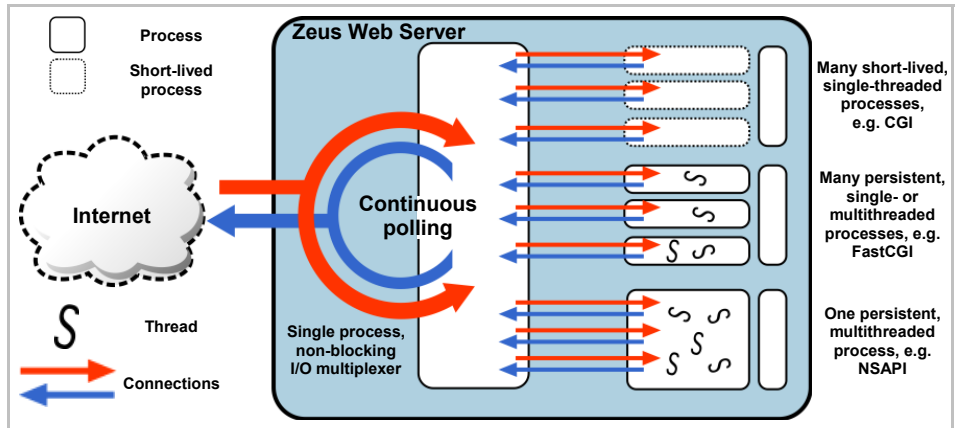
your original hardware and software investments, **without** having to port your applications to a different API - the best of both worlds.

Zeus Migration Services

Through a combination of migration services and technical support, Zeus Global Services assists customers who have chosen to move their NSAPI infrastructure away from their iPlanet / SunONE-based platform to Zeus. As a result, the often complex task of migration is carried out swiftly, ensuring timely completion of the project.

A typical migration project will involve the construction of regression (test) cases, initial deployment in a test environment, running the regression cases and resolving any issues, performance and security tuning, followed by planning and executing the actual solution deployment. Zeus have considerable experience in these activities with clients from a broad range of market sectors. Migration projects have involved everything from single web servers to complex clustered NSAPI application environments.

Zeus Global Services are backed up by the development team that wrote Zeus Web Server. Our developers are on hand to provide advice on application compatibility and performance tuning, based on examination of the source code. This ensures that any behavioural issues with the application can be debugged



The unique hybrid process architecture of Zeus Web Server ensures that NSAPI applications run in their own, native, multithreaded environment

and resolved quickly, keeping your project on schedule. Of course, the amount of time involved to perform a migration depends on the scale and complexity of the migration, and the level of support required, however, the cost and benefits are compelling.

Example: a recent migration for a public-facing account management system for a major bank involved only **15 days** of dedicated support from the Zeus Global Services and Development teams, including on-site visits. The migration was required because Sun Microsystems was withdrawing support for its web server on the Tru64 platform. Porting the NSAPI applications to another architecture would have taken significantly longer than 15 days, and would have resulted in major disruption. Zeus was able to assist the customer in migrating their large internal application from iPlanet on Tru64 to Zeus Web Server, thus preserving their substantial investment in Tru64 hardware.

Key Benefits of NSAPI with Zeus

• Increased Reliability

The Zeus NSAPI environment consists of a separate, sandboxed process which hosts the NSAPI applications in a controlled and managed manner. The core Zeus Web Server is completely protected from faults or crashes in NSAPI-based application code.

• Increased Security

Zeus Web Server has an unrivalled security record. In the last two years, the following numbers of vulnerabilities have been reported against ZWS, SunONE and comparable web servers:

Web server	Vulnerabilities
Zeus Web Server	2
SunONE / iPlanet / Netscape	14
Apache	49
Microsoft IIS	38

Source: securityfocus.com vulnerability database.



The screenshot shows the TD Waterhouse website interface. At the top, there are navigation links for Login, Open Account, Customer Service, and Search. Below this is the TD Waterhouse logo and a secondary navigation bar with links for Home, Get Started, Trading, Quotes, News & Research, Planning, Products, and Banking. A third navigation bar includes Branch Locator, Press Releases, About Us, and Careers. The main content area features several promotional banners and articles, such as 'Open an account online now', 'Moving on to Better Things? Your Retirement Savings Deserve the Same!', 'Friends and Neighbors Program', 'Talking Heads or Solid Research?', 'Our 0% Introductory APR Platinum VISA® Really Adds Up', 'S&P Insight', and 'No Time To Manage Your Investments?'. On the right side, there is a login section with fields for Account # and Password, a 'Choose a Start Page' dropdown, and a 'Login' button. Below the login section is a 'News and Research' section with a 'Symbol Lookup' field and a 'Go' button. The 'Market Summary' section displays a line chart for the Dow Jones Industrial Avg. and a table of market indicators:

DJIA	9,801.12	14.51
NASDAQ	1,932.21	-0.48
S&P 500	1,050.71	3.77
10YR NOTE %	4.32	0.03

“Easy migration of existing content and third-party applications was a key issue to avoid any disruption to our service, and the move to Zeus Web Server was a straightforward process. Zeus software and technical support have excelled in migrating our web site to a more secure and reliable platform.”

Derek O’Herlihy, IT Director
TD Waterhouse Investor Services Ltd.

• Ease of Development

Unlike SunONE, Zeus Web Server can trace the activity of the NSAPI application code in great detail, providing you with sophisticated application debugging tools which generate 'strace' or 'truss'-like reports of:

- all NSAPI application functions called; and
- all calls to internal NSAPI support functions.

These reports greatly assist the development and debugging of NSAPI applications making both migration and development easier tasks.

• Performance

Zeus Web Server has an unequalled reputation for its performance and effective hardware utilisation. It is the software of choice for large hardware OEMs such as HP and IBM in SPECweb99 and SPECweb99_SSL benchmarks due to its extreme scalability and all-round content serving capabilities.

The performance of the NSAPI application often limits the peak performance of the host web server, so Zeus Web Server gives similar

performance to SunONE for traffic that involves a large amount of NSAPI processing, and outperforms SunONE in other areas such as SSL processing.

Looking at the Bigger Picture

When considering scalability, bottlenecks in unrelated parts of your network can lead to poor performance in your application. Zeus Global Services offers performance audits, not only of your Zeus software, but also of the applications which you run and of the surrounding messaging, database, storage and network infrastructures.

Zeus Gives You Freedom of Choice

The combination of Zeus Web Server and migration support from Zeus Global Services gives you the freedom of choice of:

- hardware and operating system for your NSAPI-based applications;
- a convenient time to port your applications to a new operating system; and
- a wide variety of APIs from which you can choose the most suitable for your application needs.

Pricing and Availability

Zeus Web Server, including NSAPI

functionality, is available for only \$1,700 / £1,100 / EUR1,650 for servers with up to 2 CPUs. Access to our skilled Technical Support team is available from only \$510 / £330 / EUR495 per 2 CPU license, per annum.

For further information on Zeus Technology’s products, technical support offerings and consultancy services, please feel free to contact us on info@zeus.com, or call us on +44 1223 568555.

Zeus at a glance:

Zeus Technology is the world's leading Internet infrastructure software vendor. Zeus provides best-of-breed solutions that lead the industry in security, performance, scalability and reliability. Zeus has created a highly scalable and robust line of software products including the award-winning Zeus Web Server, Zeus Load Balancer and Zeus Mass Hosting Application.

Zeus solutions are used by Federal agencies and companies from a broad range of market sectors. Customers include eBay, TD Waterhouse, Cable & Wireless, NEC BIGLOBE, THUS / Demon, Verisign, Play.com and the Federal Railroads Administration. For more information visit our web site at <http://www.zeus.com/>

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