

Kanagawa University

<http://www.kanagawa-u.ac.jp/>



Using the Sun Java™ Enterprise System for Education for simple single sign-on inexpensively, providing both excellent security and convenience

Key Highlights

Issues

- Integrate disparate account management systems
- Reduce costs of account management
- Improve security and convenience

Solutions

- Sun Fire™ 280R x6
- Sun Fire V240 x4
- Sun StorEdge™ 3510 FC x2
- Sun StorEdge L8 x1
- Solaris™ 9 OS
- Sun Java Enterprise System for Education (Sun Java System Directory Server & Sun Java System Access Manager)

Partner

Itochu Technoscience

Integrator

- Sony Broadband Solutions
- Bulwark

Benefits Accrued

- Reduced operating costs
- Expandability thanks to use of open systems
- Improved security and convenience thanks to single sign-on

Introduction

Kanagawa University's educational principles are "To help advance individuals and society through broad-ranging research and education, to cultivate people both as individuals and as members of their community and international society, and to give people capabilities that they can use to better their communities." The school, which has a record of turning out excellent graduates, has 1,000 personal computers on campus, and is a vigorous proponent of information technology. Students can check the canceled classes and syllabi on the Web, and can use PCs in classrooms that aren't otherwise in use. The school offers additional network services as educational tools, including online storage that is only available on-campus, and web-based e-mail that is available off-campus.

Kanagawa University's educational goals:

1. Integrate education and research
2. Shore up basic education while cultivating specialized education and skills.
3. Spark dynamic, creative thinking and cultivate communications skills.
4. Build self-awareness and competence to make independent, sensible citizens.



Reasons for implementation:

Integrate management of over 25,000 accounts with a secure, universally accessible environment

Kanagawa University issues network accounts to all of its students, including those at the affiliated middle and high schools, as well as its faculty and staff, and makes a range of services available to them. An assumption behind the platform for these services is that the school will not be tied to any particular vendor. In the process of implementing a single sign-on system, the first phase consisted of integrating account authorization, and Sun Java Enterprise

System for Education (consisting of Sun Java System Directory Server and Sun Java System Access Manager) were chosen for this.

As Mr. Yoshinobu Kiuchi, assistant manager in the Information Systems department at the university put it, "Before, we were working with a different vendor to operate an account-management system. But because it was practically a one-off system we developed by ourselves, it was difficult to customize and expensive to operate, which is why we started looking at moving to off-the-shelf systems everyone understands. But in the set-up process, we discovered that

Kanagawa University, using information technology to help develop capable individuals who will contribute to society

We that we were going to wind up with account passwords to manage, with the drawback of increased cost. This would also require that each user have multiple passwords, which would lead to a security problem. Therefore, we decided to use a single sign-on system and integrated authentication.

Reasons for choosing Sun

Ease of integration with other systems was the primary reason for choosing Sun. Java Enterprise System enabled Kanagawa University to complete account integration and single sign-on in six months.

The account integration/authentication system was up and running in April 2004. The single sign-on system was added on to the account integration/authentication system in only half a year, and was up running by October 2004. “At the outset, we expected that just account integration would take one year. But it’s a good thing we chose a system that can accommodate tighter schedules. And by switching to an authentication system that uses open standards, adding other features in the future will take less work and less money.” What was it that resulted in this short set-up time? To build this system, the school called on Bulwark Co., Ltd. (previously Altes Consulting), a system consultant with an extensive background in designing large networks. Here’s what Bulwark’s Mr. Kenichi Oba had to say about why Sun is the right choice for rapid-deployment

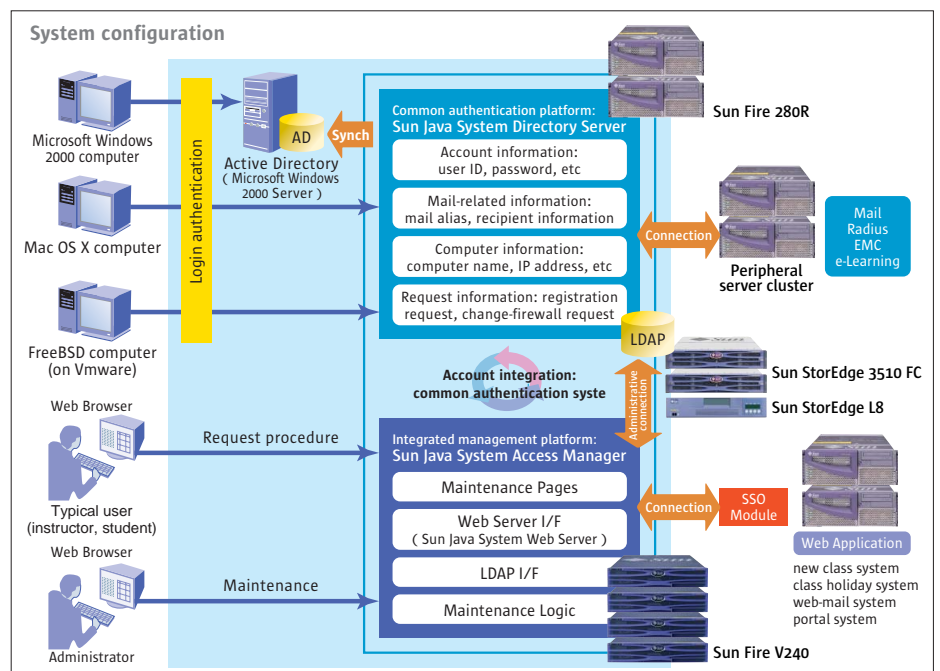
systems: “Right from the start, we only considered open, general-purpose systems for use in this account integration and single sign-on project. The reason we decided to go with Sun Java Enterprise System for Education (Sun Java System Directory Server and Sun Java System Access Manager) is that it can communicate easily with other systems. It uses standard protocols like LDAP of course, and because these products are widely used, even if the vendors of other systems don’t provide good documentation, it’s relatively little work to get them all running together.” Because the various departments at Kanagawa University are all using different open systems, an

authentication system that can keep pace with future changes and expansions in those systems is especially important. Currently, Kanagawa University is using the Sun-based single sign-on for 3–5 services.

Benefits of the Sun system

An economical, easy to use licensing system that doesn’t count students; system stability and expandability

Mr. Oba continued: “The Sun Java Enterprise System for Education (priced from ¥9,500 per year per full-time faculty; see back cover) does not count the number of students in calculating license fees, making it very cost-effective. Other systems use very different licensing terms, making straight comparisons impossible, but if you compare a company with a staff of 25,000 with a university that has a student body of 25,000, I think the school comes out ahead by a fair amount this way. And although we don’t currently have any plans to use any Sun software other than Sun Java System Directory Server and Sun Java System Access Manager, the contract with Sun lets the school use any other components in the Sun Java Enterprise system, with no limits, so you might say the license is written so that



the more the school uses, the cheaper it gets.” Licensing costs are a fixed amount every year, and this can be a more significant consideration than initial costs. The licensing system for the Sun Java Enterprise System for Education takes each school’s circumstances into consideration. We asked Mr. Kiuchi how the system was working out, operationally speaking. “Right now we have a few people on the educational side, and ten people on the back end running things, but there’s almost no work involved in ongoing directory configurations and account operations.” With Sun’s identity management, admins have access to account and password management, but giving individual users responsibility for that is an important part of the system as well. With the Sun Java System Access Manager, users can change their own passwords and get password reminders, and these features are in use at Kanagawa University. Features like these help further reduce administrative overhead. We asked Mr. Oba about the hardware that runs all this. “Currently, there are six Sun Fire 280Rs running the Sun Java System Directory Server software, and four Sun Fire

Mr. Yoshinobu Kiuchi
Assistant manager,
Information Systems Department,
Information Promotion Division,
Kanagawa University



Mr. Kenichi Oba
President and
Representative Director,
Bulwark Co., Ltd.



V240s running the Sun Java System Access Manager. We started off with only four 280Rs, but later added two, to keep up with a load that increased according to expectations. And if we ever found ourselves with insufficient capacity, it would be easy to add more.” And because the school offers its students web-based e-mail, it is only logical that the single sign-on process work for that as well, using SSL-encrypted logins. As Mr. Kiuchi puts it “we’re really making the most of that single sign-on.” The Sun solution makes a contribution in terms of both hardware and software. Finally, we asked Kiuchi if he had anything to say to the students. “Providing an opportunity to put students in touch with

cutting-edge technology as part of their educational experience is one of the ways that the information-systems department is trying to contribute to making this a better educational environment. I hope that by making effective use of the information infrastructure on campus, including the wi-fi network we are building, students will develop skills and knowledge that will serve them in the world at large. The advantage of the single sign-on system is that users can get online without really thinking about it, but I do want them to understand just how important it is and keep that in mind. And of course we’ll keep looking for ways to improve the educational infrastructure.”



Software included in the Sun Java Enterprise System

About the Sun Java Enterprise System for Education

The educational institution license for the Sun Java Enterprise System provides underlying software for servers to run network services and applications at a fixed-cost for unlimited usage. This entirely revamped licensing structure works out to approximately ¥9,500 per year per full-time faculty, and includes the unlimited use of a dozen or so components, including a directory server, portal server, web server and application server. Because the pricing will not change regardless of the number of processors, applications, services, or users (including students), system costs are easy to manage, and there are fewer steps involved in adding new software. Similarly with the corporate version of the Sun Java Enterprise System, pricing is per employee, and there are no additional fees based on number of customers—even adding servers requires no additional licensing, contributing to a significant reduction in TCO for enterprises using it.

Identity services	<ul style="list-style-type: none"> •Sun Java System Access Manager •Sun Java System Directory Server •Sun Java System Directory Proxy Server
Web & application services	<ul style="list-style-type: none"> •Sun Java System Web Server •Sun Java System Web Proxy Server •Sun Java System Application Server •Sun Java System Message Queue
Communication & collaboration services	<ul style="list-style-type: none"> •Sun Java System Messaging Server •Sun Java System Calendar Server •Sun Java System Instant Messaging
Portal services	<ul style="list-style-type: none"> •Sun Java System Portal Server •Sun Java System Portal Mobile Access •Sun Java System Portal Secure Remote Access
High-availability services	<ul style="list-style-type: none"> •Sun Cluster •Sun Cluster Agents •Sun N1 Service Provisioning System
Development Tools	<ul style="list-style-type: none"> •Java Studio Enterprise •Java Studio Creator

For more details on the Sun Java Enterprise System, see jp.sun.com/javaenterprisesystem or jp.sun.com/solutions/education/jes/

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Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 USA Phone 1-800-555-9SUN or 1-650-960-1300 Web sun.com



Sun Worldwide Sales Offices: Argentina +5411-4317-5600, Australia +61-2-9844-5000, Austria +43-1-60563-0, Belgium +32-2-704-8000, Brazil +55-11-5187-2100, Canada +905-477-6745, Chile +56-2-3724500, Colombia +571-629-2323, Commonwealth of Independent States +7-502-935-8411, Czech Republic +420-2-3300-9311, Denmark +45 4556 5000, Egypt +202-570-9442, Estonia +372-6-308-900, Finland +358-9-525-561, France +33-134-03-00-00, Germany +49-89-46008-0, Greece +30-1-618-8111, Hungary +36-1-489-8900, Iceland +354-563-3010, India-Bangalore +91-80-2298989/2295454; New Delhi +91-11-6106000; Mumbai +91-22-697-8111, Ireland +353-1-8055-666, Israel +972-9-9710500, Italy +39-02-641511, Japan +81-3-5717-5000, Kazakhstan +7-3272-466774, Korea +822-2193-5114, Latvia +371-750-3700, Lithuania +370-729-8468, Luxembourg +352-49 11 33 1, Malaysia +603-21161888, Mexico +52-5-258-6100, The Netherlands +00-31-33-45-15-000, New Zealand-Auckland +64-9-976-6800; Wellington +64-4-462-0780, Norway +47 23 36 96 00, People's Republic of China-Beijing +86-10-6803-5588; Chengdu +86-28-619-9333, Guangzhou +86-20-8755-5900; Shanghai +86-21-6466-1228; Hong Kong +852-2202-6688, Poland +48-22-8747800, Portugal +351-21-4134000, Russia +7-502-935-8411, Saudi Arabia +9661 273 4567, Singapore +65-6438-1888, Slovak Republic +421-2-4342-94-85, South Africa +27 11 256-6300, Spain +34-91-596-9900, Sweden +46-8-631-10-00, Switzerland-German 41-1-908-90-00; French 41-22-999-0444, Taiwan +886-2-8732-9933, Thailand +662-344-6888, Turkey +90-212-335-22-00, United Arab Emirates +9714-3366333, United Kingdom +44-1-276-20444, United States +1-800-555-9SUN or +1-650-960-1300, Venezuela +58-2-905-3800, or online at sun.com/store

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