

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI, INDIA

RECAL-Sun Lab

The inauguration of the RECAL-Sun lab in NIT-Tiruchi is to be held on 14 December, 2004. This marks another milestone of firsts for NIT-Tiruchi in pursuit of academic excellence. The primary function of the lab is to foster learning of Java and related web technologies. We would like share with you the process under which the lab became reality.

Sun Microsystems is a world leader in open systems technologies. The education sector has always played in a important part in the growth of the company. Sun got its name from its roots - "Stanford University Network". It has grown from a four person company in 1982 to being USD\$11b global company in twenty two years. During all the these years, Sun has always put special emphasis on partnering with higher education institutions. Within its customer facing organization, there is a separate group dedicated to working with educational institutions with world-wide responsibility. Today, Sun has multiple formal mechanisms with which it fosters these relationship.

These formal programs can be categorized broadly in four ways: a) Academic Excellence Grants, b) Centers of Excellence, c) Sun Academic Initiative and d) Sun software program for Education (EduSoft). All these programs are connected with Sun's primary focus – Open Computing. Much has been written about open computing and much misunderstanding still exists. But briefly put, open computing is more than Mozilla or Linux and commodity hardware. It is about published, royalty free interfaces (APIs) with well defined behavior. It is about competing on implementation of these open interfaces. These initiatives from Sun are structured to foster the usage of these principles and to further them in new areas of computing. The Sun Academic Excellence Grant (AEG) program funds donation of hardware, software & services to seed strategic programs and enables the creation of partnership for success. The Center of Excellence (COE) program is formalized, documented relationship with Sun and 3rd party wherein the partner brings in special expertise of strategic importance to Sun and is usually a one to three year commitment. The Sun Academic Initiative (SAI) authorizes educational institutions to deliver free training on Sun technologies to faculty, staff & students, creating a collaborative relationship, promoting a broader knowledge of Sun software and solutions. The EduSoft program provides for no cost licensing on more than hundred Sun software products for academic and research use.

The RECAL-Sun lab was created under the AEG program. CSG, NITT (when we were RECT) initially gave a proposal to Sun Microsystems for SUN AEG last year on July 31, 2003. It could not be approved during that time because of issues of having missed the deadline. The proposal was revised to include topics which were important to both parties. Sun Microsystems approved the proposal and the grant/gift of kind was sanctioned to NIT in May 2004. This would not have happened without the efforts of our alumni Mr. K. Venkatasubramanian (Katni) (1976-1981 EEE batch), Senior Director at Sun, heading up Sun's Edge Computing Solutions Group.

Once the decision was made to go ahead with the lab in NIT-Tiruchi, the details of what it should be had to be decided on. A meeting with Mr. Ganesh Mahabala, head of education sector, Sun India, NITT & RECAL took place on July 01, 2004 to work this out. After a few revisions, this list was finalized.

Sun Micro Systems agreed to provide the following Servers, Thin Clients, Desktops and Software under the SUN AEG program at no cost to NITT:

1. SunFire V440 Server - Rack Mountable, with 2 CPU/4GB memory
2. SunFire V250 Server, with 2CPU/2GB Memory with 19" LCD Monitor
3. SunRay (1g) without monitors - 30 numbers
4. SunBlade 1500 WorkStations, 512 MB Memory & 19" LCD Monitor – 3Nos.
5. Sun software

This equipment is worth US\$41,000/- (About Rs.20 Lakhs). On July 13, 2004 CSG released a formal Zero-Order value Purchase Order on Sun Microsystems as per their request. An End User Certificate was signed by NITT on July 28, 2004 stating that these Sun hardware & software would be used only for education, training, certification, CAD purpose and that it shall not be used for Nuclear, Missiles technology development. This is a standard End User agreement which needs to be signed for all imports from USA.

Sun Micro Systems shipped all the equipment from USA to India on September 9, 2004. This consignment was detained by the Customs officials at USA. The glitch was due to Zero value on items. After about 15 days, the consignment was released by US Customs, which then landed at Chennai Airport. This consignment was again detained by the Customs officials at India. The glitch was again due to Zero value on items. After 2 days, the consignment was released once the Customs Duty was paid by NITT. The equipment was finally brought to CSG, NITT.

All users are encouraged to use the 'dtrace' feature of the OS, to better understand how their processes are being executed.

This SunFire server can be accessed from RECAL-SUN Lab at the Octagon which is going to be formally inaugurated on December 14, 2004 or from other PCs across our network in which Exceed software is installed.

While logging into this SunFire server users will have two options "Common Desktop Environment" (CDE) or "Java Desktop System, Version 3" Java Desktop System (JDS) is new & has more features than CDE and it also has a Windows like environment. It is recommended that all users use the JDS environment. By default, all accounts will be set up to use JDS.

Preference will be given to those students who are learning Java as a part of their curriculum. Sun Java Studio tools will be provided to assist with sw development using Java.

Acknowledgments:

We would like to thank our alumni Mr. K. Venkatasubramanian, 1976-1981 EEE batch and Mr. B.V. Ramanan, 1976-1981 Chemical batch, President of RECAL for their efforts in making this lab a reality.

We would also like to thank Mr. Bhaskar Pramanik, Managing Director, Sun India, Mr. Ganesh Mahabala, Head of Education Sector, Sun India; Mr. Andrew Lim, Head of Education Sector for Asia South; and Mr. Dinesh Bahal, Head of Education Sector for Asia Pacific for their active support of this initiative.