The Australian Centre for Jini Technologies Summary

Introduction

Jini is a new distributed technology from Sun Microsystems based on the Java programming language. It allows software and hardware to be written that is ‘‘Jini aware’’, and to capture and bridge between non-Jini applications, hardware and software services. This allows new and existing systems to be built or brought into a Jini environment.

On the ‘‘pioneer-early adopter-mainstream’’ cycle, Jini is in the pioneer stage. There are many home devices (fridges, hifi systems, etc) and office devices (fax machines, security systems, etc) that can be linked to networks, but none of them are as yet Jini-aware. However, many companies (such as Motorola) are experimenting with adding this technology to their network products.

As it is in the pioneer stage, there is of course a high risk of failure in that it may not be taken up to the mainstream level. There are two counterweights to this: the cost of investment at this stage is relatively low, and the organisations and individuals involved with Jini have a good track record of taking pioneer technology into the mainstream.

Projects

Demonstration laboratory

A major project under this proposal is to set up a ‘‘demonstrator laboratory’’. This will include a variety of heterogeneous hardware, running many different operating sytems: Unix, Linux, Windows (several varieties) and Macintosh computers for workstations; digital cameras, other office equipment, and scientific equipment associated with engineering and Physics projects.

The laboratory will be used to demonstrate on a local scale how Jini can be used in office, home and scientific environments. In addition, since Jini is a distributed network system, the services will be available across the Internet as a demonstrator laboratory for Australian and world use.

It is expected that service vendors will contribute into this laboratory as they develop Jini-enabled services. This may be in the form of further equipment, but may also be done by registration with the ‘‘clearing house’’ capability that will come from a stable laboratory with known network address.

Training projects

The director of the Centre has already written a textbook on Jini and has prepared a half-day/one-day course on the subject. The course has been presented at several conferences already both in Australia and overseas. It will continue to be offered, and may become one of the ‘‘Day in the Life’’ seminar series given by DSTC.

Staff of the Centre or supporting organisations will be available for consulting and promotional tasks using Jini.

Publicity about the capabilities of Jini and the possibility for technology transfer into Australian industry will be given at technical conferences during the lifetime of the Centre.

Research projects

The Centre will run a number of short to medium term research projects. These will be staffed in a number of ways

- Research students, from Honours to PhD level
- Staff funded from particatory organisations
- Open Source projects on the Internet

Particpants

The participant organisations in this will be

- University of Canberra
- Distributed Systems Technology CRC (DSTC)
- Telstra
- Defence Science and Technology Organisation (DSTO)
- itsy

Management Structure

I will be boss!

Delivery

Benefits

Jan Newmarch (http://pandonia.canberra.edu.au)
jan@ise.canberra.edu.au
Last modified: Sat Oct 23 22:35:22 EST 1999