Table of Contents

Smalltalk Application Server, TIPC

July Meeting: Smalltalk Application Server, TIPC

Date: July 3, 2006 at 7 p.m.
Location: University of Ottawa, Tabaret Hall Senate Room (083)

A Smalltalk Application Server

Speaker: Bruce Badger

The OpenSkills SkillsBase system runs using an application server that has the advanced features one would expect but with several unique properties. Demonstrations will be interleaved throughout the talk. The following is a selection of the topics Bruce will include:

- No impedence missmatch when persisting objects
- Huge numbers of instances of the application are possible
- No HTTP session affinity required (i.e. apps can be RESTful)
- A cache of unmodified objects shared by all instances
- One language throughout the system
- Application code is executed in the databases processes ?..
- The DBMS *is* the application server
- Premier IDE from which code is injected directly into the app server ... though we do use a staging area for production changes

About the Speaker

Bruce Badger is an enthusiastic technologist and the Founder and President of OpenSkills.org, a global non-profit association of professional individuals. His strong technical leadership skills have contributed to his success of a wide range of IT projects, over a period of more than 25 years. He has built and deployed many systems and libraries over the past 10 years, preferring to develop software using Smalltalk, a pure Object Oriented language. Bruce is currently focusing on the evolution of the services market as Free and Open Source software is increasingly adopted. He has written a number of Open Source libraries, and is currently engaged with building the support systems for the OpenSkills association.

Transparent InterProcess Communication (TIPC)

Speaker: Randy MacLeod

One feature missing from the Linux kernel is a reliable, efficient and transparent interprocess and interprocessor communication protocol that we can use to build highly available Linux clusters. Transparent interprocess communication (TIPC) is a suitable open-source implementation that fills this gap and provides an efficient cluster communication protocol, leveraging the particular conditions present within loosely coupled clusters.

TIPC is unique because no other protocol seems to provide a comparable combination of versatility and performance. It includes some original innovations, such as functional addressing, topology subscription services and reactive connection concept. Other important TIPC features include full location transparency, support for lightweight connections, reliable multicast, signaling link protocol, topology subscription services and more.

About the Speaker

Randy MacLeod has worked at Nortel for six years. For the past three years, he has been developing linux-based embedded systems. Previous to Nortel he spent 10 years doing computer systems development in several particle and nuclear physics labs. He worked at QNX Systems and is microkernel infected. He has been involved in linux since 1995 and fondly remembers the Redhat IPO. Despite being a born-again Californian, he lives in Ottawa.