

Prioritized Mutual Exclusion support for RT - CORBA

Goals

Supporting prioritized mutual exclusion on a Real Time CORBA system by way of implementing the known protocol for prioritized mutual exclusion for distributed systems in a Real Time CORBA system that conforms to OMG RT-CORBA specification.

Work Done (During Last Month)

- Study of the Protocol supporting "Prioritized Token-Based Mutual Exclusion on Distributed Systems".
- Study of the Protocol supporting "Priority Inheritance and Ceilings for Distributed Mutual Exclusion".
- Exploration of the existing pertaining OMG specifications to get an overview of what exists, what should be supported and how.
- Study of the OMG RT-CORBA specification.
- Study of the OMG Concurrency Service specification.
- Study of the OMG RT-Notification Service specification (RFP).
- Study of RT-CORBA Joint Revised submission ptc/99-05-03 to OMG.
- Installation of ACE & TAO on Redhat Linux machine.

Future Work (Up to foreseeable future)

- Devising the extensions to the above said protocol to support and to conform to the OMG specifications pertaining to the mutual exclusion in CORBA.
- Prepare a document that summarizes the pertaining information from the abovementioned studies to help direct the course of action.
- Understanding the existing DSM modules and using them for the minimal implementation.
- Implementation of the extended protocol on a small-scale system.
- Testing the TAO (The stable release).
- Deciding the scope of the implementation.

Nirmit Desai
nvdesai@unity.ncsu.edu
Date: 11-20-2001