

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)

- The ACE is installed and tested for errors. There are no errors found.
- Installation of TAO is completed without errors and compiler errors are overcome.
- The document summarizing the installation procedure for ACE and TAO is on my homepage. It also contains a README for compiler problems and steps to be taken to overcome those.
- Some of the tests of the TAO are failing due to unknown reasons. This will be taken up once we finish off with the simulated implementation or during that time.
- The extensions of the protocol without priority support and with priority support are understood.
- A rough draft summarizing the protocol by means of pseudo-code is prepared and the discussion on which is to be held on meeting. This draft is an outcome of the understanding of the extensions and discussion we had on it. It turns out that the algorithmic complexity of the extended protocol is same as that of the original protocol.

Future Work (Up to foreseeable future)

- The extensions are to be carefully discussed and perused for any errors or flaws. This will be done in the meeting.
- Once the extensions are believed to be true they will be implemented in a simulated system wherein we can test the effectiveness of the extended protocol and come up with the results. This has to be done before 02-08-2002.
- Preparation of the proposal for NSF can be done once we have the results. This is to be done before 03-01-2002, which is deadline.
- The extensions can be presented in some workshop as a proof of concept. This means that the rough draft should be finalized and prepared in terms of a proposal.

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Date: 01-23-2002