Who

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Description

MISS2TE is an adapter for Transaction Engine (T.E.), a proprietary middleware of Commerzbank AG. It delivers trade confirmations from Eurex (derivatives exchange owned by Deutsche Börse AG and Swiss Exchange) in real-time to T.E. In T.E. these trade confirmations are mapped and delivered in near-real-time to the following destination systems: Summit ZGS, Summit ZDT, Bloomberg and Option/Future-System). Primary objective is to write a new adapter based on the new VALUES API because Eurex is switching to a complete new communication architecture (MISS, GATE). The MISS2TE adapter has to be highly available and reliable. VALUES API is event driven and consists of C function calls and callbacks which is appropriate for GUI-Applications whereas the T.E. API is based on a transaction and loop driven C++ class library. The second project target is the definition, implementation and testing of new mappings because of changes in the data structures.

Tools/Technologies

- Sun C++ 4.2 and C++ 5.0, 5.1, 5.2
- Sun Workshop 5
- Forte Developer 6 / Sun Workshop 6 for C++
- Rogue Wave Libraries Tools.h++
- Sybase 11
- Shell scripts (sh, ksh, perl), make
- Rational Clearcase
- Rational Purify for UNIX
- Playground (object-modelling environment)
- Sun Solaris 2.6, 8
- nmap

Tasks

- Analysis of Eurex Values API
- Design of layered C++ wrapper classes for VALUES API to make calls and callbacks type save and enable consistent error handling
- Design of exception handling and exception forwarding from VALUES API callback functions
- Design of a reliable restart of the adapter (retransmission of lost messages, removal of duplicate messages, maintain order of messages)
- Handling of different trading phases on Eurex and lost connections
- Implementation of logon, logoff to Eurex and error recovery
- Installation of development and test environment on Solaris 2.6 and 8
- design and implementation of shell scripts for adapter configuration, adapter start/stop and unattended GATE start/stop
- Definition of required mappings
- Error tracing and debugging of T.E. API libraries
- Definition of test cases for adapter and target systems
- Extensive adapter test (load test, error handling, etc.)
- Test of all mappings
- Operations manual and project documentation