FUTURE OF CORBA IN DISTRIBUTED REAL-TIME AND EMBEDDED SYSTEMS

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Abstract

CORBA is being used as the middleware infrastructure for many large-scale communication systems, particularly mission-critical distributed real-time and embedded (DRE) systems. Now that CORBA has passed its 15th birthday, software architects must evaluate its continued use as software architectures and technologies evolve. Is it still the middleware of choice for DRE systems? Other asynchronous message-oriented middleware (MOM) technologies are being used by emerging Service-Oriented Architectures (SOA) and enterprise systems. Given these industry trends, how can existing CORBA enabled applications best integrate with overarching enterprise information systems. At the embedded end of the DRE spectrum, will the recent completion of the CORBA/e (embedded) standard and FPGA- and DSP-based ORBs push CORBA further into the software/hardware domain for high performance, highly reliability DRE systems intelligent sensors? Are the platform- and language-independent features of CORBA still important requirements of existing and future large DRE systems? This talk explores these and other questions about the use of CORBA in DRE system architectures.

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