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ANSA Phase III

JETSTREAM presentation

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Abstract

The business problem addressed is...

The technical problem created by that business problem is ...

The solution being offered is....

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Draft

19th March 1996

Briefing Note

Distribution:

Supersedes:

Superseded by:



JETSTREAM

Explicit binding and Streams extensions to JET

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March 1996



Overview

- **JET provides a CORBA API on top of the DIMMA platform**
- **JETSTREAM provides application programmers using JET with access to:**
 - **explicit binding**
 - **stream facilities**



Benefits

- **Explicit binding provides application programmers with:**
 - the ability to control the time of binding
 - the ability to specify the required QoS on a per binding basis
- **Streams provide typed directional data flows which:**
 - can be specified in IDL in a similar manner to operational interfaces
 - can be transparently provided and type checked by the infrastructure
 - can be used by applications to exchange audio and video data (Amber)

Both are essential requirements for Multi-Media!



Approach

- Provide the same transparencies for stream interfaces as for operational interfaces
- Adapters export IDL based control interfaces to an application for QoS/binding management
- JET IDL definition and JET Stub Compiler will be extended with support for explicit binding and typed streams
- Application level threading to allow concurrent processing of multiple multi-media flows
- Application specific marshalling schemes



Dependencies

- **JET: a CORBA API on the DIMMA platform**
- **AMETHYST: Resource management and Controlled sharing of resources**
- **RUBY: Concurrent multi-media stream processing**

Deliverables

- **JET stub compiler extended with stream support**
- **Adapter template generation**
- **API support for application concurrency**

Time scales

- **Completion is expected in October 1996**