



**Mission Oriented Architectural
Legacy Evolution**

ACMEServer

**Communications Interface for
ACME Text Descriptions**

Program Description

ACMEServer is a communications wrapper around the CMU ACMELib that allows multiple applications to share the same ACME description. Changes made by one program can be reflected in others. Applications do not need to link to the ACMELib, but can obtain ACME manipulation services through a standard interface. Interfaces provided include Tcl/Tk, Java and C/C++.

Program Features

ACMEServer provides the following capabilities:

- Interactive access to ACME descriptions via a standard interface
- Multiple concurrent access to the same ACME representation
- ACMELib services available without need to link the ACMELib Library
- Standard interfaces including C/C++, Tcl/Tk and Java for ease of use
- User extensibility for addition of application-specific functionality

MORALE

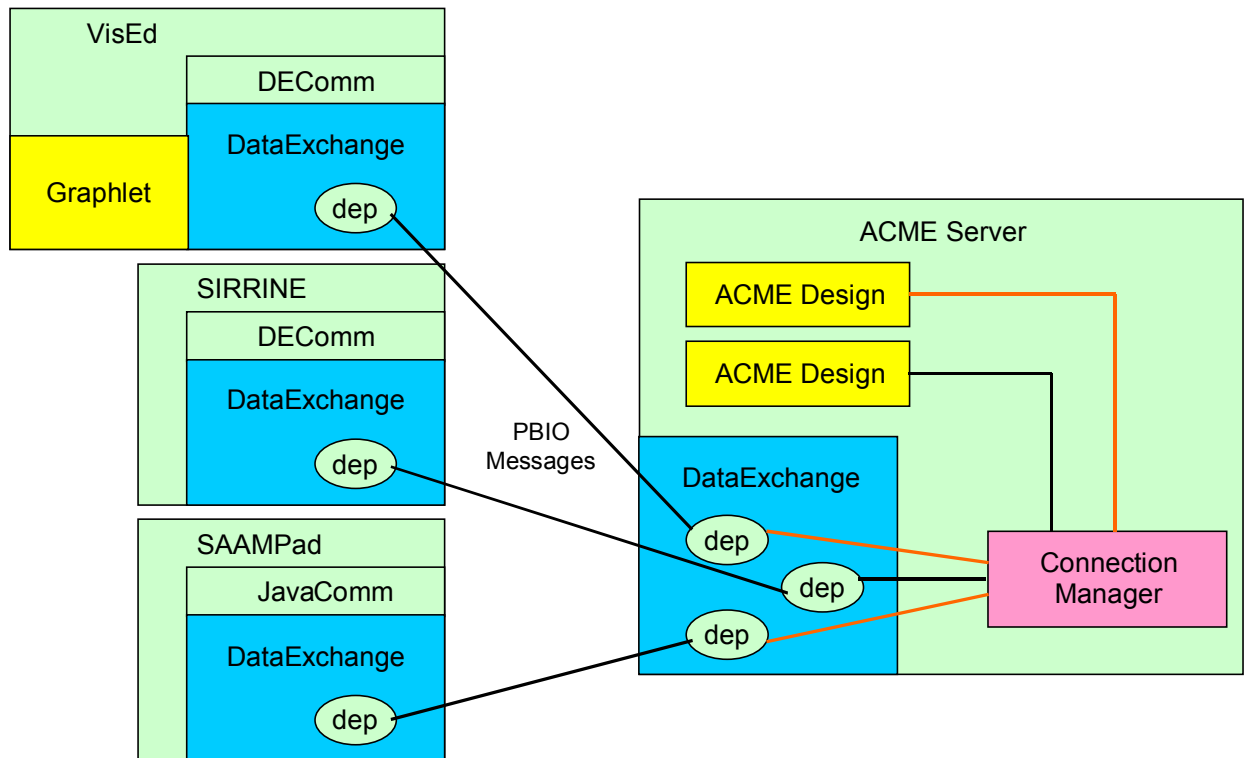
ACMEServer supports the Mission Oriented Architectural Legacy Evolution (MORALE) architecture analysis process. The goal of the MORALE project is to facilitate the evolution of legacy software systems. Facilitation takes the form of improved quality by requirements validation, reduced risk via architectural evaluation and assessment, and increased productivity from maintenance and access to design rationale and from high level reuse of architectural components.

ACMEServer Architecture

The following diagram shows how ACMEServer provides its communications interface services. In the example, each application creates its own DataExchange which acts as a communications and routing hub. A DataExchange port is created by each application, which represents a connection to the server. The ACMEServer itself has several ports – one for each application to which it is providing services. As the example shows, tools may either have a dedicated ACME representation which is being manipulated, or there may be concurrent access being provided. ACMEServer also does some processing of ACME descriptions, freeing client applications from tedious computation. For example, when getting connections, the server returns not only the connection name, but the names of the components to which the connector is attached. This frees applications from having to resolve attachment information and simplifies interpretation of ACME descriptions by attached tools.



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Availability

ACMEServer version 0.5 is currently available from the EDCS Tool Page in both source and binary distributions.

System Requirements

ACMEServer has currently been tested on the Solaris and Win32 platform. It depends on:

- C++ AcmeLib 1.0b
- Dataexchange 2.3 or greater
- PBIO 3.1 or greater

Contact Information

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