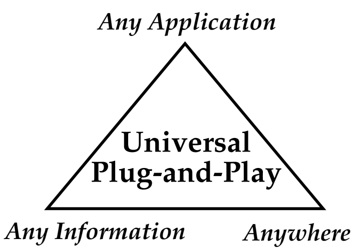
ToolTalk

Application Integration Solutions



Computer users are insisting that the independently-developed applications they use work together. This leads application developers to search for mechanisms that enable their applications to cooperate with one another. This is the *universal plug-and-play* requirement of applications.

The ToolTalk™ inter-application communication service from SunSoft™ is the premier UNIX-based mechanism for developers to quickly produce applications that interoperate with one another, providing the integrated environment end users want.

ToolTalk fits easily into the way applications are developed. Applications communicate by exchanging messages. Developers first decide what types of messages their applications need to receive, then they register their requirements with the ToolTalk service, which acts as a go-between. The messages are delivered to those applications that have registered interest in them. Developers need not know in advance all the applications they will be communicating with, nor do they have to know their network locations. End users can choose which of these interoperable applications will best suit their needs.

ToolTalk is completely distributed and network aware. Location issues are completely transparent to the user because ToolTalk hides the networking details.

Features and Benefits

Network Transparent Interoperability

- With current interprocess communication mechanisms, such as RPCs, applications need to know exactly who they are communicating with and where they are located. ToolTalk clients need know only what they want to say. This transparency is accomplished by reversing the traditional roles of senders and receivers. Potential receivers register their interest and ability to process certain types of messages with they ToolTalk service. Senders simply send messages, leaving the ToolTalk service to deliver them to the appropriate interested applications.

Multicast Messaging

- The messaging paradigm ToolTalk supports is multicast messaging, which supports communication from one application to one or more other applications. Multicast messaging's procedural approach fits easily into the way most applications are developed today.

Requests and Notifications

- ToolTalk messages fall into two basic classes. The first class, Requests, enables one application to request action from another application. This allows applications to leverage one another's functionality. The second class, Notifications, allows applications to be informed of the actions of other applications. This enables applications to coordinate their activities.

Integration for Individuals and Workgroups: Session and File-Scoped Messages

- The ToolTalk service supports integration of applications belonging to individuals or groups via message "scoping." The scope of a message determines which audience of interested applications is considered a potential recipient. The ToolTalk service offers both session and file scoping. Session-scoped messages support integration of an individual's applications. Because network window systems, like SunSoft's OpenWindows, allow users to run processes on multiple machines, applications cannot easily determine which application should be notified when an event occurs. If applications have expressed interest in the user's session, the ToolTalk service delivers the message to all these applications. File-scoped messages support interoperation of applications used by different people. If a file is modified by several people in a workgroup, the applications belonging to different users on different machines learn of changes to the file by registering interest in that file.

Application Startup and Message Queuing

- Applications may not always be available to receive a message. ToolTalk can start the application automatically or queue the message for later delivery.

Application Programming Interface (API)

- Applications use the ToolTalk service by calling functions from the ToolTalk API, a C-language set of function calls designed to simplify integration.

Requirements

System Software

- ToolTalk is part of both the Solaris 1.0 and Solaris 2.0 operating environments .

Distribution Media

- CD-ROM

For more information about Solaris, call 1 800 227-9227.