Network Appslication Tools: Creating The Solution

Overview

As personal computers have become an integral part of more and more people's daily lives, user expectations of the applications they use have changed. It is no longer sufficient to provide great stand-alone applications. Today users demand from both commercial and MIS developers new types of applications that allow users to share the work they do on their computers with their managers, colleagues and subordinates. Users want to be able to use **all** of the power of their personal computers and leverage any network to which they are connected, seamlessly and transparently.

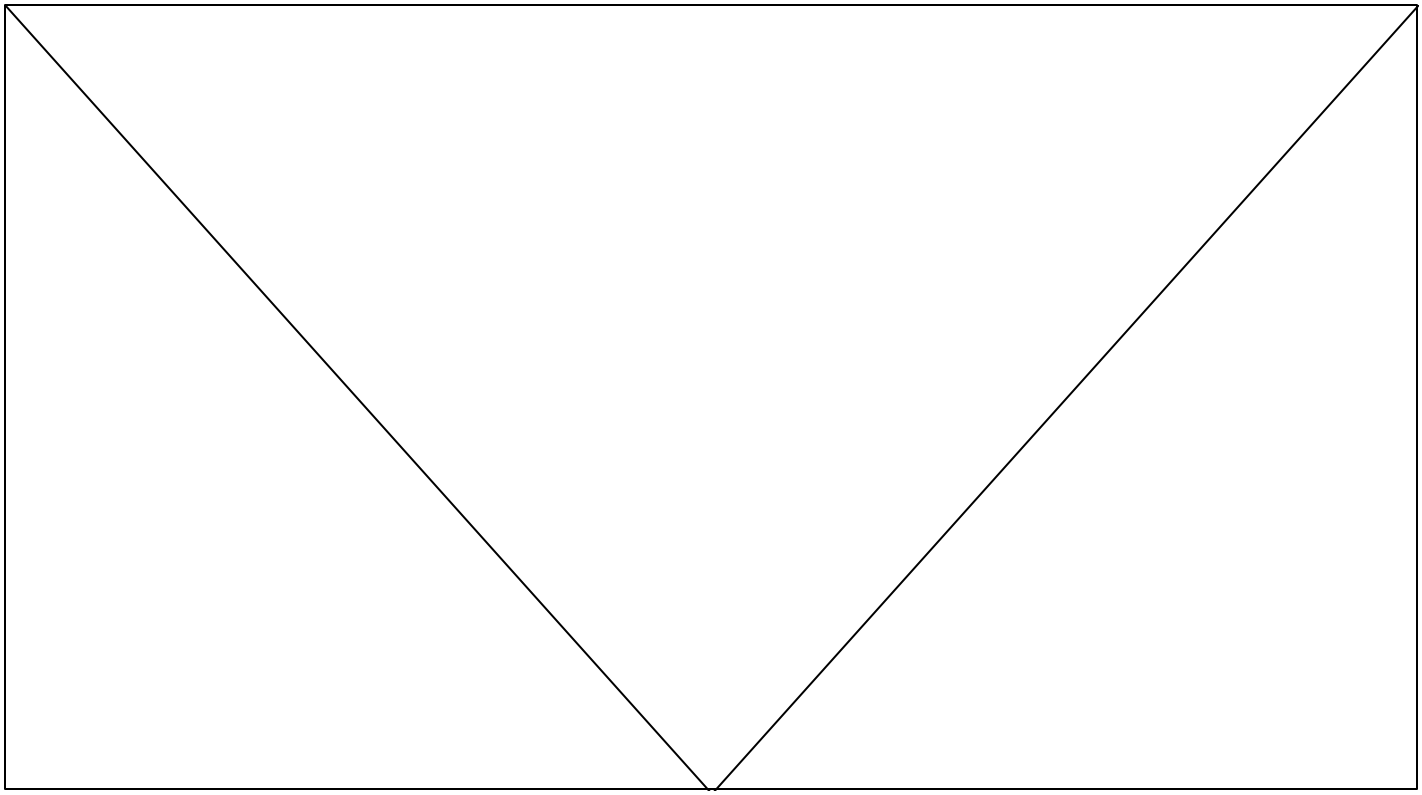
At Apple, applications that do this successfully are called collaborative applications. In its broadest sense a collaborative application is one that allows people to communicate and work with one another faster, more easily, or with richer content. What distinguishes a collaborative from a non-collaborative application is that the former always involves multiple people working on common data to achieve a shared objective. Thus, an application as simple as a terminal emulator **can** be used to accomplish collaborative work, but isn't used that way in all cases. Innovative collaborative applications are those that allow users to send and receive messages through the network as though the network did not exist. Applications such as electronic mail and screen sharing point the way to a new era of collaborative computing.

To assist developers in creating this new type of innovative application, Apple has created a suite of collaborative application development tools referred to as Network Application Tools. Simply stated, a Network Application Tool is software that empowers developers to design, build, test, and deliver distributed, collaborative applications. Apple's Network Application Tools model (shown on the next page) classifies all tools based upon the type of network functionality they provide, the "level" of interface to the network they provide, and what they allow the Macintosh user to access.

The model encompasses four different types of network functionality: front end or distributed user interface; file and database access; store and forward; and the most complex type of network functionality, cooperative processing. The different levels of access each tool provides to the network are: application level, system level, or

The Environment

network level. Application level tools are those applications such as HyperCard that also have a network development component built into them such as HyperCard's XCMD interface. System level tools ship with every Macintosh and include such tools as Data Access Language, the Macintosh Communications Toolbox and the components of Apple's Interapplication Communication Architecture. Network level tools are for those developers requiring low level access to the network for performance or flexibility reasons.



Apple's Network Application Tools Model as it applies to:

- *Another Macintosh or PC*
- *Digital VAX systems*
- *IBM host*
- *UNIX host or workstation*

Apple is not the only provider of Network Application Tools. A number of Apple developers provide highly functional tools that enable the implementation of collaborative applications. Products like MItem View and Masquerade allow MIS developers to renovate older host applications so they may be used effectively with intelligent desktop devices. Microsoft Mail and its executable forms capability allows developers to build customized data entry applications. Even products such as VersaTerm allow developers to build custom scripts to automate access and file transfer to host systems.

This section provides an in-depth look at the Network Application Tools for Macintosh available from Apple and third-parties. You will find a tool for almost every use and network environment.