Macintosh

## Developer Support

## IC 525 - Collaborative Computing Q&As Interapplication Communication

Revised by: Developer Support Center September 1993 Written by: Developer Support Center March 1993

This Technical Note contains a collection of Q&As relating to a specific topic—questions you've sent the Developer Support Center (DSC) along with answers from the DSC engineers. While DSC engineers have checked the Q&A content for accuracy, the Q&A Technical Notes don't have the editing and organization of other Technical Notes. The Q&A function is to get new technical information and updates to you quickly, saving the polish for when the information migrates into reference manuals.

Q&As are now included with Technical Notes to make access to technical updates easier for you. If you have comments or suggestions about Q&A content or distribution, please let us know by sending an AppleLink to DEVFEEDBACK. Apple Partners may send technical questions about Q&A content to DEVSUPPORT for resolution.

New Q&As this month:

Two Macintosh systems showing same application screen

## Two Macintosh systems showing same application screen

Date Written: 11/5/92 Last reviewed: 3/1/93

How can I get the same information to appear on the screens of two different Macintosh systems?

If you want the second screen (the one on the other machine) to show *exactly* what's on the first machine—including up-to-date user actions such as the mouse position—you'll be faced with a difficult task. Here, you might find it best to look into a third-party application, such as Farallon System's "Timbuktu."

If you want the second screen to show the same display as the first, but aren't concerned about mouse clicks or other user-interaction issues, you might consider writing your application so that it uses Apple events (or some other network protocol) to send screen changes to the display application.

In the second case, we recommend that you use a "factored" (client-server) application design with independent human-interface and display modules. In this design,

- *All* user actions (menu choices, data entry, etc.) are packaged into Apple event messages; they aren't acted on immediately.
- To run on one system, send the Apple event to yourself.
- To run on two systems, create two Apple events (with the two destinations) that have the same content and send to both systems.
- On each system, your application's event loop will receive Apple events as part of its normal operation. It should then extract the content and update the display.

Note that the second computer doesn't know (or care) that it received its window-change request from the first computer. Also, this application design makes it simple to record actions to a file, so you can make your application scriptable, or drive it from a script using AppleScript or some suitable third-party application, such as UserLand Frontier.

This design is also much easier to debug, as you can do all the work on one machine.

There's a nice article on this technique in issue #10 of *develop* called "Apple Event Objects and You," as well as a course from Apple Developer University.

(When the Developer Support Center mentions a third-party product by name, it's meant to be a possible solution for you to investigate, not a recommendation. The DSC doesn't evaluate third-party tools, nor does the DSC maintain complete lists of possible third-party solutions. Consult resources such as the APDA Catalog, Macintosh Development Tools & Languages, the Redgate Buyer's Guide, your dealer, electronic bulletin boards, and reviews in technical magazines to find a product that will fit your needs.)

## Macintosh XTND translators and graphic type registry

Date Written: 10/9/92 Last reviewed: 11/24/92

I need to translate TIFF, PhotoShop, Targa, PICT, EPSF and other file types that are going to be 24-bit depth and beyond. The last *Developer CD Series* disc has XTND 1.3.5, which I'm studying. Does Apple have other XTND files available through APDA or a more recent version? Do you have a registry of graphic file types with information about them that can be used to write XTND translators? I want to avoid having to license or request the file structures from companies.

All that Apple has on developing translators is the XTND Developers Kit from APDA, which is the same as what you found on the latest Developer CD; it is also the most current version.

Apple doesn't maintain a registry of graphic file types (nor any other type of file type). You have two avenues to pursue to meet your development needs. The first, you already stated you wanted to avoid: contacting the companies individually and requesting the formats/translators directly. The second might be less painful from an effort point of view--purchasing prewritten translators from a company that specializes in them. Dataviz and at least one other third-party developer write and sell a varied set of translators. You can check the Redgate Buyers Guide or Macintosh periodicals such as MacWorld and MacUser for more information on what they offer and how to contact them.