Apple IIGS: Printing to the LaserWriter from AppleWorks

```
Article Created: 26 November 1986
Article Last Reviewed: 23 April 1991
Article Last Updated: 23 April 1991
```

The following instructions are valid for AppleWorks versions 1.3 and 2.0;
earlier versions of AppleWorks have not been tested with these
modifications. These changes support both the LaserWriter and the
LaserWriter Plus.

You first create an AppleWorks program disk with all the files required to
print AppleWorks documents to the LaserWriter and thereupon you test the
disk by printing a document.

Then you can create a bootable disk that effectively reduces the number of
manual steps needed to prepare the system for printing your AppleWorks
documents to the LaserWriter.

Creating a program disk:

    Using the System Utilities program,

        -- Name a disk /APPLEWORKS. For this set of instructions, we'll say the
           disk is a single 3.5" disk.

        -- Copy all files from the master AppleWorks disk to the single 3.5"
           disk you have named /APPLEWORKS.

        -- Put away the master AppleWorks disk

        -- Delete the old version of ProDOS 1.1.1 from your /APPLEWORKS disk.

        -- Copy the new version of ProDOS, P8, from the Apple IIGS System Disk
           to your /APPLEWORKS disk.

        -- On your AppleWorks disk, rename P8 with the name PRODOS.

        -- Copy the following files from the Apple IIGS System Disk to your
           /APPLEWORKS disk:

                ATINIT ------ AppleTalk initialization program
                IWEM -------- ImageWriter Emulator program

```
         MTXABS.0 ---- Mousetext tool kit
         NAMER.0 ----- Namer Object Code
         NAMER.II ---- Namer program
         CHOOSER.O --- Chooser Object Code
         CHOOSER.II -- Chooser program
```

Printing a document with AppleWorks and the LaserWriter:

    You need only do steps 3a through 3f once; after that, the disk has
    the necessary information.

    1. Plug the AppleTalk cable into the printer port on the back of
        the Apple IIGS.

    2. Change the Control Panel Slot settings to "Your Card" for Slot 1
        and to "Built-In AppleTalk" for Slot 7. (Note: If you have the
        newer model Apple IIGS with 1MB of RAM on the logic board, set
        Slot 7 to AppleTalk and EITHER slot 1 or slot 2 to AppleTalk.)

    3. Tell AppleWorks how to send information to the LaserWriter:

        a. Start up AppleWorks and choose Other Activities from the
            Main Menu (item #5).

        b. Choose Specify information about your printer(s) (item #7).

        c. Choose Add a printer (item #2).

        d. Choose Apple ImageWriter.

        e. To name the printer, type "LaserWriter" and press Return.

        f. Choose Slot 7.

    4. Start up the application called Chooser on your System Disk.

    5. Click on LASERWRITER and choose the LaserWriter to which you want
        to print.

    6. Quit Chooser.

    7. Start AppleWorks by typing:

        -/APPLEWORKS/APLWORKS.SYSTEM

Note: The Chooser and the ImageWriter Emulator

The Chooser program "CHOOSER.II" must be run and the LaserWriter selected
each time your LaserWriter is turned off and on. The CHOOSER program is used
to download the IWEM file from the Apple IIGS into the LaserWriter. If the
LaserWriter has been powered off since the last time the IWEM program was
downloaded, the AppleWorks program will not print to the LaserWriter.

A problem surfaces when a network only has one AppleTalk device available at the time of a Chooser boot. The very first time you boot the Chooser and select the LaserWriter, it will download the emulator and everything will work fine. The problem starts when the Chooser saves the user name and last selected printer to disk: when you re-run the Chooser, the one and only LaserWriter is already selected and won't let you click on it again to re-download the ImageWriter Emulator.

This has been fixed in Chooser 1.1. The only AppleTalk device that is available allows you to 're-click' on it to load the ImageWriter Emulator.

Creating a bootable disk:

   To run the Namer, Chooser, or AppleWorks at boot time, create the simple
   startup program below and copy it to the disk. Follow the file copying
   instructions above in "Creating a program disk," and then:

      1. Using the System Utilities

            -- Copy the file BASIC.SYSTEM from the Apple IIGS System Disk
               to your AppleWorks disk.

            -- On your AppleWorks disk, rename the file called
               APLWORKS.SYSTEM to APLWORKS

            -- Exit to BASIC

      2. Create the following Applesoft BASIC program:

```
10  HOME : REM  Startup program
20  PRINT " Program Loader ": PRINT
30  PRINT " 1) AppleWorks "
40  PRINT " 2) Chooser"
50  PRINT " 3) Namer": PRINT
60  INPUT " Enter your choice:";A$
70  A =  VAL (A$)
80  ON A GOTO 100,200,300
90  GOTO 10
100  PRINT  CHR$ (4);"-APLWORKS"
110  END
200  PRINT  CHR$ (4);"-CHOOSER.II"
210  END
300  PRINT  CHR$ (4);"-NAMER.II"
310  END
```

      3. Check to be sure you entered the BASIC program exactly as shown.

      4. Type SAVE STARTUP and press Return.

   Boot your AppleWorks disk; the following appears on the screen:

   Program Loader

```
    1) AppleWorks
    2) Chooser
    3) Namer

    Enter your choice:

    Type in the number of the program you wish to run, and press Return.
    Whenever you print to "LaserWriter," your output will be directed to the
    last LaserWriter chosen using Chooser.
Copyright 1986, 1991 Apple Computer, Inc.


Keywords:  <None>

===================================================================

This information is from the Apple Technical Information Library.

19960215 11:05:19.00
```

Tech Info Library Article Number: 2098