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## Accessing the Advantis Network from a Macintosh

Advantis, an IBM company, is a commercial Internet access provider. Today, Advantis is only “supported” on Windows and OS/2 computers, but because Advantis operates with open, standard protocols, it is possible to access Advantis with a Macintosh. This note explains how.

### 1 Introduction

In the companion note *Macintosh Dialup Internet Access with MacTCP/MacPPP* I explain how to connect to the Internet from your Macintosh, using a dialup connection operating the PPP protocol. I recommend the PPP protocol for two reasons: it is very easy to configure, and reliable free software is available. I use PPP to connect to my provider InfoRamp in Toronto.

Smaller Internet access providers such as InfoRamp generally do not offer telephone access beyond their own cities. The Advantis network, operated by IBM, offers worldwide access. However, the Internet services available directly from Advantis tend to lag behind smaller, more agile providers such as InfoRamp. Today, Advantis offers only the SLIP connection protocol, and not PPP.

In this note, I explain how to configure your Macintosh to use Advantis through a SLIP connection. Once you are connected through SLIP to an Advantis local access number, you can access Internet services offered by Advantis or any other provider, anywhere in the world.

Here I give instructions on how to install and configure both Hyde Park Software's MacSLIP and InterCon Systems' InterSLIP. You may use either one. Consult *Macintosh Dialup Internet Access with MacTCP/MacPPP* for a discussion of the concepts of the Internet, details on MacTCP installation and configuration, and an introduction to using Internet applications.

### 2 Setting up an Advantis Account

Advantis has developed software for automatic registration that operates under the Windows or OS/2 operating systems. You can use one of those operating systems to register. IBM's Internet Access Kit, a standard part of OS/2 WARP 3.0, includes the registration program. It is my understanding that NetManage's NetChameleon software for Windows also has Advantis registration.

Alternatively, you can telephone the Advantis help desk at +1 800 727 2222, explain that you will be using a Macintosh and so have no access to the registration software, and ask them to register for you. They can transmit the key pieces of configuration information to you by fax or e-mail.

After you have registered, you can configure your Mac. Obtain a few key pieces of information from the IBM Internet Dialer's setup notebooks, or from the help desk:

- the Advantis local access telephone number,
- your “account” (actually a network), user identification (user ID) and password, and
- the IP addresses of the Advantis primary and secondary *domain name system* (DNS) servers.

### 3 SLIP protocol

The Advantis network is accessible using the SLIP protocol. The main disadvantage of SLIP compared to PPP is that SLIP is difficult to configure, and requires a rather complex connection script. I will explain how to configure SLIP and where you can obtain a script.

You will need a SLIP software package on your Mac.. You have two choices: Hyde Park's MacSLIP or InterCon Systems' InterSLIP. In a moment, I will explain how to obtain these.

I hope that Advantis will announce an official Macintosh support, or better still, implement the PPP protocol. I urge you to adopt the official method if one is announced. Meanwhile, use my script.

Sections 4, 5 and 6 detail how to obtain, install and configure MacSLIP. Sections 7, 8 and 9 explain how to obtain, install and configure InterSLIP. Use whichever set of instructions is appropriate for your situation, then proceed to section 10 *Configuring your applications*.

### 4 Obtaining MacSLIP and Poynton's MacSLIP/Advantis Script

MacSLIP is commercial software from Hyde Park Software. In addition to being available as a "stand-alone" product, it is also bundled with Software Ventures' Microphone Pro II.

You can obtain my script *Advantis.script*, along with a skeleton MacSLIP preferences file, from a self-extracting archive in my ftp directory at InfoRamp:

```
<ftp://ftp.inforamp.net/pub/users/poynton/bin/Mac/Poynton/MacSLIPAdvantisPrefs.sea.hqx>
```

### 5 Installing MacSLIP

The MacSLIP files are located in the MacSLIP folder of TCP/IP Tools subfolder of Microphone's TCP/IP Tools disk. Use the Microphone Pro II installer if you wish. Alternatively, just "drag-install" the *MacSLIP* control panel and the *SLIP Extension* onto your closed System Folder. The Finder will confirm that it will copy the files into special places, namely your *Control Panels* folder and your *Extensions* folder. The Finder will notify you that 1 Control Panel and 1 Extension were copied.

My file *MacAdvantisPrefs.sea* is a self-extracting archive. Double-click the file to produce a folder with two items, a file *SLIP Prefs* and a folder *MacSLIP f*. Drag these two items onto the closed Preferences icon within your System Folder. Throw away the now-empty *MacAdvantisPrefs folder*.

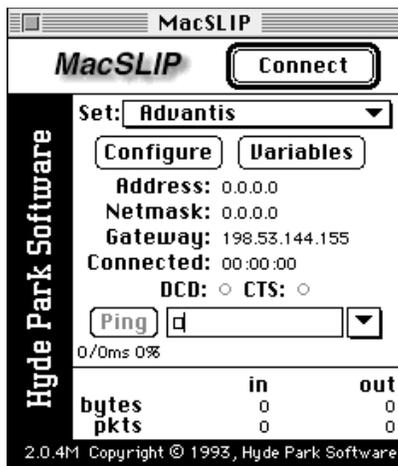
Install MacTCP as instructed in *Macintosh Dialup Internet Access with MacTCP/MacPPP*. Disregard the portions of that note that are specific to MacPPP.

### 6 Configuring MacSLIP

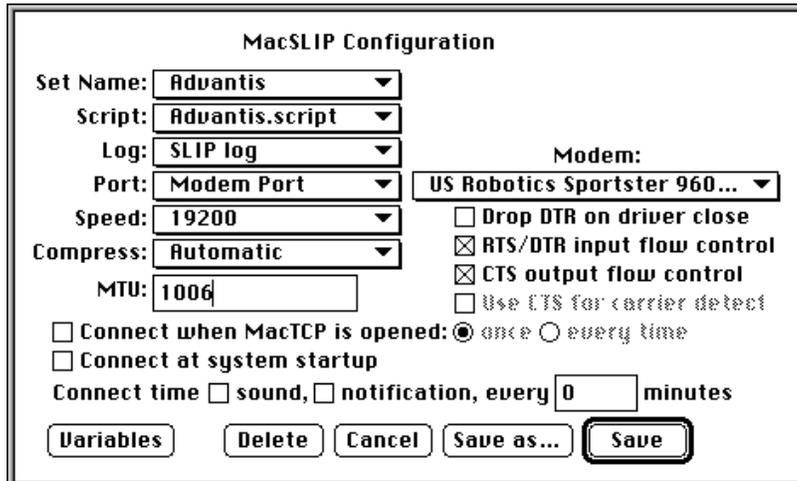
Restart your Mac to activate the new software. Open the MacTCP control panel. Instead of clicking on *PPP* as outlined in *Macintosh Dialup Internet Access with MacTCP/MacPPP*, click on *SLIP*.

Configure MacTCP as I explain in my MacTCP/MacPPP document. Use the domain names and domain name server IP addresses that you obtained after registering your new account with Advantis, even if you will be accessing another Internet access provider such as InfoRamp.

Open the MacSLIP control panel. It will look something like this:



From the main MacSLIP dialog, click *Configure* to obtain a dialog box like this:



Click *Save As ...*, and assign the name *Advantis*. This will preserve the *default* entry in case you wish to define a new SLIP service at some time in the future. The *Set Name* will now reflect *Advantis*.

In the *Script* popup menu, choose *Set ...*, then select the *Advantis.script* file.

In the *Log* popup, choose *SLIP log*. You may need this log file to diagnose connection problems.

In the *Port* popup, choose the port to which your modem is connected, probably the *Modem* port.

In the *Speed* popup, choose 19200 b/s. If you have a Mac IIci or slower machine, or a PowerBook that is slower than a PowerBook 180, choose 9600 b/s.

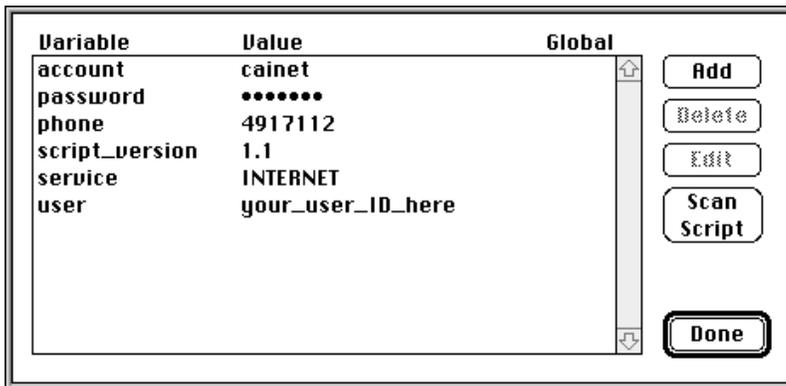
Leave *Compress* and *MTU* at their default values, *Automatic* and *1006*.

In the *Modem* popup, choose your modem type. If you are aware of a special setup string for your modem, choose *Edit* from the popup and enter the string. For my US Robotics Sportster 28,800 Fax Modem, the setup string is completely empty. What a treat!

As I detail in the MacTCP/MacPPP document, make sure that both your modem and its cable implement hardware (RTS/CTS) handshaking. Check the two indicated boxes.

Click *Save* to return to the main MacSLIP dialog box. Choose the *Set Name Advantis*, the name that you used to save the configuration a moment ago.

Now click *Variables* to obtain this dialog box:



Each of these lines represents a variable and its value; these will be accessed by the script. When you edit the value fields, be careful not to introduce any extraneous space characters.

Double-click *user* and replace the value *your\_name\_here* with your Advantis user ID.

Double-click *password* and replace the existing value with your Advantis password. Check *Hidden* to prevent your password from being displayed.

Double-click *phone* and insert your local Advantis phone number, in place of the Toronto phone number that I have entered.

Double-click *account* and replace its value by the Advantis account information that you obtained from the registration process. The value *cainet* is an "account" specific to Advantis in Canada; in the U.S.A your "account" will probably use *usinet*.

Do not change the values of *script\_version* or *service* unless you have good reason to do so.

Click *Done* to confirm your changes. Now you are ready to connect. Click *Connect* to display the connection progress box. Dialing is not initiated automatically: you must click *Restart*. The rest of the connect sequence is automatic. Should your first connection fail, you will need to retain the log file in order to help diagnose the problem. Skip to *Configuring your applications* on page 6.

## 7 Obtaining InterSLIP and IBM's InterSLIP/Advantis Script

An alternative to MacSLIP is InterCon Systems' InterSLIP. It is of commercial quality, but is distributed free of charge. It is available for downloading at InterCon's ftp site:

<ftp://ftp.intercon.com/Intercon/sales/InterSLIPInstaller1.0.1.hqx>.

It is not clear whether Advantis officially supports InterSLIP, but a page on IBM's Web server includes a script that enables InterSLIP to connect to Advantis:

<http://www.ibm.net/support/macslip.html>

For your convenience I have extracted this script from the web page so you don't have to copy and paste, and made it available by ftp protocol in case you cannot yet access the web:

<ftp://ftp.inforamp.net/pub/users/poynton/bin/Mac/Poynton/InterSLIPAdvantisPrefs.hqx>

## 8 Installing InterSLIP

Install InterSLIP by running its installer. It places two files on the desktop. You can throw away the file *PSinet HOST-DCS*; it is a script for an Internet access provider that you will not be using.

Place the second file *InterSLIP Docs* inside a new folder *InterSLIP 1.0.1*. Then Double-click on *InterSLIP Docs*, the online documentation file, and review the instructions there. The installation process also creates a several files in your System Folder.

Double-click it my file *InterSLIPAdvantisPrefs.sea* to extract a single script file *Advantis*. The file is for U.S.A. so-called "accounts". If you are in a country other than the United States, you will have an "account" different from *usinet*. You will have to open the script in a text editor, search for *usinet*, and replace that string with your "account". In Canada, you will replace it with *cainet*.

Install MacTCP as instructed in *Macintosh Dialup Internet Access with MacTCP/MacPPP*. Disregard the portions of that note that are specific to MacPPP. Restart your Mac to activate the new software. Then move the *Advantis* settings file into the *Gateway Script* subfolder of the *InterSLIP Folder* of the *Preferences* folder of your *System Folder*. Deep, eh?

## 9 Configuring InterSLIP

Open the MacTCP control panel. Instead of clicking on *PPP* as outlined in *Macintosh Dialup Internet Access with MacTCP/MacPPP*, click on *SLIP*.

Configure MacTCP as I explain in my *MacTCP/MacPPP* document. Use the domain names and domain name server IP addresses that you obtained from Advantis, even if you will be accessing another Internet access provider such as InfoRamp.

Pull down the Apple menu and choose *InterSLIP Setup*. There will be no entries in the window, because you haven't created any services yet. Choose *New* from the *File* menu, and create a service called *Advantis*. You will obtain a dialog box similar to this:

In the *Serial Port* popup, choose the port to which your modem is connected, probably *Modem Port*. In the incorrectly-named *Baud Rate* popup, choose 19200 b/s. If you have a Mac IIci or slower machine, or a PowerBook that is slower than a PowerBook 180, choose 9600 b/s. Choose 8 data bits, 1 stop bit and parity *None*.

As I detail in the *MacTCP/MacPPP* document, make sure that both your modem and its cable implement hardware (RTS/CTS) handshaking. Check *Hardware Handshaking* and *Speaker on while dialing*. In the *Dial Script* popup menu, make an appropriate modem choice. Choose *Dial: Tone*, and enter your local Advantis *Phone No.*

In the *Modem* popup, choose your modem type. If you are aware of a special setup string for your modem, enter it in the *Modem init* field. For my US Robotics Sportster 28,800 Fax Modem, the setup string is completely empty. What a treat!

In the *Gateway* popup menu, choose *Advantis*, the file that you transferred earlier to the Gateway Script folder.

In the *User name* field, enter your Advantis user ID. Click *Prompt for password at connect time*.

Leave *IP address* blank. Your IP address will be set by the connection script, based on responses from the Advantis server at the time of dialup. Enter the numeric IP address of the primary Domain Name Server that you obtained from Advantis, something like *165.87.194.244* (no trailing dot).

Check *RFC 1144 Compression* and leave *MTU size* at its default value *1006*.

Click *OK*. Now you can click *Connect*. The InterSLIP documentation refers to certain failures to disconnect, and suggests that you may have to power-cycle your modem when you are finished.

## **10 Configuring your applications**

If the connection succeeds, try to establish an ftp connection to Adobe as a test, as described in my MacTCP/MacPPP note. Problems in connecting can be a pain to diagnose, but if you have followed these instructions rigorously, and you're not running any flaky Extensions or Control Panels, your attempt to connect should succeed.

I use two famous freeware programs to access the Internet: Steve Dorner's *Eudora* for mail and John Norstad's *NewsWatcher* for news. Both of these are extraordinarily well designed and implemented, and both have excellent documentation. In the companion document *Configuring Macintosh Internet Applications* I explain how to configure these two applications.

If you will use Advantis to provide your main Internet services, configure your applications according to the mail, news, ftp, gopher, www and other server settings that you obtain from the IBM Internet Dialer settings notebooks. Use numeric IP addresses for the domain name system server addresses; use symbolic host names for all the other servers.

If you will use Advantis merely as a conduit to access a local Internet access provider such as InfoRamp, configure the domain name server information in MacTCP to access Advantis, and configure your Internet applications to access your main Internet service provider. It is conventional when using an anonymous ftp server to enter a password corresponding to your e-mail address. Certain ftp servers confirm that you are accessing the server from a host at that address. In the e-mail address setting used by your ftp application, enter your Advantis e-mail address.