

Running SAS® Applications on the Web

Prepared by Destiny Corporation

Starting The Web Server

A Web Server is required to execute SAS/Intrnet software. It must be up and running for a web browser and SAS to be able to interact.

A Web Server and SAS can run under any supported platform, including Unix, Windows NT, etc...

For the purposes of the following demonstrations, we will use a Personal Web Server available through Apache. (Apache for Windows 1.3.4) See www.apache.org for more details.

Configuring A Local Web Server

We must determine the Internet Protocol Configurations available and choose the appropriate one as our IP address.

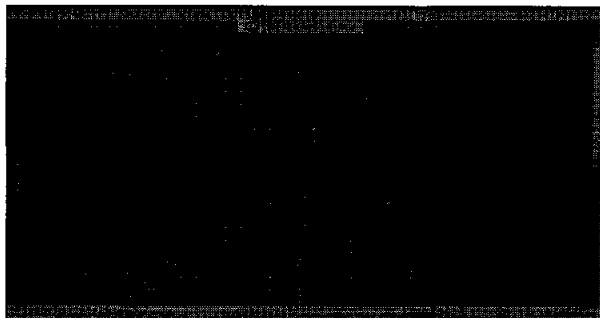
To do this, type IPCONFIG /ALL > junk at the command line.



Edit the junk. file.



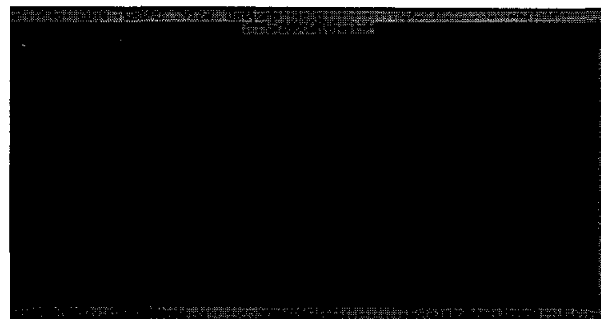
Determine the IP address to use.



We will use IP address 0.0.0.0

The HOSTS. file under the C:\WINDOWS subdirectory must list the IP address, along with the servername, so it can be found easily by the local browser.

Change the HOSTS. file under C:\WINDOWS to read:



Loading The Web Server

We load the Web Server with the following command:



The name of the server is *drafilee*.

The following message appears.



Minimize the window.

Loading the Application Dispatcher and Broker

The Application Dispatcher is an integral part of executing SAS/Intrnet Software. It:

- Is a Gateway that connects Web browsers with SAS software
- Allows for executing SAS programs from a Web browser.

Note: Installation of SAS/Intrnet Software is required prior to loading it.

To load it, simply double click on the appropriate icon:



Its properties are as follows:

```
C:\SAS612\sas.exe -config
C:\SAS612\config.sas -dmsbatch -
initcmd "af c=sashelp.web.appstart.scl
port=5001 srvroot='C:\SAS612\IntrNet'"
-altlog C:\SAS612\IntrNet\appsrv.log -
splashlocation
C:\SAS612\IntrNet\splash.bmp -awstitle
'SAS/IntrNet AppServer'
```

Double clicking produced the following splash screen:



And the following non-interactive SAS session.



Minimize it.

Testing the Broker

Now, we can test the broker.exe file.

The following SAS supplied files must live in the *cgi-bin* subdirectory of the Web Server.

- BROKER.EXE
- BROKER.CFG

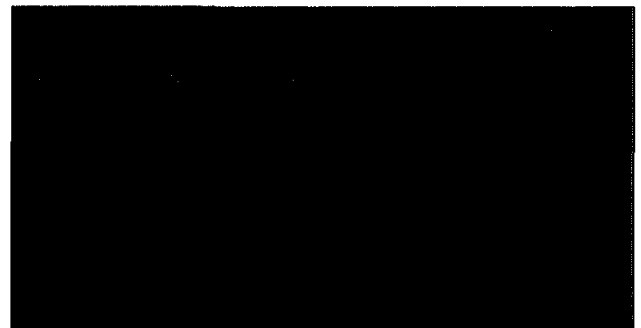
On this demonstration machine, these files live in:

```
C:\Program Files\Apache Group\Apache\cgi-bin
```

Test them with the following commands at the command prompt:

```
broker
"_service=default&_program=ping"
```

The following message should appear.



HANDS ON WORKSHOPS

For more debugging, specify:

```
broker
"_service=default&_program=ping&_debug
=2305" > junk.
```

Returns the following in the junk. file.

Content-type: text/html

```
<H2>Symbols passed to SAS</H2>
<PRE>
#symbols: 13
  "_RMTHOST" = ""
  "_RMTADDR" = ""
  "_RMTUSER" = ""
  "_HTCOOK" = ""
  "_HTUA" = ""
  "_HTREFER" = ""
  "_service" = "default"
  "_program" = "ping"
  "_debug" = "2305"
  "_VERSION" = "1.0"
  "_URL" = "http://drafilee/cgi-
bin/broker.exe"
  "_ADMIN" = "Dana Rafiee"
  "_ADMAIL" =
"drafiee@destinycorp.com"
</PRE>
Using timeout: 60
<BR>
rcv gethostname...ok
rcv gethostbyname...ok
rcv socket...ok
rcv bind...ok
rcv getsockname...ok (1041)
rcv listen...ok
Trying...drafilee:5001 (1 of 1)
gethost...ok
socket...ok (56)
bind...ok
connect...ok
write...ok
shutdown...ok
accept...ok
select...ok (1)
  recv...24
select...ok (1)
  recv...69
Content-type: text/html

<P><B>Ping!</B> The Application Server
is functioning properly.</P>
select...ok (1)
  recv...0
accept...ok
select...ok (1)
  recv...129
select...ok (1)
```

recv...0

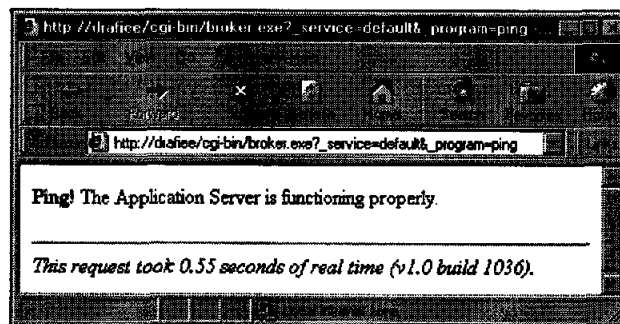
Notice the valid URL value.

Testing the Browser

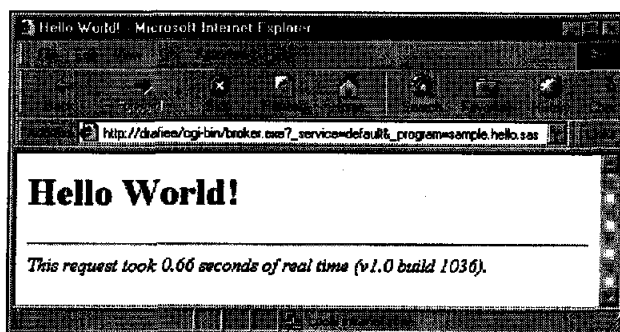
Load the browser. For this demonstration, we will use Microsoft Internet Explorer version 4.



Specify something similar to the following in the web address line to PING the system and the following should be returned.

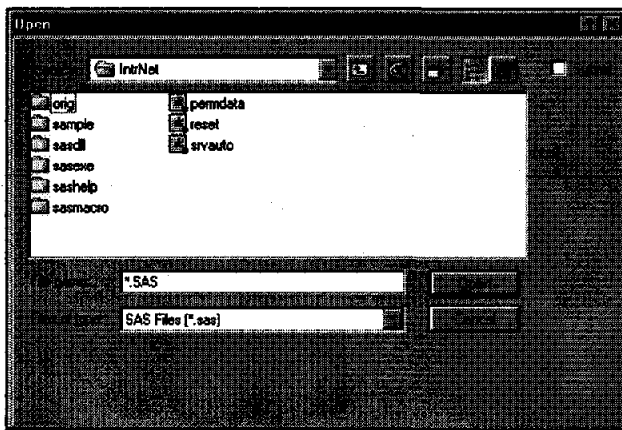


To run a sample program supplied with SAS Software, type:



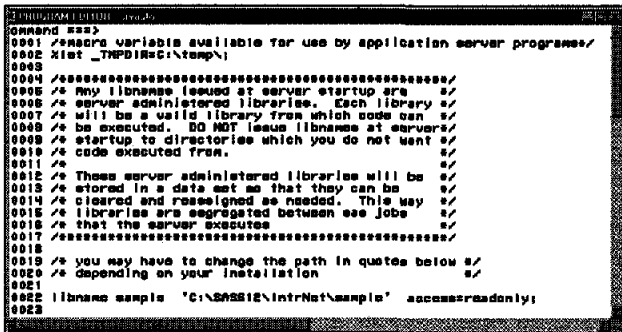
Sample Programs

Several Sample programs come with SAS/Intrnet Software. They are typically located under the sas\intrnet subdirectory.



Server Auto File

This file is designed to reference locations for SAS programs. It automatically loads when the Application Dispatcher loads.



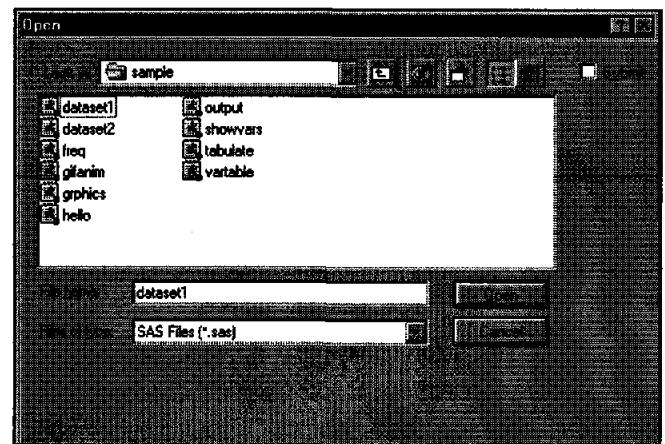
It can be tailored to fit your needs. See the reference to *sample*. This is why the call for the SAS program has a three level name.

sample.hello.sas

means

libref.programname.filetype

The following is a listing of the sample programs that are shipped with SAS/Intrnet software.



Let's open each one and examine the design. Features displayed here will be discussed in upcoming modules.

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