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Introduction

This guide contains the most common problems reported to the ISIS Help Desk. Before calling Basis to report problems you may be able to resolve them yourself. Locate the problem reported in the list below and follow the reference for instructions to troubleshoot and resolve the issue.

I. Problem Scenarios

A. User receives “Logon Balancing Error 88”

Solution: There are several things to consider when troubleshooting this error. The following questions should be asked to determine the cause of the error. Following each question is a sequence of steps to carry out based on the response:

1. Have any network issues been reported?

Yes: See [Section II](#), Steps [A](#) & [C](#)

No: Continue to question 2

2. Can others in the immediate area connect?

Yes: See [Section II](#), Steps [A](#), [B](#) & [C](#)

No: See [Section II](#), Steps [A](#) & [C](#), and [Section III](#)

3. Has a new firewall been installed or the existing firewall been changed?

Yes: See [Section III](#)

No: Continue to question 4

4. Has the user been able to connect previously?

Yes: Continue to question 5

No: See [Section II](#), Steps [A](#), [B](#) & [C](#) and [Section III](#)

5. Has the user just been set up on a new PC or operating system?

Yes: See [Section II](#), Steps [A](#) & [B](#)

No: Continue to question 6

6. Has the SAPGUI just been installed?

Yes: See [Section II](#), Steps [A](#) & [B](#)

No: Contact Basis personnel

II. Troubleshooting Steps

1. Logon Balancing Error 88

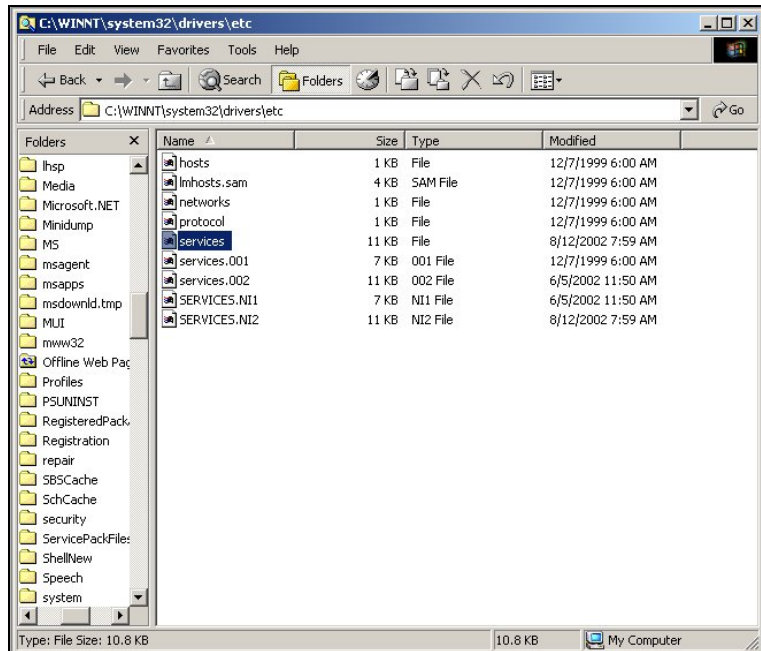
There are many factors affecting a SAPGUI user's ability to connect to ISIS HR, ranging from configuration on the local PC to network issues. This section offers solutions to common causes of this error, and a few troubleshooting scenarios.

A. Network Connectivity As a preliminary step, the user should be asked to check if he/she can reach "outside" internet sites via the web browser (for example, ask the user to connect to www.yahoo.com, and refresh the page by pressing F5 or clicking Refresh to confirm connection). If the user cannot connect to the Internet, the LAN technicians for his/her building should be contacted to resolve any connection issues.

B. Services File SAP uses the Windows services file to establish communication port numbers. In order to load balance to ISIS HR, a certain entry must exist in the services file. This file is located in <*System Drive*>\<*Windows Directory*>\System32\Drivers\etc (i.e., file location on Windows NT/2000 is C:\Winnt\System32\Drivers\etc or on Windows XP, C:\Windows\System32\Drivers\etc).

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Note: There may be several files named services in that directory, but only the one without a file extension should be modified for SAP purposes.



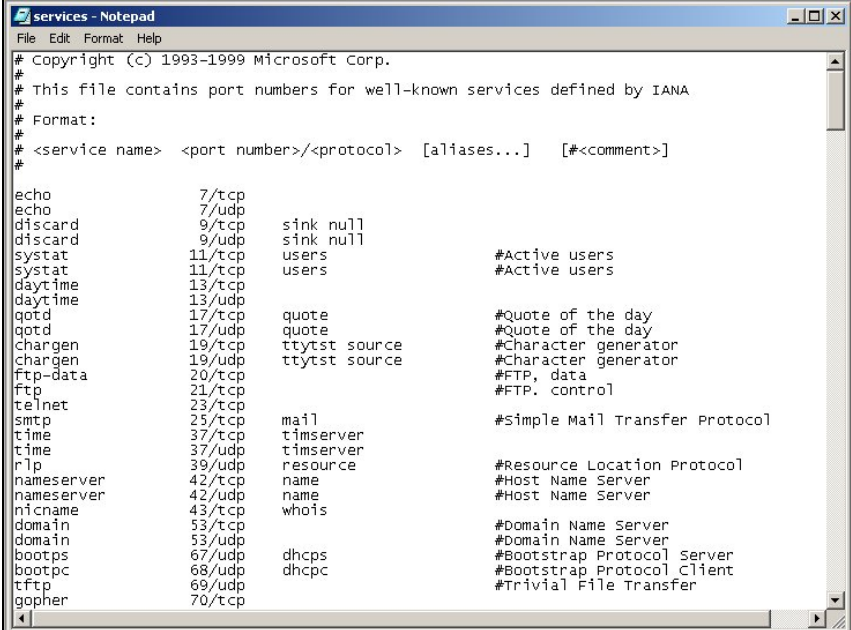
1. The user should view the services file by right clicking on the filename, selecting **Open With...**, then selecting **Notepad** from the list and click **OK**:

Note: This will open the file for editing in Notepad:



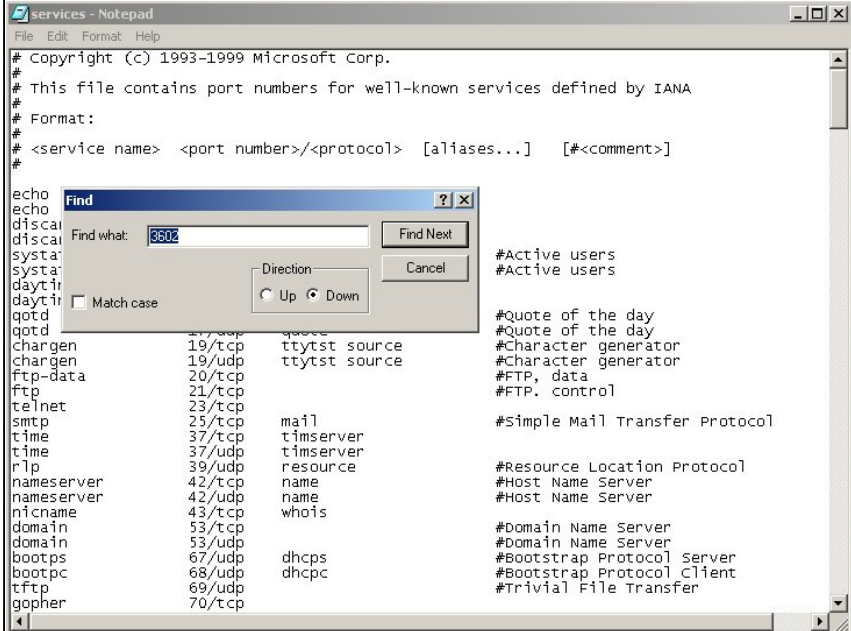
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- The user should then select **Edit->Find** from the menu.



```
services - Notepad
File Edit Format Help
# Copyright (c) 1993-1999 Microsoft Corp.
# This file contains port numbers for well-known services defined by IANA
# Format:
# <service name> <port number>/<protocol> [aliases...] [#<comment>]
#
echo          7/tcp
echo          7/udp
discard      9/tcp      sink null
discard      9/udp      sink null
sysstat      11/tcp     users      #Active users
sysstat      11/tcp     users      #Active users
daytime      13/tcp
daytime      13/udp
qotd         17/tcp     quote     #Quote of the day
qotd         17/udp     quote     #Quote of the day
chargen      19/tcp     ttytst source #Character generator
chargen      19/udp     ttytst source #Character generator
ftp-data     20/tcp
ftp          21/tcp     #FTP, data
ftp          21/tcp     #FTP, control
telnet       23/tcp
smtp         25/tcp     mail      #Simple Mail Transfer Protocol
time         37/tcp     timserver
time         37/udp     timserver
rlp          39/udp     resource  #Resource Location Protocol
nameserver  42/tcp     name      #Host Name Server
nameserver  42/udp     name      #Host Name Server
nrcname     43/tcp     whois
domain      53/tcp     #Domain Name Server
domain      53/udp     #Domain Name Server
bootps      67/udp     #Bootstrap Protocol Server
bootpc      68/udp     #Bootstrap Protocol Client
tftp        69/udp
gopher      70/tcp
```

- In the Find dialog box, the user should type **3602**, and then click **Find Next**.



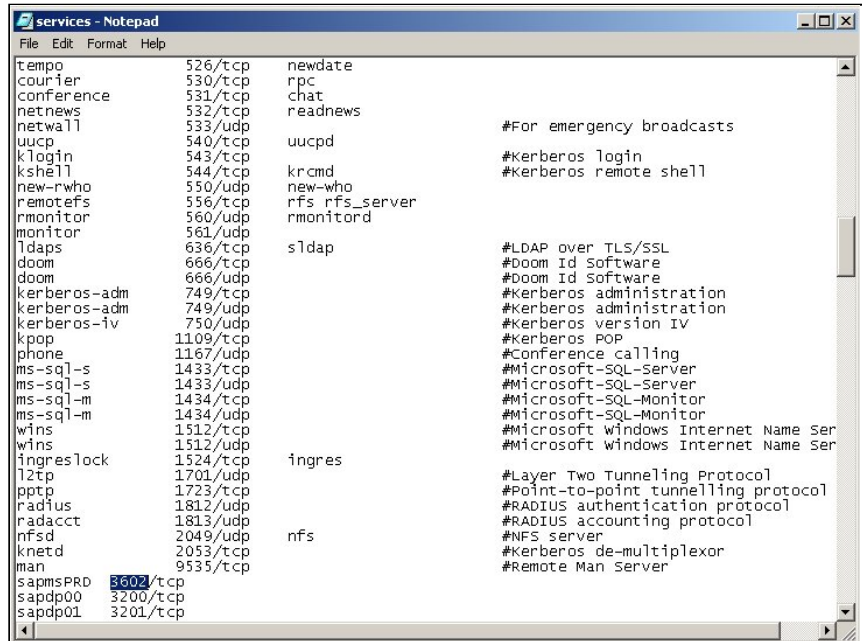
```
services - Notepad
File Edit Format Help
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# This file contains port numbers for well-known services defined by IANA
# Format:
# <service name> <port number>/<protocol> [aliases...] [#<comment>]
#
echo          7/tcp
echo          7/udp
discard      9/tcp      sink null
discard      9/udp      sink null
sysstat      11/tcp     users      #Active users
sysstat      11/tcp     users      #Active users
daytime      13/tcp
daytime      13/udp
qotd         17/tcp     quote     #Quote of the day
qotd         17/udp     quote     #Quote of the day
chargen      19/tcp     ttytst source #Character generator
chargen      19/udp     ttytst source #Character generator
ftp-data     20/tcp
ftp          21/tcp     #FTP, data
ftp          21/tcp     #FTP, control
telnet       23/tcp
smtp         25/tcp     mail      #Simple Mail Transfer Protocol
time         37/tcp     timserver
time         37/udp     timserver
rlp          39/udp     resource  #Resource Location Protocol
nameserver  42/tcp     name      #Host Name Server
nameserver  42/udp     name      #Host Name Server
nrcname     43/tcp     whois
domain      53/tcp     #Domain Name Server
domain      53/udp     #Domain Name Server
bootps      67/udp     #Bootstrap Protocol Server
bootpc      68/udp     #Bootstrap Protocol Client
tftp        69/udp
gopher      70/tcp
```

Find dialog box: Find what: 3602, Find Next, Cancel, Direction: Up (selected), Down, Match case:

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- The search should locate the line **sapmsPRD 3602**. If line does not exist, the user should add the line at the end of the file.

Note: This entry is case sensitive and should be entered exactly as shown.



- If the line was already in the file, the user should close Notepad without saving any changes. If the line was not found and added manually by the user, the document should be saved by clicking **File->Save**. Notepad may then be exited.

Note: When using Windows XP the line **sapmsPRD 3602** must appear before any other sap lines.

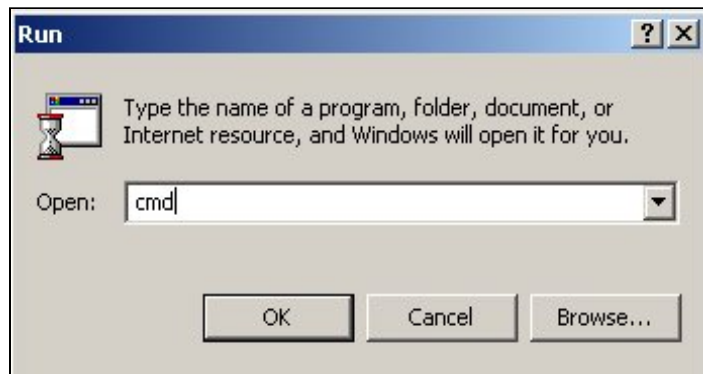
- If the **sapmsPRD 3602** line does not appear before any other sap lines, user should move the line to the top of the sap lines and save the file as noted in step 5 above.

C. Advanced Network Troubleshooting

If the Internet connection test proved successful and the services file is configured as outlined previously, there are a few more tests that can be performed to further investigate connection failures. This step presents some advanced connectivity tests that can be performed by the user under necessary circumstances.

1. FTP Test

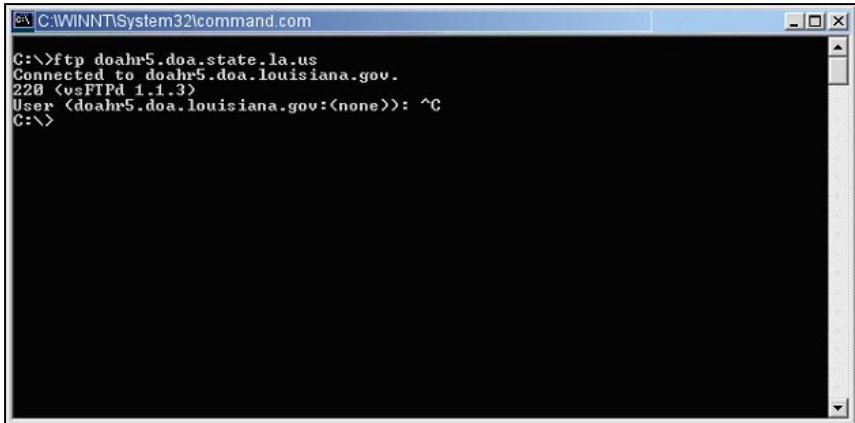
- The user should open a command prompt by clicking **Start->Run**, then type **cmd** in the dialog box and click **OK**.



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- b. When the command prompt window appears the user should type **ftp doahr5.doa.louisiana.gov** and press *Enter*.

- c. If successful, the prompt will show “connected” and prompt for a user ID. The user should terminate the connection by pressing *CTRL* and *C* simultaneously. If the connection failed, then it is possible that the user’s network is preventing connection.

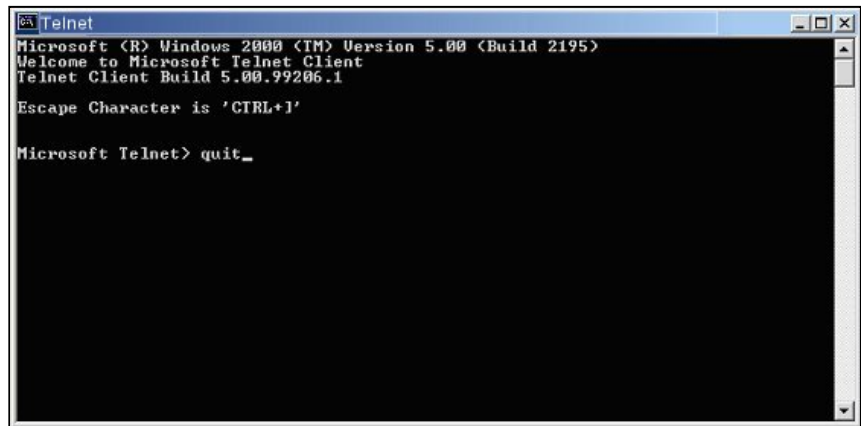


```
C:\WINNT\System32\command.com
C:\>ftp doahr5.doa.state.la.us
Connected to doahr5.doa.louisiana.gov.
220 (vsFTPd 1.1.3)
User (doahr5.doa.louisiana.gov:(none)): ^C
C:\>
```

2. Telnet Test

- a. Using the same command prompt as the previous test, the user should type **telnet doahr4.louisiana.gov 3602/tcp** and press *Enter*.

- b. If the connection is successful, the screen will go blank. The user should press *CTRL* and *J* (right bracket) simultaneously, then type **quit** at the telnet prompt and press *Enter*.



```
Telnet
Microsoft (R) Windows 2000 (TM) Version 5.00 (Build 2195)
Welcome to Microsoft Telnet Client
Telnet Client Build 5.00.99206.1
Escape Character is 'CTRL+J'

Microsoft Telnet> quit_
```

- c. If the connection fails, then the user is unable to connect to the ISIS HR system on port 3602. Assuming the entries mentioned previously are made in the services file, the user’s network is blocking connections on that port, and the user should contact his/her LAN administrator.

III. Ports Required by SAP

The SAP system requires that certain ports not be blocked (by a firewall, for example). The following is a listing of those ports:

3200 through 3299
3300 through 3399
3602