WORKSTATION CHANGES FOR EXISTING FRAME RELAY SITES MOVING TO GALILEO MANAGED VPN

When a site is converted from frame relay IP to the Galileo Managed VPN router configuration there are changes that need to be made to the configuration of each workstation. The changes that need to be made will vary depending on the current type of configuration at the site. There are three basic types of situations.

- Sites without VAS (Valued Added Services) Pages 2 - 11
- Sites with VAS. Pages 12 - 25
- Sites with a customer owned DSL circuit. Pages 26 - 38

There are also instructions to change the configuration server addresses in FPM for 3 types of situations on pages 39 - 40

VAS or Valued Added Services is Internet and or email access which is accomplished by the addition of a second PVC (Private Virtual Channel) on the frame relay router. When a site is moved to a DSL circuit for the Managed VPN product there is no longer a need for the second PVC because the customer has access to the Internet by default on the DSL circuit.

There are some sites that have their own DSL circuit that they use for Internet/Email access and the Galileo frame relay IP circuit is used for access to Apollo. These types of sites have either Route add statements or static routes in place to direct the appropriate traffic to the appropriate circuit. These customers may choose to keep their DSL circuit even though Galileo is providing a DSL circuit for Managed VPN or they may choose to drop their DSL circuit and use the Galileo DSL circuit for Managed VPN for all of their connectivity needs. **If the customer chooses to remove their DSL circuit, follow the steps on pages 26-38.**
SITES WITHOUT VAS

If an existing frame relay IP site is switching to Managed VPN the following changes in Internet Explorer and Network DNS settings must be made to each workstation.

INTERNET EXPLORER CHANGES

WINDOWS 95/98

1. Right click the Internet Explorer icon on the desktop and click Properties.
2. Click the Connections tab.

3. Click LAN Settings.
4. If “Use a proxy server for your LAN” is checked, uncheck it.

5. Click OK, when the Internet Properties screen displays click OK to close.

6. Right click Network Neighborhood and click Properties.

7. Double click TCP/IP in the network components box.
8. The TCP/IP Properties screen will display

![TCP/IP Properties screen](image)

9. Click the DNS Configuration tab.

Note: If the “Enable DNS” option is not already selected, click to select, then type a host name (name does not matter, workstation name is fine).
10. If the site has their own DSL circuit they are using for Internet/email access skip to step 12. If not, then remove there are any addresses in the DNS Server Search Order.

11. In the DNS Server Search Order field type 12.127.16.83, click Add. Type 12.127.17.83 and click Add. These addresses are DNS server addresses for AT&T (the DSL circuit provider).

12. Click OK to close the Network Components screen. When the screen below displays click Yes.

Note: If you need fall back to the frame relay circuit remove the entries made in steps 9 and 10.

If the site has FPM go to page 39 to change the configuration server addressing.
**WINDOWS 2000/XP**

Note: Make sure the workstation is in Admin mode if it is not a Galileo provided workstation. Galileo provided Windows XP workstations are in Admin mode by default.

1. Right click the Internet Explorer icon on the desktop and click Properties.
2. Click the Connections tab.

3. Click LAN Settings.
4. If “Use a proxy server for your LAN” is checked, uncheck it.

5. Click OK, when the Internet Properties screen displays click OK to close.

7. Right click the Local Area Connection Ethernet card icon and click Properties.

9. If the site has their own DSL circuit for Internet/email access skip to step 10. If not then In the Preferred DNS server field type 12.127.16.83, in the Alternate DNS server field type 12.127.17.83. These addresses are DNS server addresses for AT&T (the DSL circuit provider).

![Internet Protocol (TCP/IP) Properties window]

10. Click OK to close the Properties screen and close the Network Connections screen.

Note: If you need fall back to the frame relay circuit remove the entries made in steps 9 and 10.

If the site has FPM go to page 39 to change the configuration server addressing.
SITES WITH VAS

If an existing frame relay IP site using VAS (Valued Added Services) a Galileo provided second PVC for Internet and/or email access is converting to the Managed VPN router product some of the email client, Internet Explorer and Network DNS settings must be changed.

INTERNET EXPLORER CHANGES

WINDOWS 95/98

1. Right click the Internet Explorer icon on the desktop and click Properties.

![Internet Properties window](image)
2. Click the Connections tab.

3. Click LAN Settings.
4. Uncheck “Use a proxy server for your LAN”.

5. Click OK, when the Internet Properties screen displays click OK to close.

6. Right click Network Neighborhood and click Properties.

7. Double click TCP/IP in the network components box.
8. The TCP/IP Properties screen will display

![TCP/IP Properties screen with an IP address configuration](image1)

9. Click the DNS Configuration tab.

![TCP/IP Properties screen with DNS configuration](image2)
10. Click the 198.177.190.67 entry in the DNS Server Search Order box, click Remove. Remove any other entries as well.

11. In the DNS Server Search Order field type 12.127.16.83, click Add. Type 12.127.17.83 and click Add. These addresses are DNS server addresses for AT&T (the DSL circuit provider).

12. Click OK to close the Network Components screen. When the screen below displays click Yes.
13. When the workstation boots up to the Windows desktop right click on the icon named “Ping Firewall” and click delete. Click Yes to confirm the deletion.

14. If the site is using the Outlook Express Apollo Agency Mail product go to page 23 to setup the configuration to work with Managed VPN.

Note: If you need to fall back to the frame relay circuit, go to Windows Explorer, open the VAS folder located on root of the C: drive and run the Setup program. This will add back in the Internet Explorer Proxy server settings. Then follow steps 9, 10 and 11 but remove the 12.127.16.83 and 12.127.17.83 entries and add back in the 198.177.190.67 entry.

If the site has FPM go to page 39 to change the configuration server addressing.
1. Right click the Internet Explorer icon on the desktop and click Properties.
2. Click the Connections tab.

3. Click LAN Settings.
4. Uncheck “Use a proxy server for your LAN”.

5. Click OK, when the Internet Properties screen displays click OK to close.

7. Right click the Local Area Connection Ethernet card icon and click Properties.

9. Remove the 198.177.190.67 entry in the DNS server address field.

10. In the Preferred DNS server field type 12.127.16.83, in the Alternate DNS server field type 12.127.17.83. These addresses are DNS server addresses for AT&T (the DSL circuit provider).

11. Click OK to close the Properties screen and close the Network Connections screen.

12. From the Windows desktop right click on the icon named “Ping Firewall” and click delete. Click Yes to confirm the deletion.

13. If the site is using the Outlook Express Apollo Agency Mail product go to page 23 to setup the configuration to work with Managed VPN.

Note: If you need to fall back to the frame relay circuit, go to Windows Explorer, open the VAS folder located on root of the C: drive and run the Setup program. This will add back in the Internet Explorer Proxy server settings. Then follow steps 9, 10 and 11 but remove the 12.127.16.83 and 12.127.17.83 entries and add back in the 198.177.190.67 entry.

If the site has FPM go to page 39 to change the configuration server addressing.
OUTLOOK EXPRESS EMAIL CHANGES

Note: These instructions are valid for Windows 95/98/2000/XP

1. From the Windows Desktop double click on the Outlook Express icon.
   Note: This icon may be named “Shortcut to email” on Windows XP workstations.

The Outlook Express main screen will display

2. Click Tools and from the drop down menu click Accounts.

The Internet Accounts screen will display.
3. Click the Mail tab.

![Image of Internet Accounts window with Mail tab selected]

**Note:** Some AgencyMail accounts will display as pop3.postoffice.net.

4. Click Properties.

![Image of AgencyMail properties window with Mail account selected]

5. Click the Servers tab.
6. Verify that “My server requires authentication” is checked.

7. Click OK, click close when the Internet Accounts screen displays and close Outlook Express.
SITES WITH A CUSTOMER OWNED DSL CIRCUIT

This section provides information in conjunction with the other sections (pages 2-11) to insure that the routing tables in the workstations are set up correctly as the default destinations will have changed with the migration to the Managed VPN DSL circuit. Customers that currently have multiple destinations set up for routing current traffic will no longer need the secondary routing capabilities if they choose to remove their DSL circuit.

In the current environment the default Gateway is generally used to provide access to the Internet and a subsequent Route Add statement is used to redirect Apollo reservation traffic to the Apollo/Galileo router. This convention is provided by instructions provided by Galileo.

CHANGING THE DEFAULT GATEWAY IN THE WORKSTATION

This will need to be accomplished in order to provide for normal routing functions. The Default Gateway will need to be changed to the IP Address of the Managed VPN Router (same IP address as the Cisco or Bay router being removed).
1. Right click Network Neighborhood and click Properties.

2. Double click TCP/IP in the network components box.

3. The TCP/IP Properties screen will display
4. Select the Gateway Tab

5. To change the setting for the Gateway you need to remove the old address and insert the IP Address of the Managed VPN router IP Address.
Windows 2000/XP

Note: Make sure the workstation is in Admin mode if it is not a Galileo provided workstation. Galileo provided Windows XP workstations are in Admin mode by default.

1. Right click My Network Places and click Properties.

2. Right click the Local Area Connection Ethernet card icon and click Properties.

3. Select Internet Protocol (TCP/IP) and Click Properties.
4. Change the Default Gateway address to the IP Address of the Managed VPN Router.

**Note:** The Default gateway address below is an example only.
Route Statements

Route statements are used to create and delete additional access to the local workstation routing table. This is very helpful when you need to access two distinct destinations such as Apollo/Galileo and the Internet. These are either accomplished manually or placed in a batch file to correct the routing table each time the workstation is started.

Depending on the Operating System you are working with there may or may not be a batch file left behind to remove when you are removing the secondary access.

**Window 95/98** Operating Systems will always have a batch file with a link placed in the Startup group to change the routing table on each startup of the workstation.

**Windows 2000/XP** may use the Persistent route option in the command string (–p) that allows you to enter the command once and it will remain as a connection even when the workstation is rebooted. In this case there need not be a batch file in the startup configuration.

In both cases the additional routes will go the following addresses:

<table>
<thead>
<tr>
<th>IP Address 198.177.164.0</th>
<th>Mask 255.255.255.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP Address 57.8.81.0</td>
<td>Mask 255.255.255.0</td>
</tr>
</tbody>
</table>
A batch file is very simple and may be created in different ways. By convention Galileo has two methods of deployment for this file.

1. When using the instructions that reside on the APS Web site for MANUAL creation of the file to add the commands, the file itself is to be named **APROUTE.BAT**. This file is normally placed in the C:\WINDOWS directory (although by personal preference it may have been placed in the C:\) and a LINK to this file will be placed in the startup group. The following statements will be added to a file:

```
@ECHO OFF
ROUTE ADD 198.177.164.128 MASK 255.255.255.224 xxx.xxx.xxx.xxx
```

(where: xxx.xxx.xxx.xxx represents the current Apollo Router IP Address)

2. Additionally there was a program created by Fes Cannady that was called the MakeRouteAdd.EXE tool. This product is also available on the APS Web site. This product allowed for the automatic creation of a batch file that was used by numerous people. The file that is built by the automated tool it is named **FPRT_ADD.BAT**. This file is also normally placed in the WINDOWS directory. The automated toll created the following lines:

```
ROUTE ADD 198.177.164.0 MASK 255.255.255.0 xxx.xxx.xxx.xxx
ROUTE ADD 57.8.81.0 MASK 255.255.255.0 xxx.xxx.xxx.xxx
```

: This batch file created from a Fes Cannady application.
: 04/28/2003 303 627-0034
: Line one is for the Focalpoint application.
: Line two is for Focalpoint Print Manager and only necessary on the FPM set.

(where: xxx.xxx.xxx.xxx represents the current Apollo Router IP Address)

*NOTE: The IP address of the Apollo network is subject to change. Please verify the correct address prior to building your batch files.*
Removal of the Batch files.

The file APROUTE.BAT or FPRT_ADD.BAT must be removed from the C:\WINDOWS directory.

1. Go to the Start Button in the lower left corner of the main screen. Right-click on the Start button and choose EXPLORE.

2. Select WINDOWS directory and find the file named APROUTE.BAT or FPRT_ADD.BAT.
3. Right-Click and select DELETE

Removal of the LINK

The link to this file that is placed in the Startup group must also be removed.

1. Go to the Start Button in the lower left corner of the main screen.
2. Click on the Start button and choose PROGRAMS.
3. Click on Startup
4. Right-click on the LINK for FPRT_ADD and Select DELETE
5. Click OK to accept the deletion.
You should now re-boot the workstation and insure the modifications are complete by using the ROUTE PRINT command from a DOS window.
Microsoft (R) Windows 98  
(C) Copyright Microsoft Corp 1981-1999.

C:\WINDOWS\Desktop>route print

Active Routes:

<table>
<thead>
<tr>
<th>Network Address</th>
<th>Netmask</th>
<th>Gateway Address</th>
<th>Interface</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0.0.0</td>
<td>0.0.0.0</td>
<td>10.184.88.65</td>
<td>10.184.88.69</td>
<td>1</td>
</tr>
<tr>
<td>10.184.88.64</td>
<td>255.255.255.255</td>
<td>10.184.88.69</td>
<td>10.184.88.69</td>
<td>1</td>
</tr>
<tr>
<td>10.184.88.69</td>
<td>255.255.255.255</td>
<td>127.0.0.1</td>
<td>127.0.0.1</td>
<td>1</td>
</tr>
<tr>
<td>10.255.255.255</td>
<td>255.255.255.255</td>
<td>10.184.88.65</td>
<td>10.184.88.69</td>
<td>1</td>
</tr>
<tr>
<td>57.8.81.0</td>
<td>255.255.255.0</td>
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<td>1</td>
</tr>
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<td>10.184.88.69</td>
<td>1</td>
</tr>
<tr>
<td>224.0.0.0</td>
<td>224.0.0.0</td>
<td>10.184.88.69</td>
<td>10.184.88.69</td>
<td>1</td>
</tr>
<tr>
<td>255.255.255.255</td>
<td>255.255.255.255</td>
<td>10.184.88.69</td>
<td>10.184.88.69</td>
<td>1</td>
</tr>
</tbody>
</table>

C:\WINDOWS\Desktop>route delete 198.177.164.0

C:\WINDOWS\Desktop>route delete 57.8.81.0

C:\WINDOWS\Desktop>route print

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<tr>
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<tr>
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<td>255.255.255.255</td>
<td>10.184.88.65</td>
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<td>1</td>
</tr>
<tr>
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<td>10.184.88.69</td>
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</table>
Note: Make sure the workstation is in Admin mode if it is not a Galileo provided workstation. Galileo provided Windows XP workstations are in Admin mode by default.

The format of the Route command is:

```
ROUTE [-f] [-p] [command [destination] [MASK netmask] [gateway] [METRIC metric] [IF interface]
```

- **-f**: Clears the routing tables of all gateway entries. If this is used in conjunction with one of the commands, the tables are cleared prior to running the command.
- **-p**: When used with the ADD command, makes a route persistent across boots of the system. By default, routes are not preserved when the system is restarted. Ignored for all other commands, which always affect the appropriate persistent routes. This option is not supported in Windows 95.

**command**
- **PRINT**: Prints a route
- **ADD**: Adds a route
- **DELETE**: Deletes a route
- **CHANGE**: Modifies an existing route

**destination**
- Specifies the host.
- Specifies that the next parameter is the 'netmask' value.

**netmask**
- Specifies a subnet mask value for this route entry.
- If not specified, it defaults to 255.255.255.0.

**gateway**
- Specifies gateway.

**interface**
- The interface number for the specified route.

**METRIC**
- Specifies the metric, i.e., cost for the destination.

All symbolic names used for destination are looked up in the network database file NETWORKS. The symbolic names for gateway are looked up in the host name database file HOSTS.

If the command is PRINT or DELETE, Destination or gateway can be a wildcard. ( wildcard is specified as a star ‘*’), or the gateway argument may be omitted.

If Dest contains a * or ?, it is treated as a shell pattern, and only matching destination routes are printed. The * matches any string, and ? matches any one char. Examples: 157.*.1, 157.*, 127.*, *24.

**Diagnostics**
- **Invalid MASK** generates an error, that is when (DEST & MASK) != DEST.

**Example**
- `route ADD 157.0.0.0 MASK 255.0.0.0 157.55.80.1 IF 2`  
- The route addition failed: The specified mask parameter is invalid.

**Examples:**

```
> route PRINT
> route ADD 157.0.0.0 MASK 255.0.0.0 157.55.80.1 METRIC 3 IF 2
> route DELETE 157.0.0.0

C:\Documents and Settings\Gordon McHenry, CONSULTING>
```
These workstations may or may not have a batch file left in the Startup group. If there is no APROUTE.BAT file you must determine if there is a persistent connection with the ROUTE PRINT statement.

This must be accomplished in a DOS command window.

1. On the main screen choose START>RUN and type in CMD in the window and press OK.

   ![Command Prompt Window]

   This will bring up the command window.

2. Type ROUTE PRINT in this window and press ENTER.

   ![Command Output]

   This is what you will see for the Automated Route Add
   Change picture to Windows XP!
3. If there is no batch file you will need to remove the PERSISTANT connection(s) using the ROUTE command:

```
ROUTE DELETE 198.177.164.0
ROUTE DELETE 57.8.81.0
```

Re-display the routing table to insure the connection is removed.

**Note:** It is strongly suggested that the workstation be re-booted in order to verify the routing is completely removed.
FOCALPOINT PRINT MANAGER ADDRESSING CHANGES

1. From the desktop of the workstation running Focalpoint Print Manager double click the Print Manager icon.

2. Click the Configuration Server tab.
3. Change the Primary Server name from 198.177.164.151 to 57.8.81.13 and change the Alternate Server name from 198.177.164.152 to 57.8.81.113.

Note: The Client ID shown is only an example.

4. Click Apply, click File, click Save, File and Exit.