

CHAPTER 8

Call Control and PPP/MP Setup

8.1 Introduction

Some applications require that the router could be remotely activated, or dial up to the ISP using the ISDN interface. For instance, if you want to access the Internet via ISDN from home, usually the dialup connection is idle when you are not at home. It may be that, while working in the office, you want to get some files from home. Hence, the Vigor routers provide this function that allows you to make a phone call to the router and then ask it to dial up to the ISP. Accordingly, you can access your home network to retrieve the files. Of course, you should have a fixed IP address and expose some internal network resources to outside world, for example FTP, WWW and so on.

In the following, we explain how to setup call control and PPP/MP in Advanced Setup. You can use the following setup link on the Setup Main Menu to configure it. **Advanced Setup > Call Control and PPP/MP Setup.**

Note that, as the Vigor routers do not feature an ISDN interface, Call Control and PPP/MP Setup will not be available. For example, Vigor2900 or Vigor2900G models.

8.2 Configuration

Call Control and PPP/MP Setup

After you click Call Control and PPP/MP Setup. The following screen will automatically appear on your browser.

The screenshot shows a web browser window with the title bar indicating the URL is > Advanced Setup > Call Control and PPP / MP Setup. The main content area is titled 'Call Control Setup' and contains two sections: 'Call Control Setup' and 'PPP/MP Dial-Out Setup'. The 'Call Control Setup' section has two rows: 'Dial Retry' with a text input field containing '0' and the unit 'times', and 'Dial Delay Interval' with a text input field containing '0' and the unit 'second(s)'. The 'Remote Activation' section has a text input field. The 'PPP/MP Dial-Out Setup' section is divided into two columns. The left column is titled 'Basic Setup' and contains four rows: 'Link Type' with a dropdown menu showing 'Dialup BOD', 'PPP Authentication' with a dropdown menu showing 'PAP or CHAP', 'TCP Header Compression' with a dropdown menu showing 'None', and 'Idle Timeout' with a text input field containing '180' and the unit 'second(s)'. The right column is titled 'Bandwidth On Demand (BOD) Setup' and contains four rows: 'High Water Mark' with a text input field containing '7000' and the unit 'cps', 'High Water Time' with a text input field containing '30' and the unit 'second(s)', 'Low Water Mark' with a text input field containing '6000' and the unit 'cps', and 'Low Water Time' with a text input field containing '30' and the unit 'second(s)'. At the bottom of the form is an 'OK' button. The footer of the page contains the text 'Copyright (c) 2004, DrayTek Corp. All Rights Reserved.'

Call Control Setup:

On the **Call Control and PPP/MP Setup** setup page, you will see **Dial Retry** and **Dial Delay Interval**. These two parameters set global settings for ISDN dialup access.

This is a close-up of the 'Call Control Setup' section from the screenshot. It shows two rows: 'Dial Retry' with a text input field containing '0' and the unit 'times', and 'Dial Delay Interval' with a text input field containing '0' and the unit 'second(s)'.

Dial Retry: Specifies the dial retry counts per triggered packet. A triggered packet is any packet whose destination is outside the local network. The default setting is no dial retry. If set to 5, for each triggered packet, the router will dial 5 times until it is connected to the ISP or remote access router.

Call Control and PPP/MP Setup

Dial Delay Interval: Specifies the interval between dialup retrys. By default, the interval is 0 seconds.

Remote Activation: Specify a phone number in the Remote Activation field to enable the remote activation function. If the router accepts a call from the number 12345678, it will disconnect immediately and dial to the ISP.

Remote Activation	<input type="text" value="12345678"/>
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Note that Internet Access Setup > Dialing to a Single ISP should be pre-set properly.

PPP/MP Dial-Out Setup

Basic Setup :

Link Type:

PPP Authentication: Specify the PPP authentication method for PPP/MP connection. Normally set to **PAP/CHAP** for the widest compatibility.

TCP Header Compression: VJ Compression is used for TCP/IP protocol header compression. Normally set to **Yes** to improve bandwidth utilization.

Idle Timeout:

BOD Setup :

BOD stands for bandwidth-on-demand for Multiple-Link PPP (ML-PPP or MP). The corresponding parameters are shown below.

Bandwidth On Demand (BOD) Setup	
High Water Mark	<input type="text" value="7000"/> cps
High Water Time	<input type="text" value="30"/> second(s)
Low Water Mark	<input type="text" value="6000"/> cps
Low Water Time	<input type="text" value="30"/> second(s)

These parameters are activated when you set the **Link Type** to **Dialup BOD**. Usually the ISDN will use one B channel to access the Internet or remote network when you use the Dialup BOD link type. The router will use the parameters here to make a decision on when to activate/drop the additional B channel. Note that **cps** (characters-per-second) measures the total link utilization.

High Water Mark and High Water Time: These parameters specify the condition that the second channel will be activated. With the first connected channel, if its utilization exceeds the High Water Mark and such a channel is used over the High Water Time, the additional channel will be activated. Thus, the total link speed will be 128kbps (two B channels).

Low Water Mark and Low Water Time: These parameters specify the condition for dropping the second channel. Considering the two B channels, if their utilization is under the Low Water Mark and these two channels are used over the [High Water Time \(???\)](#), the additional channel will be dropped. As a result, the link speed will be 64kbps (one B channel).

Note: If you are not familiar with ISDN and ML-PPP's operations, please be wary of changing the default values.

Click **OK**.