eWONx104
ADSL connection

Content

eWON2104 and eWON4104 have an ADSL modem built-in. This guide describes all the eWON ADSL features. How to configure and monitor the ADSL connection.
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Hardware and software requirements

Hardware requirements

- eWON2104 or eWON4104
- An ADSL line

eWON Firmware Version

eWON firmware version 5.4S5 or higher.
A simple way to realize the eWON firmware upgrade is to use eBuddy, the eWON software companion (http://support.ewon.biz).
Quick ADSL connection

Step 1: Connect the eWON to the ADSL/Phone plug

Step 2: Configure your eWON

Open your Internet browser and enter the IP address of your eWON. By default, the address is 10.0.0.53 (http://10.0.0.53) and the UserName/Password is adm/adm.

Go to the Wizard menu.

Choose the "Configure Internet Connection" button.

Select "ADSL" Connection

Enter the ADSL configuration parameters

Connection type: PPPoE or FPPoA

User name: 
Password: 
PPPoE Mode: FPPoE LLC
VPI: 8
VCI: 35
2. Quick ADSL connection

Select "Maintain Connection"

Configure "Go Online" trigger

☐ Triggered by outgoing actions

eWON will establish the connection each time an internal action needs to connect to the Internet (eMail, FTP, NTP, etc.)

☐ Maintain connection

eWON will establish the Internet connection each time it is broken down.

Now, the wizard will perform an online test.

Select the "Test online address"

Internet connection is configured

Click Next to start the Internet connection test:

☐ Test online address.

If this checkbox is selected, eWON will perform an online IP check.
If you have configured a connection through proxy or on an intranet, do not select this test.

At the end of the test, you will have the following screen:

Now, your eWON is on the Internet.
2. Quick ADSL connection

Step 3: Set the eWON as Router

To allow devices connected on the LAN of the eWON to access the Internet, you must configure the eWON as Router.

Go to the Routing configuration page:

```
Configuration → System Setup → Communication → Networking Config → Routing
```

and set the NAT & TF to "NAT & TF on WAN".

Step 4: Set the parameters in your Devices

**IMPORTANT**

1. You must configure your devices to use the eWON as Gateway.
2. In your PC connection, do not forget that the eWON is NOT a DNS relay, you must enter your provider's DNS address(es) explicitly in the PC's ethernet interface configuration.

On a Windows-PC, you will find these 2 settings in:

```
Control Panel → Network Connections → Local Area Network → Properties → Internet Protocol(TCP/IP) → Properties
```

Now, your devices connected to the eWON-LAN are able to go to the Internet through your ADSL line.
Security recommendations

As the ADSL connection is intended to be permanent, your eWON will be connected to the Internet all the time.

- Then, do not forget to change the default administrator account (adm/adm) to something less obvious.

**Configuration → Users setup**

- Also, use the security page of the eWON to close all access from the Internet.

**Configuration → System Setup → Communication → Networking Config → Security**

<table>
<thead>
<tr>
<th>Networking security setup</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WAN Protection</strong></td>
</tr>
<tr>
<td>WAN Protection level</td>
</tr>
<tr>
<td>- Discard all traffic excepted VPN and inbound traffic (see: ENet)</td>
</tr>
<tr>
<td>- Discard all traffic excepted VPN and inbound traffic (see: ENet) and ICMP (Ping)</td>
</tr>
<tr>
<td>- Allow all traffic on WAN connection (no protection)</td>
</tr>
<tr>
<td><strong>Transparent Forwarding</strong></td>
</tr>
<tr>
<td>Require authentication for Transparent Forwarding</td>
</tr>
</tbody>
</table>

These changes will be effective from next WAN connection

When Protection Level is "Discard all", your eWON is not reachable from the Internet. Only the eWON (and devices on LAN) can access the Internet.

To securely reach your eWON-ADSL, use a VPN tunnel (with Talk2M, eSync or eCatcher):.

- use Talk2M, more info on [http://www.talk2m.com](http://www.talk2m.com).
- set the eWON to accept Incoming VPN connection (from eCatcher) see [AUG002.pdf](http://support.ewon.biz) on [http://support.ewon.biz](http://support.ewon.biz)
Manual ADSL Configuration

Step 1: Configure your eWON

The modem configuration is accessible through the following menus:

- Configuration → System Setup → Communication → Interfaces → ADSL
- Configuration → System Setup → Communication → Network Connections → ADSL

Most of the configuration will be done through the menu:

- Configuration → System Setup → Communication → Interfaces → ADSL

### eWONx104 (ADSL connection)

<table>
<thead>
<tr>
<th>Control</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Connection Type** | Always “PPPoE or PPPoA”  
PPPoE: Point-to-Point Protocol over Ethernet  
PPPoA: Point-to-Point Protocol over ATM |
| **User name** | Provided by the operator with your ADSL account |
| **Password** | Provided by the operator with your ADSL account |
| **PPP mode** | Provided by the operator with your ADSL account. Choose between  
- PPPoE LLC  
- PPPoA VC-Mux  
- PPPoA LLC |
| **VPI** | Virtual Path Identifier is provided by operator (default: 8) |
| **VCI** | Virtual Channel Identifier is provided by operator (default: 35) |
4. Manual ADSL Configuration

The connection parameters are defined through:

Configuration → System Setup → Communication → Network Connections → ADSL

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection timeout</td>
<td>Maximum time the eWON will wait for the ADSL WAN to be established. After this time the connection will fail. If &quot;Maintain connection&quot; is selected, then the eWON will retry continuously.</td>
</tr>
</tbody>
</table>

Do not forget to set the "Internet Connection" on "ADSL".

Configuration → System Setup → Communication → Networking Config → Internet Connection

**IMPORTANT**

See also Step 3: Set the eWON as Router and Step 4: Set the parameters in your Devices
Diagnosis

Differents tools are provided to check the ADSL connection status and determine why it has failed.

**Status windows**

Accessible through

| Diagnostic → Status → Status |

This summary will indicate the current status of the ADSL Line and ADSL Connection.

<table>
<thead>
<tr>
<th>ADSL Line status</th>
<th>Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADSL WAN status</td>
<td>Up</td>
</tr>
<tr>
<td>ADSL Local IP</td>
<td>81.240.182.166</td>
</tr>
<tr>
<td>ADSL Remote IP</td>
<td>81.240.182.1</td>
</tr>
<tr>
<td>ADSL Primary DNS</td>
<td>195.238.2.22</td>
</tr>
<tr>
<td>ADSL Secondary DNS</td>
<td>195.238.2.21</td>
</tr>
</tbody>
</table>

**The ADSL Line status**: as soon as the modem is connected to the ADSL line (phone line), it will try to negotiate an ADSL link, this is the low level link connection and does not provide any IP connectivity.

Even if you have NOT configured anything in the eWON, if the telephone line is connected and the system is powered, your ADSL Line should go “Online”.

**The ADSL WAN status**: This is the actual ADSL IP connection, you must have a valid configuration and the ADSL WAN connection must be active for this status to be “Connected”.

If your WAN is connected, the ADSL Local, Remote and DNS should be defined.
5. Diagnosis

**ADSL Log**

If your ADSL does not work, you may have problems with your configuration. In that case, you can check the ADSL Log, this log is fetched from the modem itself and remains in 'English', it may contain information about an invalid VPI/VCI configuration or an incorrect username and password:

<table>
<thead>
<tr>
<th>Event Log</th>
<th>Status</th>
<th>Scheduled Address</th>
<th>Real-Time Log</th>
<th>ADSL Log</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon Jan 01 16:40:57 2001 : STATUS ALARM : IP Interface Created : Interface - ppp-0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mon Jan 01 16:40:57 2001 : STATUS ALARM : Non IP Interface Created : Interface - eal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mon Jan 01 16:40:57 2001 : STATUS ALARM : IP Interface Deleted : Interface - ppp-0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mon Jan 01 16:40:57 2001 : WARNING : ATM VC Down : Interface - eal1-1, PortId=1, Vpi</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mon Jan 01 16:40:57 2001 : WARNING : PPPoe Down : Interface - ppp-0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Debug ADSL**

In case you are in real trouble with your ADSL, you can also enable the ADSL process debug option:

**Configuration → System Setup → General → Diagnosis → Debug**

Select the 'Debug ADSL' option.
5. Diagnosis

As soon as the ADSL Debug option is enable, the ADSL process will log information in the 'Real Time Log'.

<table>
<thead>
<tr>
<th>Time</th>
<th>Source</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/01/2001 16:42:34</td>
<td>ADSL</td>
<td>Read Log</td>
</tr>
<tr>
<td>01/01/2001 16:41:07</td>
<td>ADSL</td>
<td>Enter status ADSL_CONNECTING</td>
</tr>
<tr>
<td>01/01/2001 16:41:07</td>
<td>ADSL</td>
<td>Current WAN Status: Status=5, LocalIP=0.0.0.0, Rem IP=0.0.0.0, DNS1=0.0.0.0, DNS2=0.0.0.0</td>
</tr>
<tr>
<td>01/01/2001 16:41:06</td>
<td>ADSL</td>
<td>Current Dial Status: Open=1, LastFail=0x0, StartProg=0x0</td>
</tr>
<tr>
<td>01/01/2001 16:41:06</td>
<td>ADSL</td>
<td>Ethernet interface opened and default GW set.</td>
</tr>
<tr>
<td>01/01/2001 16:40:57</td>
<td>ADSL</td>
<td>Connect online</td>
</tr>
</tbody>
</table>

This information may help you determine where the ADSL connection process fails.

Modem informations

Accessible through

Main Menu → Diagnostic → Status → Info

This page provides information about the ADSL Modem hardware, firmware and serial number.

<table>
<thead>
<tr>
<th>ADSL Version info</th>
<th>SW Ver: VUL-2.5.060322a, FW Ver: E37.09.48</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADSL Serial number</td>
<td>XG060507</td>
</tr>
</tbody>
</table>