

# Application Note

## >> ANw3.2: Using the TCP/IP stack as a PPP server in GSM mode

<b>TARGET</b>	B40h-09gg + eDsoft-w302 v1.0
<b>NEED</b>	To authenticate a remote PPP client and assign it an IP address through a GSM call
<b>DESCRIPTION</b>	<p>A user may want to use a standard PPP client (like MS Dial-up Networking) to access the Wavecom product directly. In this case, the user must configure his or her computer (equipped with a modem) with the phone number related to the Wavecom device, instead of the one of a standard ISP.</p> <p>Once authenticated, a direct PPP link is opened between the Wavecom product and the remote computer.</p>
<b>NOTE</b>	<ul style="list-style-type: none"><li>- Active feature in GSM and not in GPRS mode.</li><li>- The embedded PPP server allows the PPP negotiation in the PAP mode only (different from the PPP client mode with the PAP or CHAP negotiation).</li></ul>

### CONFIGURATION

<b>PPP server activation</b>	<p>When this parameter is set to 1, the Wavecom product behaves as a PPP server when an incoming call is received. For specific requirements, it is also possible to configure the Wavecom product as a PPP Server only (4) or as PPP server when initiating a call (2).</p>
AT#	PPPMODE
<b>PPP server authentication</b>	<p>Defines the login / password required to access the Wavecom product internal PPP server. The user must specify these values when creating the PPP client on his computer (like for a standard ISP).</p>
AT#	PPPSERVUN, PPPSERVPW
<b>PPP server IP address</b>	<p>Once the negotiation is successfully completed, this IP address will be the one assigned to the Wavecom product internal PPP server.</p> <p>This IP address must be on the same IP network as the <code>PPPPEERIP</code>.</p>
AT#	PPPMYIP
<b>PPP client IP address</b>	<p>Once the negotiation is successfully completed, this IP address will be the one assigned to the remote PPP client.</p> <p>This IP address must be on the same IP network as the <code>PPPMYIP</code></p>
AT#	PPPPEERIP

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### OPERATION

<b>Negotiation</b>	<p>Once the call is accepted and the modem modulation negotiation is successful, the Wavecom product automatically behaves as a PPP server.</p> <p>The 'Ok_Info_Ppp' message indicates that the IP link is up.</p> <p>A '#CME ERROR: 37121 or '#CME ERROR: 38981 message (or a 'NO CARRIER') means that the PPP negotiation has failed. This can be due to:</p> <ul style="list-style-type: none"><li>- Incorrect authentication parameters</li><li>- The PPP client doesn't accept the IP address provided by the Wavecom product</li><li>- The PPP client doesn't support the basic set of PPP options managed by the Wavecom product.</li></ul>
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### TROUBLESHOOTING

<b>PPP ERROR</b>	<p>On the PPP entry on the remote PC the following points must be checked:</p> <ul style="list-style-type: none"><li>- Valid username, password</li><li>- The IP address must be attributed by the remote PPP server</li><li>- LCP options must be disabled into the dial up configuration</li></ul>
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### LINKS

<b>AT# PARAMETERS</b>	PPPMODE - PPPMYIP - PPPPEERIP - PPPSERVPW - PPPSERVUN - ANSWERMODE
<b>APP. NOTES</b>	ANAnswer_Call (ANw3.5) - ANAutomatic_Answer (ANw3.4)- ANAutomatic_Callback (ANw3.3)