I. Architecture:

This document describes how to configure a station to receive an incoming call (Server Station) triggered from a remote station (Client Station), running Studio/CEView application. It also explains how to configure the Studio/CEView application in order to execute the DialUp connection.

Studio/CEView provides some functions to trigger the DialUp connection from the Client Station. The Server Station must be previously configured to receive an incoming call. The operating system of the Server Station must provide a RAS Server (Remote Access Service Server) to receive the incoming call.

II. Server Station Settings (Incoming Call – RAS Server):

II.1. Run the Windows dialog “Network and Dial-up Connection”;
II.2. Click on the icon "Make New Connection" and press the button "Next" in the "Network Connection Wizard";

II.3. Select the option "Accept Incoming Connections" and press the button "Next";
II.4. Select the modem connected to your Win2k station (this modem must be connected directly to the phone line – no PABX) and press the button "Next";

II.5. Select the option "Do not allow virtual private connection" and press the button "Next";
II.6. Create Users and Passwords (e.g.: UserName=Administrator; Password=mypass) and make sure this user is checked on the list “Users allowed to connect”. Press the button “Next”;

II.7. Check the option “Internet Protocol (TCP/IP)”, select it and press the button “Properties” to configure the TCP/IP settings;
II.8. Check the option “Allow callers to access my local area network” and “Allow calling computer to specify its own IP address”. Select the option “Specify TCP/IP address” and configure a range of IP Addresses to be set to the remote station. Press the button “OK” and the button “Next”;

![Incoming TCP/IP Properties](image)

II.9. Press the button “Finish” creating the connection “Incoming Connections”;
II.10. You must be able to see the “Incoming connections” icon from the “Network and Dial-Up connections” folder. You can double-click on it to edit its properties.
III. Client Station Settings (Dial-Up – RAS Client):

Create an application to Dial-Up to the Server Station: Studio provides functions to trigger Dial-Up connections automatically or due a command from the operator.

<table>
<thead>
<tr>
<th>Configuration:</th>
</tr>
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<tbody>
<tr>
<td>Connect using:</td>
</tr>
<tr>
<td>3Com Windows Modem T1</td>
</tr>
<tr>
<td>Phone number:</td>
</tr>
<tr>
<td>Domain name: (Optional)</td>
</tr>
<tr>
<td>Status: Disconnected</td>
</tr>
<tr>
<td>Error: None</td>
</tr>
</tbody>
</table>

LogOn Information:

- Username: Administrator
- Password: ******

The main functions used to configure a Dial-Up connection:

- **FindModem**: Returns the amount of modems available in the local station, such as their names.
- **DialUp**: Triggers a Dial-Up connection to private network. The Dial-Up connection may be addressed to other computer with the RAS Server enabled (see previous chapter) or to an ISP (Internet Service Provider).
- **HangUp**: Hang-up the Dial-Up connection.
- **DialStatus**: Returns the status code and its correspondent label for the Dial-Up connection – e.g. Verifying UserName and Password.
- **DialError**: Returns the error code and its correspondent label for the Dial-Up connection – e.g. Invalid Username and Password.
- **DialGetClientIP**: Returns the IP Address of the RAS Client station, for the Dial-Up connection.
- **DialGetServerIP**: Returns the IP Address of the RAS Server station, for the Dial-Up connection.

⚠️ **Note**: See the Technical Reference Manual (or the Service Packs documentation – MLIST.DOC) for the full description of the Dial-UP functions and their parameters.
The main steps to create a Dial-Up connection are:

- Execute the `FindModem` function to get the list of available modems in the local station and select the modem which must be used to dial to the Server station.
- Execute the `DialUp` function to trigger the dialing process.
- Keep executing the `DialStatus` and `DialError` to monitor the dialing process.
- Execute the `DialGetClientIP` and `DialGetServerIP` after get connected to the Server to monitor the IP Addresses assigned to the connection.
- Execute the `HangUp` function to drop the line when you want to finish the Dial-Up connection.

At lease the following information is required before executing a Dial-Up connection from Studio:

- **Phonebook Entry or Modem Name:** All the Dial-Up functions require that you specify either a reconfigured connection from your computer’s phonebook or the name of the modem as it is registered in the computer. It is the handler which identifies each Dial-Up connection.
- **Phone Number:** The full phone number, including area code if needed, which the application will dial to connect to the remote computer.
- **User Name:** One of the Usernames configured in section II.6.
- **Password:** The password corresponding to the Username above, also configured in section

There are basically two modes to handle a Dial-Up connection:

- **PhoneBook:** It is possible to configure the Dial-Up settings by the `Network Connection` interface of the `Control Panel`. Studio is able to trigger a Dial-Up connection, calling the `PhoneBook` previously created in the `Control Panel` of the operating system. Therefore, the settings configured in the `PhoneBook` are automatically used in the Dial-Up connection.
- **Modem Name:** It is not necessary to create a PhoneBook in the control panel (Studio creates a temporary PhoneBook during the Dial-Up connection, with the settings configured in the `DialUp` function).
### IV. History of Revisions

<table>
<thead>
<tr>
<th>Revision</th>
<th>Author</th>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Bryan Morgan</td>
<td>February 20, 2002</td>
<td>Initial revision</td>
</tr>
<tr>
<td>B</td>
<td>Fabio Terezinho</td>
<td>February 25, 2002</td>
<td>Layout revision</td>
</tr>
<tr>
<td>C</td>
<td>Fabio Terezinho</td>
<td>October 3, 2003</td>
<td>Layout revision</td>
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