

Quick Reference Guide

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INTERBUS Controller via FL COMSERVER ... 232/422/485

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1.) Application Set Up



The FL COMSERVER has the default IP-Address **192.168.0.254**
 The default password for the "General Configuration" menu is "private"

- 1.) Type the IP-Address as URL into your Web Browser.
- 2.) Select "General Configuration", then "Serial"
- 3.) Set the parameters to a 3964R connection:

Interface Type = Port 0 RS-232
 Baud Rate = 9600
 Data Bits = 8
 Parity = even
 Stop Bits = 1
 Flow Control = none
 RS-232 Interf. Type = DTE

Serial Configuration	
Interface Type	Port 0 RS-232 ▾
Baud Rate	9600 ▾
Data Bits	8 ▾
Parity	none ▾
Stop Bits	1 ▾
Flow Control	none ▾ (485 is selfcontrolled)
RS-232 Interface Type	DTE ▾
Switching output	RESET ▾ (Setting is NOT retained after a reboot)
<input type="button" value="Confirm"/>	
<i>Note: You have to save and reboot to activate the new configuration.</i>	
Typical settings:	3964 R, Phoenix Contact: 9600; 8; Even; 1; none S7-PC Adapter: 19200; 8; Odd; 1; RTS/CTS S7-TS-Adapter: 19200; 8; None; 1; RTS/CTS Modbus RTU: xxxx; 8; Even; 1; none Modbus ASCII: xxxx; 7; Even; 1; none

- 4.) Select "Application".
- 5.) Adjust the application settings as shown in the figure below.

Application Settings for TCP	
Protocol settings	
Operation Mode	<input type="radio"/> UDP <input checked="" type="radio"/> TCP
IP and port address	
Own TCP port	<input type="text" value="3001"/>
Remote TCP port	<input type="text" value="0"/>
Remote IP address	<input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/>
Remote Domain name	<input type="text"/>
Channel settings	
Device type	<input checked="" type="radio"/> Server(Responder) <input type="radio"/> Client(Initiator)
Modem DTR Control	<input checked="" type="radio"/> Off <input type="radio"/> On
Disconnect with inactivity timeout	<input type="text" value="0"/> minutes
	<input type="text" value="0"/> seconds
<i>Valid range: 0...255. If unused set to 0,0.</i>	
TCP Flush Mode	Clear Input Buffer <input type="radio"/> Off <input checked="" type="radio"/> On
	Clear Output Buffer <input checked="" type="radio"/> Off <input type="radio"/> On
Idle Force Timeout Characters	<input type="text" value="10"/>
<input type="button" value="Confirm"/>	
<p><i>Note: To switch operation modes press the button and then Confirm. You have to save and reboot to activate the new configuration (and Firmware). Current Firmware Image loaded: PC PC=UDP and TCP</i></p>	

- 6.) Click to "Save and Reboot"
- 7.) Activate the "Save" and the "Reboot" checkbox and execute the reboot by entering the password.

2.) Wiring diagramm Com Server to the controller board

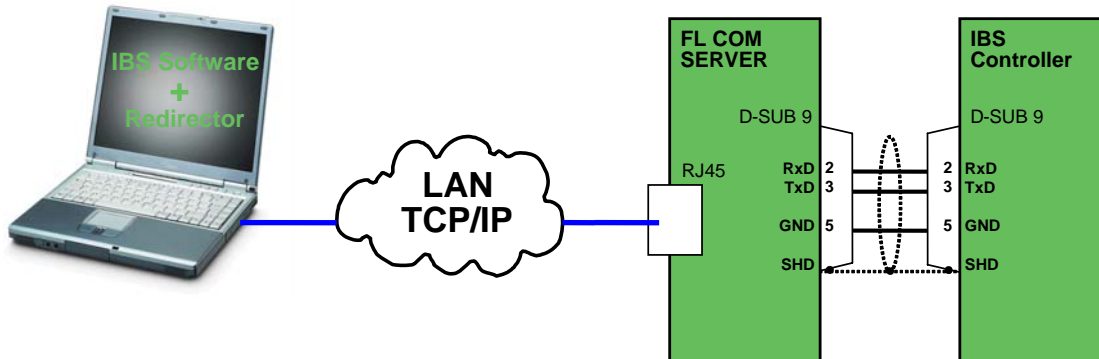


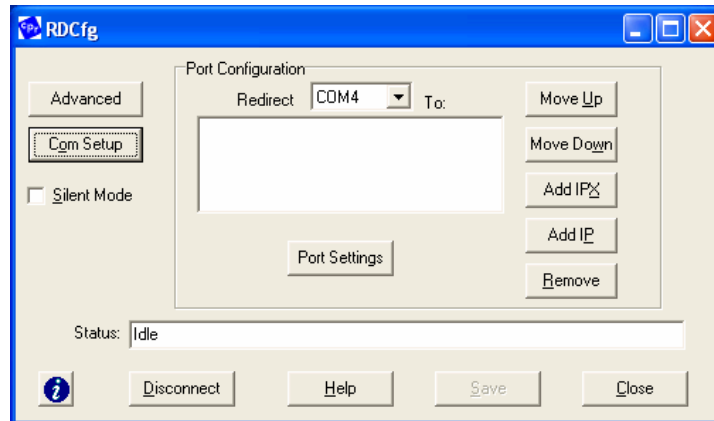
Image 1: Structure and wiring in principle



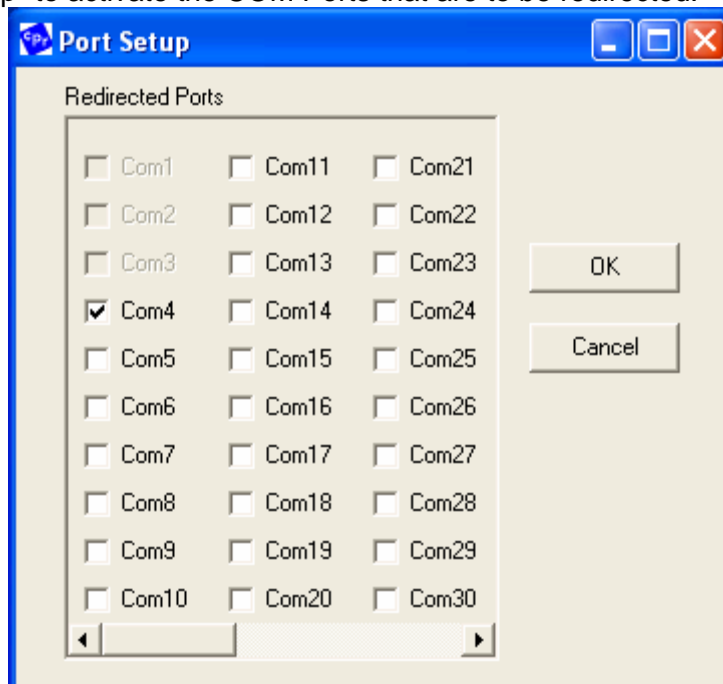
The data lines of the **RS-232** cable towards the IBS controller board have to be **1:1**;
The cable must be arranged with the minimal assignment **TxD, RxD and Ground only**.

3.) Redirector settings

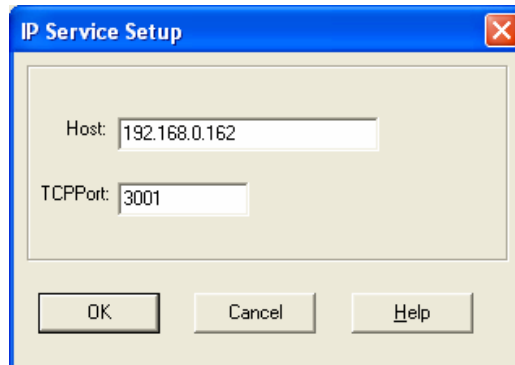
- 1.) Install the Redirector using the attached CD.
- 2.) Configuration menu (RDCfg) opens automatically after installation of the Redirector.



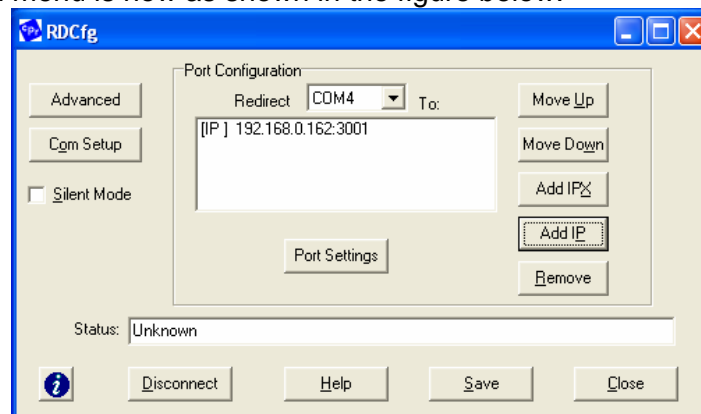
- 3.) Select "Com Setup" to activate the COM Ports that are to be redirected.



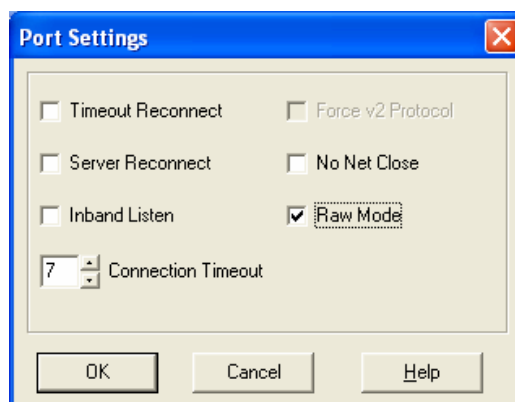
- 4.) Activate the requested COM Ports.
- 5.) Confirm with "OK"
- 6.) Back in the configuration menu, select a COM Port from the pull-down menu.
- 7.) Click on "Add IP" to set the communication parameters of the target COM Server.
The window "IP Service Setup" pops up.



- 8) Enter the IP address of the target Com Server in dotted notation in the field "Host".
Add the communication port in the field "TCP Port"
- 9) Click on "OK" to save the settings and to close the window.
- 10.) The configuration menu is now as shown in the figure below.



- 11.) Finally, the TCP Port of the Redirector is set. Activate "**RAW Mode**" for this Port.



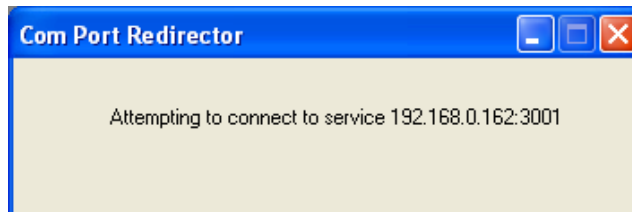
- 12) Click on "OK" to save the settings and to close the window.



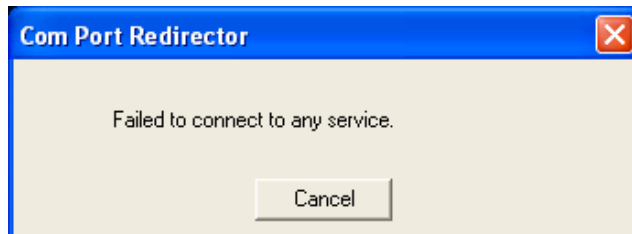
Reboot the PC to activate the new virtual Com Ports in the windows operating system.

4.) Application software

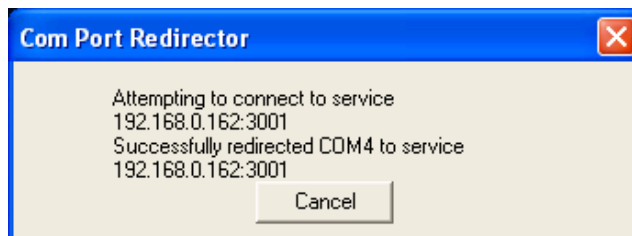
- 1.) Select the virtual Com Port as communication link from the application software
- 2.) As soon as the application software opens the Com Port, a window with the connection status is displayed.



- 3.) A window informs in case the connection is not possible. In this case there are still errors on the Ethernet side.



- 4.) In case of a successful connection, the window is completed by confirming "Successfully redirected...".

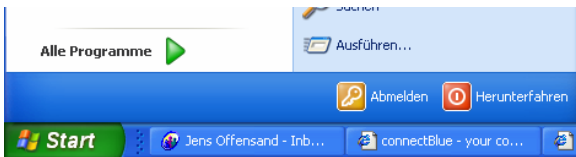


If you have a successful redirected connection but still no communication with the application software then often the time out settings must be additionally resetted.

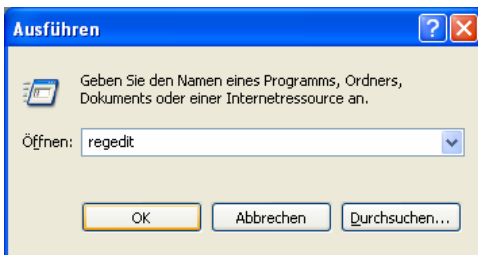
5.) Change time out values in the registry

The adjustment of the time out values for the 3964R-connections is often necessary due to additionally delays from Modems, Satellites, Com Server etc. with 3964R-connections. As remedy the „Quittungsverzugszeit (Qvz)“ and the „Zeichenverzugszeit (Zvz)“ has to be extended. You find the parameter in the Windows registry.

1.) Choose the „Execute“ Dialog in the Windows Startmenu

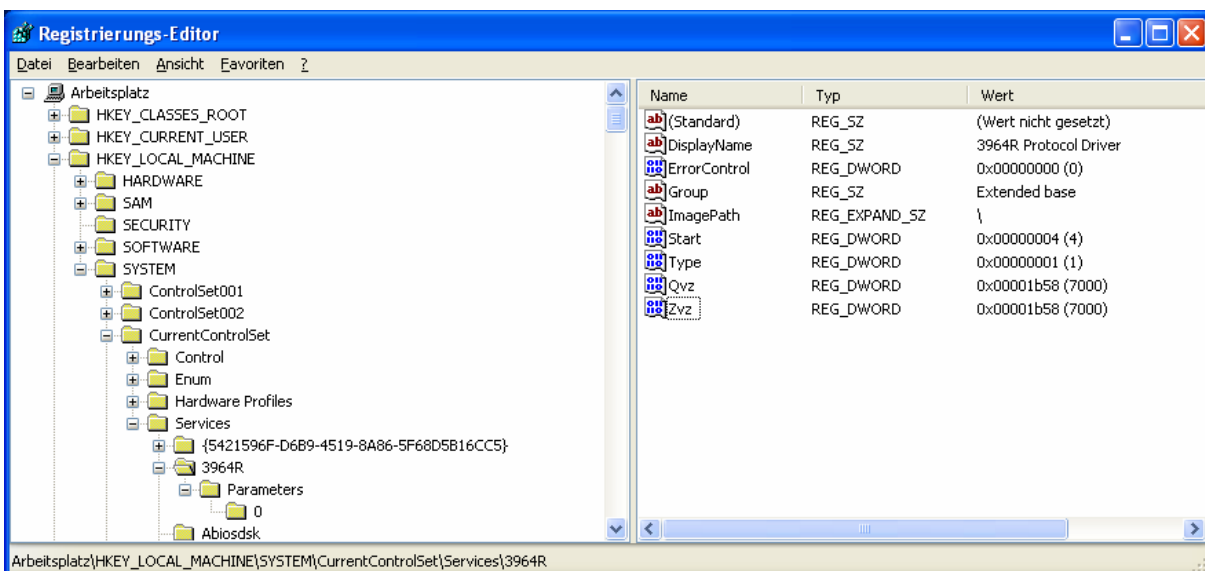


2.) Enter „regedit“ and confirm with „OK“.

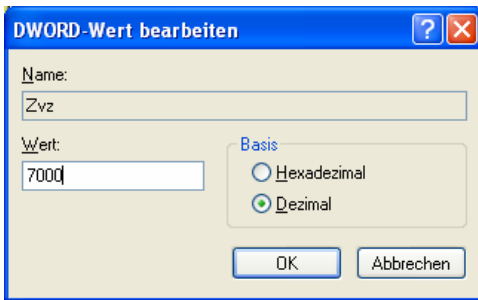


3.) In the registry follow the path

„HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services\3964r\Parameters\0“



4.) Choose the desired parameter (Qvz or Zvz) and change into the „Modify“ Dialog with a right mouse click.



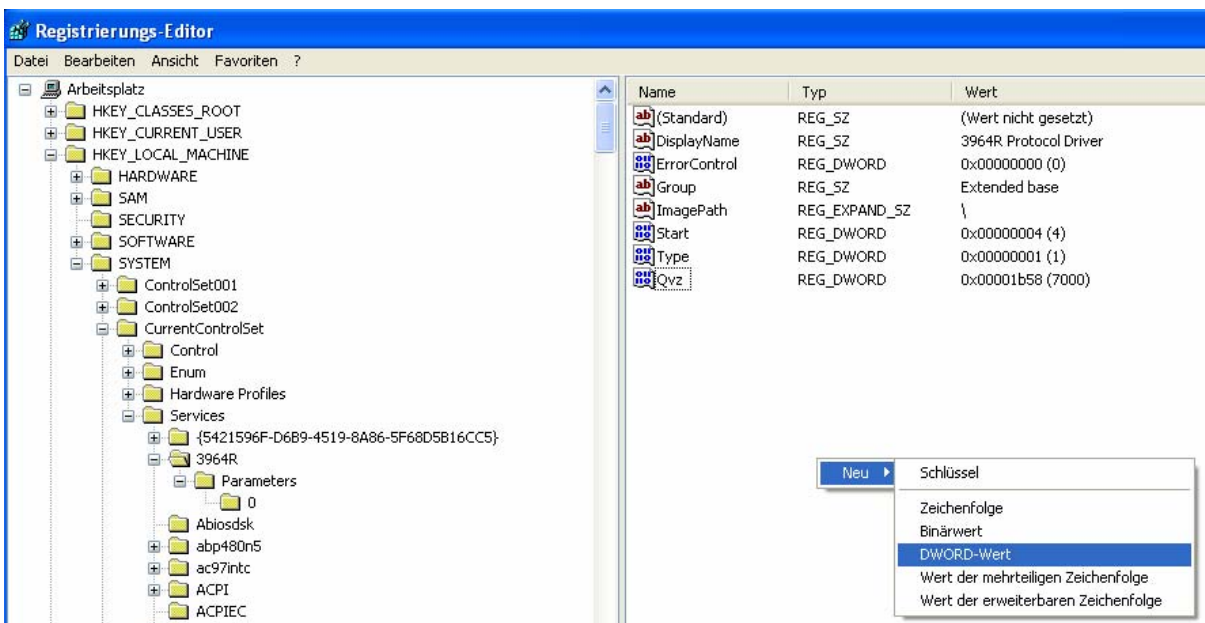
5.) Change into the number base „DECIMAL“

6.) Enter the value 7000

7.) Finish the modification with “OK“

8.) Repeat the operation for the second parameter

If there are no registry entries for Qvz and Zvz you have to enter them before you can change the values.



1.) Click into the right part of the Window and open with a right mouse click the menu for a new entry.

2.) Choose a new „DWORD-Value“.

3.) Enter the name of the new value.

Attention: Here you must pay attention to the notation „Qvz“ and „Zvz“.

4.) Change the values as described above.