

QUICK MANUAL

Windows XP Embedded (XPE) Image
for
Micro Client II (M@CII) and MediClient with ETX-PM

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Revision History

ChangeLog			
Rev	Description	Date	Author
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1 Features

CF-size	At least 1 GB
Image-size	approx. 364 MB
Recommended RAM	At least 256 MB (better 512 MB)
Features:	
	Onboard Hardware support :
	<ul style="list-style-type: none"> • Graphic Card • Serial Ports (RS232,RS485 (opt.)) • Ethernet - LAN • USB support (USB mass storage, USB HID Device etc.) • Audio
	User Interface :
	<ul style="list-style-type: none"> • USB Mouse/Keyboard
	Communication Services and Networking:
	<ul style="list-style-type: none"> • TCP/IP, DHCP, SNMP, Winsock support • MAPI • RDP (Remote Desktop Protocol)
	Application und Service Development :
	<ul style="list-style-type: none"> • DCOM, COM, MSXML • MFC • OLE • Jet Database , MDAC • Visual C++, VB6.0 ++ libs
	Features / Application :
	<ul style="list-style-type: none"> • Control Panels • Windows Firewall • Windows Installer • Desktop QFE support • Web Browser (IE 7) • Hyperterminal • Soft-Keyboard • WMI tools • Explorer • CMD • Language support: English, french, german • Keyboard support: English french, german • EWF RAM Overlay (protect the CF for damage) • RAS support

	<ul style="list-style-type: none">• Microsoft Management Console (MMC)
	<ul style="list-style-type: none">• Disk Management MMC Snap-In
	<ul style="list-style-type: none">• Administration Support Tools
	<ul style="list-style-type: none">• Windows Accessories: (Wordpad, Notepad ...)
	<ul style="list-style-type: none">• MS Config Support Utility
	<ul style="list-style-type: none">• Audio Volume Control
	<ul style="list-style-type: none">• Audio/Sound Codecs
	<ul style="list-style-type: none">• Remote Desktop Server/Client

2 BIOS Settings

BIOS Settings ETX-PM Modul (MODBR127)

- Press „F2,, Key as long as booting the BIOS-setup starts

2.1 Main

PhoenixBIOS Setup Utility						
Main	Advanced	Security	Power	Boot	Exit	
System Time			Xxxxxx			Item Specific help
System Date			Xxxxxx			
Legacy Diskette A:			[Disabled]			
Legacy Diskette B:			[Disabled]			
> Primary Master			[HDD *)]			
> Primary Slave			[xxxxxx]			
> Secondary Master			[xxxxxx]			
> Secondary Slave			[xxxxxxxx]			
SMART Device Monitoring			[Enabled]			
System Memory			Xxxxx			
Extended Memory			Xxxxx			
BIOS Date			06/25/07			
F1 Help		↑ ↓	: Select Item	-/+	Change Value	F9 Setup Defaults
Esc Exit			Select Menu	Enter	Select > Sub-Menu	F10 Save and Exit

2.1.1 Primary Master/ Slave Secondary Slave

PhoenixBIOS Setup Utility	
Main	
Primary Slave Secondary Master / Secondary Slave	Item Specific help
Type [Auto*] XXXXX	
Multi-Sector Transfer : [16 Sectors]	
LBA Mode Control : [Enabled]	
32 Bit I/O [Disabled]	
Transfer Mode : [Xxxxxxx]	
Ultra DMA Mode: [Disabled]	
SMART Monitoring : Disabled	
F1 Help ↑↓ : Select Item -/+ Change Value F9 Setup Defaults Esc Exit Select Menu Enter Select > Sub-Menu F10 Save and Exit	

- * HDD = Auto
- Compactflash = User **

2.2 Advanced

PhoenixBIOS Setup Utility						
Main	Advanced	Security	Power	Boot	Exit	
Setup Warning					Item Specific help	
Setting items on this menu to incorrect values may cause your system to malfunction						
> Advanced Chipset Control > PCI/PNP Configuration > Memory Cache > I/O Device Configuration > Keyboard Features > Hardware Monitor > Watchdog Settings > Display Control > Miscellaneous						
F1	Help	↑ ↓	: Select Item	-/+	Change Value	F9 Setup Defaults
Esc	Exit		Select Menu	Enter	Select > Sub-Menu	F10 Save and Exit

2.2.1 Advanced Chipset Control

PhoenixBIOS Setup Utility	
Advanced	
Advanced Chipset Control	Item Specific help
Enable Memory Gap [Disabled]	
Graphics Engine 1 [Enabled]	
Graphics Engine 2 [Enabled]	
Graphics Memory [UMA=8MB]	
Graphics Aperture [256 Mb]	
Assign IRQ to VGA [Enabled]	
Serial Interrupt Mode [Quit]	
F1 Help ↑↓ : Select Item -/+ Change Value F9 Setup Defaults Esc Exit Select Menu Enter Select > Sub-Menu F10 Save and Exit	

2.2.2 PCI/PNP Configuration

PhoenixBIOS Setup Utility	
Advanced	
PCI Configuration	Item Specific help
PNP OS Installed [Yes]	
Reset Configuration Data [No]	
Secured Setup Configuration [Yes]	
> PCI Device, Slot #1	
> PCI Device, Slot #2	
> PCI Device, Slot #3	
> PCI Device, Slot #4	
PCI IRQ line 1: [Auto Select]	
PCI IRQ line 2: [Auto Select]	
PCI IRQ line 3: [Auto Select]	
PCI IRQ line 4: [Auto Select]	
Onboard LAN IRQ line [Auto Select]	
Onboard USB EHCI IRQ line [Auto Select]	
> PCI/PNP ISA UMB Region Exclusion	
> PCI/PNP ISA IRQ Resource Exclusion	
Default Primary Video Adapter [PCI]	
Assign IRQ to SMB [Enabled]	
F1 Help ↑ ↓ : Select Item -/+ Change Value F9 Setup Defaults	
Esc Exit Select Menu Enter Select > Sub-Menu F10 Save and Exit	

2.2.2.1 PCI Device, Slot #1 / #2 / #3 / #4

PhoenixBIOS Setup Utility	
Advanced	
PCI Device, Slot #1 / #2 / #3 / #4	Item Specific help
Option ROM Scan: [Enabled]	
Enable Master: [Disabled]	
Latency Timer: [Default]	
F1 Help ↑↓ : Select Item -/+ Change Value F9 Setup Defaults Esc Exit Select Menu Enter Select > Sub-Menu F10 Save and Exit	

2.2.2.2 PCI/PNP ISA UMB Region Exclusion

PhoenixBIOS Setup Utility	
Advanced	
PCI/PNP ISA UMB Region Exclusion	Item Specific help
CC00 - CFFF [Available]	
D000 – D3FF [Available]	
D400 – D7FF [Available]	
D800 – DBFF [Available]	
DC00 – DFFF [Available]	
F1 Help ↑↓ : Select Item -/+ Change Value F9 Setup Defaults Esc Exit Select Menu Enter Select > Sub-Menu F10 Save and Exit	

2.2.2.3 PCI/PNP ISA IRQ Resource Exclusion

PhoenixBIOS Setup Utility	
Advanced	
PCI/PNP ISA IRQ Resource Exclusion	Item Specific help
IRQ 3:	[Available]
IRQ 4:	[Available]
IRQ 5:	[Available]
IRQ 7:	[Available]
IRQ 9:	[Available]
IRQ 10:	[Reserved]
IRQ 11:	[Available]
IRQ 12:	[Available]
F1 Help ↑↓ : Select Item -/+ Change Value F9 Setup Defaults Esc Exit Select Menu Enter Select > Sub-Menu F10 Save and Exit	

2.2.3 Memory Cache

PhoenixBIOS Setup Utility	
Advanced	
Memory Cache	Item Specific help
Memory Cache: [Enabled]	
Cache System BIOS area: [Write Protect]	
Cache Video BIOS area: [Write Protect]	
Cache Base 0 – 512k [Write Back]	
Cache Base 512 – 640k [Write Back]	
Cache Extended Memory Area : [Write Back]	
Cache D000 – D3FF: [Disabled]	
Cache D400 – D7FF: [Disabled]	
Cache D800 – DBFF: [Disabled]	
Cache DC00 – DFFF: [Disabled]	
F1 Help ↑↓ : Select Item -/+ Change Value F9 Setup Defaults Esc Exit Select Menu Enter Select > Sub-Menu F10 Save and Exit	

2.2.4 I/O Device Configuration

PhoenixBIOS Setup Utility	
Advanced	
I/O Device Configuration	Item Specific help
Local Bus IDE adapter: [Both]	
Primary IDE UDMA66/100: [Enabled]	
Secondary IDE UDMA66/100: [Enabled]	
> USB Options	
AC97 Audio controller: [Enabled]	
> LAN Options	
> SIO Options	
F1 Help ↑ ↓ : Select Item -/+ Change Value F9 Setup Defaults	
Esc Exit Select Menu Enter Select > Sub-Menu F10 Save and Exit	

2.2.4.1 USB Options

PhoenixBIOS Setup Utility	
Advanced	
USB Options	Item Specific help
USB UHCI Host Controller 1: [Enabled]	
USB UHCI Host Controller 2: [Enabled]	
USB EHCI Host Controller : [Enabled]	
Legacy USB Support: [Enabled]	
EHCI Legacy Support: [Enabled]	
F1 Help ↑ ↓ : Select Item -/+ Change Value F9 Setup Defaults	
Esc Exit Select Menu Enter Select > Sub-Menu F10 Save and Exit	

2.2.4.2 LAN Options

PhoenixBIOS Setup Utility			
Advanced			
LAN Options		Item Specific help	
LAN MAC address (ETH1)	xx:xx:xx:xx:xx:xx		
Onboard LAN Controller	[Enabled]		
Onboard LAN PXE ROM:	[Disabled]		
Enable WOL	[OS control]		
F1 Help	↑ ↓ : Select Item	-/+ Change Value	F9 Setup Defaults
Esc Exit	Select Menu	Enter Select > Sub-Menu	F10 Save and Exit

2.2.4.3 SIO Options

PhoenixBIOS Setup Utility			
Advanced			
SIO Options		Item Specific help	
Serial port A:	[Enabled]		
Base I/O address	[3F8]		
Interrupt:	[IRQ 4]		
Serial port B:	[Enabled]		
Mode:	[Normal]		
Base I/O address:	[2F8]		
Interrupt:	[IRQ 3]		
Onboard LPT	[Disabled]		
F1 Help	↑ ↓ : Select Item	-/+ Change Value	F9 Setup Defaults
Esc Exit	Select Menu	Enter Select > Sub-Menu	F10 Save and Exit

2.2.5 Keyboard Features

PhoenixBIOS Setup Utility	
<u>Advanced</u>	
Keyboard Features	Item Specific help
NumLock: [Auto]	
Key Click: [Disabled]	
Keyboard auto-repeat rate: [30/sec]	
Keyboard auto-repeat delay: [1/2 sec]	
F1 Help ↑ ↓ : Select Item -/+ Change Value F9 Setup Defaults Esc Exit Select Menu Enter Select > Sub-Menu F10 Save and Exit	

2.2.6 Hardware Monitor

PhoenixBIOS Setup Utility	
Advanced	
Hardware Monitor	Item Specific help
VCC 3.3V Voltage = XXXX	
CPU Core Voltage = XXXX	
5Vsb Voltage = XXXX	
Battery Voltage = XXXX	
CPU Temperature = XXXX	
CPU Fan Speed No Function	
F1 Help ↑↓ : Select Item -/+ Change Value F9 Setup Defaults Esc Exit Select Menu Enter Select > Sub-Menu F10 Save and Exit	

2.2.7 Watchdog Settings

PhoenixBIOS Setup Utility	
Advanced	
Watchdog Settings	Item Specific help
Mode : [Disabled]	
F1 Help ↑↓ : Select Item -/+ Change Value F9 Setup Defaults Esc Exit Select Menu Enter Select > Sub-Menu F10 Save and Exit	

2.2.8 Display Control

PhoenixBIOS Setup Utility	
<u>Advanced</u>	
Display Control	Item Specific help
Display Mode: [CRT+LFP]	
JDA Revision: 1.5	
Flat Panel Type: [Auto]	
Flat Panel Scaling [Stretched]	
Flat Panel Backlight: [128]	
Default Primary Video Adapter [PCI]	
Assign IRQ to VGA [Enabled]	
F1 Help	↑ ↓ : Select Item -/+ Change Value F9 Setup Defaults
Esc Exit	Select Menu Enter Select > Sub-Menu F10 Save and Exit

2.2.9 Miscellaneous

PhoenixBIOS Setup Utility	
Advanced	
Miscellaneous	Item Specific help
Floppy check: [Disabled]	
Summary screen: [Disabled]	
QuickBoot Mode: [Enabled]	
Extended Memory Testing: [Just zero it]	
Dark Boot: [Disabled]	
Halt on Errors: [Yes]	
PS2 Mouse: [Disabled]	
Large Disk Access Mode: [DOS]	
Spread Spectrum [Disabled]	
F1 Help	↑ ↓ : Select Item -/+ Change Value F9 Setup Defaults
Esc Exit	Select Menu Enter Select > Sub-Menu F10 Save and Exit

2.3 Security

PhoenixBIOS Setup Utility						
Main	Advanced	Security	Power	Boot	Exit	
						Item Specific help
Supervisor Password Is:			Clear			
User Password IS:			Clear			
Set Supervisor Password			[Enter]			
Set User Password			[Enter]			
Diskette access:			[Supervisor]			
Fixed disk boot sector:			[Normal]			
Virus check reminder			[Disabled]			
System backup reminder			[Disabled]			
Password on boot:			[Disabled]			
Password on bootmenu:			[Disabled]			
F1	Help	↑ ↓	: Select Item	-/+	Change Value	F9 Setup Defaults
Esc	Exit		Select Menu	Enter	Select > Sub-Menu	F10 Save and Exit

2.4 Power

PhoenixBIOS Setup Utility					
Main	Advanced	Security	Power	Boot	Exit
					Item Specific help
Enable ACPI					[No]
> Thermal Management					
Power Savings					[Disabled]
Hard Disk Timeout					[Disabled]
> Wake Up Events					
Resume On Modem Ring:					[Off]
Resume On Time:					[Off]
Resume Time:					[00:00:00]
Power Supply					[AT]
Power Base Function					[Power Off]
Power Loss Control					[Power ON]
F1	Help	↑ ↓	: Select Item	-/+	Change Value
F9					Setup Defaults
Esc	Exit		Select Menu	Enter	Select > Sub-Menu
F10					Save and Exit

2.4.1.1 Thermal Management

PhoenixBIOS Setup Utility					
Thermal Management					
Automatic Thermal Control Circuit			[TM1]		
F1	Help	↑ ↓	: Select Item	-/+ Change Value	F9 Setup Defaults
Esc	Exit		Select Menu	Enter Select > Sub-Menu	F10 Save and Exit

2.4.1.2 Wake Up Events

PhoenixBIOS Setup Utility					
Power					
Wake Up Events				Item Specific help	
Wake on Mouse activity			[Enabled]		
Wake on Keyboard activity			[Enabled]		
Wake on Serial Port A activity			[Enabled]		
Wake on Serial Port B activity			[Enabled]		
F1	Help	↑ ↓	: Select Item	-/+ Change Value	F9 Setup Defaults
Esc	Exit		Select Menu	Enter Select > Sub-Menu	F10 Save and Exit

2.5 Boot

PhoenixBIOS Setup Utility	
Boot	
	Item Specific help
Boot priority order: 1: USB KEY:: 2: IDE 0: 3: IDE 1: 4: IDE 2: 5: IDE 3: 6: IDE CD: 7: USB CDROM: 8 USB KEY:: Excluded from boot order: : USB FDC: : USB HDD: : USB ZIP: : USB LS120: : PCI BEV: : PCI SCSI: : Bootable Add-in Cards : Legacy Network Card	
F1 Help ↑↓ Esc Exit Select Menu	: Select Item -/+ Change Value F9 Setup Defaults Enter Select > Sub-Menu F10 Save and Exit

*) IDE 0 -> HDD or Compactflash

3 FAQ

3.1 Set “?”-Icon in the symbolbar to the current EWF status

- 2 x Click on the symbol right below and set to the listed device



Note :



RED : Enhanced Write Filter switch off (disabled) -> you can installing software on the CF .

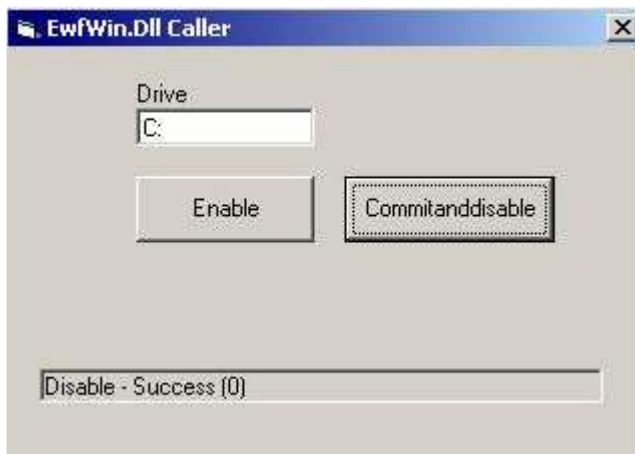


Green: Enhanced Write Filter switch on (enabled) -> CF protection is enabled

3.2 Switch On/OFF the CF Protection (EWF)

3.2.1 Variant 1

- Double click on the "EWFController" icon on the Desktop



Enable -> Switch On (enable) the EWF -> CF Protection

Commitanddisable -> Switch Off (disable) the EWF

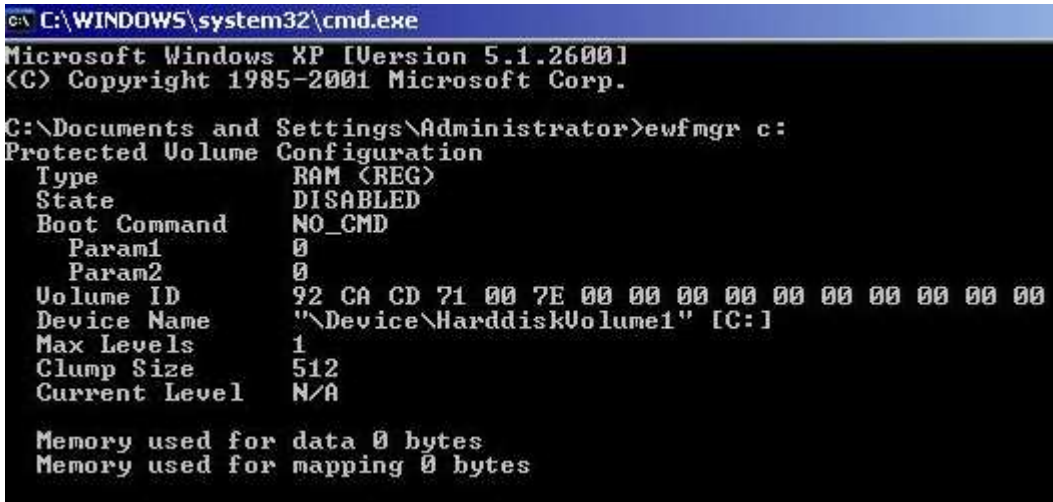
NOTE: The choice is activated after a reboot !!!

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3.2.2 Variant 2

- Launch the DOS-BOX (cmd.exe)

```
"ewfmgr c:" - EWF status
```



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>ewfmgr c:
Protected Volume Configuration
Type                RAM (REG)
State               DISABLED
Boot Command        NO_CMD
  Param1             0
  Param2             0
Volume ID           92 CA CD 71 00 7E 00 00 00 00 00 00 00 00 00
Device Name         "\\Device\HarddiskVolume1" [C:]
Max Levels          1
Clump Size          512
Current Level       N/A

Memory used for data 0 bytes
Memory used for mapping 0 bytes
```

Enable the EWF:

- (1) "ewfmgr c: -enable" -> EWF enable (CF Protection)
- (2) "xpepm -restart" -> reboot the system

Disable the EWF:

- (1) "ewfmgr c: -commitanddisable" -> EWF disabled
- (2) "xpepm -restart" -> reboot the system

3.2.3 Variant 3

- Launch the DOS-BOX (cmd.exe)

Enable the EWF:

* "Ewfon" -> EWF enable (CF Protection)

-> Enable the EWF and make a reboot for activation

Disable the EWF:

* "Ewfoff" -> EWF disable

-> Disable the EWF and make a reboot for activation

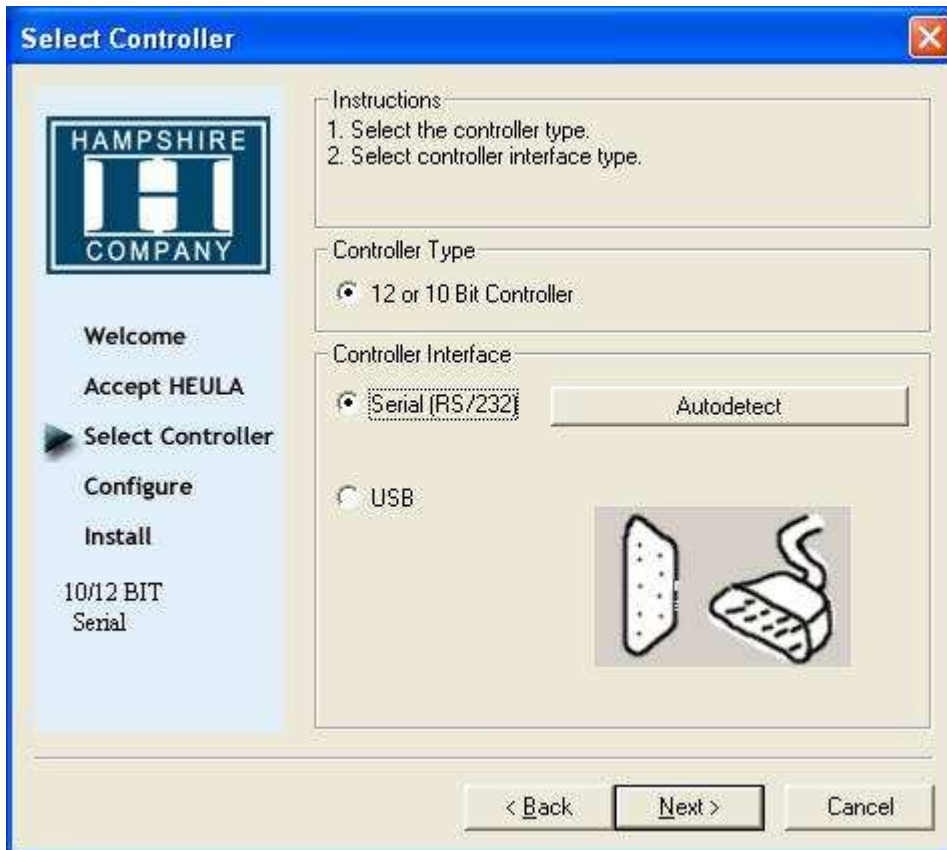
3.3 Howto installation software

- Disable the EWF (see 5.2)
- Reboot the system
- Check the EWF state -> (see 5.1)
- Install software
- Enable the EWF. (see 5.2)
- Reboot des systems.
- Check the EWF state -> (see 5.1)

3.4 Touch installation and calibration

- Disable the EWF (see 5.2)
- Reboot the system
- Check the EWF state -> (see 5.1)
-
- Double click in the folder c:\Tshark620 "setup.exe" icon and follow the directions
- Select Controller (Serial or USB)

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- The data are "c:\tshark620\serial" or "c:\tshark620\usb" saved.
 Note: The file "hidusb.sys" > c:\windows\system32\drivers
 "hidclass.sys" > c:\windows\system32\drivers
 "hid.dll" > c:\windows\system32
 "mouhid.sys" > c:\windows\system32\drivers
 "mouclass.sys" > c:\windows\system32\drivers



- Double click on the "hwincal.exe" icon and follow the directions

- Enable the EWF. (see 5.2)
- Reboot des systems.
- Check the EWF state -> (see 5.1)

3.5 Determination of the xpe Image Version\Revision

- click on Start -> Settings -> Control Panel -> System



- click on "Support information"

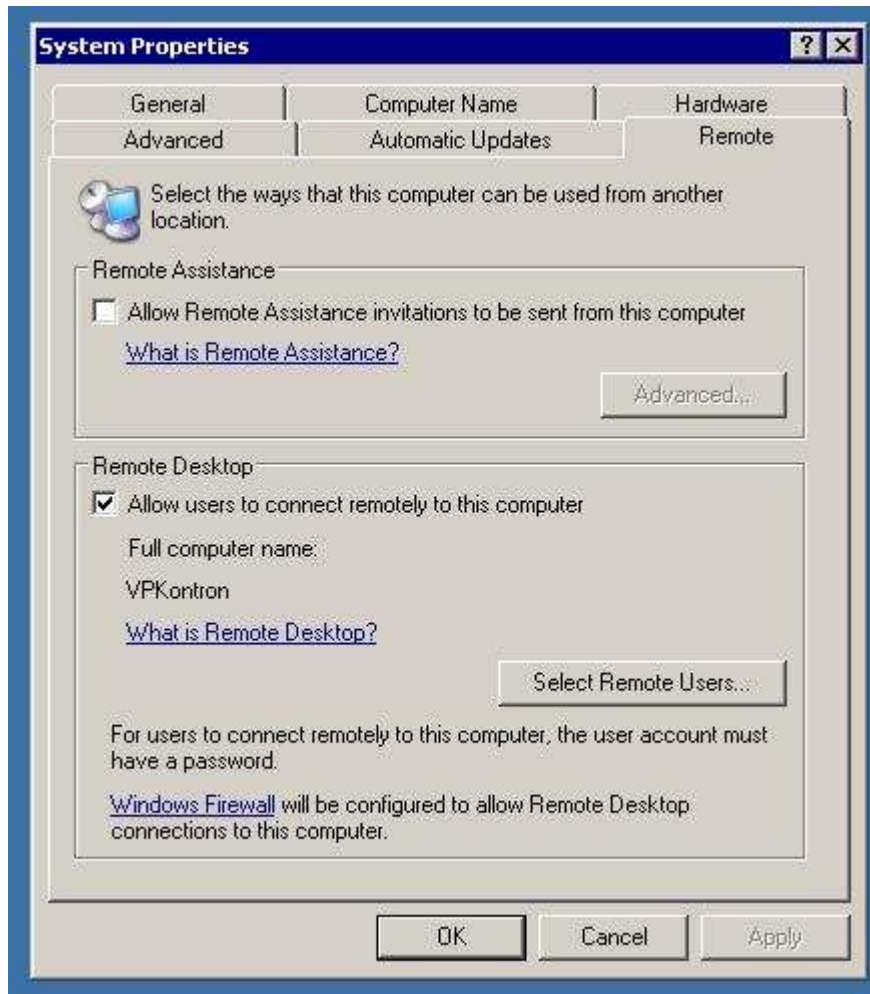


3.6 HOWTTO configure Remotedesktop

3.6.1 Configuration Target:

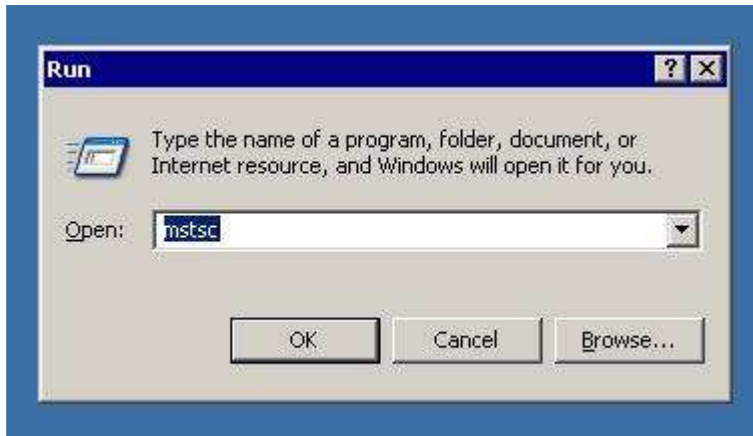
Start -> Settings -> Control Panel -> System -> Remote Desktop

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3.6.2 Start Remote session on Development PC:

- click on Start -> Run -> Launch the Programm “mstsc” -> click on “OK” on the Development PC

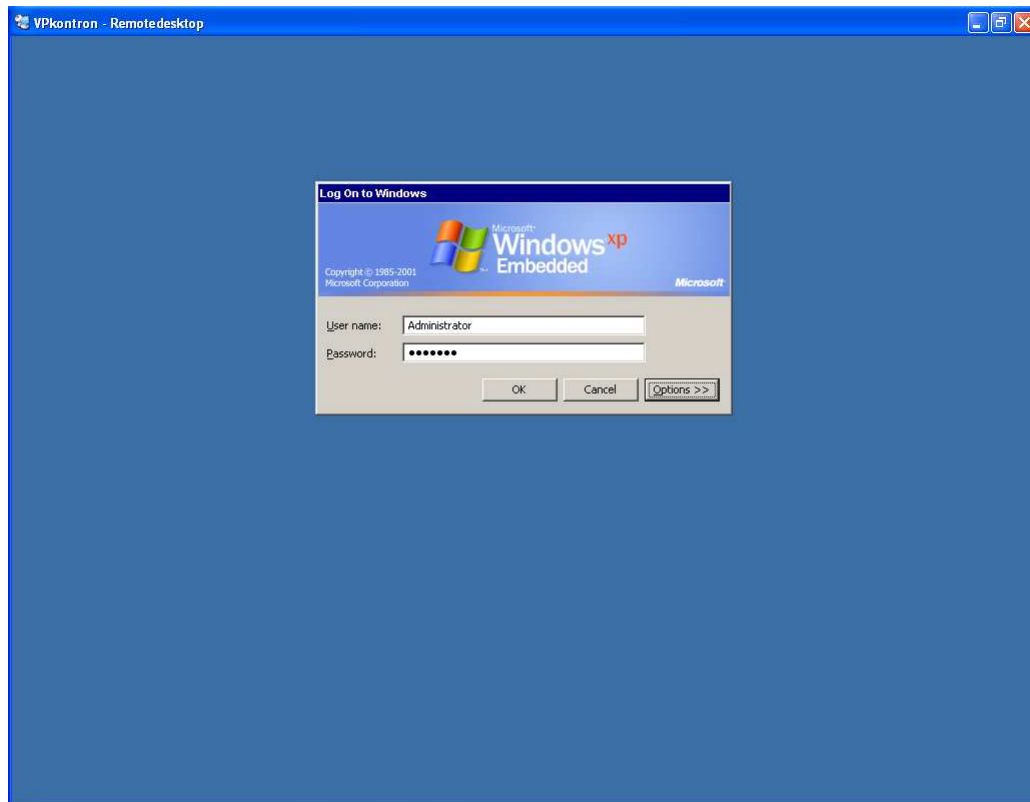


- Remote Desktop Connection is shown
- Write the Computername of the Remote Computer (Target) in the Dialogbox (e.g VPkontron)
- Press “Connect”

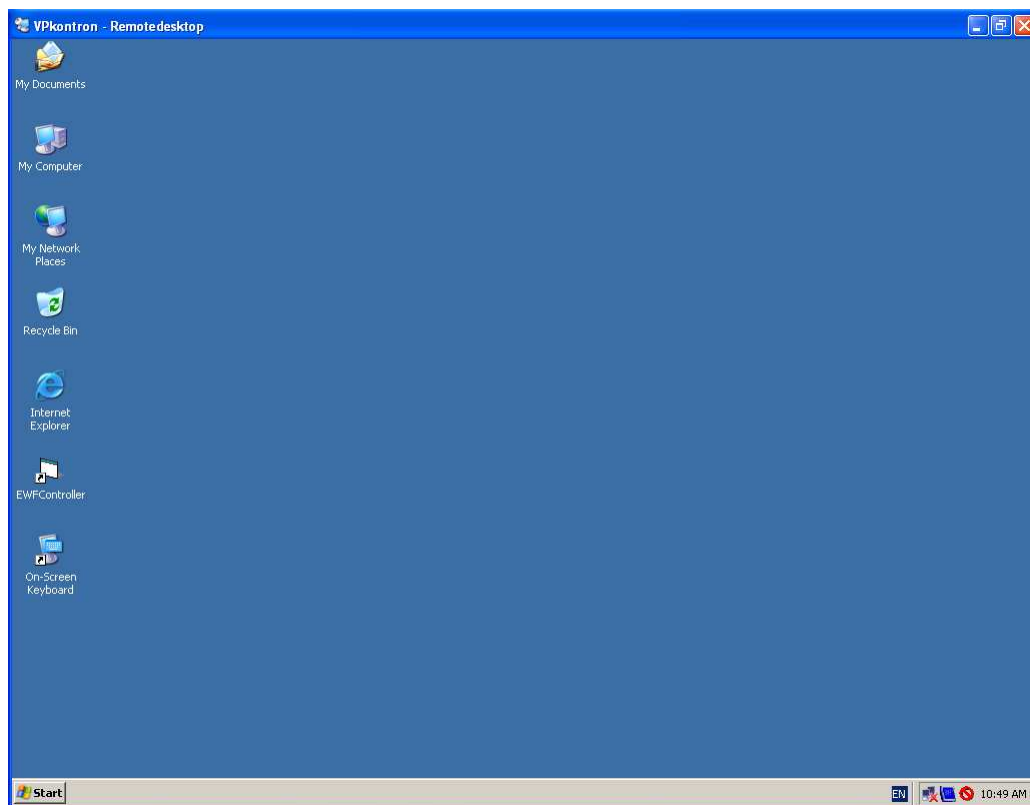


“Log On” to the Remote Desktop

User Name: Administrator
Password : kontron



After the Logon the " Remote Desktop " of the Target appear



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