Virtual Machine for JACoW (JACoW Editor VM)

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on behalf of JACoW

Agenda

- Cumbersome Proceedings Office Setup
- Alternatives?
  - Cloning
  - Combined Installer (MSI/NSIS)
  - ImageX / Windows AIK (Automated Installation Kit)
- The „JACoW Editor VM“
  - Install
  - Activate
  - Uninstall
- Conclusions
- References

Cumbersome Proceedings Office Setup

- During e.g. ICALEPCS '09 we had to set-up all computers manually (takes some hours)
- Sometimes software is missing
- Products are most of the time not configured properly (JACoW-MediaBox, Destiller Settings missing etc.)
- Goal

→ Providing an easy way to setup and configure the machines up front saves the editors time.

→ Enables them to work on more important tasks.

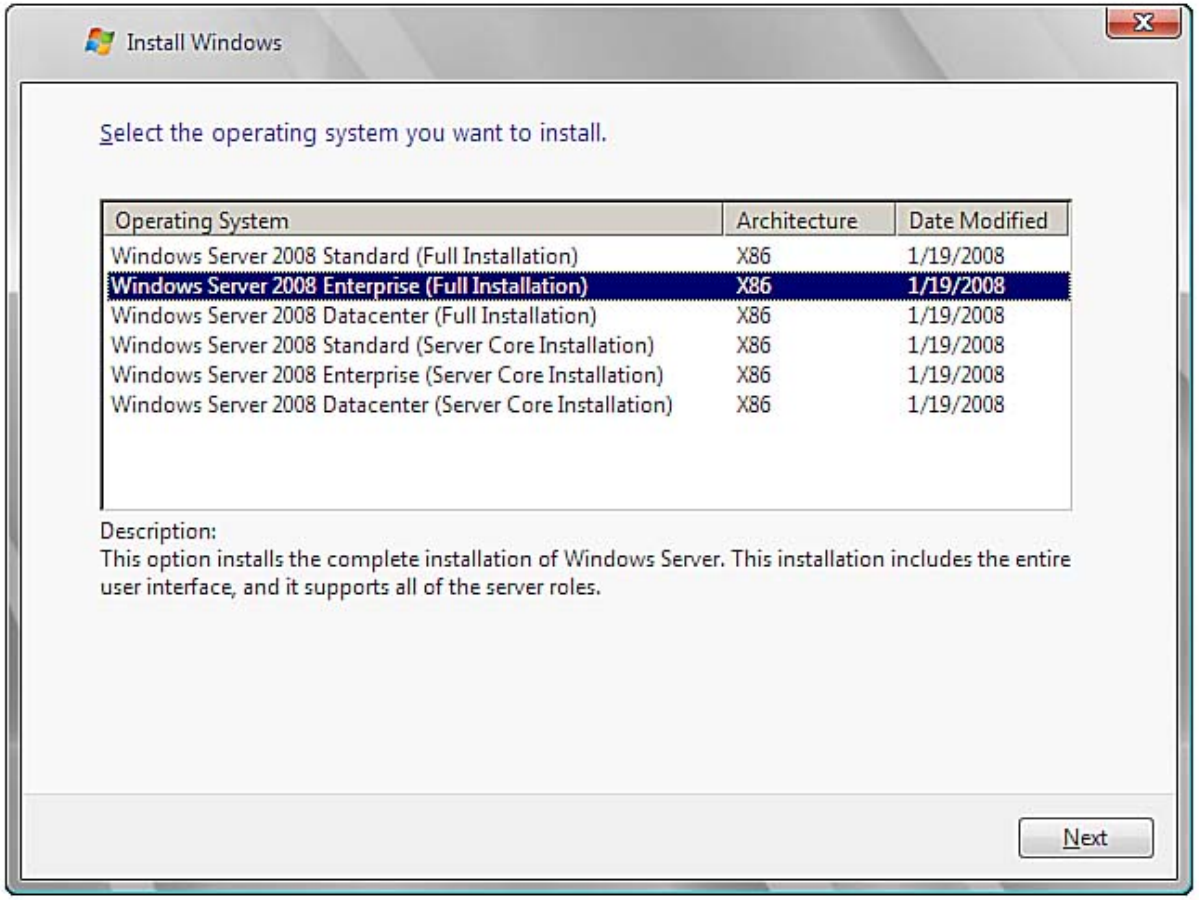
Alternatives
Cloning / Combined Installer

- Cloning
  - Platform dependent
  - At least one machine needs to be setup properly (and sometimes that was already a problem)
- Combined Installer
  - High maintenance
  - Compatibility issues
    - Some software already installed?
    - Platform issues (32/64-bit, Windows/.NET versions) ?

Alternatives
ImageX / Windows AIK (1)

- ImageX / Windows AIK (Automated Installation Kit)
  - Only available for newer Windows versions (Vista / Win7)
  - All computers need to be installed from scratch (also Windows)
    - You can use ImageX only to capture and to apply a full version of the operating system and software applications. You cannot use ImageX to capture and to apply upgrades to the operating system or applications.
  - Complicated image capture process throug a Windows PE environment

Alternatives
ImageX / Windows AIK (2)



A selfmade image would also show up in the OS list.

The „JACoW Editor VM“
Basics

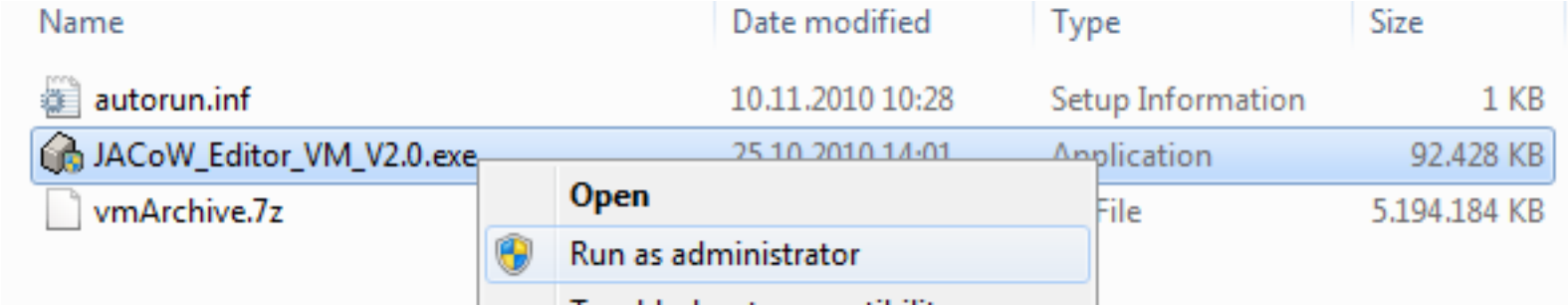
- Virtual Machine (VM) sim-/emulates a real machine
- Programs only see the interfaces of the VM, not of the underlying system
- Based on VMWare's VMPlayer product (free for personal and non-commercial use)
- VMPlayer exists for several platforms (Linux 32/64-bit, Windows 32/64-bit)

The „JACoW Editor VM“
Pre-Installed Software

- Licensed Software
  - Windows XP Professional English (needs serial), Adobe Acrobat 7.x.x (JACoW license), Enfocus PitStop Professional 7.x (JACoW license)
- Free/Open Source
  - JACoW PS Printer Driver, OpenOffice, Mozilla FireFox, GhostScript, GSView, MikTex (2.8), TeXnicCenter, 7-Zip, IrfanView, Paint.NET, JAVA 6, FileZilla FTP, Putty, Defraggler, ImgBurn, Media Player Classic
- 30day Trials
  - Speed Commander, WinEdt, WinZip

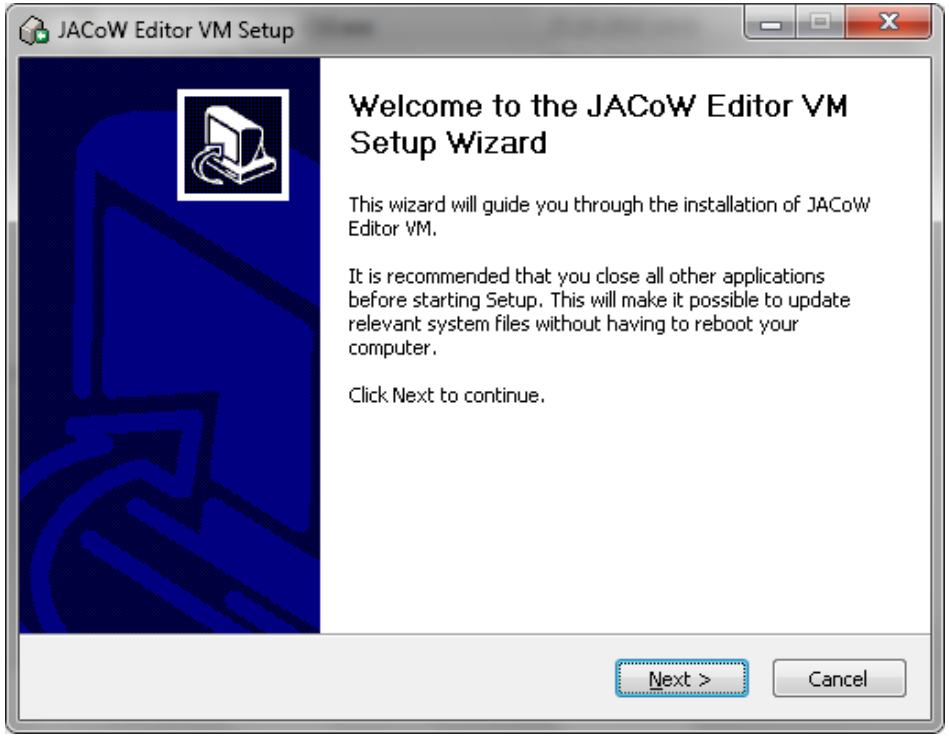
The „JACoW Editor VM“ - Install (1)

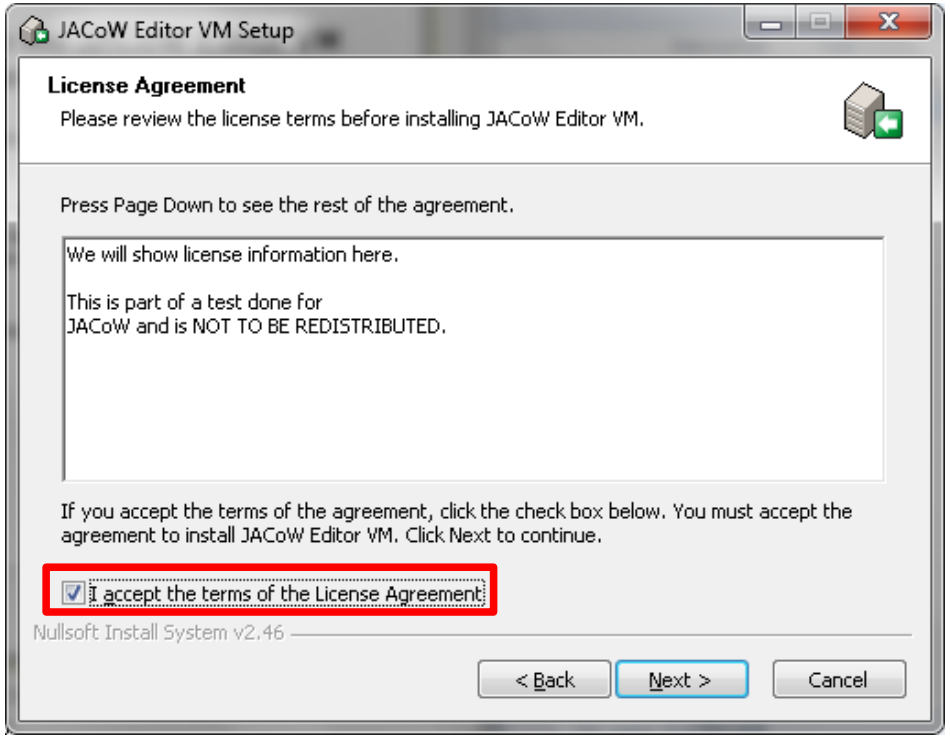
- No download available at the moment (size 6GB)
- Execute the installer through right-clicking it and choose „Run as administrator...“



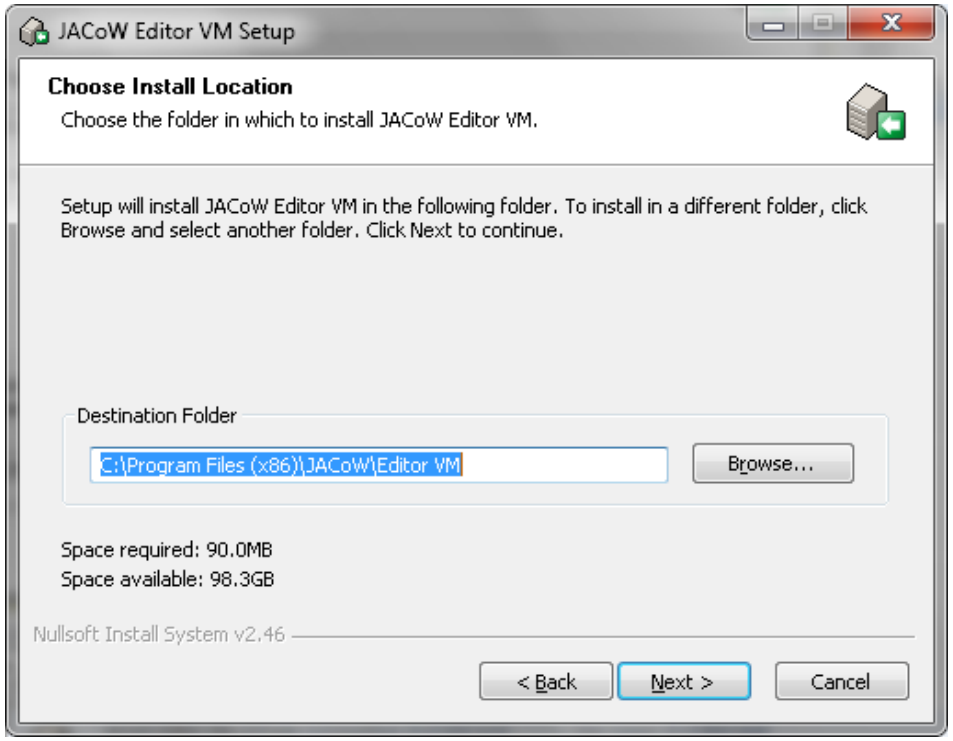
The „JACoW Editor VM“ - Install (2)

- Installing is done through an NSIS step-by-step installer
- Possibility for license information foreseen

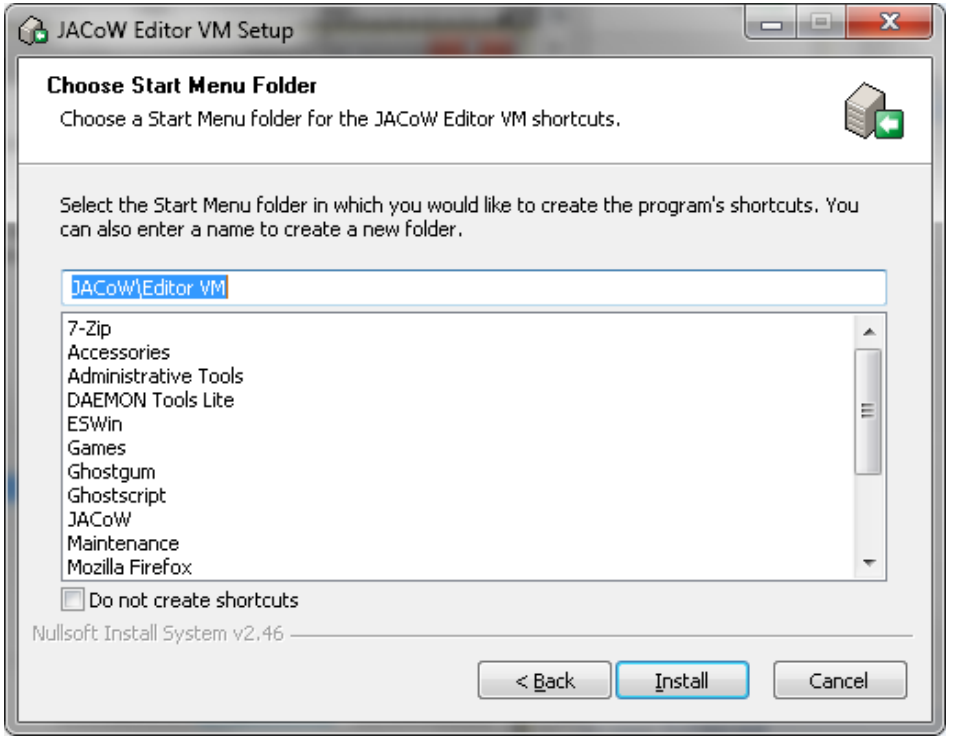




The „JACoW Editor VM“ - Install (3)

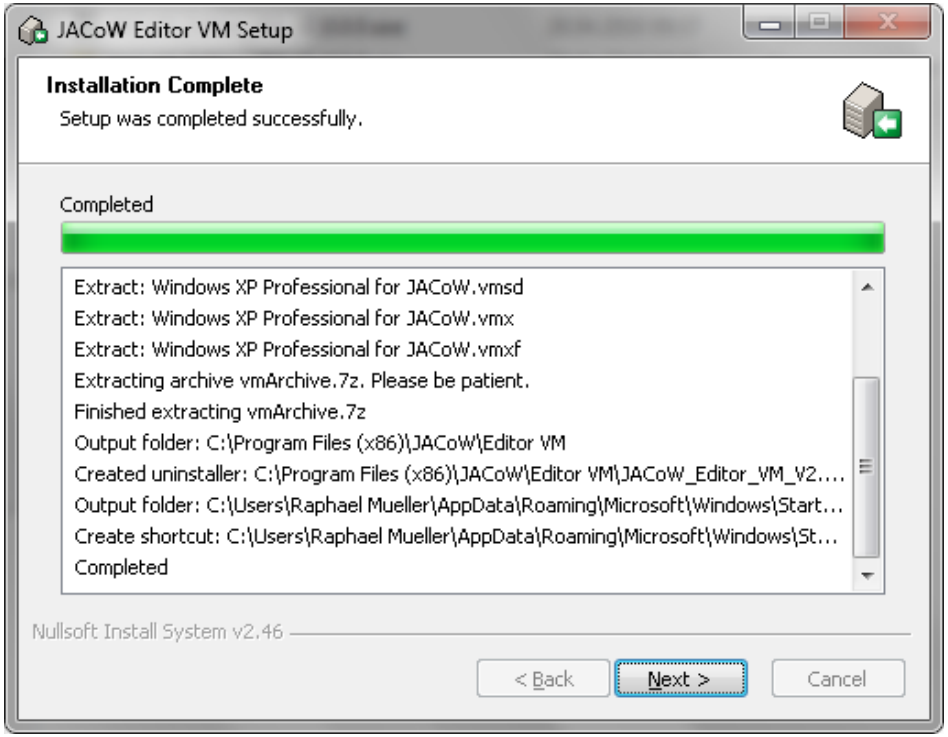


Choose a destination for the VM files

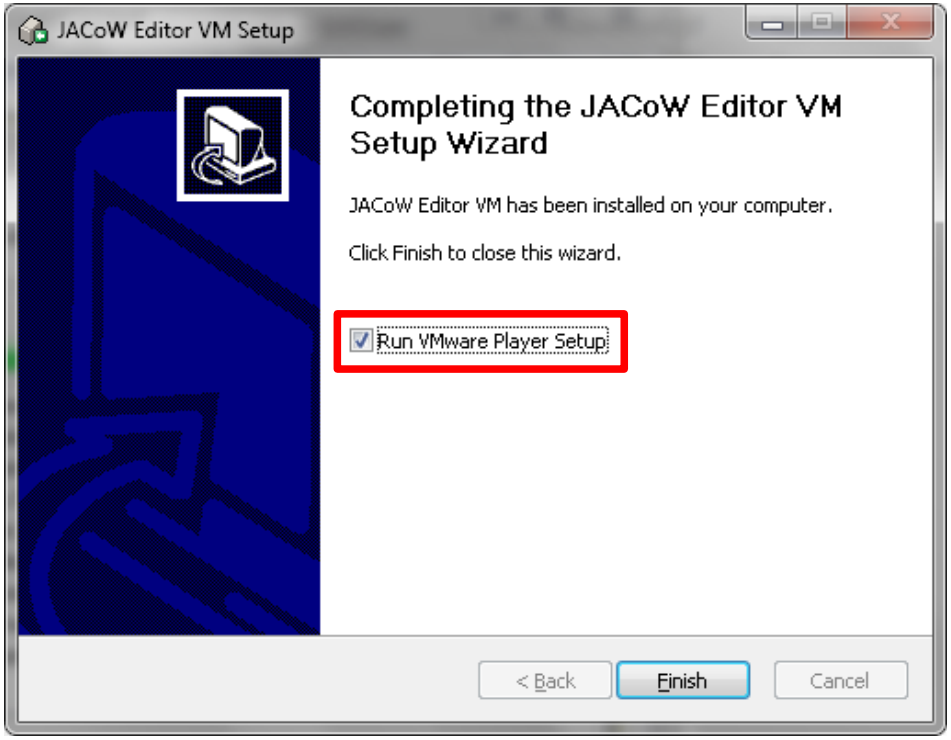


Create Start Menu shortcuts (suggested!)

The „JACoW Editor VM“ - Install (4)

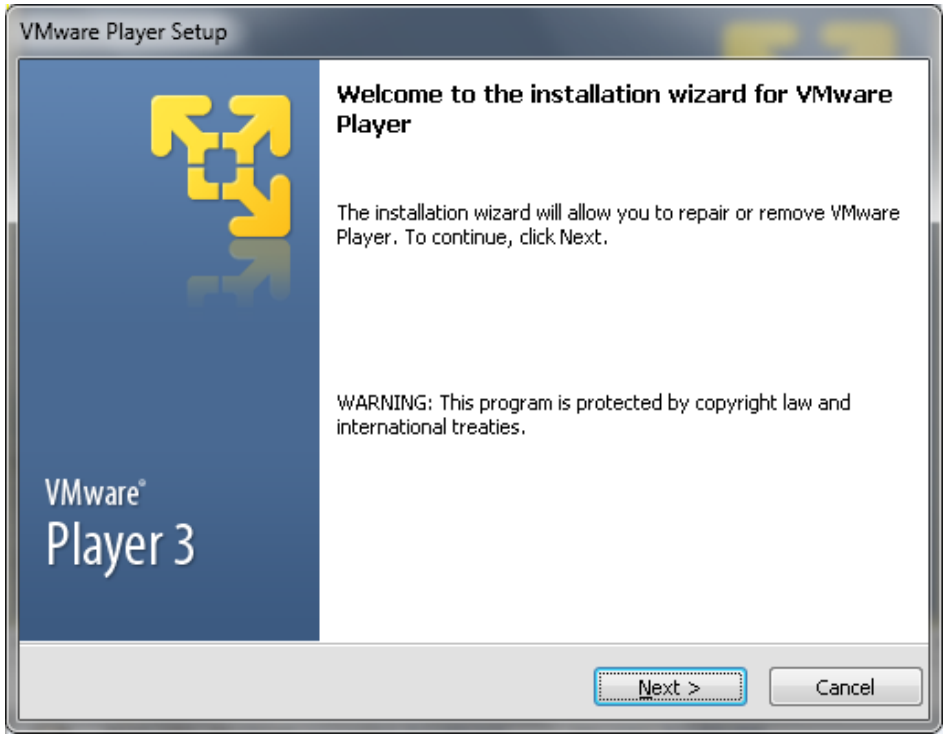


Wait patiently (extracting 6 GB takes time)



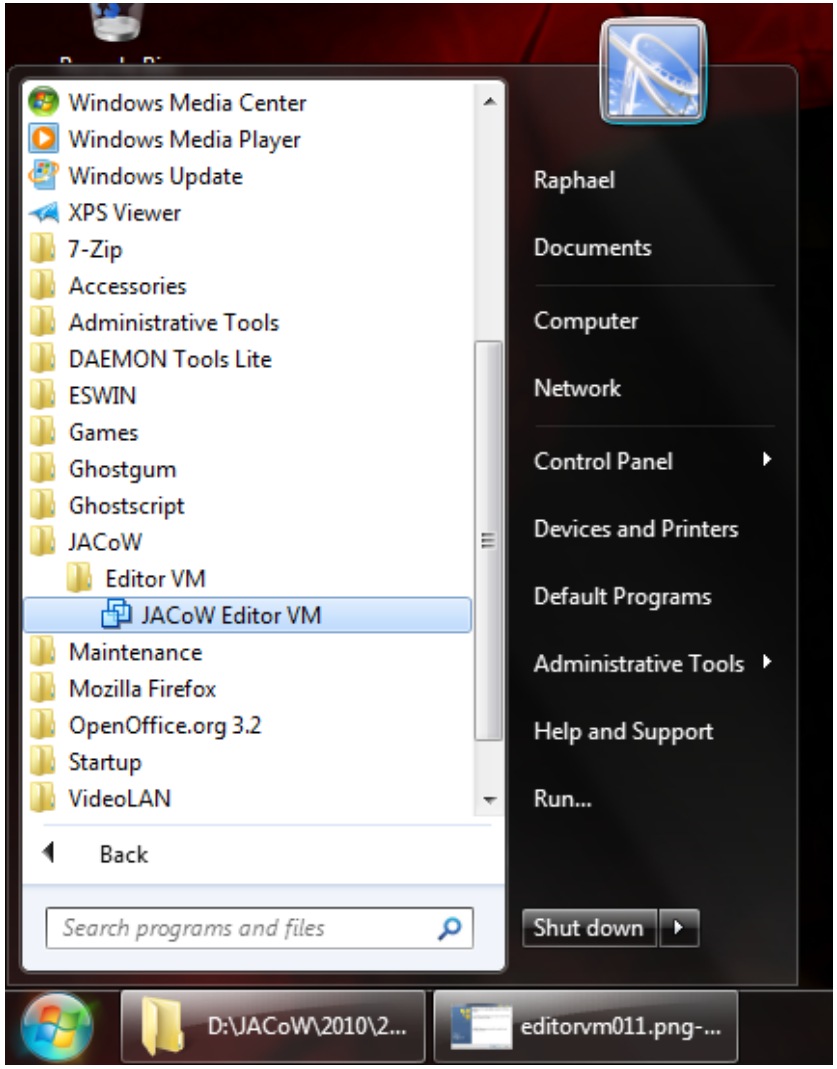
If it is not already installed run also VMware Player Setup

The „JACoW Editor VM“ - Install (5)



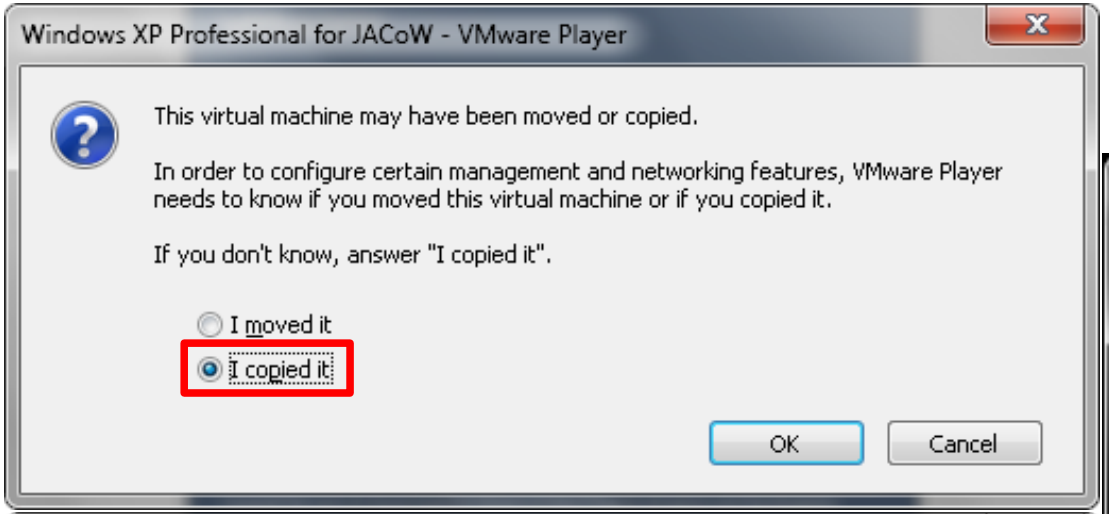
For details on VMplayer setup visit www.vmware.com

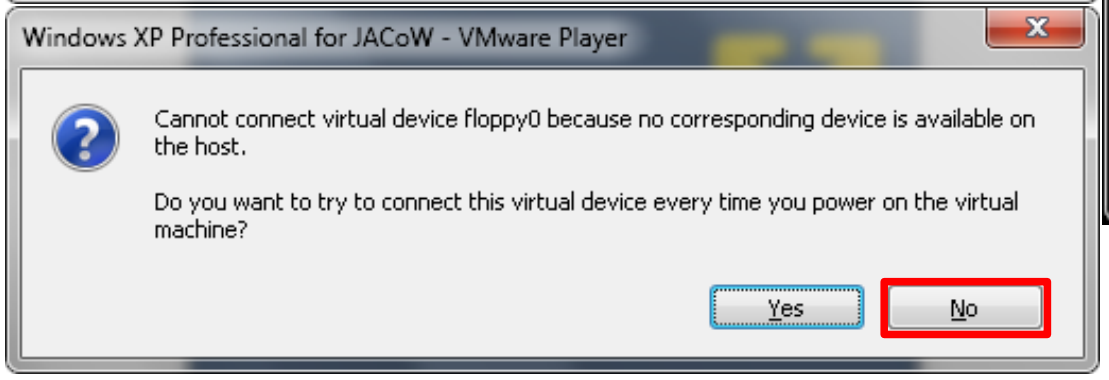
The Result after installing →

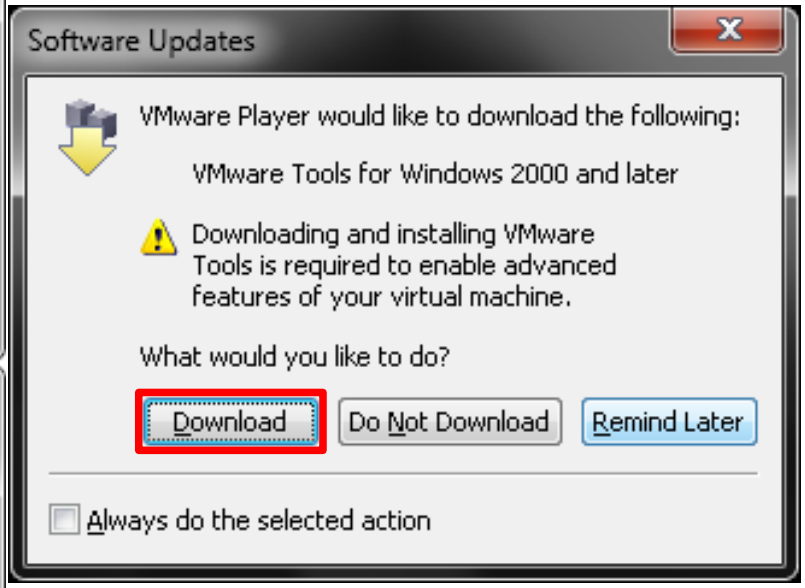


The „JACoW Editor VM“ - Activate (1)

On first startup answer some questions for the VM...

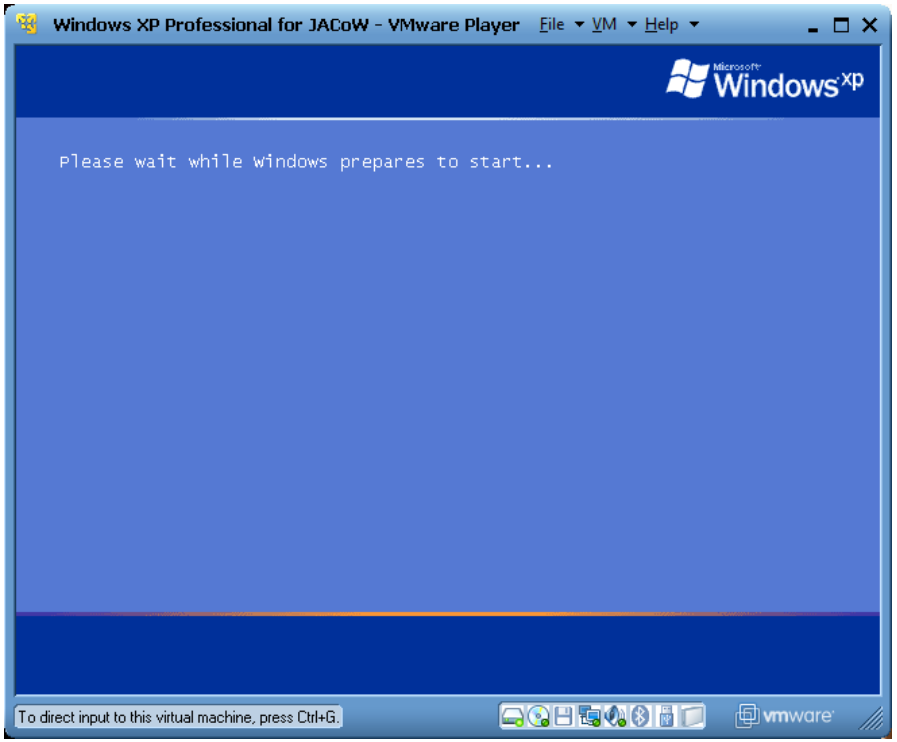






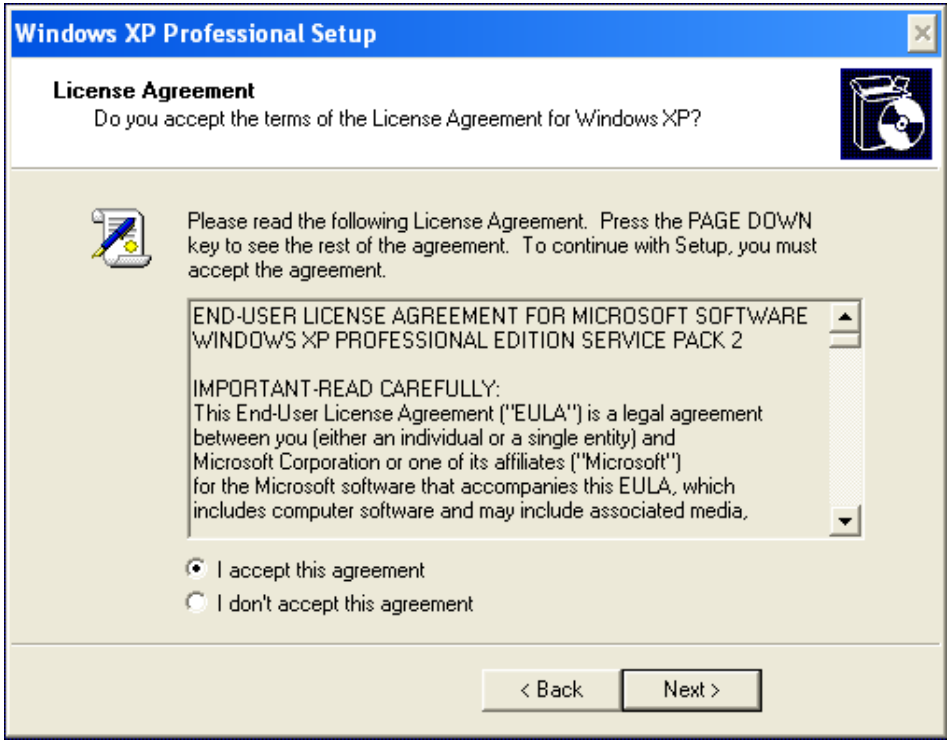
The „JACoW Editor VM“ - Activate (2)

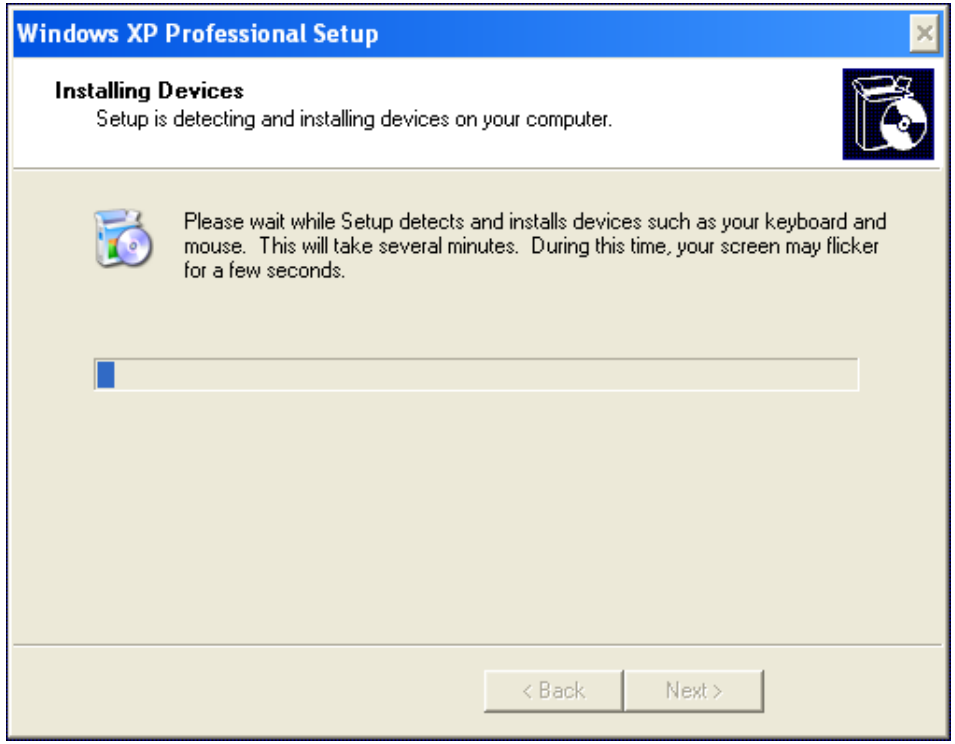
After that a Windows Mini-Setup follows that configures this Windows XP Instance



The „JACoW Editor VM“ - Activate (3)

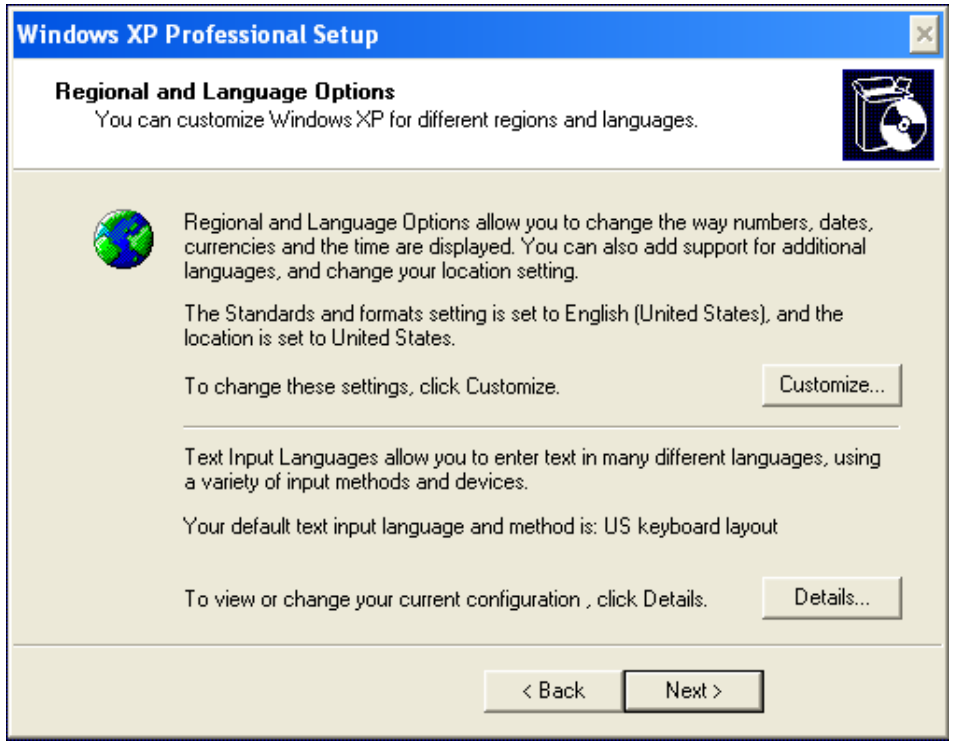
The Mini-Setup asks the common setup questions about EULA and does hardware detection

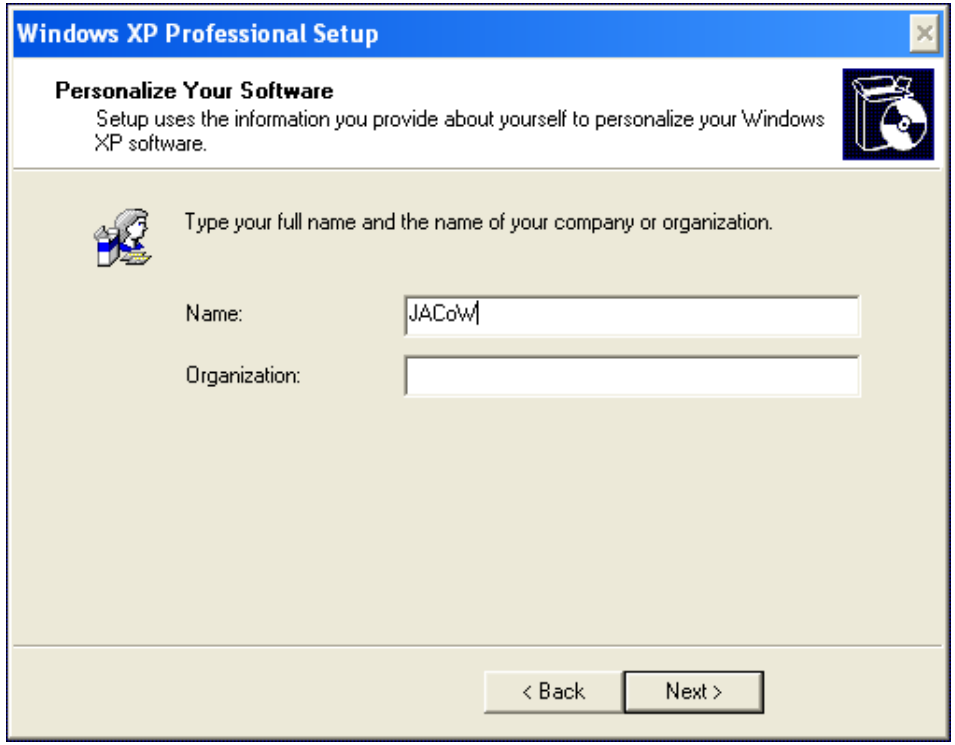




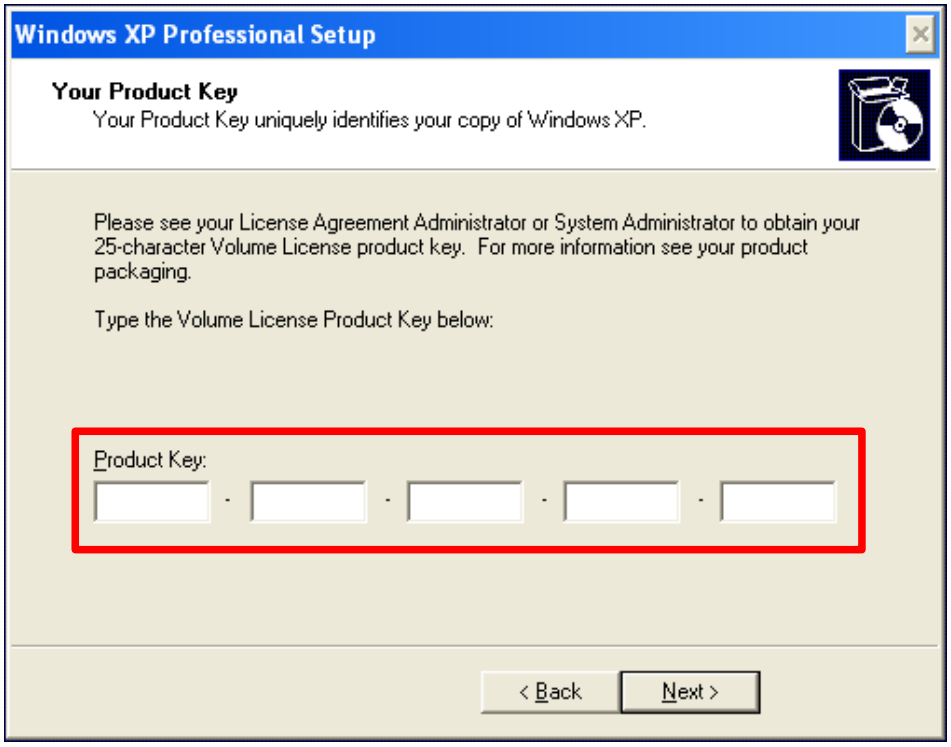
The „JACoW Editor VM“ - Activate (4)

Also setting language (best leave to english) and owner information is required as usual...

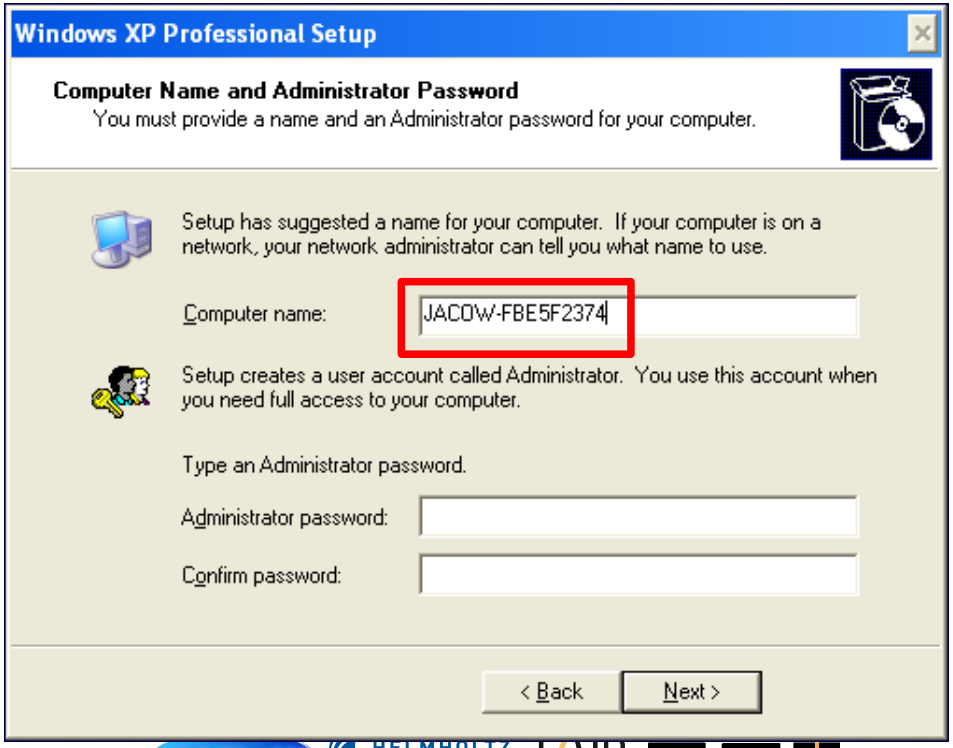




The „JACoW Editor VM“ - Activate (5)



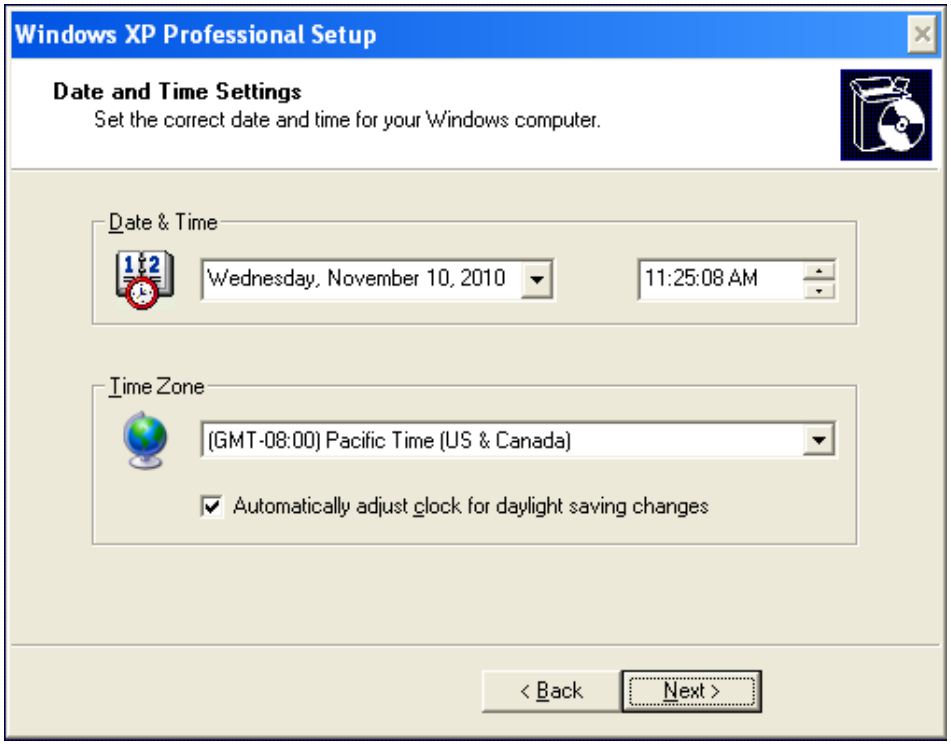
Serial depends on Windows version in VM. At the moment: Windows XP, English, 32-bit

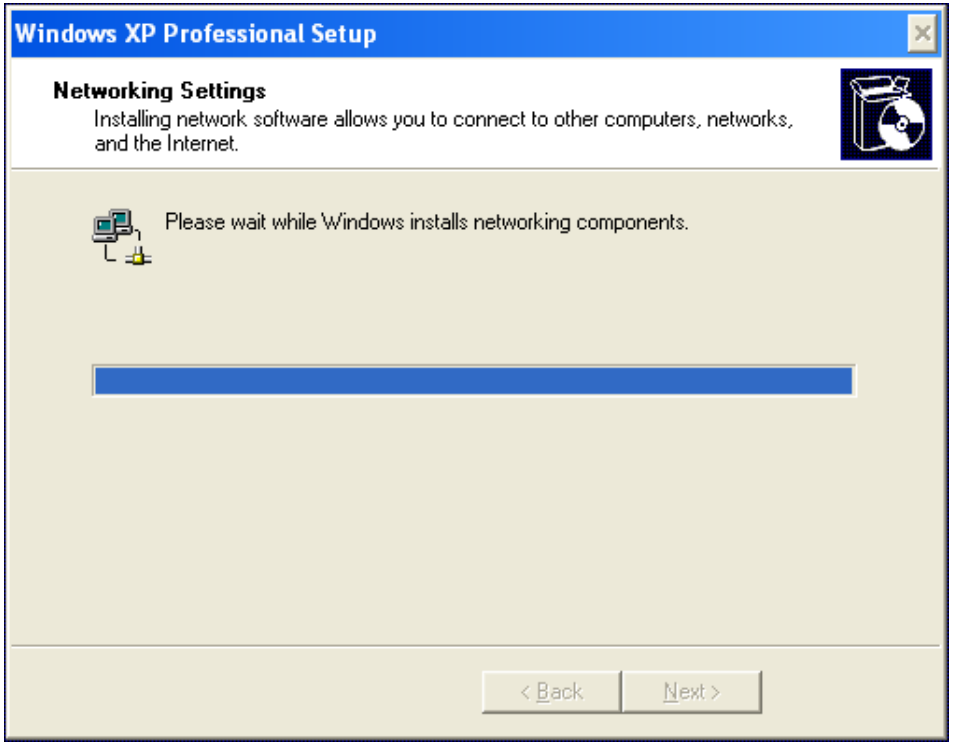


Remember computer name you assign! In case of PitStop licensing problems you need it.

The „JACoW Editor VM“ - Activate (6)

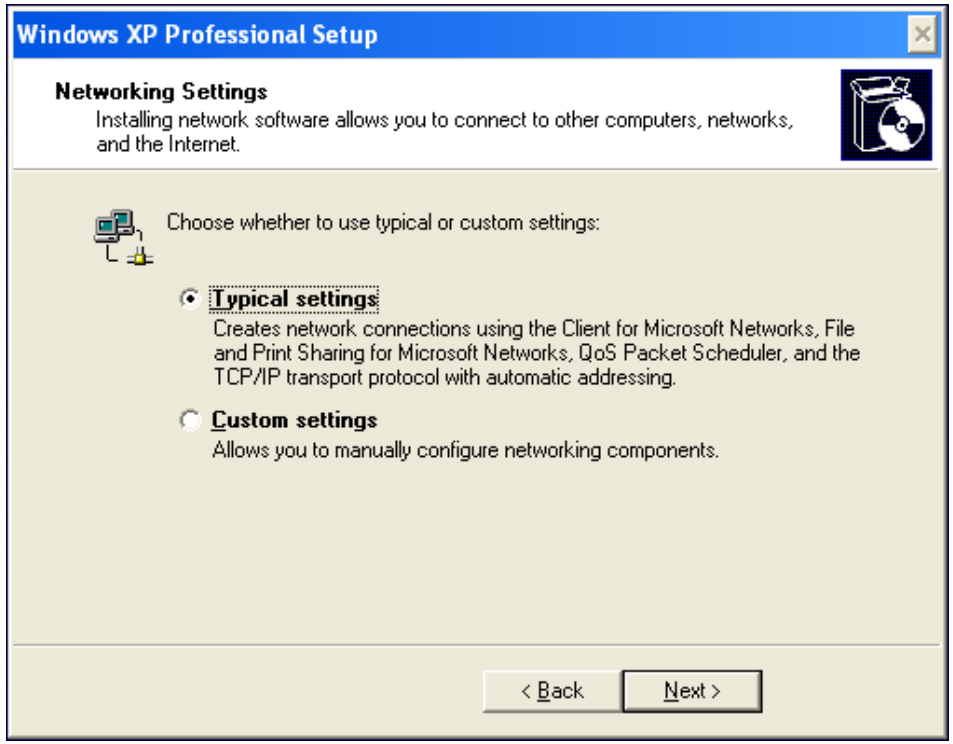
Time and networks settings that you would also specify during a regular Windows installation

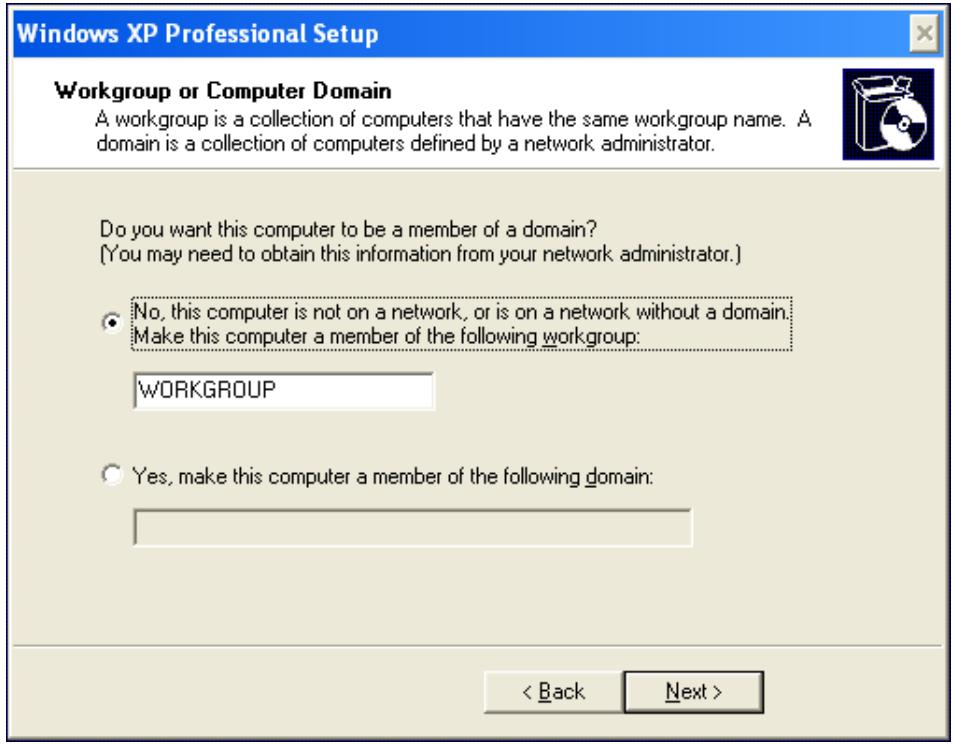




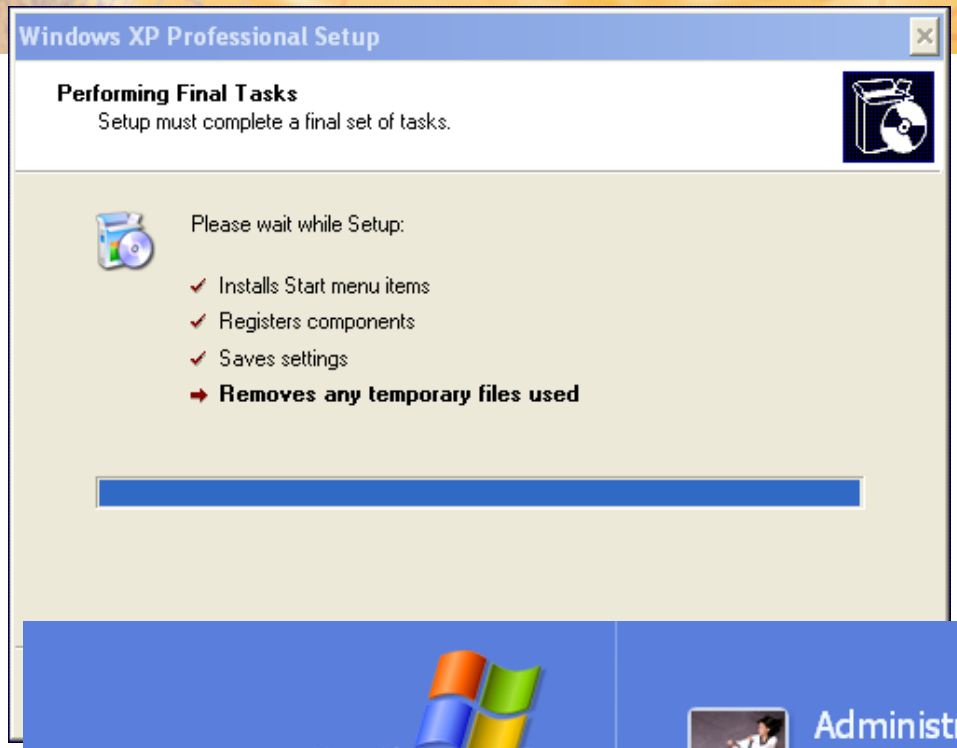
The „JACoW Editor VM“ - Activate (7)

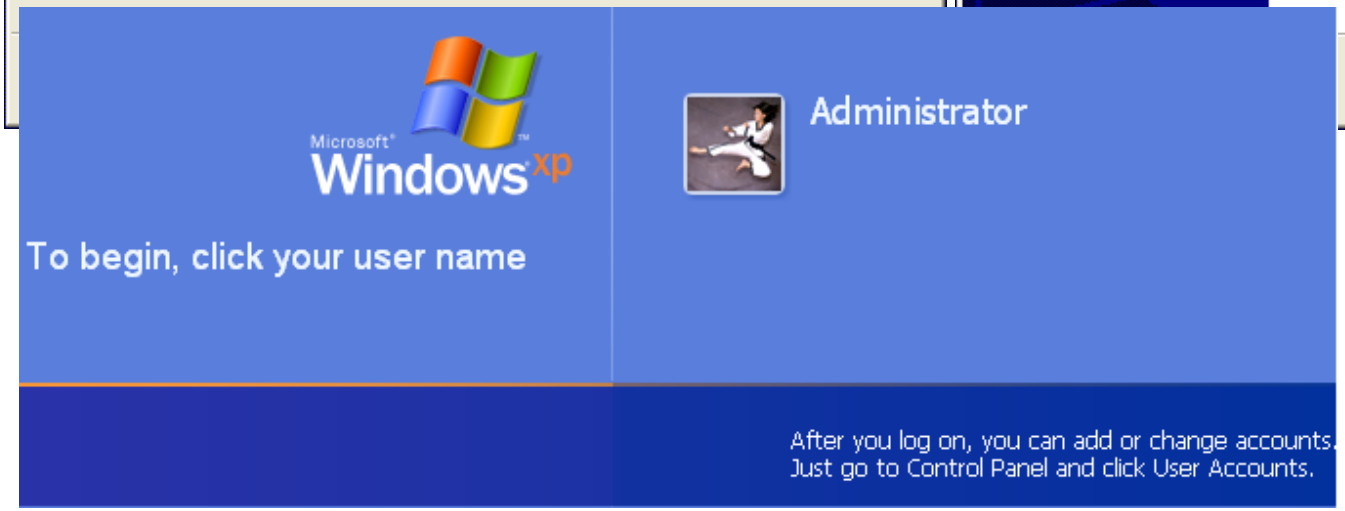
Network details, most of the time the default settings are sufficient.



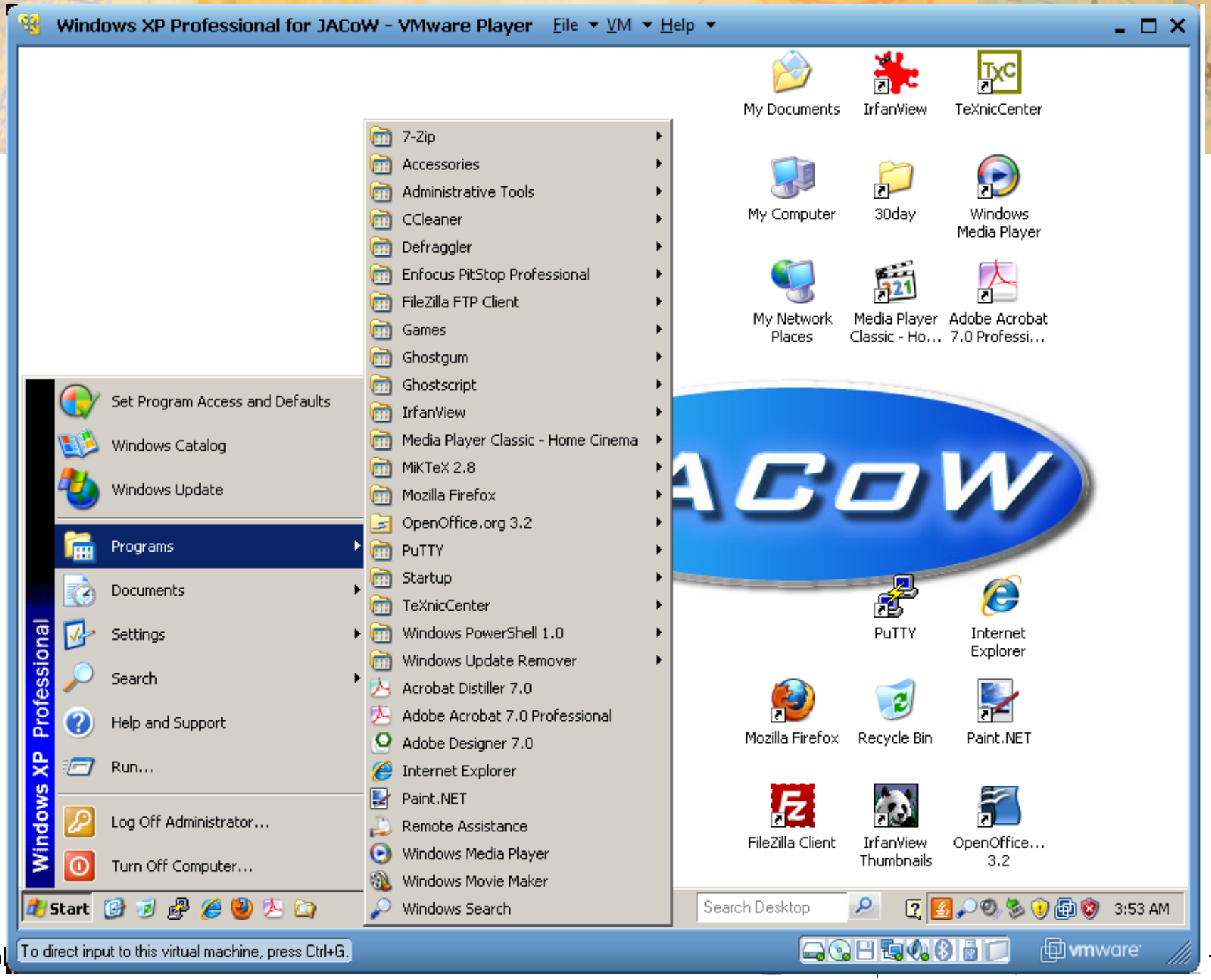


The „JACoW Editor VM“ - Activate (8)

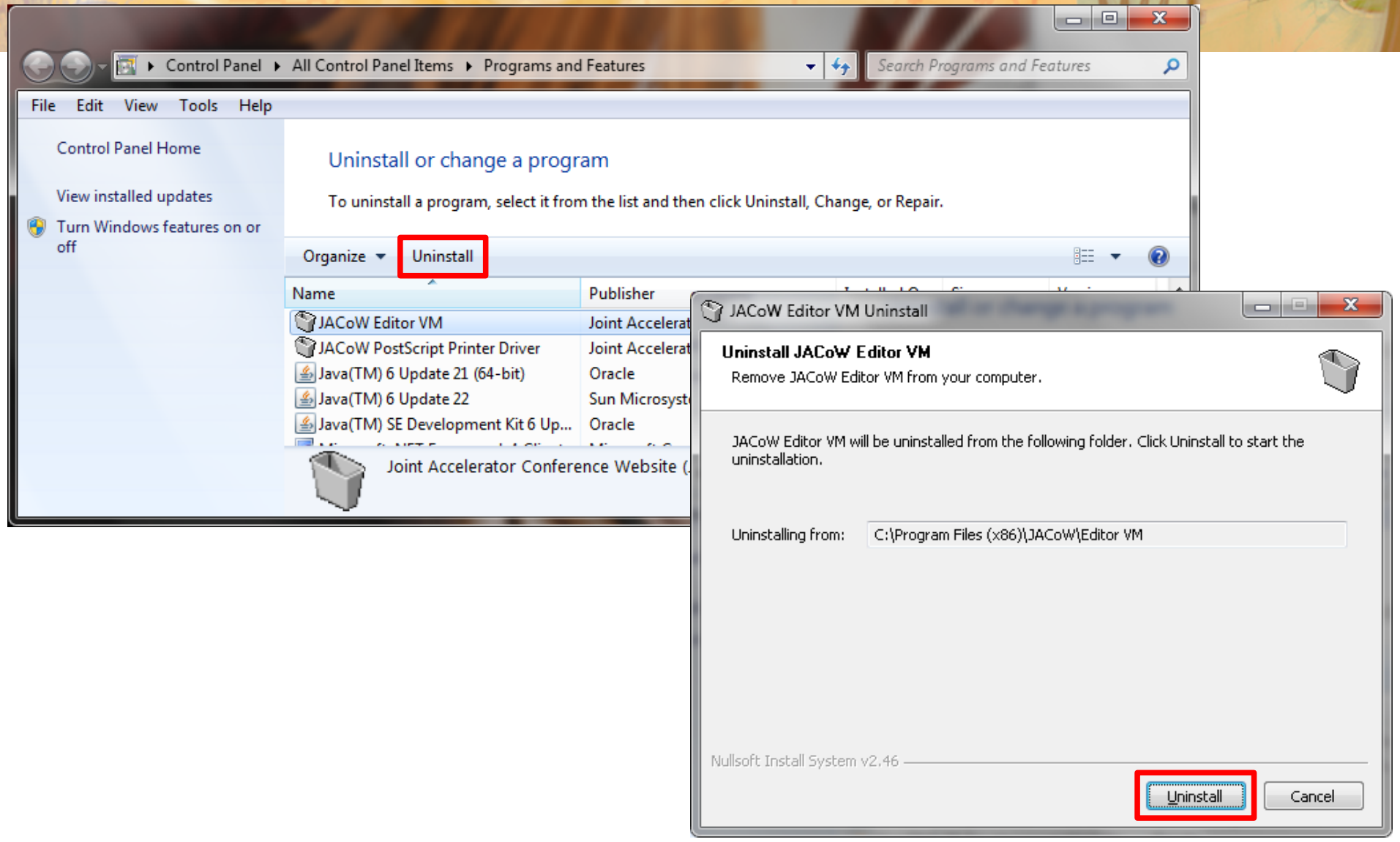




Final stage and logon after restart of the VM.


Windows XP Professional for JACoW - VMware Player
File
VM
Help
My Documents
IrfanView
TeXnicCenter
My Computer
30day
Windows Media Player
My Network Places
Media Player Classic - Ho...
Adobe Acrobat 7.0 Professi...
PuTTY
Internet Explorer
Mozilla Firefox
Recycle Bin
Paint.NET
FileZilla Client
IrfanView Thumbnails
OpenOffice... 3.2
7-Zip
Accessories
Administrative Tools
CCleaner
Defraggler
Enfocus PitStop Professional
FileZilla FTP Client
Games
Ghostgum
Ghostscript
IrfanView
Media Player Classic - Home Cinema
MiKTeX 2.8
Mozilla Firefox
OpenOffice.org 3.2
PuTTY
Startup
TeXnicCenter
Windows PowerShell 1.0
Windows Update Remover
Acrobat Distiller 7.0
Adobe Acrobat 7.0 Professional
Adobe Designer 7.0
Internet Explorer
Paint.NET
Remote Assistance
Windows Media Player
Windows Movie Maker
Windows Search
Set Program Access and Defaults
Windows Catalog
Windows Update
Programs
Documents
Settings
Search
Help and Support
Run...
Log Off Administrator...
Turn Off Computer...
Windows XP Professional
Start
Search Desktop
3:53 AM
To direct input to this virtual machine, press Ctrl+G.
vmware

The „JACoW Editor VM“ - Uninstall



Conclusions (1)

- Done
  - Created a sealed Virtual Machine Image with Windows XP Pro & Editor Software using VMWare Player
  - Created an installer for easy setup of VMWare Player & the VM
  - Testing was done on Win7/Vista/XP

    Windows XP 32bit @ Intel Core2Duo E8400, 2GB
    Vista 64bit @ AMD Neo 1.6 Ghz (single core), 2GB
    Windows 7 32bit @ Intel Core2Quad Q6600, 4GB
    Windows 7 64bit @ AMD Neo 1.6 Ghz (single core), 2GB
  - Successfull used at FEL '10 (only ?)

Conclusions (2)

- ToDo
  - Further investigation of licensing issues (e.g. what about XP licenses)
  - XP Serials are bound to language, platform and version only specific serials (English & 32-bit & Professional) work for activating the current VM
  - Preparing the OS for deployment (SysPrep) removes some configuration (solution needed)
  - Test alternative virutalization tools (VirtualBox, qemu, ...)

Questions?

References

- **Clonezilla**
  http://clonezilla.org/
- **nullsoft scriptable install system**
  http://nsis.sourceforge.net/Main_Page
- **Windows Installer**
  http://msdn.microsoft.com/de-de/library/cc185688.aspx
- **Windows Automated Installation Kit**
  http://www.microsoft.com/downloads/en/details.aspx?displaylang=en&FamilyID=c7d4bc6d-15f3-4284-9123-679830d629f2
- **VMWare Player**
  http://www.vmware.com/products/player/