Preparing a Kiosk Virtual Machine for the Field (Windows 10 Pro)

Prepare the Server's Operating System

- Make sure you have finished the preparational steps for the server machine.
- Make sure your server has an energy setting that does not hibernate or fall asleep in any other way, at least while you are running the virtual machine. That the screen switches off to save battery is okay, though.
- Plug in all the equipment you got from the Kiosk team as described elsewhere. This should include:
    - The router powered on and connected with a LAN cable to the USB-Hub
    - The VM hard drive
    - The backup hard drive
    - If your computer can be charged via USB-C, connect the charger to the hub (There should be a PD or Power Delivery slot) instead of the computer.
    - Finally: The USB hub connected to your computer

- Give the equipment and the OS some time to power up (the router needs a minute or so).
- Go to your network settings, e.g. by pressing Windows Key + X and then select Network Connections
- Under "Status" you should see an active Ethernet Connection
- Go to "properties" on that one.
- First of all make sure it is the right one: scroll all the way down to "Properties" and make sure the ip address starts with 192.168.8 (in rare cases your server fact sheet might point to some other local sub network).
- Down there under Properties you also see the description and manufacturer of the Ethernet adapter. Might be something like ASIX and ASIX AX88179A or so. Memorize that one because you will need it later again.
- If you got the right one, turn it into a Private Network. That's somewhere on top of the properties page.
- Now you can close the Network settings.

Configure Hard Drives and Drive Letters

- You should have two hard drives connected to your computer: A hard drive that holds the Kiosk Virtual machine and a backup hard drive for Kiosk. Unfortunately Windows assigns whatever drive letters are available at the moment when you plug those hard drives in. To make sure that Windows does not change those drive letters all the time (e.g. because you have an additional SD card plugged in or a USB stick), it makes sense to assign distinct drive letters.

- To do that go to Disk Management (Windows Key + X, Disk Management or just Windows Key and then type Disk Management, which leads to "Create and Format Hard Disk Partitions", which is the same thing)
- When Disk Management is open, find the disk that holds the kiosk vm in the lower list. It should be called something like "kiosk_vm" and it should have some drive letter assigned. Click on the part that shows the drive letter with the right mouse key to get a context menu.
- Choose "Change Drive Letter and Paths"
- Click on the current drive letter and choose "Change…"
- Select "Y" as a drive letter. If Y is not in the list, choose as high a letter as possible, so try X or W etc. Jot down that drive letter. It is your virtual machine drive in Windows.
- Do the same thing with the backup drive (usually called something like "kioskbackup") and try to give it a Z: if possible. That the backup drive comes after the virtual machine drive is only a convention. Just make sure you don't confuse them later.
- You can leave the Disk Management now.
- Let's check the drives. Hit windows+R and type z:\ (or whatever your backupdrive was assigned) and Enter. You should get a windows explorer windows showing a backup folder and perhaps a kiosk_install folder. Look at y:\ (or your drive letter for the kiosk vm drive) and make sure you see a VM folder.

Add the Virtual Machine to Virtual Box Manager
- Start Virtual Box 7.
- From the Menu choose "Machine" and then "Add…"
- On the Virtual Machine SSD (y: if you follow our convention) select the folder "vm" and in there open the "kiosk_vm_windows.vbox". A file with the extension .vbox is a VirtualBox virtual machine. There might also be a Virtual Machine for Mac OS in the same folder.
- It should show up now in the list of the Virtual Box Manager

Configure the Virtual Machine
- Right-click on the virtual machine and select "settings" from the context menu.
- Go to network.
- It should be set to "Bridged Adapter"
- Select the network interface that you remember from earlier from the list in "name", e.G. ASIX AX88179A …
- Now select "shared folders"
- There should be two shared folders in the list: kioskbackup and shared.
- Double-click on "kioskbackup" and set the path to z:\ if z is your backup drive letter, otherwise use what you choose as backup drive letter. The folder name should stay being "kioskbackup".
- Double-click on "shared" and set the path to y:\vm\shared if y is your kiosk vm drive letter, otherwise use what you choose as backup drive letter. Keep "shared" as folder name.
- You can leave the settings now with Ok.

First Start of the Virtual Machine

- Make sure that you don't have a ton of apps running in the background on your machine. Things like Adobe software, Browsers etc. eat up resources and processor speed. It makes sense to restart your machine if things seem slow.
- **Switch off Wifi**. (Always make sure that Wi-Fi is turned off while you run the virtual machine and NEVER connect the server itself to the Wi-Fi "kiosknet").
- Start your Virtual Machine.
- Particularly the first start can take a bit. But in general, don't be impatient when starting the VM, it can take up to 5 Minutes.
- Once the VM is responsive activate the Desktop (Windows+D). You should see an IP Address like 192.168.2.1 in the lower right corner as part of the desktop background. If it does not start with 192.168 the machine won't work. Something with the network settings in virtual box manager must be wrong. Memorize the ip address in the lower right corner. If kiosk does not respond under http://kiosk you can use that one instead.
- You also find two links to the drives on the desktop: "backup drive" and "shared folder". Click on them. Windows should properly open the backup drive (with its backup folder in the root) and the share folder drive, which should show you a folder "file_repository".

Check date and time of your Virtual Machine

- It is crucial to have the same date, time and time zone settings on your virtual machine and your iPads. Make sure all devices are set to the local time of your excavation area.
- On Windows use Windows-Key+X, "Settings" and type "date" in the search field. Windows will offer "Change the date and time". Use that to change your date and time. Don't use the automatic time adjustment, it is not reliable. Set date, time and time zone manually. You may leave the setting for daylight savings on auto.
- Leave the settings: You are ready for your first contact to Kiosk.

First Contact to Kiosk

- Take an iPad or computer and connect it to the kiosknet Wi-Fi (avoid the 2.4G version unless you have a rather old device).
- Fire up a browser and go to the address `http://kiosk`. The kiosk login should appear.
- If that's not the case try the ip address you found on the VM's desktop like this: `http://192.168.8.1`

Shut down

- ALWAYS shut down the virtual machine before you switch off the computer or plug out equipment. You can do that easily by hitting the big red "shutdown" button on the VM's desktop.
- As is general the case: ALWAYS eject the hard drives from your Windows Host OS (so not the one in the virtual machine because that should be powered off already) before you unplug them. If you don't know how to do that, either just shut down the whole computer and unplug while it is off or read the instructions on the topic in our Answers to questions manual doc: "How to eject a usb hard drive on Windows PROPERLY".