Preparing a Kiosk Virtual Machine for the Field (Apple MacOS)

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).
- Switch off WiFi on the Mac.
- On MacOS go to the system settings and then "network".
  - You should find a "connected" network interface in there. Unfortunately, network interfaces are not very well named. E.g. you'll find the Cable Creation network interface as something like "ax88179a". Given that WiFi is disconnected there should only be one network adapter shown as "connected", so that way it should be easiest to find the right one.
  - Once you have found a connected adapter, remember its name (you'll need it again in a later step), and go all the way down in the list. There is a "…" button with an option "set service order".
  - Choose the name of your connected adapter and drag & drop the adapter to a position so that it is right above your WiFi network adapter. That makes sure that all network requests will be routed to the LAN network adapter first.
  - Make sure you leave the dialog with "ok" and then you can close the system settings.

Add the Virtual Machine
- Start Virtual Box 7.
- From the Menu choose "Machine" and then "Add…"
- On the Virtual Machine SSD (might be called kiosk_vm) select the folder "vm" and in there open the "kiosk_vm_macos.vbox". A file with the extension .vbox is a VirtualBox virtual machine.
- 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".
- Now select "shared folders"
- There should be two shared folders in the list: kioskbackup and shared pointing to the kioskbackup drive and the folder "shared" on the kioskvm drive.
- Leave with Ok.

First Start of the Virtual Machine

- Make sure that you don't have a ton of apps running in the background on MacOS. Things like Adobe software, Browsers etc. eat up resources and processor speed. It makes sense to restart your machine if things seem too slow.
- **Switch off Wifi**. (Always make sure that WiFi is turned off while you run the virtual machine and NEVER connect the server itself to the WiFi "kiosknet").
- Start your Virtual Machine.
- You might be asked for permissions by MacOS during the first start. Make sure to always allow things.
- 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 (we are now on the OS running in the virtual machine) with Windows+D (which is right ⌘ (Command) +x on a Mac).
- You should see an IP Address like 192.168.8.2 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://192.168.8.2`

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".