

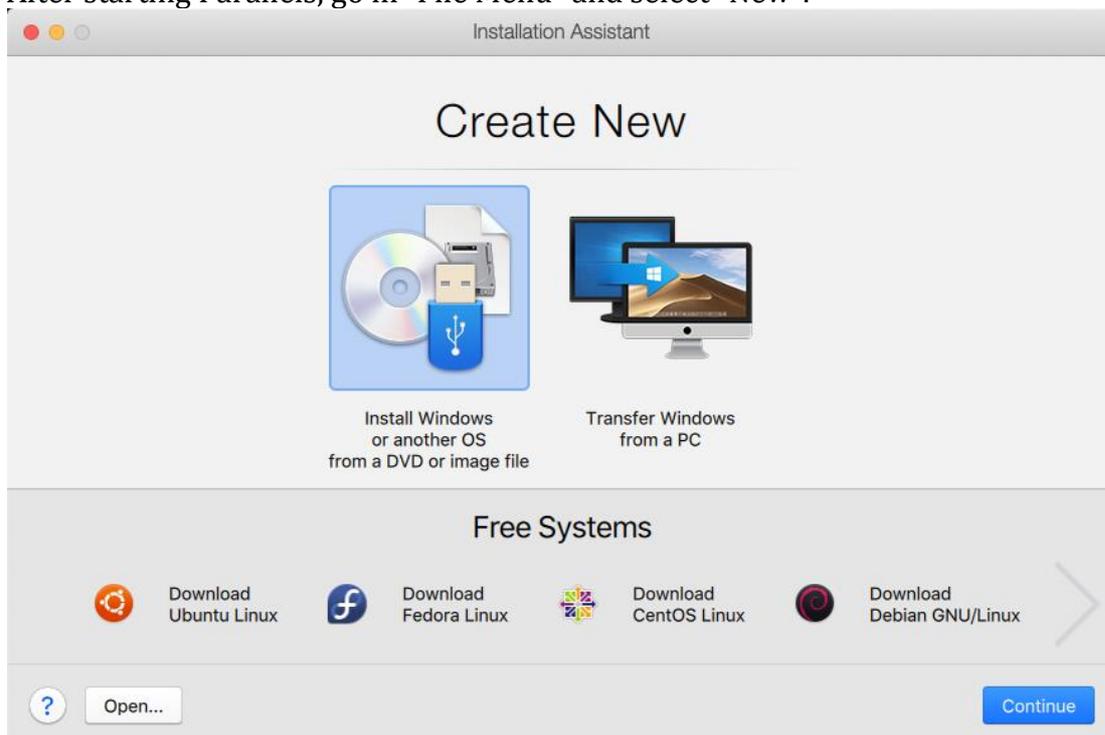
# Installing NICE Windows under Parallels for Mac

## 1. Prerequisites

- a) A Mac with OS X connected to a **portable socket** on the CERN general public network.
- b) Parallels Desktop software installed from the [Mac Self-Service](#)

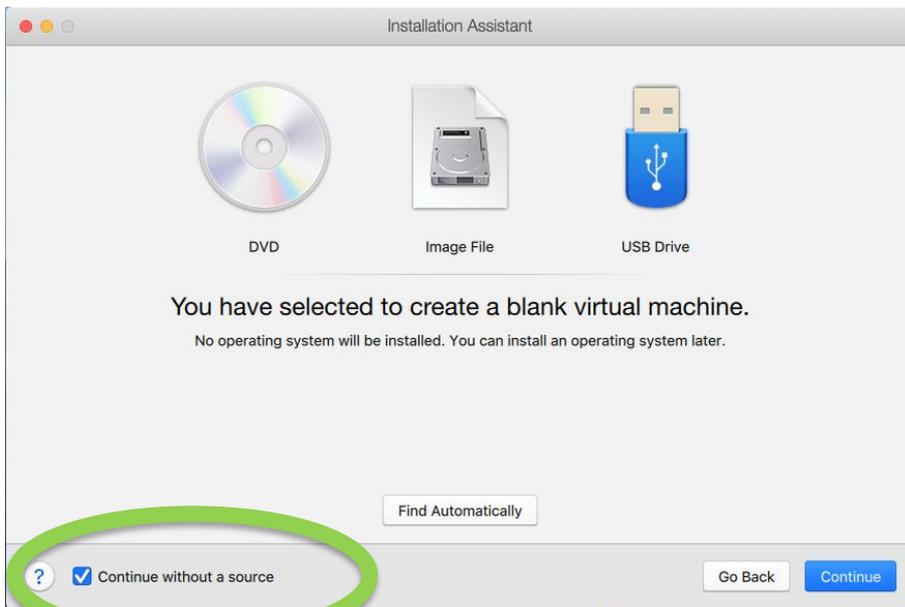
## 2. Creating a Virtual Machine (VM) in Parallels with the correct settings

- a) After starting Parallels, go in “File Menu” and select “New”.

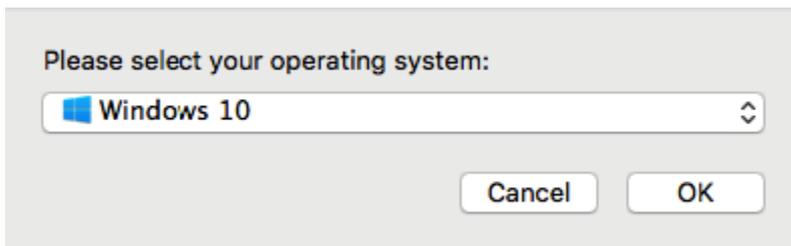


“Install Windows or another OS...” and click “Continue”.

- b) Select “Continue without a source” and click “Continue”.



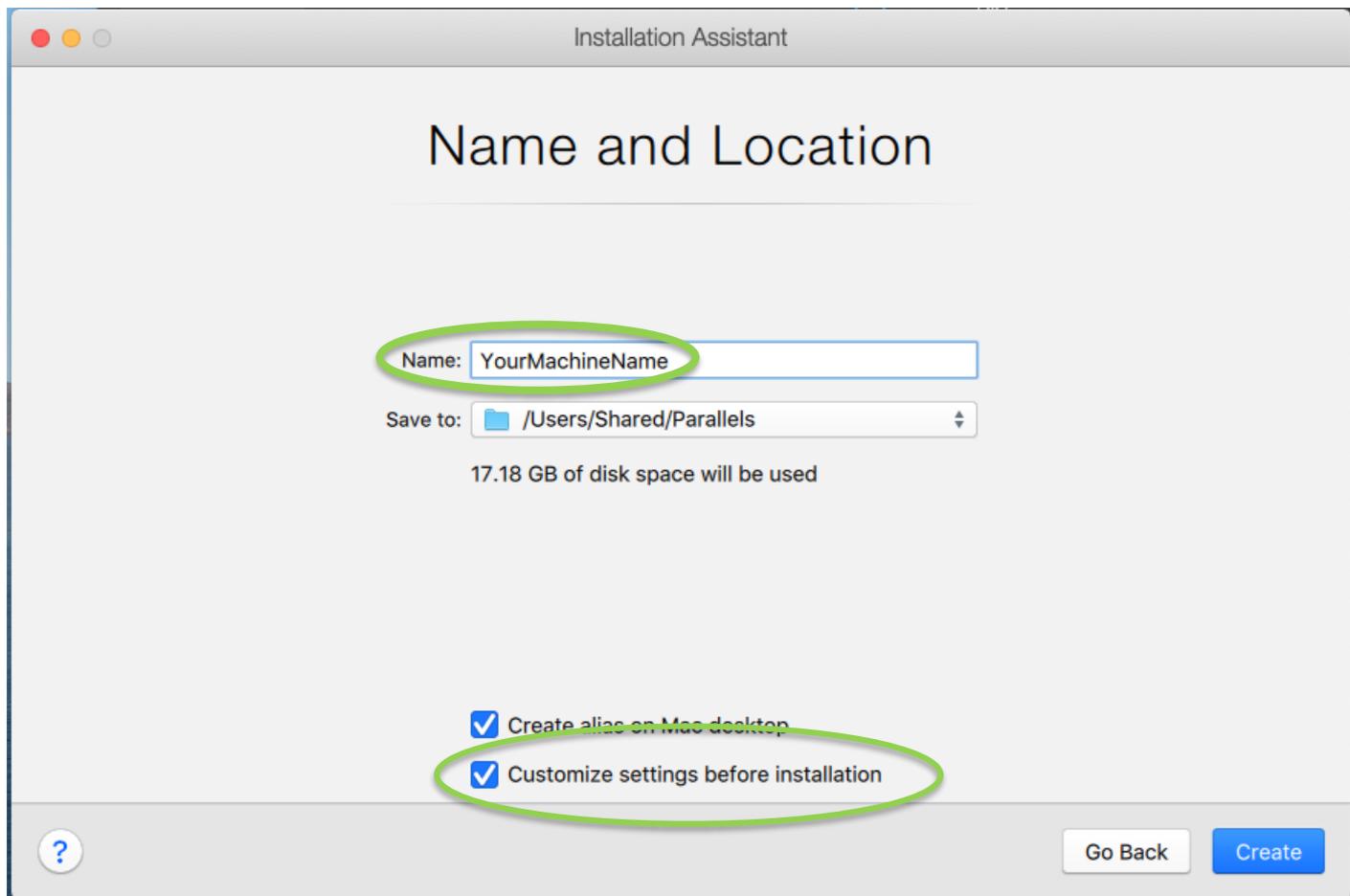
c) Select the operating system: **Windows 10**.



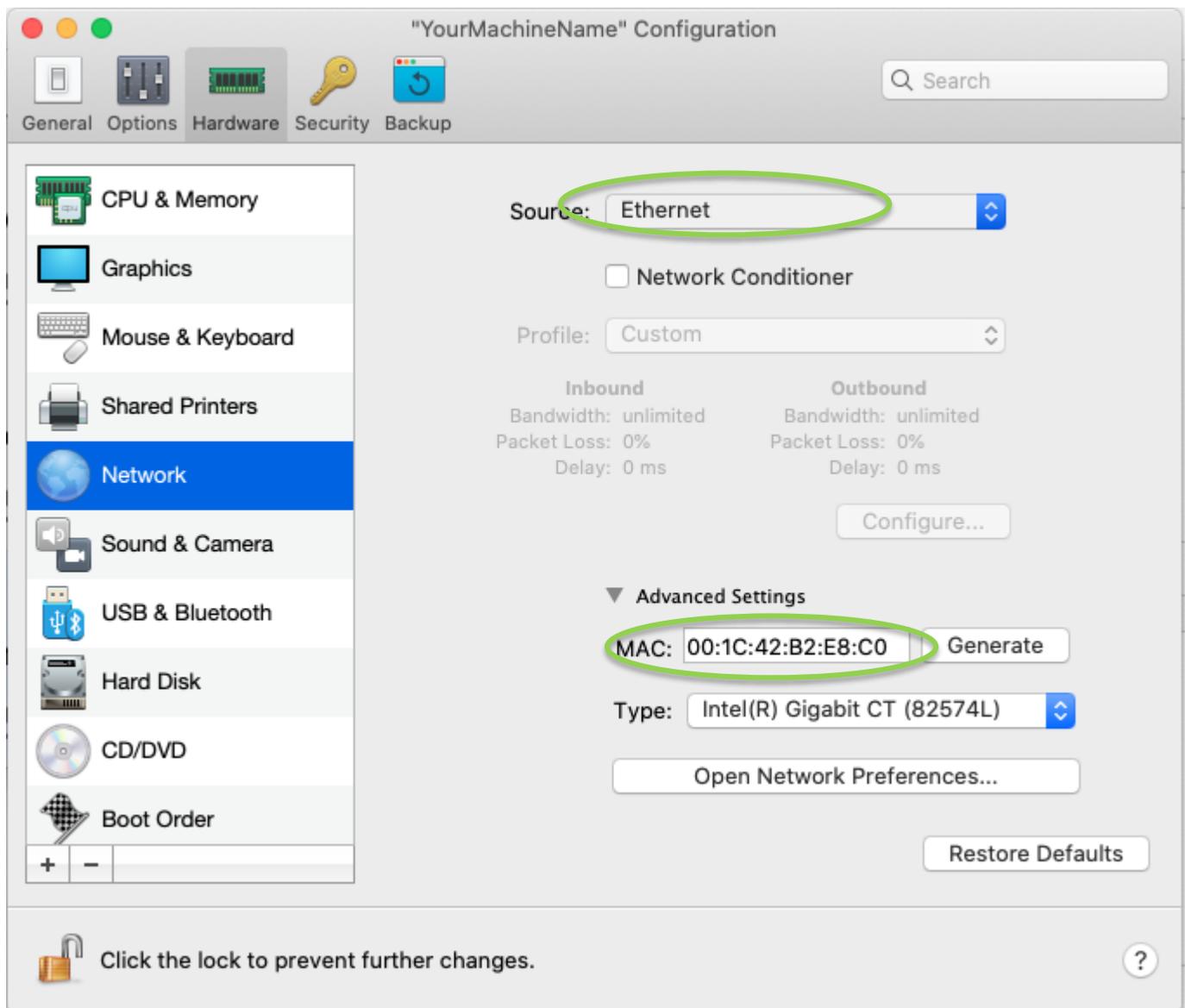
d) Choose which will be the use of the new Virtual Machine.



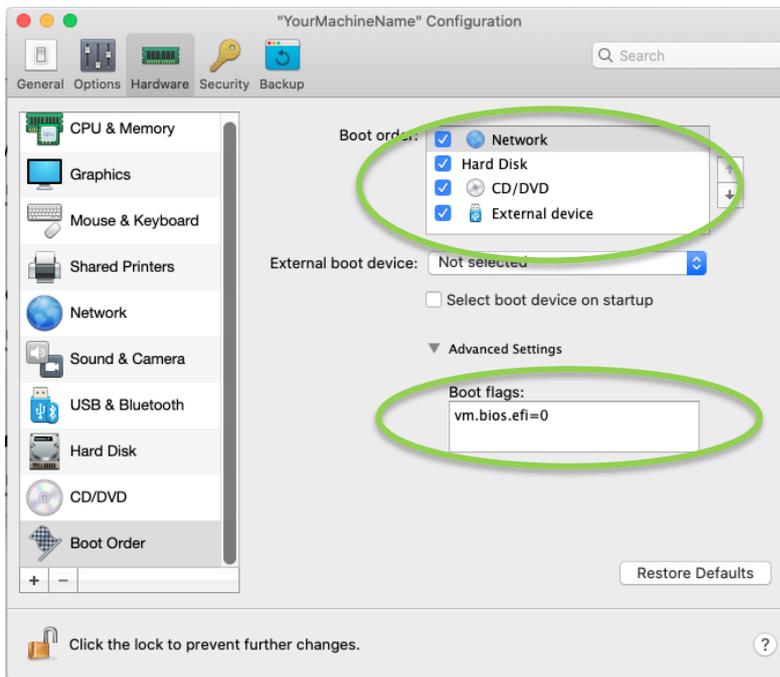
- e) Give a name to your Virtual Machine; you will need it later for registration at <http://network.cern.ch>. Then select the check box “**Customize settings before installation**”. Consider selecting the checkbox “**Share with other users of this Mac**” to avoid storing the VM in your Documents folder. Click “**Continue**”.



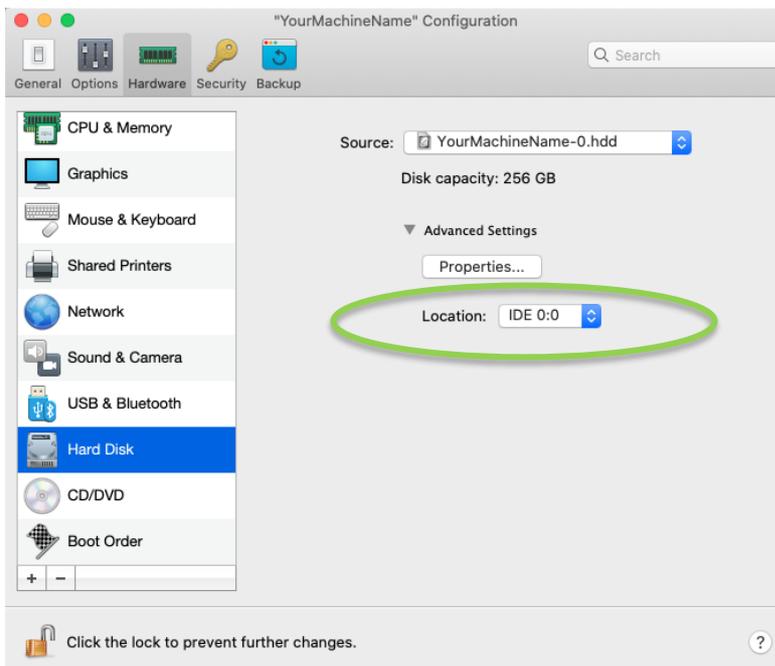
- f) In the Hardware Tab > Network 1, select “**Ethernet**” and save your MAC address for future reference - you will need it for registration at <http://network.cern.ch>.



- g) In the Hardware Tab > Boot order, set the Network as first choice and open Advanced Settings to define the following Boot flags:  
vm.bios.efi=0



h) In the Hardware Tab > Hard Disk 1, reconfigure the disk to be "IDE" rather than "SATA".



i) When you have completed these steps, the first part of your Virtual Machine configuration is done. You can proceed to register it in the **Network DB** before you boot it for the first time.

### 3. Register the machine in the Network DB

a) Go to <http://network.cern.ch> and click on "**Register Device**". Continue with the **correct Hostname (less than 15 characters) and OS**. Please associate the MAC address from point 2f above with Ethernet adapter (necessary for PXE) - check the example below. Avoid reusing any existing entry previously registered in the Network DB.

# Device

Save

You can register a new network device and configure it.

### Information

Name	<input type="text" value="YourMachineName"/>	Generic type	<input type="text" value="COMPUTER"/>
Location	<input type="text"/>	Device type	<input type="text" value="VIRTUAL MACHINE"/>
Rack	<input type="text"/>	Operating System	<input type="text" value="WINDOWS DESKTOP"/>
Ownership	<input type="radio"/> Personal device <input checked="" type="radio"/> CERN device	Description	<input type="text"/>
Serial Number	<input type="text"/>	Tag	<input type="text"/>
Inventory Number	<input type="text"/>	Properties	<input checked="" type="checkbox"/> DHCP
Last changed		DNS & Firewall openings	<input checked="" type="checkbox"/> IPv4 <input checked="" type="checkbox"/> IPv6

### Network Interface Cards

Address	Type	Bound to interface
00-1C-42-B2-E8-C0	ETHERNET	<input type="text" value="..."/>
<input type="text" value="..."/>	WIRELESS	<input type="text" value="..."/>

### People

Manager

Responsible

*Start typing and then choose one available option from the dropdown menu.*

Main user

*Start typing and then choose one available option from the dropdown menu.*

After completing all the necessary entries click “Save”.

A few minutes after this web form is submitted, you can boot your machine on the network to install Windows in Parallels Desktop as if it was physical hardware.

## 4. Install Windows using PXE boot

- When you boot your VM for the first time, it will try to boot using PXE. This is exactly what is needed to install NICE Windows. When the PXE routine starts, press “F12” to boot from the network installation server.

If the network installation server does not respond, please make sure that:

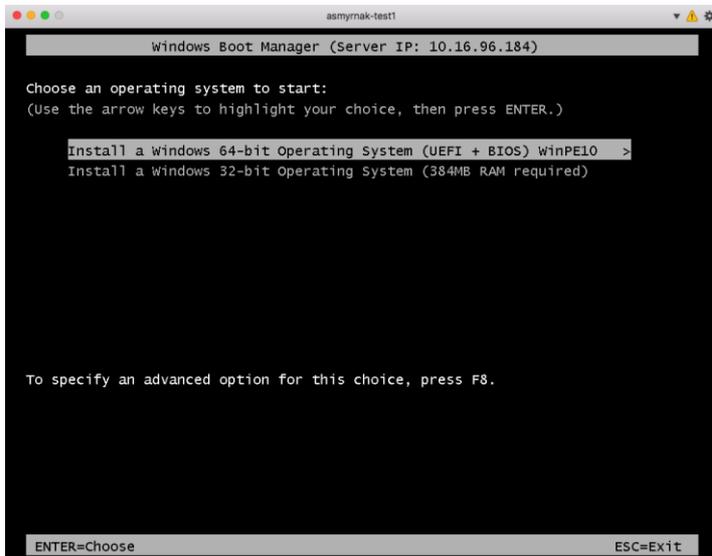
- You are using **Ethernet (Bridged)**, not Shared Network or wireless - you should see “Ethernet (Bridged)” under Devices > Network 1.
- You are connected to a portable socket - your IP address should be **128.141.x.x**.

```
Parallels Wizard
Parallels(R) UGA-Compatible BIOS Version 3.0.2111.89721
12.1.3 (41532) Wed, 10 Jan 2017 10:29:15
Copyright 1999-2017 Parallels International GmbH.
All rights reserved.
2048 MB physical memory installed
Network bootrom is installed.
Trying to boot from Primary Master IDE drive ... failed.
Trying to boot from SATA optical drive 2... SATA optical drive 2 failed.
Trying to boot from Networking...
Intel UNDI, PXE-2.0 (build 094)
Copyright (C) 2007-2015 Parallels Inc.
Copyright (C) 1997-2000 Intel Corporation
CLIENT MAC ADDR: 00 1C 42 69 12 6C GUID: E66A3C87-C7B7-40FD-ACF1-EEF76980F1F6
CLIENT IP: 128.141.209.40 MASK: 255.255.255.0 DHCP IP: 10.16.96.184
GATEWAY IP: 128.141.209.1
Downloaded WDSNBP from 10.16.96.184 cernmads04.cern.ch
Press F12 for network service boot
```

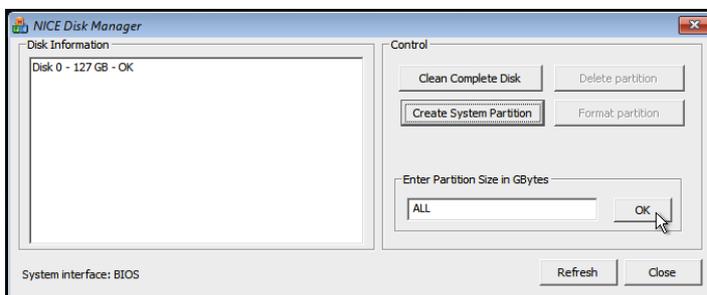
- iii. You have correctly registered your Parallels **MAC** address in your network registration. Note also that after the virtual hard disk is formatted, your VM will try to boot from the hard disk. If the OS is not installed at that time, you may need to adjust the boot order on the Hardware tab of your VM configuration in Parallels, so that it boots from the network. This is not necessary if the OS is installed immediately after the system partition is created.



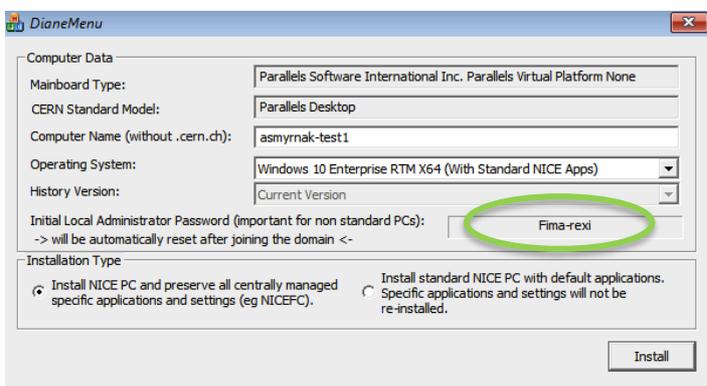
- b) Select “**Install a Windows 64-bit Operating System**” from the network installation menu.



- c) Click on **Disk0** and then on “**Create System Partition**”. For Partition Space, use **ALL** and then click **OK** to format it.



- d) Save the admin password in case you need it later and click “Install”.



In case the creation of computer account fails at this stage, please contact the Service Desk.

- e) The standard network installation of NICE Windows will now start. It will take about an hour to complete - please make sure that you stay connected to the network until it completes. After the basic installation, CMF will proceed to install standard applications. At the end, you should see the standard Windows login prompt.

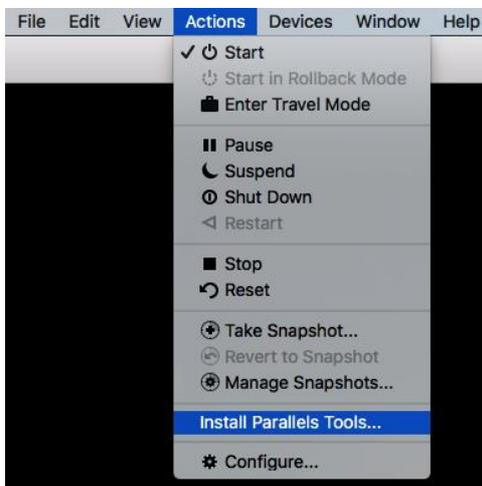
If at the end of the installation you can see the desktop rather than the logon prompt, please execute step 5b before continuing.

## 5. Log on and final configuration steps

- a) When the logon screen is shown, you might need to send “**Ctrl+Alt+Del**” before you can log on. You can do this by clicking on **Devices** > **Keyboard** > **Ctrl+Alt+Del** from Parallels Desktop application menu. Log on using your CERN credentials.



- b) Install the Parallels Tools to able to share data between your Mac and your Windows VM.

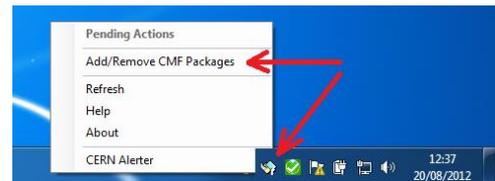


You might get a message like this:



In that case (and only if Parallels Tools installation does not start automatically) navigate to “**This PC**” > **CD/DVD** drive. Double click on “**Autorun.exe**” and the installation will start.

- c) To install applications, please use the **CMF** icon from the Windows Taskbar tray area to Add/Remove CMF Packages. Note that if you use Share Network (see below), you may need to specify the correct hostname and later use the CMF “**Refresh**” function.



- d) If you frequently change between wireless and Ethernet networks on your Mac, you may find it easier to use Shared Network, as it automatically reconnects when you pass from Ethernet to wireless.

