Dallmeier

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SMAVIA

INSTALLATION

DEPLOY INSTANCES ON ESXI SERVER

SRS VM III / DONGLE SERVER

FOR ESXI VMWARE VERSION 6.5

MADE IN GERMANY

See more.

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CONTENTS

CHAPTER 1:	**INTRODUCTION**	**4**
1.1	Validity	4
1.2	Documents	4
1.2.1	This Document	4
1.2.2	Other Applicable Documents	4
1.3	Typographical Conventions	5
CHAPTER 2:	**GENERAL NOTES**	**6**
2.1	Description	6
2.2	Features	6
2.3	Warranty	6
2.4	Disclaimer	6
CHAPTER 3:	**SYSTEM REQUIREMENTS**	**7**
CHAPTER 4:	**INSTALLATION**	**8**
3.1	Dongle Server	8
3.2	SMAVIA Recording Server VM III	16
3.2.1	Change Group Passwords	28
3.2.2	Enter Serial Number	30
3.3	Autostart Order	30

INTRODUCTION

1.1 VALIDITY

This document applies to the deployment / installation of a SMAVIA Recording Server VM III instance and a Dallmeier Dongle Server instance on a virtual machine on highperformance systems with a VMware*) ESXi hypevisor.
The contents and explanations in this document are based on the software versions:

- Dongle Server xx
- SRS VM III 9.15.4
- VMware ESXi 6.5

Figures (screenshots) in this document may differ from the actual product.

1.2 DOCUMENTS

The product documentation contains several documents that are supplied in a printed form and/or on a digital medium.

Read the available product documentation carefully and thoroughly before using your software.
Always observe and follow the contained instructions, notes and warnings as well as the technical data in the currently valid product specification of your software.

Keep all documents in legible condition and in a suitable location for future reference.

Regularly check the website www.dallmeier.com for the latest product documentation updates (and software versions).

1.2.1 This Document

The document “Installation” (this documen) detailed descriptions of the installation of the respective software.
Target group of the document are system integrators.

1.2.2 Other Applicable Documents

Specifications
The product “Specifications” contains detailed technical data, features and characteristics of the respective software.
The target audience of the document is trained video security systems integrators.

Operation
The document “Operation” contains detailed descriptions for the operation of the software modules.
The target audience of this document is operators with no technical knowledge.

Configuration
The document “Configuration” contains detailed descriptions of the configuration of the respective device.
The target audience of this document is trained system integrators.

1.3 TYPOGRAPHICAL CONVENTIONS

For reasons of clarity and readability, various text formatting elements and types of emphasis are used in this document:

NOTICE

NOTICE indicates measures to prevent device and/or property damage due to improper configuration of the device or faulty operations.

Instructions are indicated by arrows (►).
► Always carry out instructions one after the other in the sequence described.

Expressions highlighted in bold and dark gray usually refer to the name of an application, product or function or indicate an user interface control element (button, check box, drop-down list, menu item, etc.).

Paragraphs in italics provide information on basic principles, special features and efficient procedures as well as general recommendations.

GENERAL NOTES

2.1 DESCRIPTION

SMAVIA Recording Server VM III (**SRS VM III**) is a high performance server software with a processing capacity for up to 60 IP video channels per instance. Designed for the operation as a virtual machine on server systems with a VMware ESXi 6.5 hypervisor, SRS VM III can be operated simultaneously in several instances.
The **Dallmeier Dongle Server** is required for the license management of the operation of SMAVIA Recording Server VM III instances.

2.2 FEATURES

- 120 channels supported on a powerful server system due to parallel operation on 2 instances with 60 channel licenses each
- Maintenance license for the update of the SMAVIA software for 24 months included
- License for the recording of multicast video streams from Dallmeier IP cameras included
- License for real-time recording included
- Evaluation with SMAVIA Viewing Client or SeMSy® III over WAN / LAN
- Adapted, adjusted, hardened and low-maintenance Linux operating system included
- Ready-to-run package for systems with a VMware ESXi 6.5 hypervisor

2.3 WARRANTY

The terms and conditions valid at the signing of the contract shall apply.

2.4 DISCLAIMER

This documentation describes only the installation /the deployment of SMAVIA Recording Server VM instances and Dallmeier Dongle Server instances.

Note that

- resource management and support for the administration of VMwares vSphere*) and VMwares virtual machines in general provides only the VMware documentation and the VMware support.

SYSTEM REQUIREMENTS

The following system requirements must be met for the installation and the operation of a Dallmeier Dongle Server and a SMAVIA Recording Server VM III:

Dongle Server VM (virtual device, one dongle server is required for each host)

RAM	64 MB
CPU	1 core
HDD	< 100 MB
Ethernet	1× NIC / E1000 Adapter

ESXi Server

ESX version	VMware ESXi 6.5
RAM	32 GB DDR3
CPU	2× 8 cores / minimum 2.6 GHz Intel*) Xeon*)
HDD	High reliability HDD / RAID 5 or 6
Ethernet	GBit or 10 GBit
RAID controller	MegaRAID*) “SAS 9280” or “SAS 9380” controller recommended; depends on video bit rate, also in case of rebuild / degraded
Power	2× redundant power supply units
USB	1× USB 2.0 for dongle server

Addition Requirements

ESX	A contact person with knowledge regarding VMware 6.5 is required on customer side.
Monitoring	Monitoring is not supported, it has to be implemented by customer.

INSTALLATION

Proceed as follows to deploy a Dallmeier Dongle Server instance and a SMAVIA Recording Server VM III instance on a running virtual machine.

3.1 DONGLE SERVER

In the first step the template of the dongle server has to be installed.

- Enter the IP address of the corresponding ESXi server into your web browser to display the login dialog.

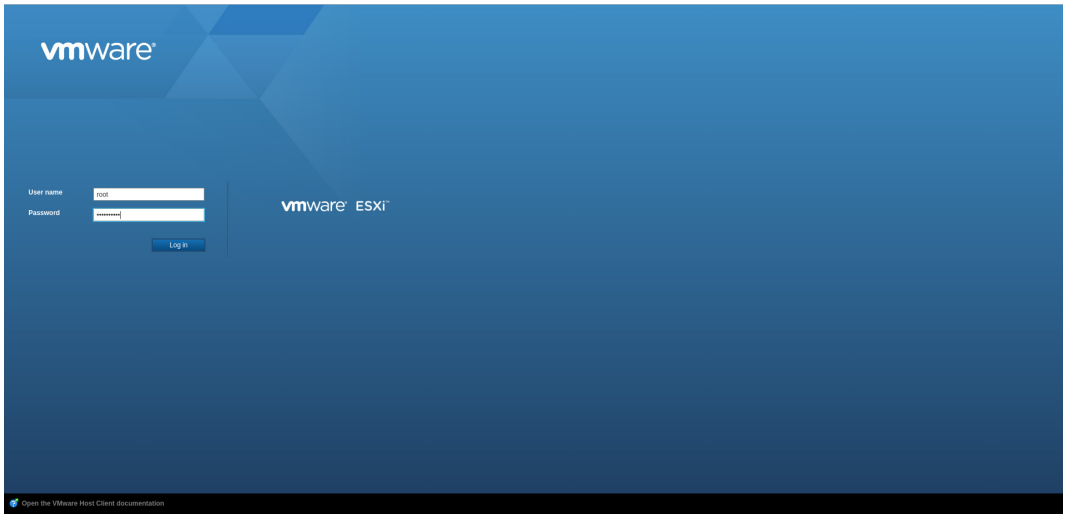

Fig. 3-1

- Enter the required credentials and **Log in**.

The administrator console for the VMware ESXi server is displayed:

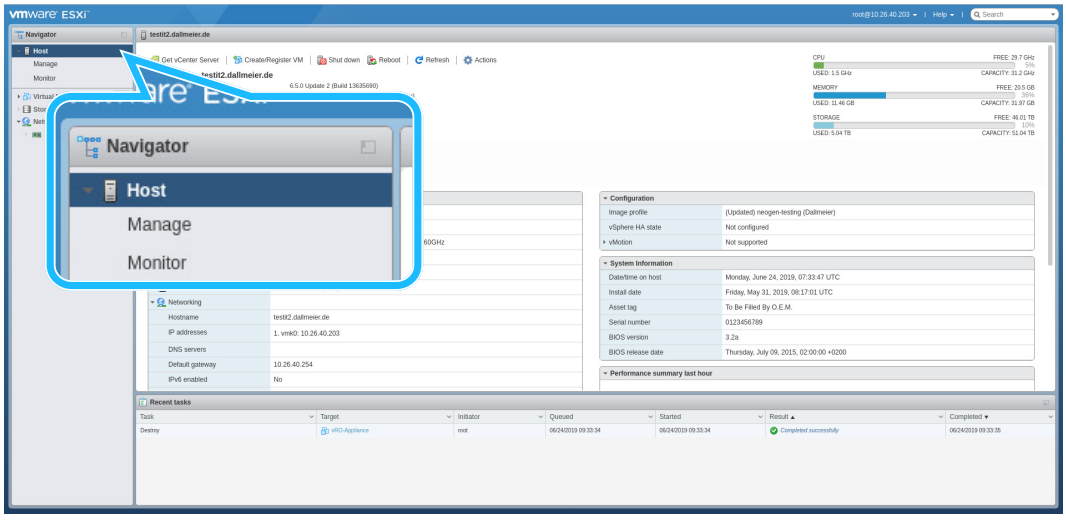

Fig. 3-2

- Select the required host in the **Navigator** column on the left side.

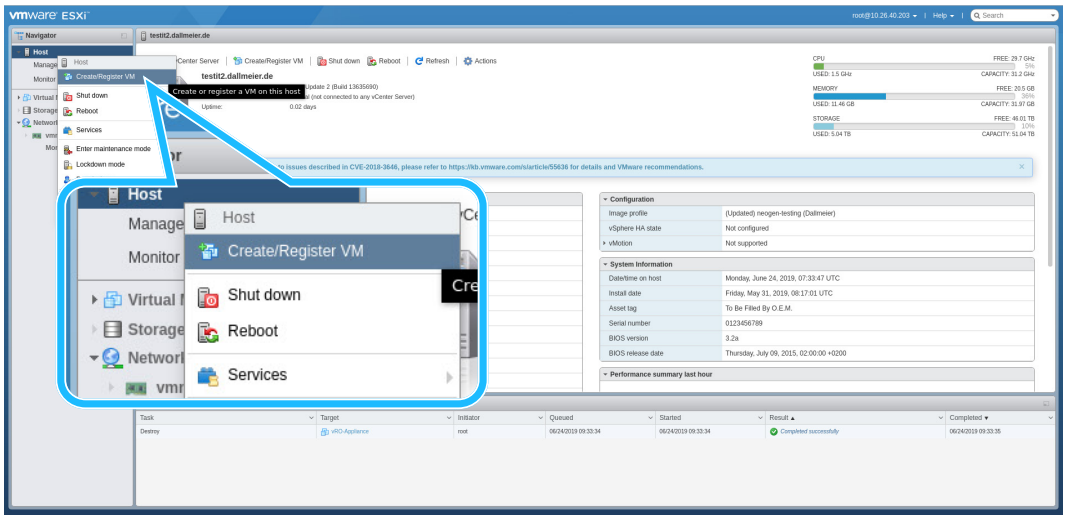

Fig. 3-3

- Right-click the host entry to display the context menu.
- Select the **Create/Register VM** option.

The **New virtual machine** settings dialog is displayed above the admin console interface:

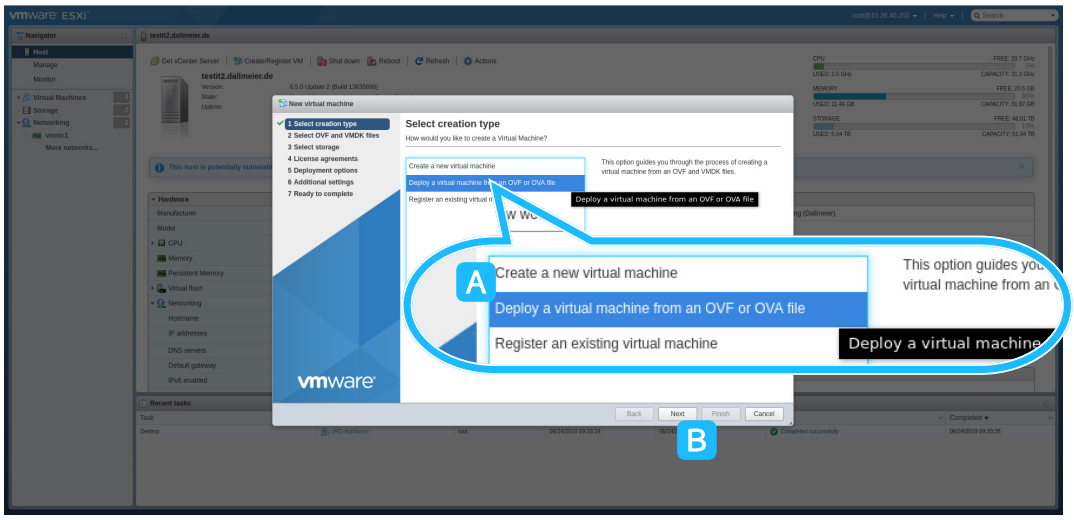

Fig. 3-4

- Select the **Deploy a virtual macine from an OVF or OVA file** option A.
- Click **Next** B to go to the following settings dialog.

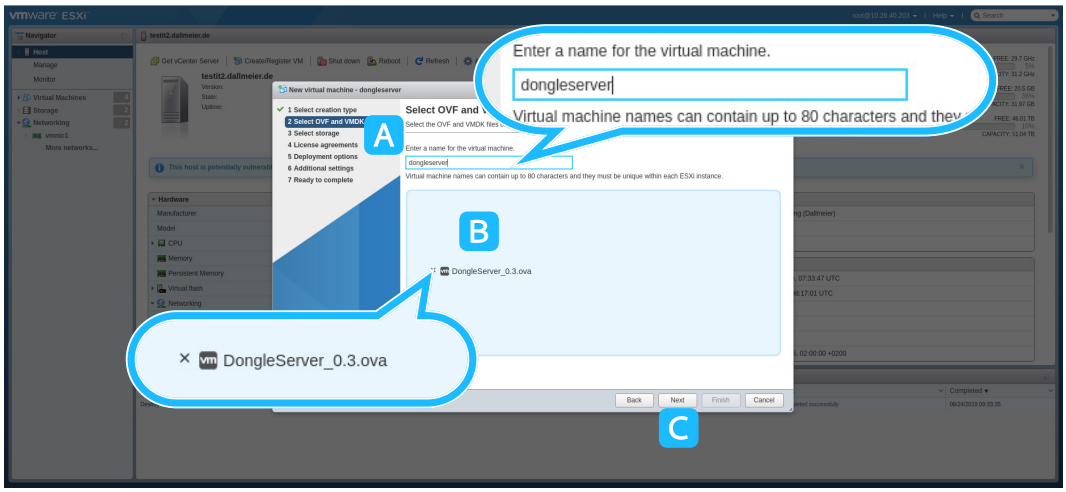

Fig. 3-5

- Enter your desired name for the virtual dongle server A.
- Add the template file for the dongle server (**DongleServer_x.x.ova**) with dragging and dropping to the corresponding area B.
- Click **Next** C to go to the following settings dialog.

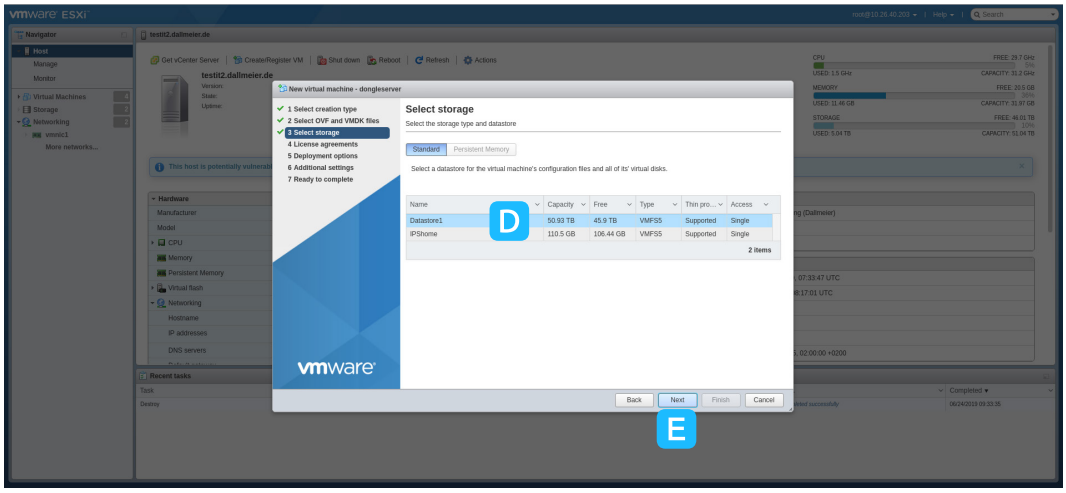

Fig. 3-6

- Select the required datastore for the virtual macine's configuration files and all of it's virtual disks D.
- Click **Next** E to go to the following settings dialog.

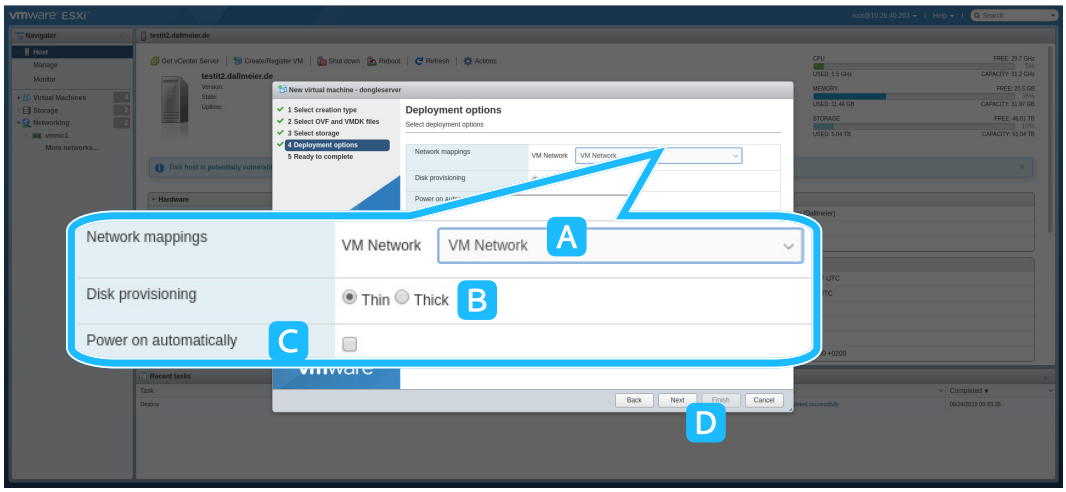

Fig. 3-7

- Select from the **VM Network** dropdown box A a network option, if required.

Normally, you do not have to change the **Disk provisioning** type (**Thin** = dynamically growing disk space, standard setting) B.

- Disable the **Power on automatically** checkbox C.
- Click **Next** D to go to the following settings dialog.

The last settings dialog shows the previously made parameters again in a summary:

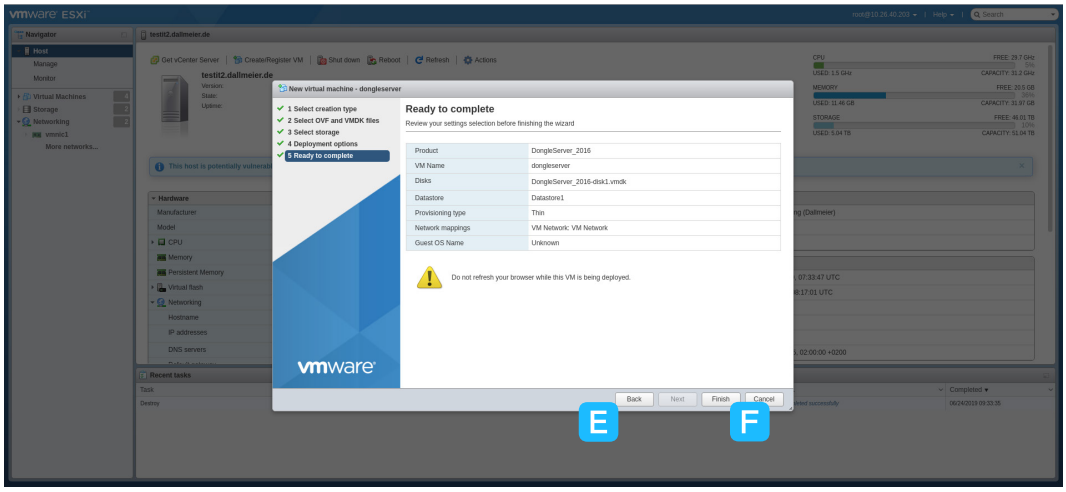

Fig. 3-8

- Check your settings.
- Use the **Back** option E to change the previous settings, if required.
- Finally, click **Finish** F to start the deployment task for the dongle server instance.

When the building process is complete, the dongle server appears as a virtual machine in the **Navigator** column:

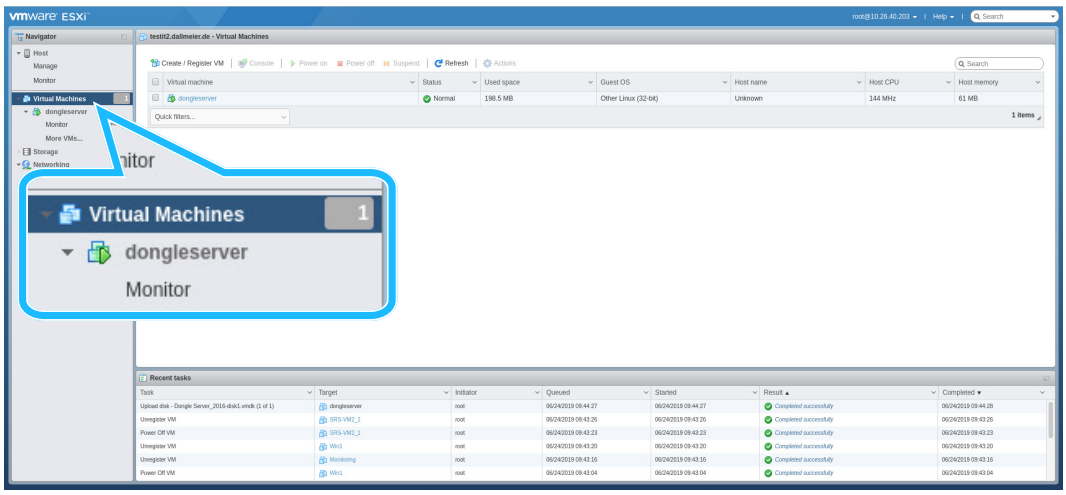

Fig. 3-9

In the next step, the dongle server has to be combined with the license dongle hardware stick (Aladdin Knowledge Sentinel HL).

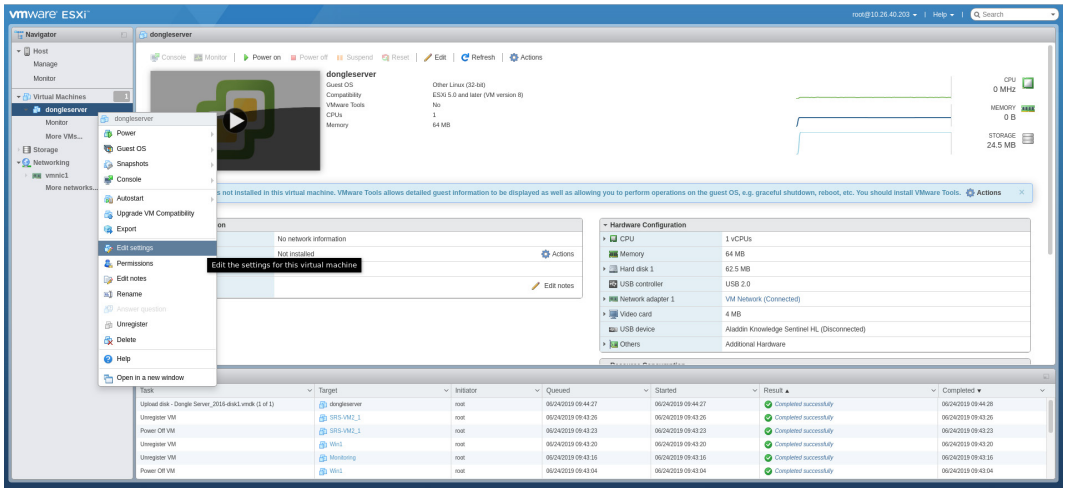

Fig. 3-10

For this step, the corresponding license dongle hardware must be plugged in via an USB port to the host PC.

- Select the dongle server entry in the **Navigator** column.
- Right-click the entry to display the context menu.
- Select the **Edit settings** option.

The **Edit settings** dialog is displayed:

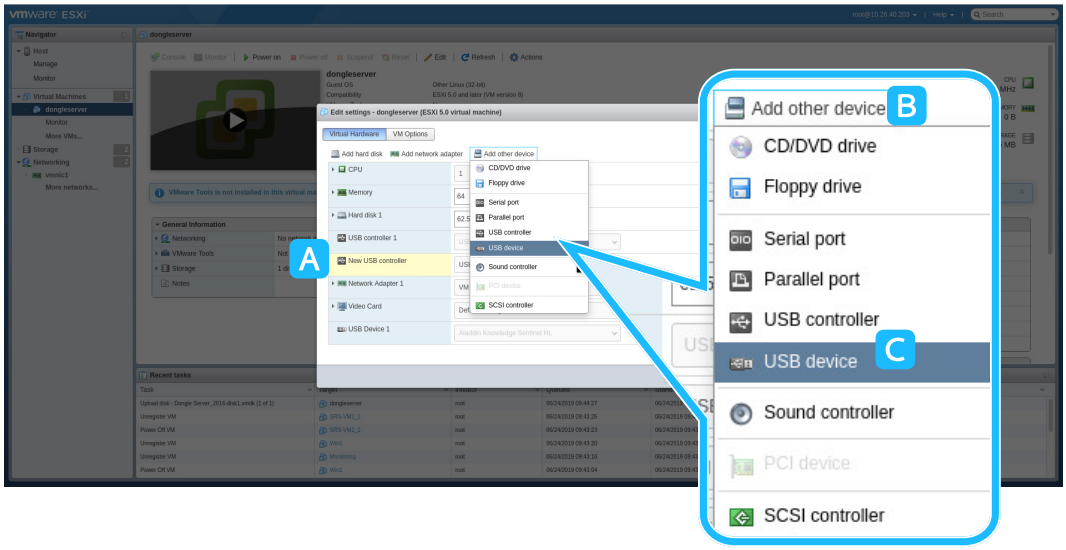

Fig. 3-11

- Select the **New USB controller** entry A.
- Expand **Add other device** the dropdown menu B.
- Select the **USB device** option C.

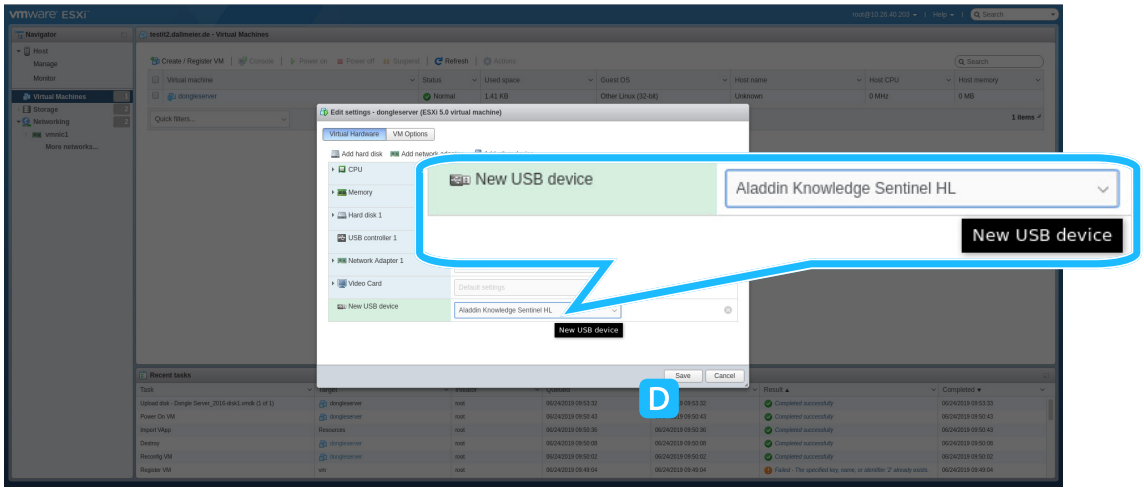

Fig. 3-12

- Select from the **New USB device** dropdown box the corresponding **Aladdin Knowledge Sentinel HL** entry.

> *The license dongle is automatically recognized when connected to the host PC and listed in the drop-down menu. If this is not the case, the stick can also be searched manually using the "New USB device" option.*

- Confirm with **Save** D.

The license dongle is associated with the virtual dongle server.

Finally, the dongle server has to be started and the network connection data entered:

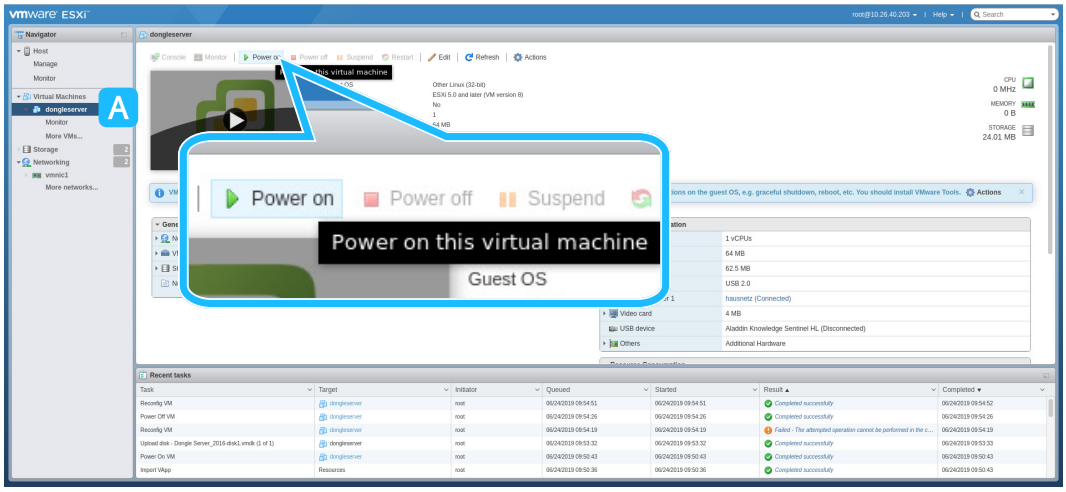

Fig. 3-13

- Select the dongle server entry in the **Navigator** column A.
- Click **Power on** in the administrator panel to start the server.

The dongle server is started.

- Switch to the console to enter the appropriate network connection data.

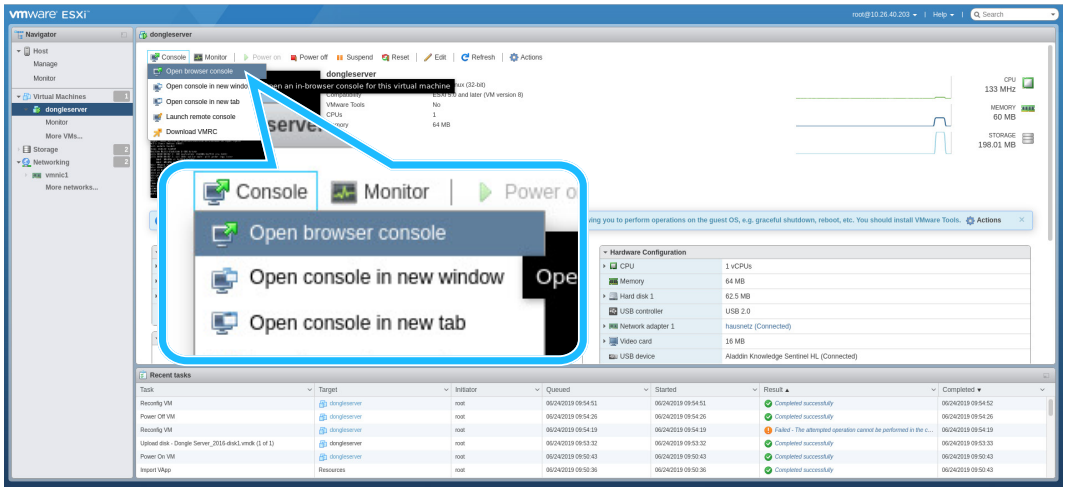

Fig. 3-14

- Open the console via **Console** > **Open browser console**.

The console is displayed in a new browser window:

Fig. 3-15

- Enter in the command line `sh ip.sh` to execute the script for allocating the IP address of the dongle server.

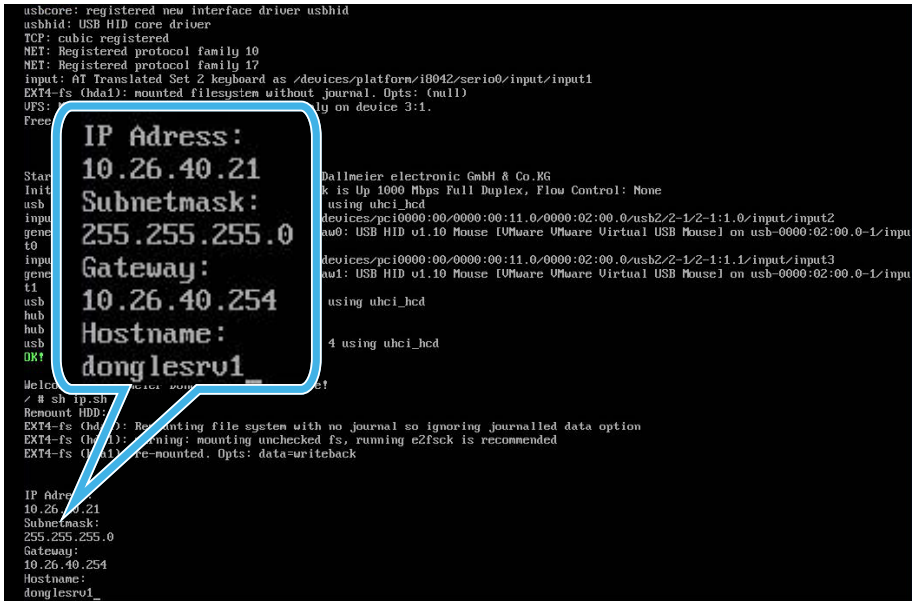

Fig. 3-16

- Enter now successively the **IP Address**, **Subnetmask**, **Gateway** and the **Hostname** of the dongle server.
- Finally, confirm the entries with the *Enter* key and the dongle server restarts automatically.

The dongle server is now completely deployed in the virtual machine and ready for use.

3.2 SMAVIA RECORDING SERVER VM III

The SMAVIA Recording Server VM III (SRS VM III) can be installed on the host PC after the deployment of the Dallmeier Dongle Server.

- Enter the IP address of the corresponding ESXi server into your web browser to display the login dialog.

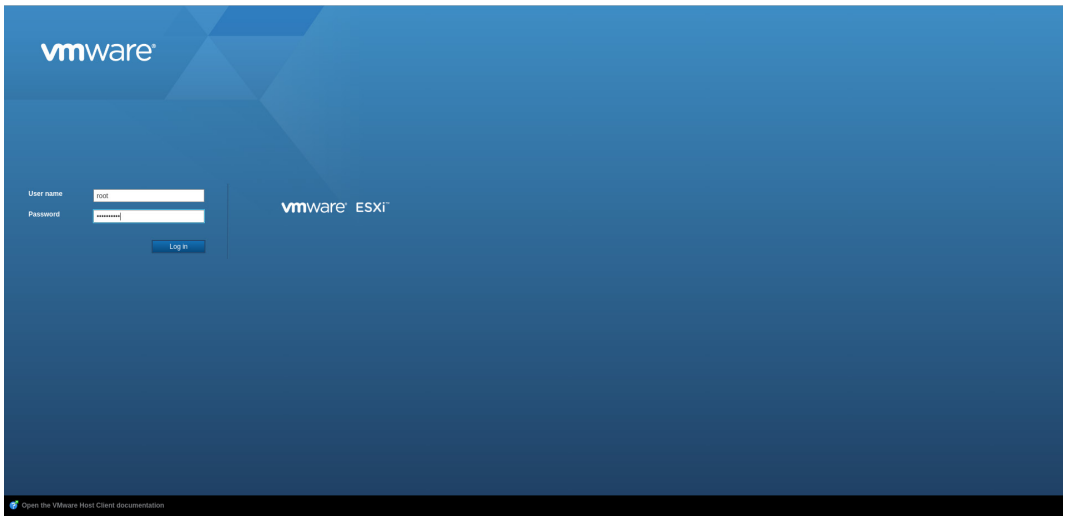

Fig. 3-17

- Enter the required credentials and **Log in**.

The administrator console for the VMware ESXi server is displayed:

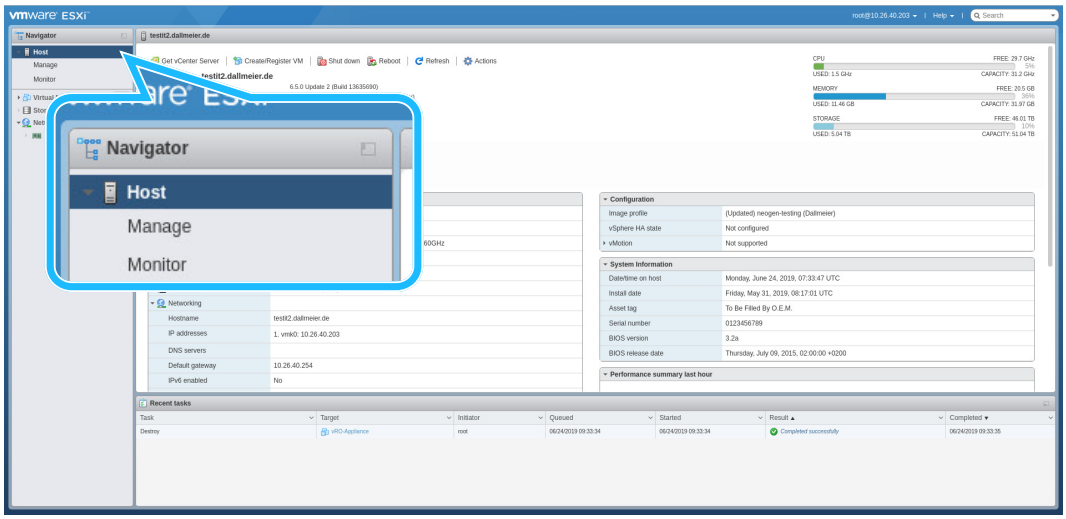

Fig. 3-18

- Select the required host in the **Navigator** column on the left side.

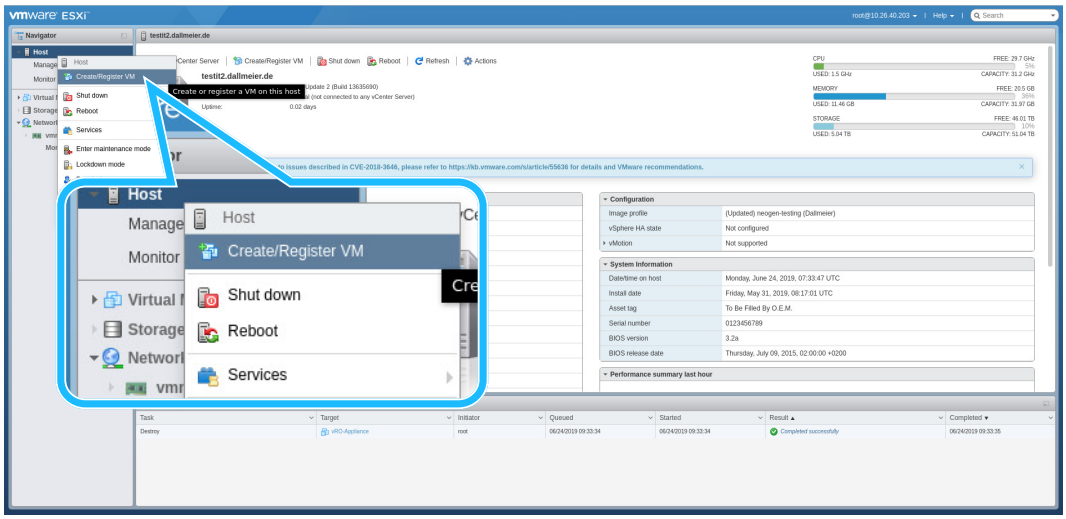

Fig. 3-19

- Right-click the host entry to display the context menu.
- Select the **Create/Register VM** option.

The **New virtual machine** settings dialog is displayed above the admin console interface:

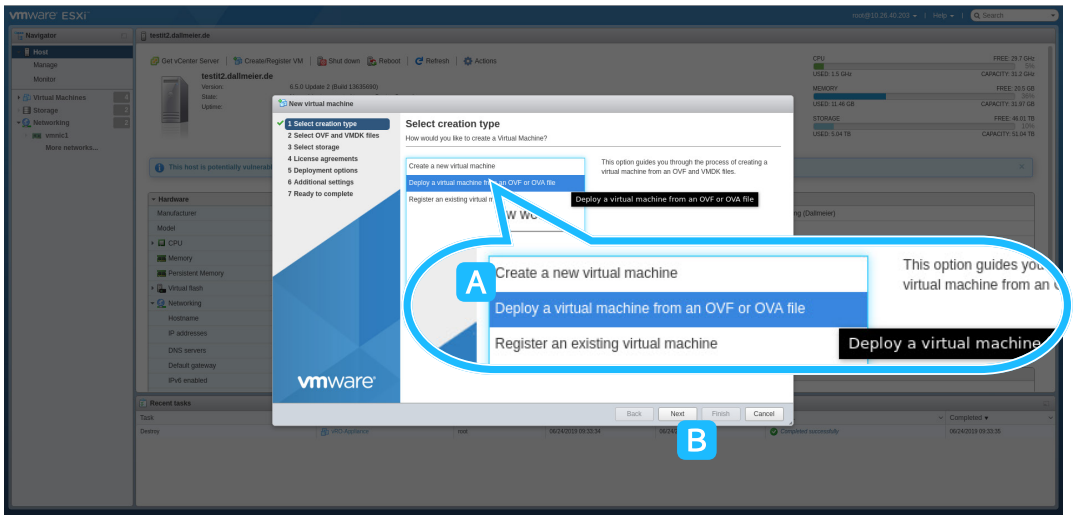

Fig. 3-20

- Select the **Deploy a virtual macine from an OVF or OVA file** option A.
- Click **Next** B to go to the following settings dialog.

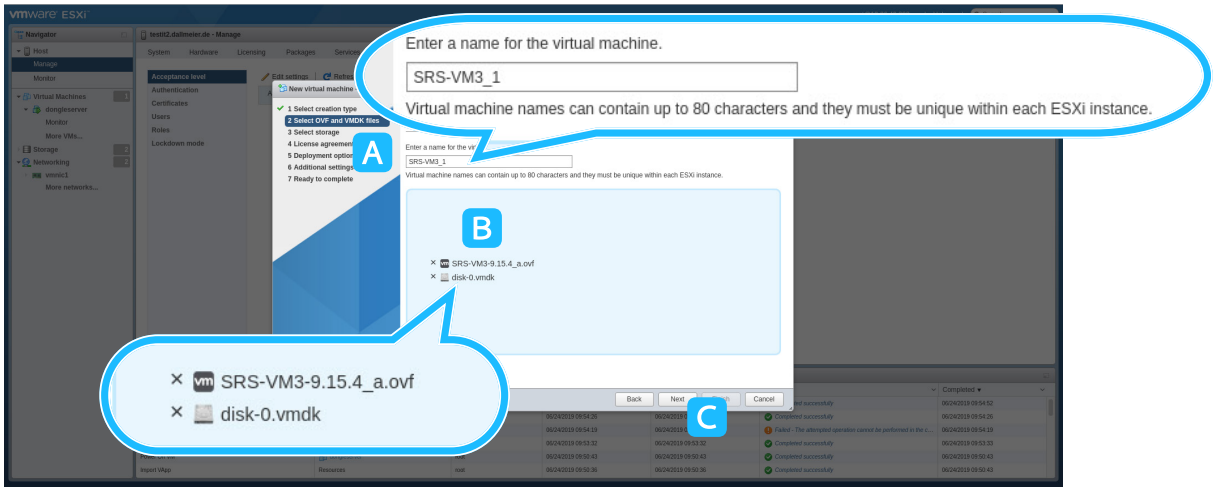

Fig. 3-21

- Enter your desired name for the virtual SRS VM III **A**.
- Add the two template files for the dongle server (**SRS-VM3-x.x.x.ova** / **disk-0.vmdk**) with dragging and dropping to the corresponding area **B**.
- Click **Next** **C** to go to the following settings dialog.

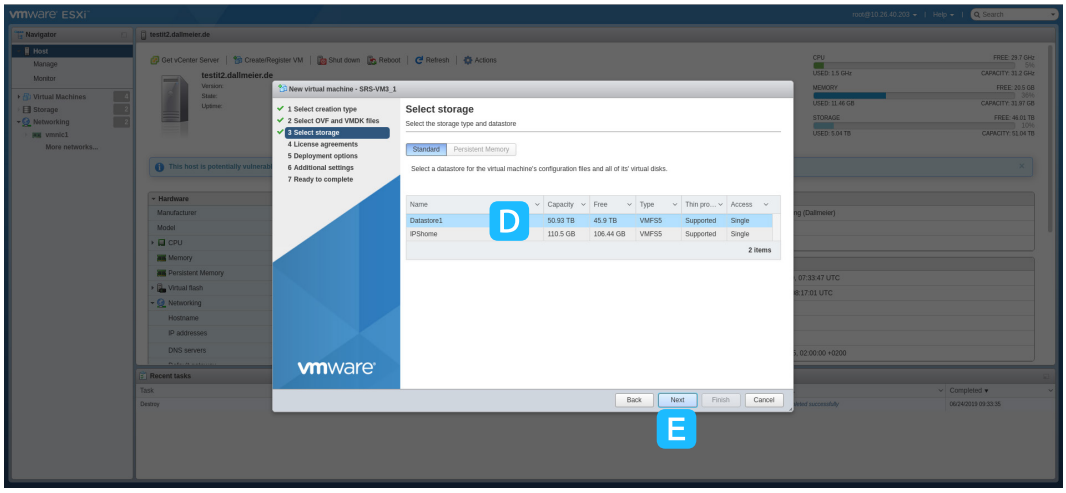

Fig. 3-22

- Select the required datastore for the virtual macine's configuration files and all of it's virtual disks **D**.
- Click **Next** **E** to go to the following settings dialog.

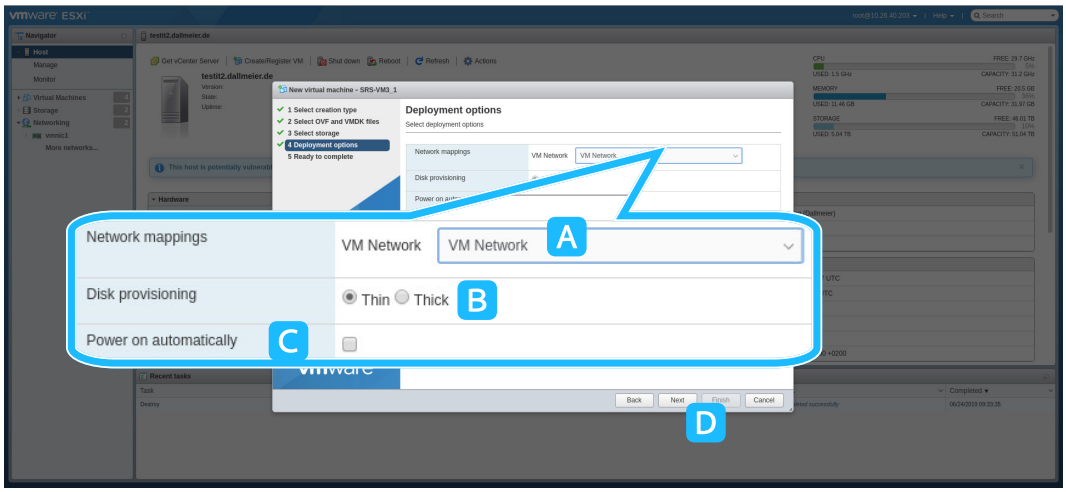

Fig. 3-23

- Select from the **VM Network** dropdown box A a network option, if required.

Normally, you do not have to change the **Disk provisioning** type (**Thin** = dynamically growing disk space, standard setting) B.

- Disable the **Power on automatically** checkbox C.
- Click **Next** D to go to the following settings dialog.

The last settings dialog shows the previously made parameters again in a summary:

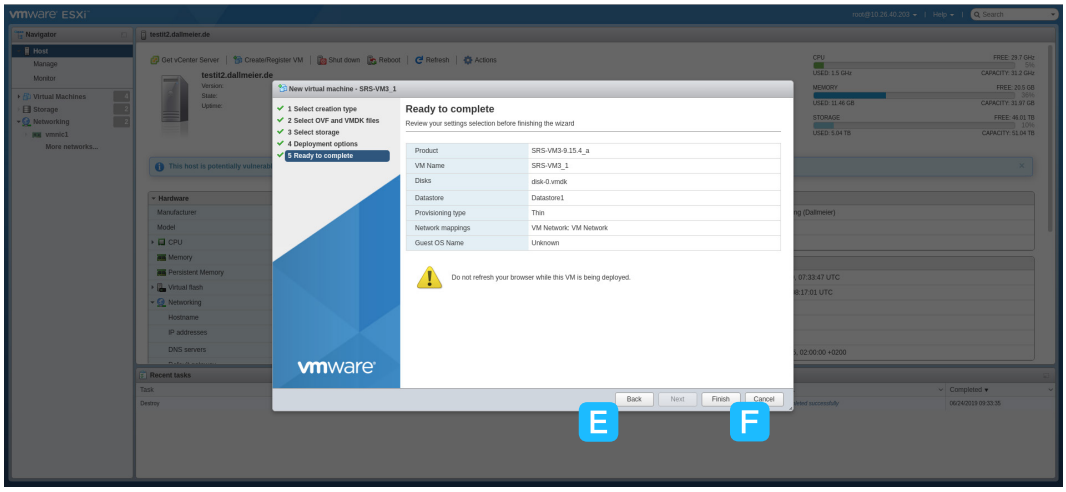

Fig. 3-24

- Check your settings.
- Use the **Back** option E to change the previous settings, if required.
- Finally, click **Finish** F to start the deployment task for the SRS VM III instance.

The installed instance of the SRS VM III is displayed next to the previously added dongle server in the administrator console after completing the configuration wizard:

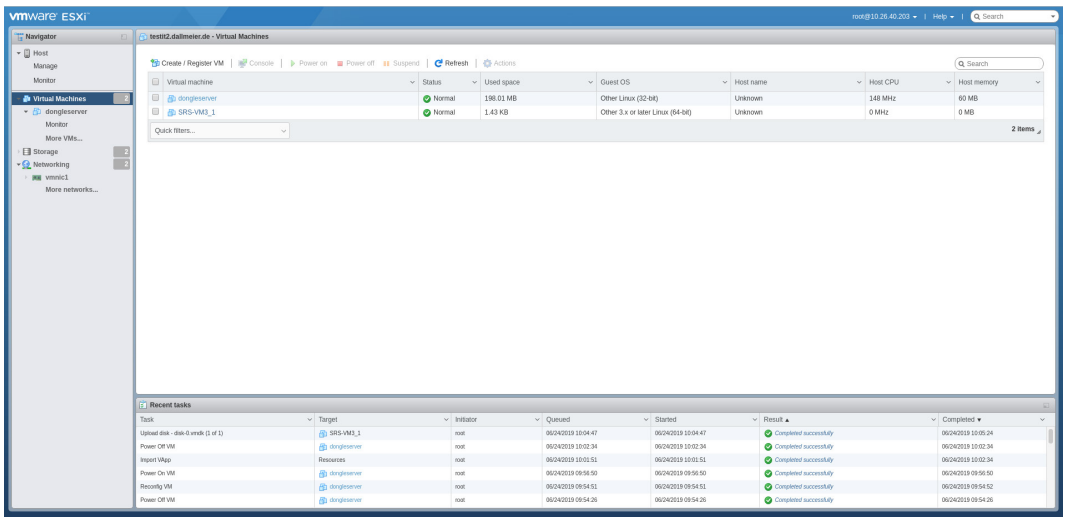

Fig. 3-25

Now add the hard disk to the SMAVIA recorder and initalize it:

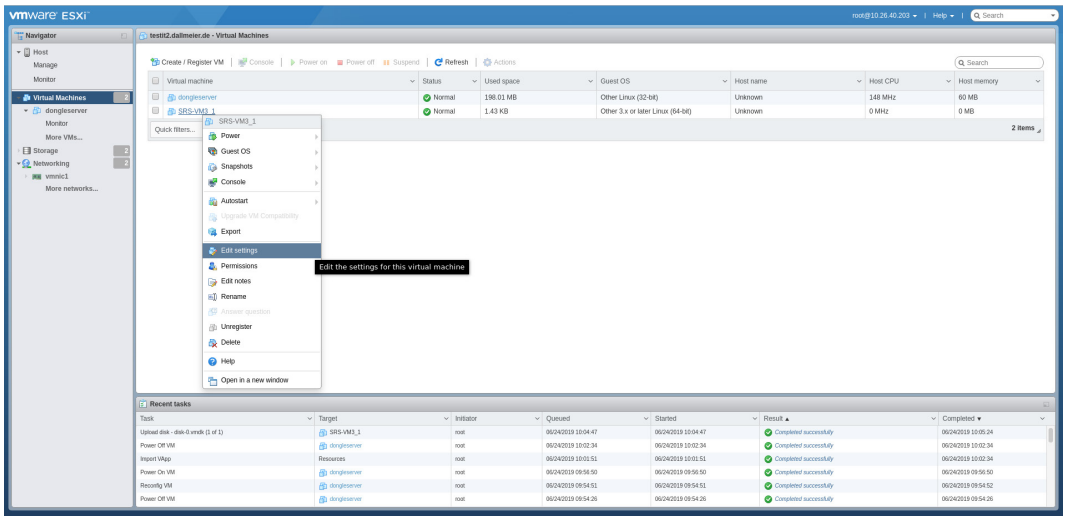

Fig. 3-26

- Right-click the SRS VM III entry to display the context menu.
- Select the **Edit settings** option.

The configuration wizard is displayed:

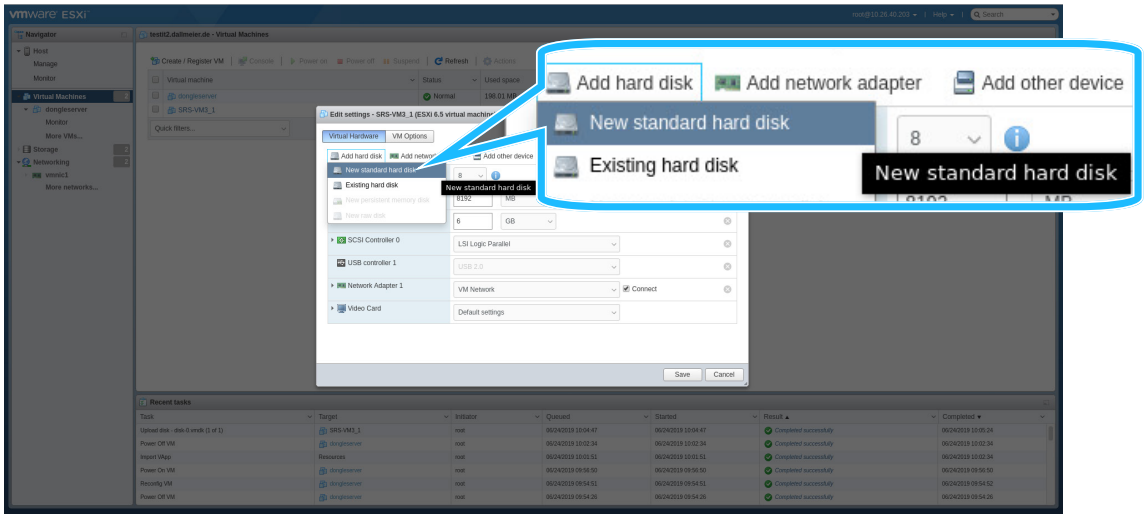

Fig. 3-27

- Select the **New standard hard disk** option from the **Add hard disk** dropdown menu.

The **New Hard disk** is added:

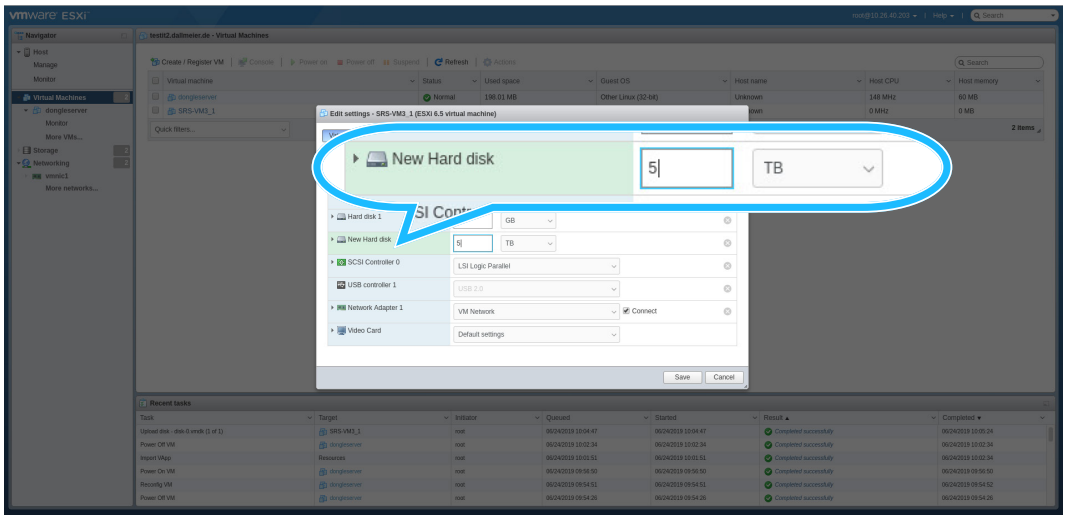

Fig. 3-28

- Enter the desired size for the new hard disk in the appropriate fields.

Check that the new hard disk is connected to the correct host adapter (SCSI host bus adapter):

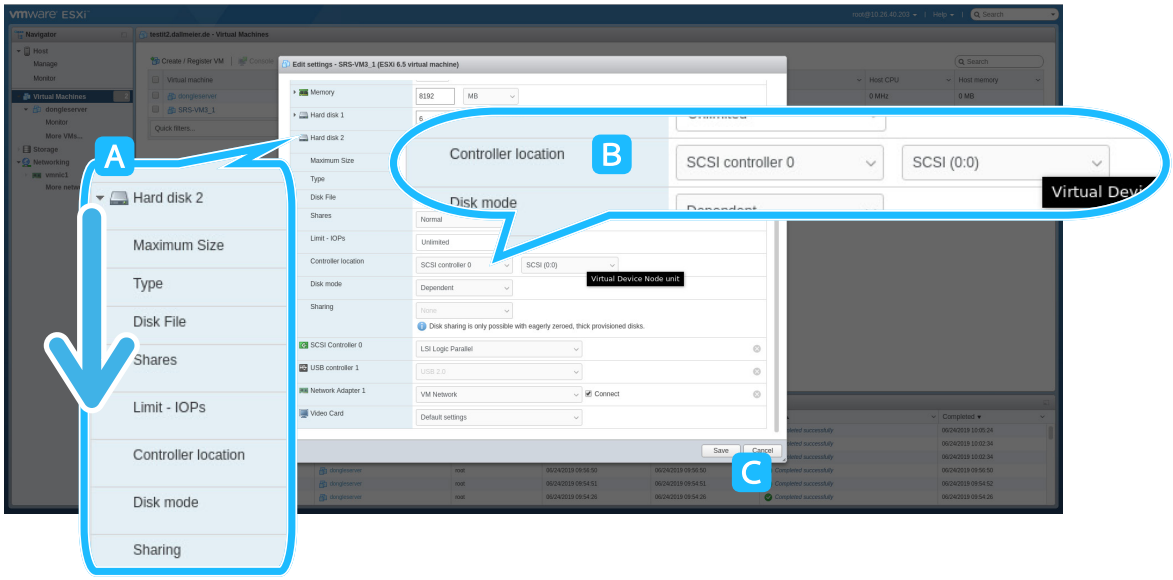

Fig. 3-29

- Expand the entry for the new hard disk A.
- Check the **Controller location** line and set **SCSI controller 0** as the host bus adapter, if required B.
- Finally, click **Save** C to finish the configuration wizard.

The next step is to power on the SRS VM instance and initialize the hard disk for the SMAVIA recorder.

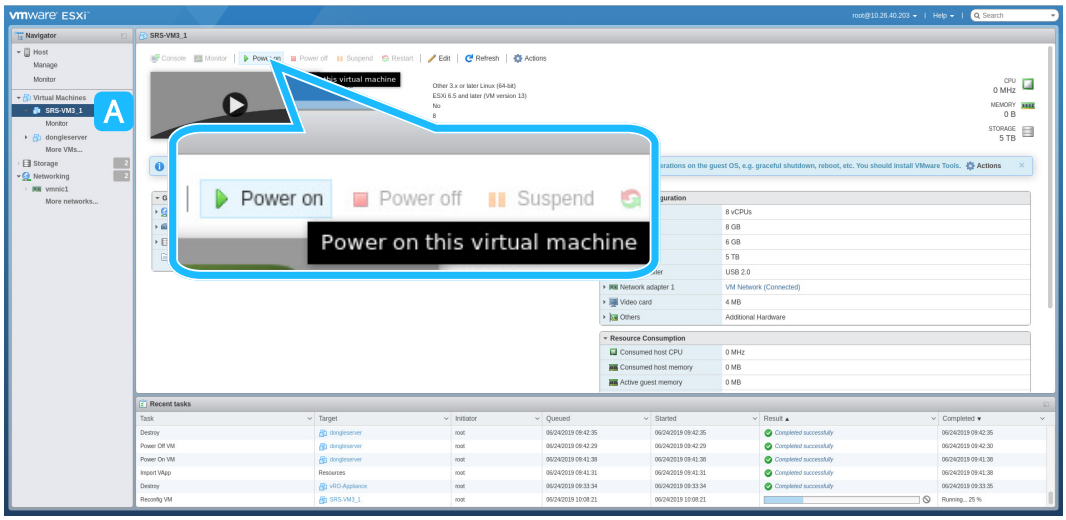

Fig. 3-30

- Select the SRS VM III entry in the **Navigator** column A.
- Click **Power on** in the administrator panel to start the server.

The SRS VM III is started.

The recorder hard disk is initialized via the console of the SRS VM III instance:

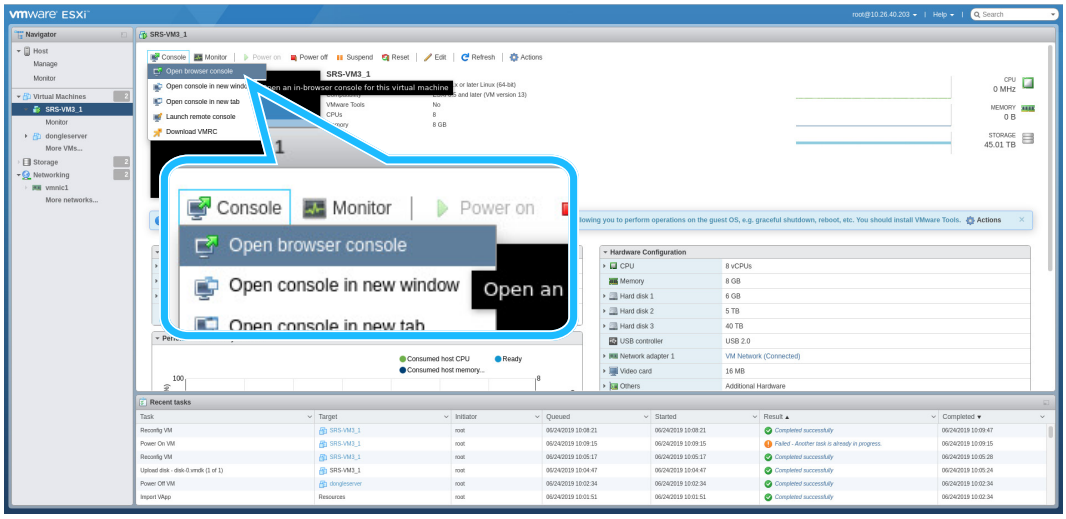

Fig. 3-31

- Click **Console** and select the **Open browser console** option.

The SRS VM III is opened in a console window.
Since the hard disk has not yet been initialized, a corresponding system message is displayed first:

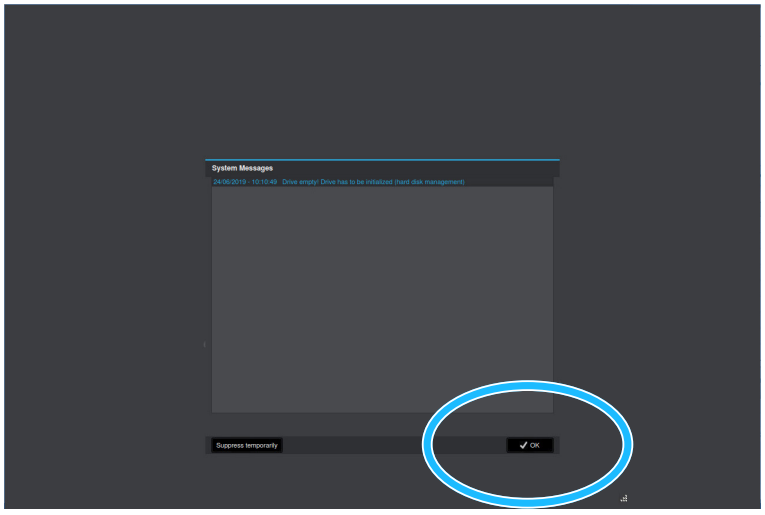

Fig. 3-32

- Confirm the message with **OK**.

The **Recorder Login** note for changing the group passwords is displayed because the group account does not initially have a password to enable the initial configuration of a SMAVIA Recording Server:

> *The group passwords should be changed after the network settings has been configured (see section "Change Group Passwords" on page 28).*

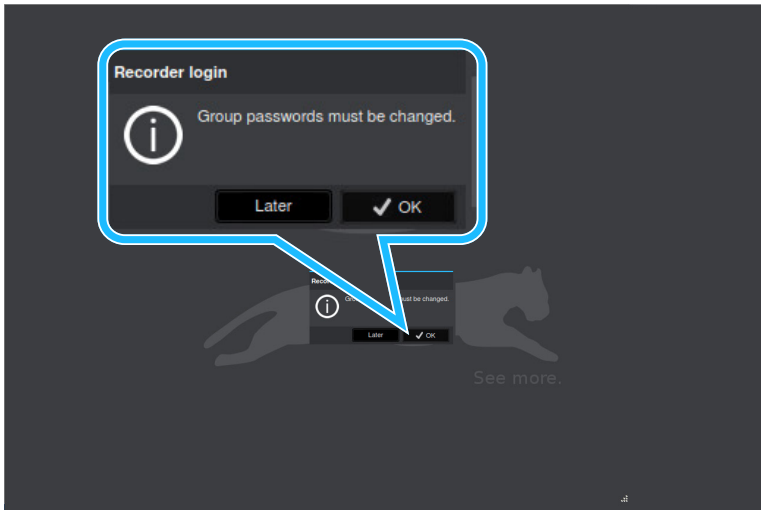

Fig. 3-33

- Confirm the dialog with **Later**.

Fig. 3-34

- Scroll the window down to display the **Login** button.
- Click **Login**.

The main menu of the SMAVIA Recording Server is displayed.

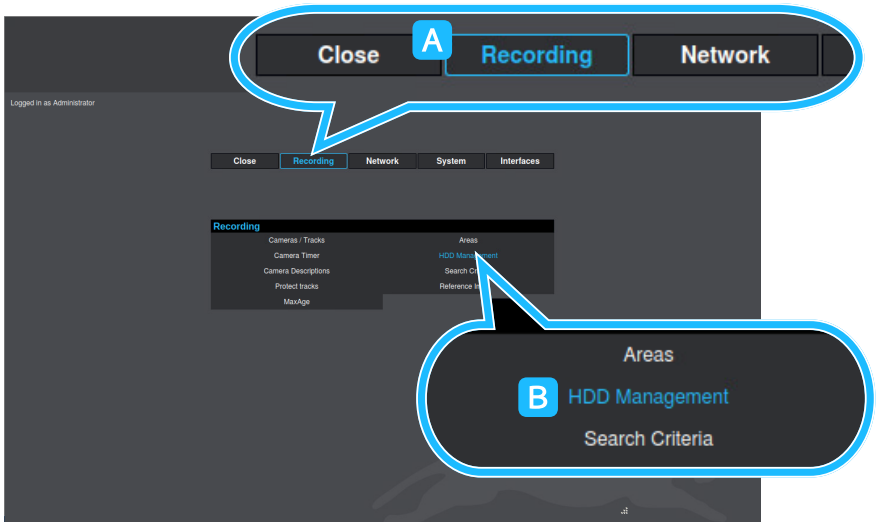

Fig. 3-35

- Open the hard disk initialization via **Recording** A > **HDD Management** B.

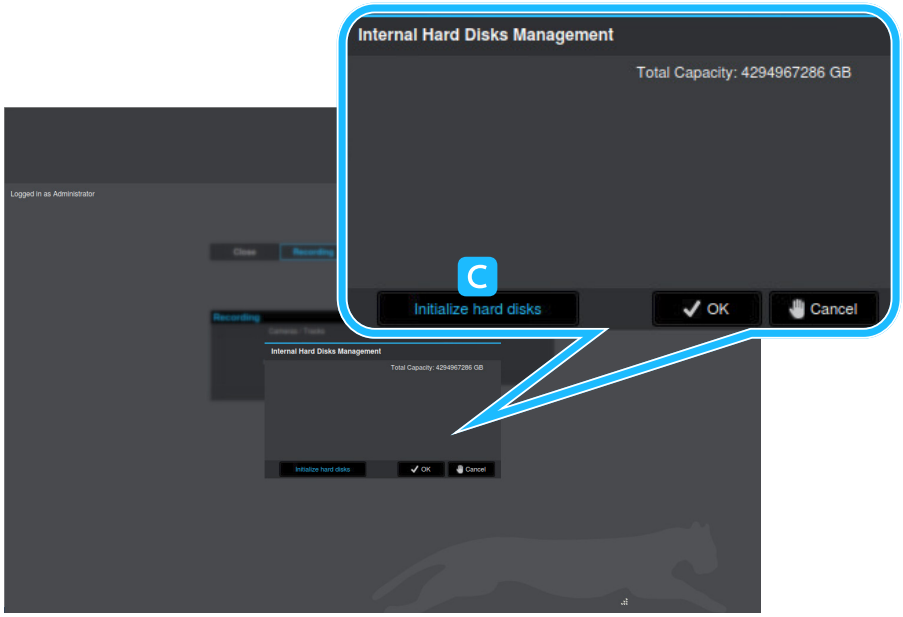

Fig. 3-36

- Start the disk initialization via **Initialize hard disks** C.

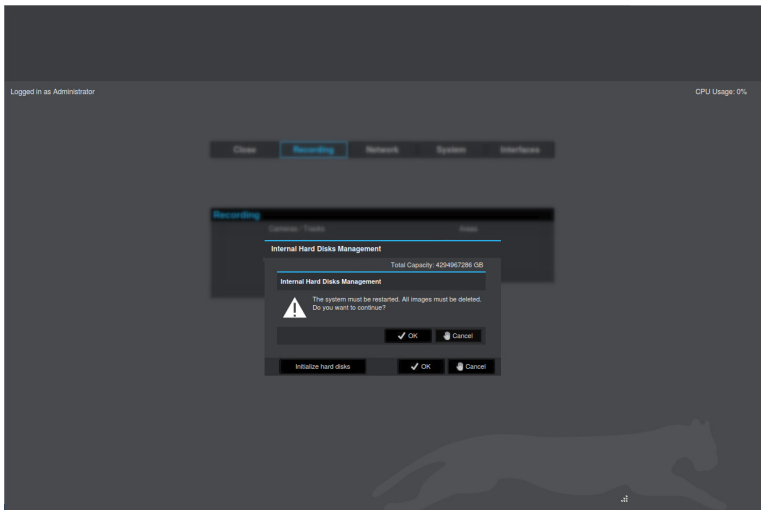

Fig. 3-37

► Confirm the subsequent info dialog with **OK**.

> *Since the hard disk is just being initialized, there are no recordings on it yet. The info dialog can therefore be confirmed.*

The disk formatting is performed:

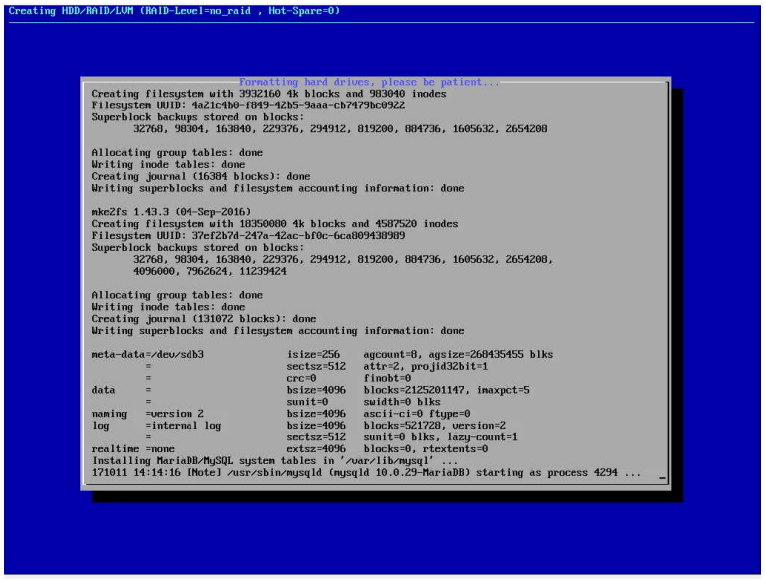

Fig. 3-38

Finally, the server reboots:

Fig. 3-39

When the disk formatting process is complete, the network connection data has now to be entered for the SRS VM III:

- Login to the SRS VM as described above.

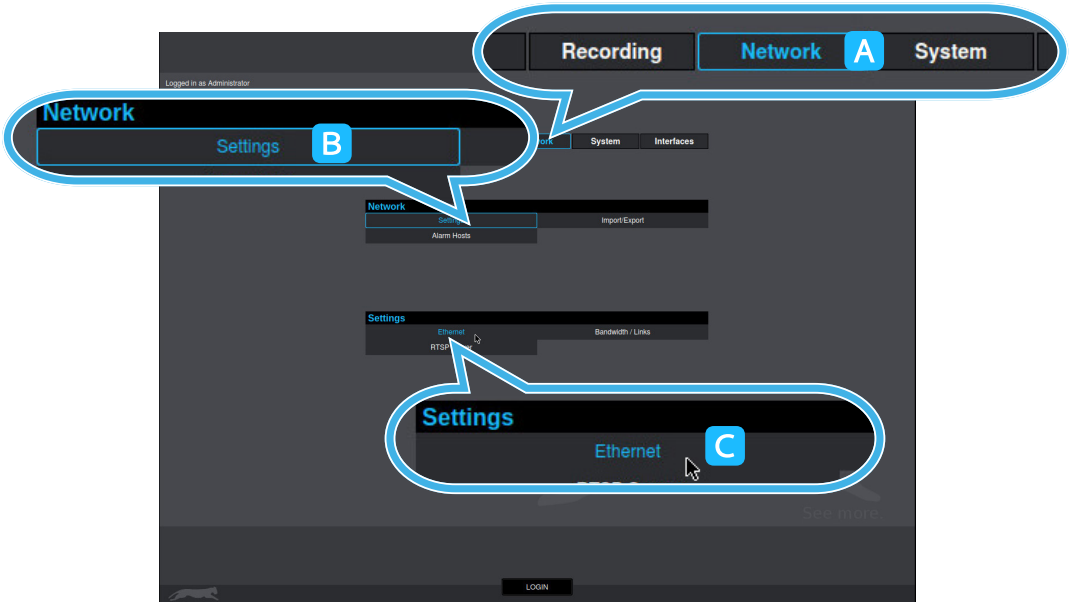

Fig. 3-40

- Open the corresponding network settings dialog via **Network** > **Settings** > **Ethernet**.

The **Ethernet** settings dialog is displayed:

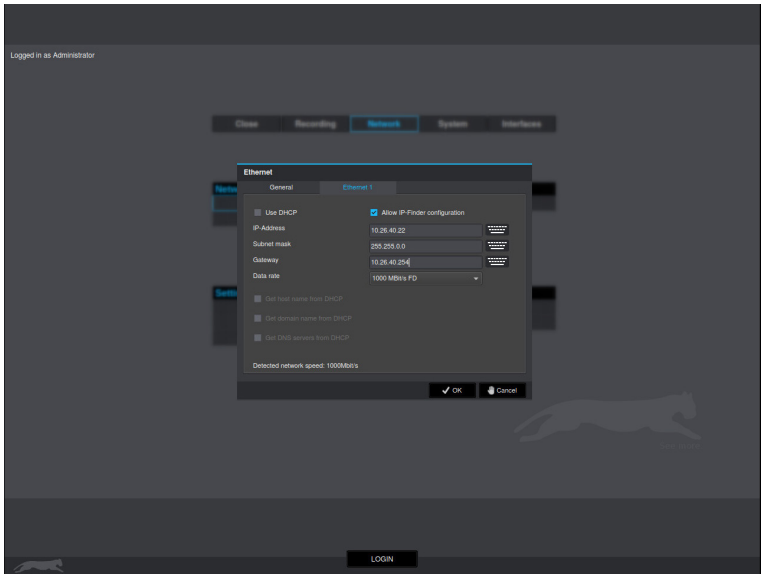

Fig. 3-41

- Enter the **IP-Address** of the SMAVIA Recording Server.
- Enter for the subnet (**Subnet mask**, **Gateway**) the same settings as for the dongle server.
- Confirm with **OK**.

3.2.1 Change Group Passwords

- Proceed as described to change the group passwords.
- Open the configuration interface of the SMAVIA Recording Server in the browser console as described above.

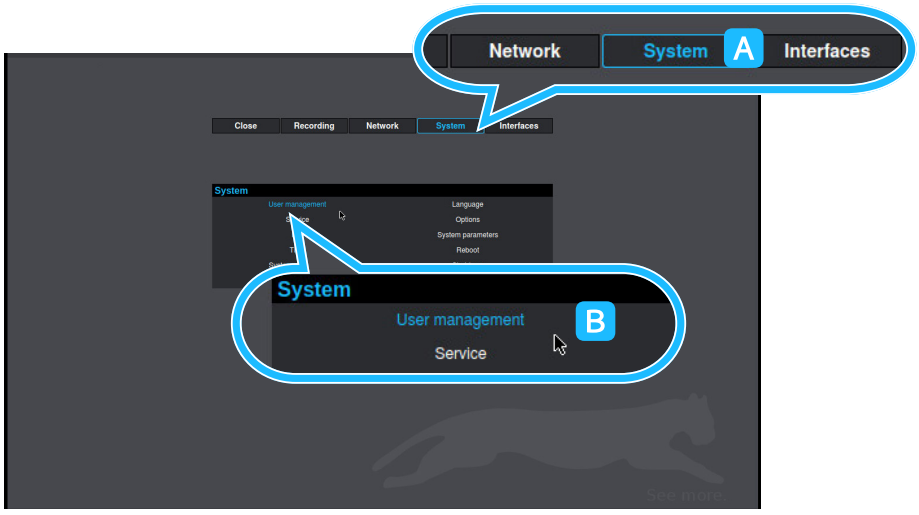

Fig. 3-42

- Select **System** A > **User management** B to display the user managment settings.

Fig. 3-43

- Select the **Administrator** group A.
- Click **Edit Group** B to open the corresponding settings dialog.

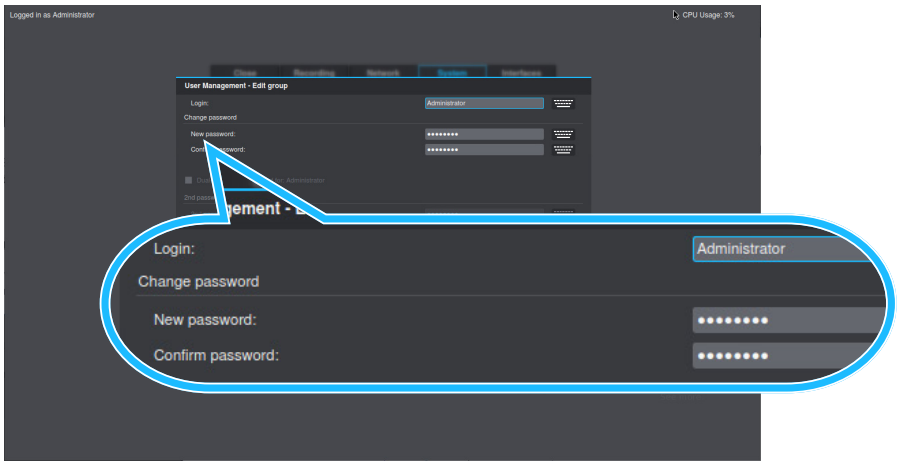

Fig. 3-44

- Enter the **New passwor**d and **Confirm** it.
- Click **OK** and confirm the subsequent info dialog with **OK**.
- Finally, close the **User Management** dialog with **OK**.

3.2.2 Enter Serial Number

In the last step the serial number has to be entered for the SMAVIA Recording Server.
After the group password has been changed, is displayed at the next login process the dialog for entering the serial number of the SMAVIA Recording Server VM III automatically:

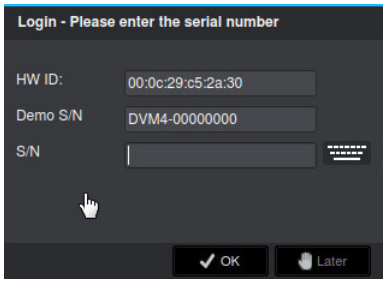

Fig. 3-45

- Enter in the **S/N** field the serial number of the SMAVIA Recording Server VM III.
- Confirm the input with **OK**.

3.3 AUTOSTART ORDER

The startup order of the virtual machines should be adjusted. The dongle server should stand here in the first place and be started before the SMAVIA Recording Server.

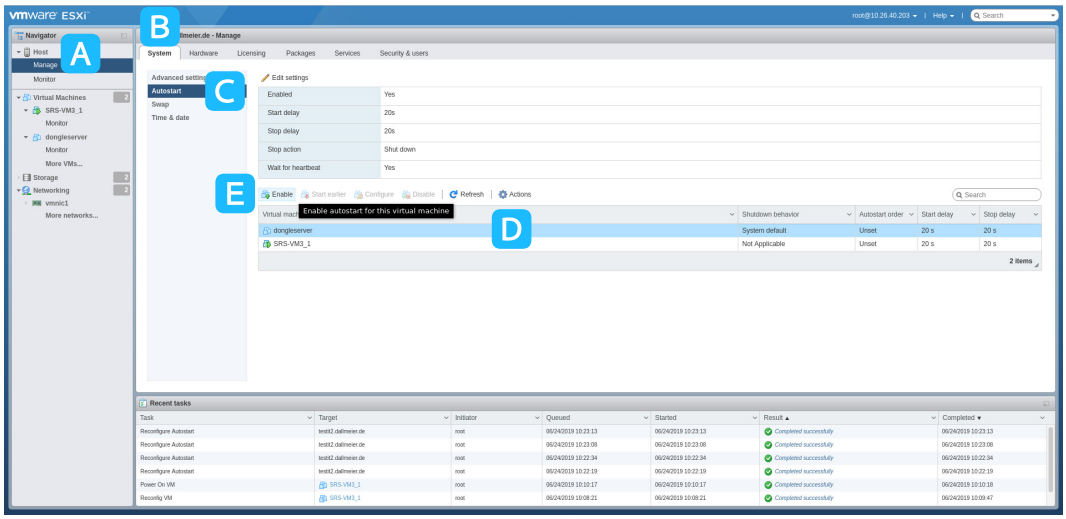

Fig. 3-46

- Select the host server in the **Navigator** column A.
- Switch to the configuration tabs in the administrator panel and select the **System** tab B.
- Select the **Autostart** section C.
- Highlight the dongle server entry D.
- Click **Enable** to include the dongle server in the autostart E.

The dongle server is positioned on the first place.

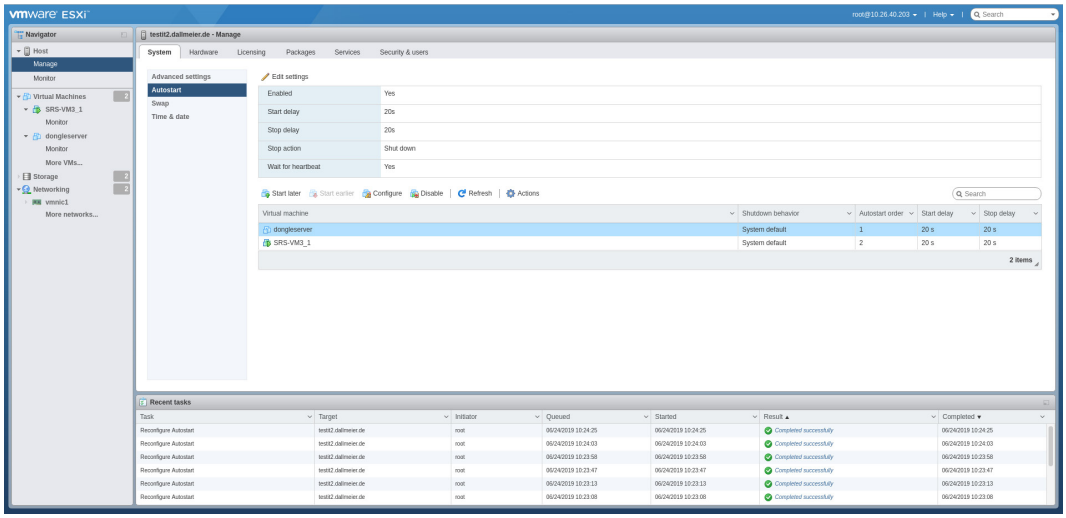

Fig. 3-47

- Repeat the steps and also include the SRS VM in the autostart and place it there in the second position.

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