

UNIVERGE SV9500

FP95-115 V5

Software Model Installation Manual

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UNIVERGE SV9500

Software Model Installation Manual

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CHAPTER 1

SOFTWARE MODEL OVERVIEW

1. Overview

Software Model offers several voice services as a virtualization platform and is installed according to the virtual environment of the user.

Note: Software Model is available from FP95-114 V4.

Each software provides the following features.

- SV9500 Software Model:

Is the Telephony Server software. The Telephony Server realizes in a virtual environment the voice services included in SV9500.

- Software-based MG-SIP:

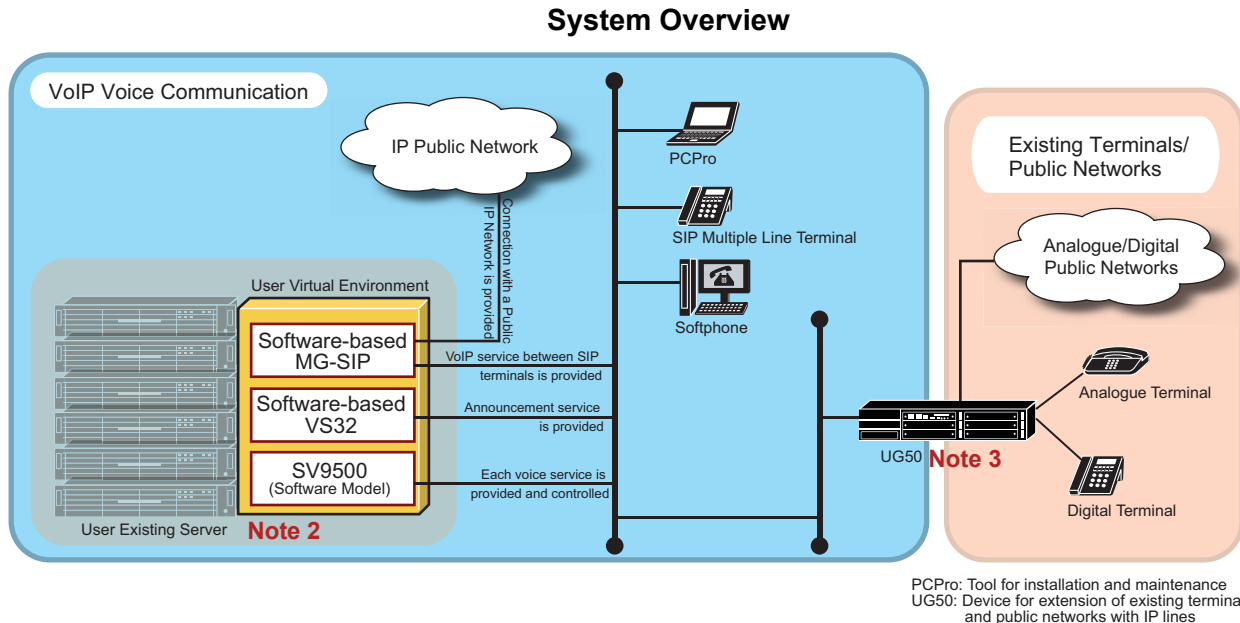
Is the software for realizing the voice services provided by MG-SIP in a virtual environment. For a detailed explanation, see Software-based MG-SIP chapter in the Software Model Peripheral Equipment Description manual.

- Software-based VS32: (**Note 1**)

Is the software for realizing the voice services provided by VS32 in a virtual environment. For a detailed explanation, see Software-based VS32 chapter in Software Model Peripheral Equipment Description.

Note 1: It only provides announcement (DAT) feature.

Overview image of the Software Model is as follows.



Note 2: The standard (recommended) specifications for the hardware server are given in the table below. Consult your dealer or the maintenance company for a detailed explanation of the hardware models that can be used for Software Model and the needed specs .

Item	Standard Specifications (Recommended)
Hard disk	600GB × 4 (minimum) (RAID6 Configuration)
CPU	2.2 GHz (minimum) 8 Cores (minimum) 16 Threads (minimum)
Memory	64GB (minimum)
External LAN	1G/100M/10M × 3 Ports
Power	AC

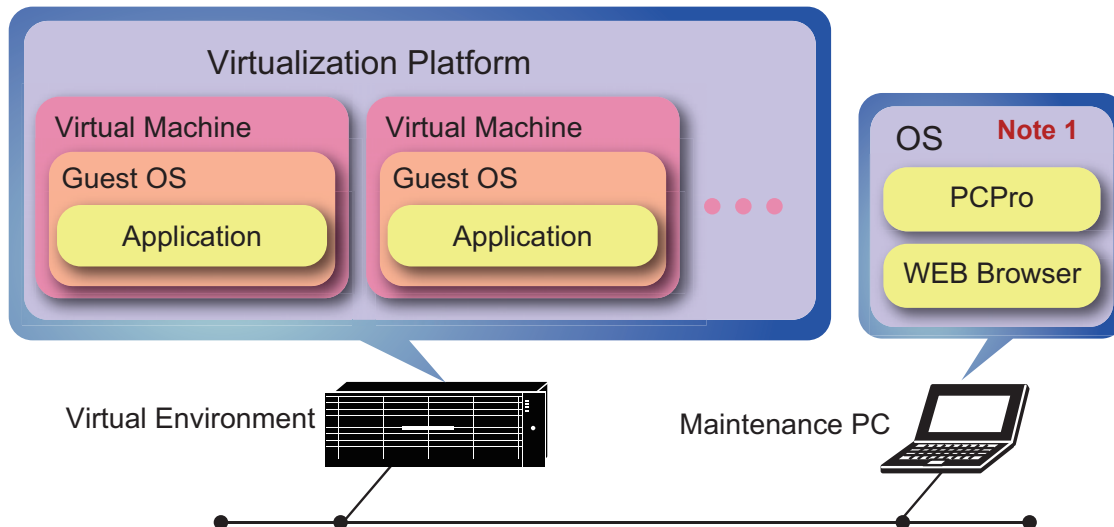
Note 3: Software Model can be used only in a full IP configuration. The connection with analog and digital terminals, as well as connections with public analog and digital networks, uses UG50.

For information about the virtual platform and guest OS that can be used, see Software Model Structure and Environment section in this manual. Also, depending on the combination in the use of peripheral devices, several configurations can be used. For an explanation, see System Description.

2. Software Model Structure and Environment

Software Model operates multiple virtual machines using virtualization platform.

Operating System Configuration Image (Software Model)



Note 1: Install applications necessary for configuring and managing the virtual machines in the virtual environment.

The following virtual platform is installed as a software that controls the virtual machines in the hardware for Software Model operations.

Telephony Server	Virtualized Platform
FP95-114 V4 or later	VMware vSphere Hypervisor (VMware ESXi)

If VMware vSphere Hypervisor (ESXi) (from now on, VMware ESXi) is used, the software versions combination is as follows:

Telephony Server	VMware ESXi	vCenter Server Appliance (vCSA)
FP95-115 V5	6.0/6.5 Note 2, Note 3	6.0/6.5 Note 3
FP95-114 V4	6.0 Note 2, Note 3	6.0 Note 3

Note 2: If there is a VMware ESXi software specific for a determined hardware used in the virtual environment, use the same version of that specific VMware ESXi. If there is not specific VMware ESXi, use the same version of the standard VMware ESXi.

Note 3: The use of the latest build version of the supported software is recommended.

If VMware ESXi is used, virtual machines need to be installed in the following configuration. Note that the configuration differs depending on what application you use.

Virtual Machine	Guest OS	Application	Remarks
SV9500	CentOS	SV9500	The virtual software of the Telephony Server.
		VMware Tools	A utility that receives instructions from VMware ESXi on the guest OS. Executes shutdown control of the guest OS and time synchronization between VMware ESXi and the guest OS.
Software-based MG-SIP (Note 4)	CentOS	Software-based MG-SIP	The virtual software of MG-SIP. For a detailed explanation, see Software-based MG-SIP chapter in the Software Model Peripheral Equipment Description.
		VMware Tools	
Software-based VS32 (Note 4)	CentOS	Software-based VS32	The virtual software of VS32 (Note 5). For a detailed explanation, see Software-based VS32 chapter in the Software Model Peripheral Equipment Description.
		VMware Tools	
vSphere Web Client (Note 6, Note 7).	vCenter Server Appliance (vCSA) (Note 8).	vSphere Web Client	A browser based management tool of VMware for the management of virtual machines configuration and operation.
		VMware Tools	

Note 4: In a virtual platform that uses VMware ESXi 6.0, when operating this virtual machine, configure and manage the virtual machine with vSphere Client. Do not use vSphere Web Client.

Note 5: It only provides announcement (DAT) feature.

Note 6: If you cannot connect with vCenter Server Appliance (vCSA) (from here, vCSA), use the following client tools for management operations. However, in this case the features that you can use are limited, and the usable client tool depends on the VMware ESXi version.

VMware ESXi	Client Tool	Remarks
6.5	VMware Host Client	A web browser based application and simplified version of vSphere Web Client. For details, refer to the VMware webpage.
6.0	vSphere Client	Download from the VMware webpage the installation software (with the same version of the used vCSA), install it in the Maintenance PC and use it.

Note 7: This software manages the vSphere infrastructure (VMware ESXi, virtual machines, etc). It can provide a uniform management for other systems if such systems also include a vCSA.

Note 8: Check the required software in the VMware webpage manual for vSphere Web Client installation and set up.

Note: For details on the operating environment of PCPro, see Operating Environments and Conditions in PCPro Setup Manual.

Note: For details on the operating environment of the Telephony Server Maintenance Menu, see [2.2 Telephony Server Maintenance Menu](#).

3. Software Model NIC Settings

In the Software Model, the physical NICs used by the hardware that operates the virtual environment and the virtual NICs of the virtual machines are connected according to the settings of the virtualization platform. Some of the design conditions when performing such settings are explained below.

- (1) LAN port operation mode settings.

The following settings are recommended for the virtual ports of the virtual machines.

Operation Mode	
Speed	Auto negotiation (10M/100M/1Gbps)
Duplex	Full

Note: The virtual ports and virtual switches need 1Gbps to operate.

- (2) Bandwidth usage.

SV9500 Software Model, Software-based MG-SIP and Software-based VS32 have a maximum bandwidth usage as explained below. When deciding the physical NICs to be used, take into consideration the loads in your actual environment and make a design according to it.

Equipment	Maximum Usage of Bandwidth (Mbps)
SV9500 Software Model	32
Software-based MG-SIP Note 1	600 Note 2
Software-based VS32	6

Note 1: If more than one Software-based MG-SIPs are used, consider increasing the number of physical NICs.

Note 2: 600 Mbps of maximum usage is in the case that 128 channels are used for video call and 128 channels for voice call.

4. Conditions

The following are conditions for Software Model.

- [1] In case several SV9500 Software Model, Software-based MG-SIP and Software VS32 are used, set the system within a range where the total amount of memory and cores does not exceed the server specifications (maximum number of cores (**Note 1**), memory quantity, etc).

[Example of Calculation]

• vCSA	2 Cores	Memory	8 GB	HDD	125 GB
• SV9500	2 Cores	Memory	2 GB	HDD	8 GB
• Software-based MG-SIP	2 Cores	Memory	2 GB	HDD	8 GB
• Software-based VS32	1 Core	Memory	1 GB	HDD	4 GB
• Software-based VS32	1 Core	Memory	1 GB	HDD	4 GB
Total	8 Cores	Memory	14 GB	HDD	149 GB

Note 1: If the server specifications are displayed in Cores and Threads, make the calculations in Cores.

- [2] Software Model supports only a full IP configuration.
- [3] The following features are not available for SV9500 Software Model:
- Attendant Console features
 - ACT-Side Quick Restart feature by the OAI system
 - AUTOMATED ATTENDANT [A-82] via MG(SIP), provided by the RST card
 - LOCATION DIVERSITY [L-55]
 - POWER FAILURE TRANSFER [P-3]
 - NIGHT CONNECTION - FIXED [N2]
- [4] Both of DSS/BLF mode and ADM mode on DSS Console are supported since FP95-114 V4 Issue 2.0. For FP95-114 V4 or earlier, only ADM mode is supported.
- [5] ACD features are supported in North America from FP95-114 V4. In other markets, it is supported from FP95-115 V5.

Note: When using ACD features, only the terminals/devices listed in both sections below can be used.

- [System Description] - [VARIOUS INFORMATION FOR SV9500] - [New/Migration List for Peripheral Equipment] - [Peripheral Equipment - SV9500 Software Model and SV9500 Prepackaged Server Model].
- [Data Programming Manual - ACD] - [GENERAL INFORMATION] - [System Configuration] - [Equipment/Terminals Accommodating in ACD/OAI System].

Note: For ACD feature usage, see [Data Programming Manual - ACD].

- [6] PIRs cannot be connected to SV9500 Software Model. Note the following limitations:
- (a) For Music-On-Hold feature, use VS32 or the internal Music-On-Hold of each device.
- Note:** An External Music-On-Hold feature that uses EMA card is not available.
- (b) CCIS networking is available only via IP (Peer-to-Peer connection). Also, when using CCIS networking, assign the system data ASYDL, SYS 1, Index 810, bit 0=1 (MOH from the Self Office).
 - (c) Attendant Console features are not supported.
 - (d) Cell Station (CS) cannot be used with SV9500 Software Model.
- [7] SV9500 Software Model cannot detect a failure that occurs in the hardware because the SV9500 Software Model operates on a virtual machine.
- [8] System Messages cannot be directly output to a printer for a SV9500 Software Model.
- [9] For Hotel features the following restrictions apply:
- (a) Only the following terminals are available:
 - SIP Multiple Line terminal (DT800/DT700 series)
 - Standard SIP terminal
 - Digital terminal (DT400/300 series) with UG50
 - Analog terminal with UG50
 - (b) Features that use Attendant Console cannot be used.
- [10] For FCCS the SV9500 Software Model, Appliance Model and Prepackaged Server Model can be used together but only with FCCS Networking via IP (Peer-to-Peer).
- [11] Software Model uses full IP configuration. Therefore, announcement related features only use VS32 and Software-based VS32.
- [12] VS32 and Software-based VS32 can be used with single connection. Multiple connection ACD Announcements are supported on the hardware VS32 but not the Software-based VS32.
- [13] The features provided by the IOC card, such as Remote Maintenance and STATION MESSAGE DETAIL RECORDING (SMDR) [S-10] features, are not available.
- [14] See Peripheral Equipment - SV9500 Software Model and SV9500 Prepackaged Server Model sections of the System Description manual for the devices that can be connected to the SV9500 Software Model.
- [15] CPU/TSW changeover is not executed during a diagnostic of SV9500 Software Model.
- [16] Software Model cannot connect to MA4000.
-

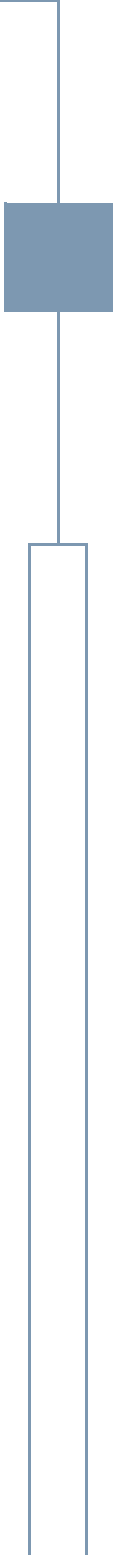
- [17] Upgrading and downgrading of the program version must be performed only through the Telephony Server Maintenance Menu. Do not use PCPro commands.
- [18] VMware ESXi needs to be licensed before operating.
- [19] Note the following conditions regarding VMware:
- (a) Failures are monitored by using the alarm feature of vCSA. This feature is not available when vCSA is down.
 - (b) When vCSA is down, reboot vCSA manually by using VMware Host Client or vSphere Client.
 - (c) Install VMware Tools on a virtual machine that is managed by VMware ESXi.
 - (d) When monitoring a startup status of the system via vSphere Web Client, there may be differences between the displayed status and the actual system status.
- [20] Note the following when using the snapshot feature of VMware ESXi:
- (a) Before using the snapshot feature, back up the office data to HDD with the MEM_HDD command.
 - (b) Before using the snapshot feature, ensure that the MEM_HDD command is not running on the SV9500 Software Model and stop routine diagnostics of the SV9500 Software Model. If a backup operation (by the MEM_HDD command or a periodic backup) is in progress, do not use the snapshot feature.
 - (c) Clear the following check boxes when using the snapshot feature:
 - Snapshot the virtual machine's memory
 - Quiesce guest file system (Needs VMware Tools installed)
- [21] Note the following conditions regarding time synchronization:
- (a) The ATIM command cannot be used for time setting.

Note: The time zone and Daylight Savings time settings can be performed by the ATIM command.
 - (b) Time synchronization with an NTP server is executed only for VMware ESXi. Time synchronization between a guest OS and VMware ESXi is executed by VMware Tools.

Note: It takes up to two minutes from when the time is set in VMware ESXi by synchronizing with an NTP server to when the time set is reflected in the ATIM command.

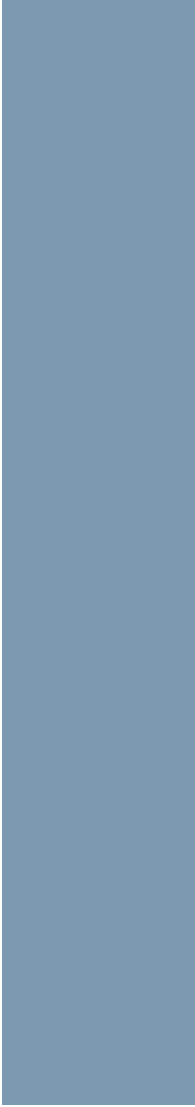
Note: Do not use the ANTPL command.

- (c) If the time of the VMware ESXi is set to an earlier time than that of the guest OS, automatic time synchronization by VMware Tools is not executed. For synchronization a time setting of VMware ESXi must be the same as that of the guest OS.
- (d) When the time of the VMware ESXi is changed while a guest OS is in operation, time synchronization between the VMware ESXi and the guest OS is executed every minute.
- (e) For time synchronization with VMware Tools, the clocks of IP/SIP terminals are synchronized at the following times:
 - at the startup of a guest OS
 - approximately one minute after the setting is changed



CHAPTER 2

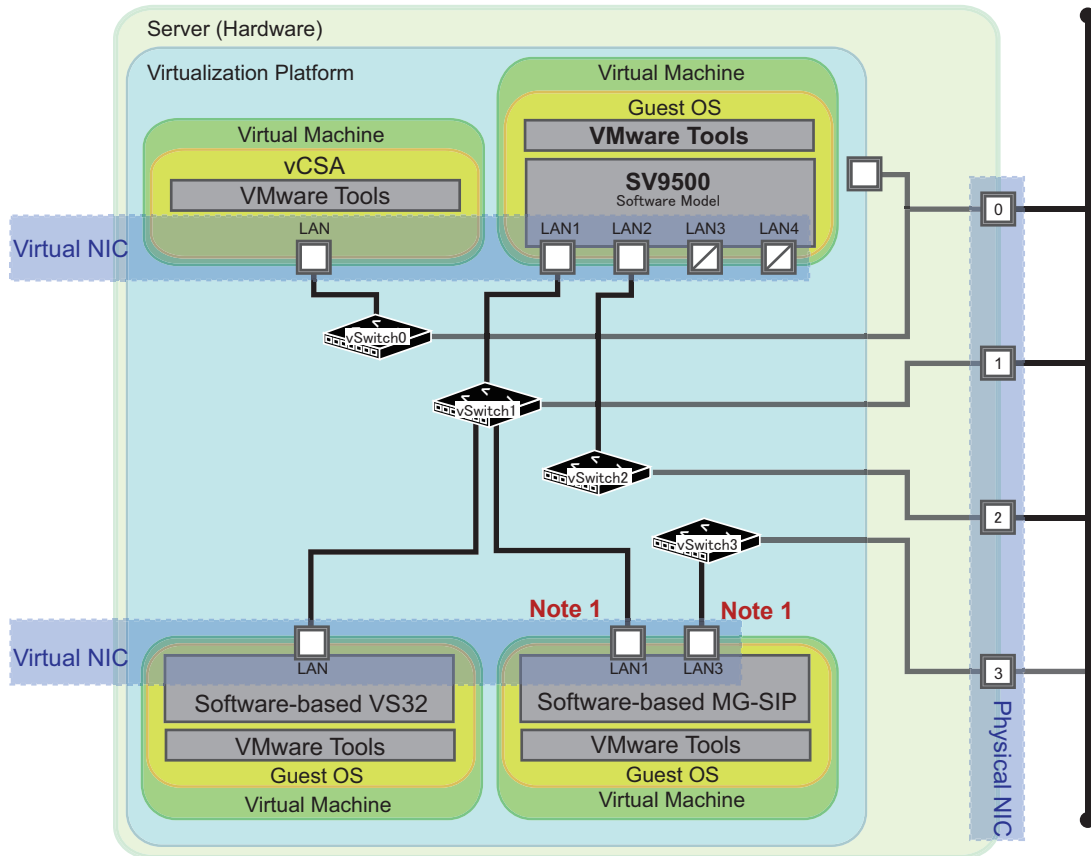
SOFTWARE MODEL INSTALLATION AND SETUP



1. Software Model Using VMware ESXi

1.1 Network Configuration Example Data

In this manual, installation process is explained using the following example of configuration.



Note 1: LAN1 and LAN3 of Software-based MG-SIP correspond respectively to Ether1 (LAN side) and Ether2 (WAN side) of Software-based MG-SIP chapter in Software Model Peripheral Equipment Description.

Virtualization Platform

Software	IP Address
VMware ESXi	192.168.1.1/16

Virtual Machine

Virtual Machine	Virtual NIC	IP Address
vCSA	-	192.168.1.2/16
SV9500 Software Model	LAN1	192.168.1.11/16
	LAN2	162.168.1.12/16
Software-based MG-SIP	LAN1	192.168.1.16/16
	LAN3	192.168.1.17/16
Software-based VS32	LAN1	192.168.1.14/16

The connection patterns of Virtual NIC and Physical NIC are as follows.

Virtual Machine	Virtual NIC (LAN Label)	Virtual Switch	Physical NIC
vCSA	-	vSwitch0	vmnic 0
SV9500 Software Model	LAN1	vSwitch1	vmnic 1
	LAN2	vSwitch2	vmnic 2
Software-based MG-SIP	LAN1	vSwitch1	vmnic 1
	LAN3	vSwitch3	vmnic 3
Software-based VS32	LAN1	vSwitch1	vmnic 1

1.2 Before Installation

Before performing the installation process, consider the following points.

- [1] Since the performance of the SV9500 Software Model can deteriorate depending on the settings of the BIOS/UEFI hardware and CPU power management, perform the settings for the VMware ESXi host server as needed. Check the BIOS/UEFI manual of each server for a detailed explanation.
- [2] In the case that NEC Express 5800 FT server is used, when a virtual machine is created, the adapter type of the Virtual NIC should be set to [VMXNET3]. For settings details, see [STEP 8](#) of [1.5.1 Virtual Machine Creation](#). Also, because of this setting, the settings and value confirmation of the communication speed and mode of the Virtual NICs need to be performed in vCSA. Use vSphere Web Client to set and confirm those values.

Note: When [VMXNET3] is set, the settings for the Virtual NICs communication and speed mode performed in the virtual machine are not executed. Also, the values displayed in the virtual machine may not be correct.

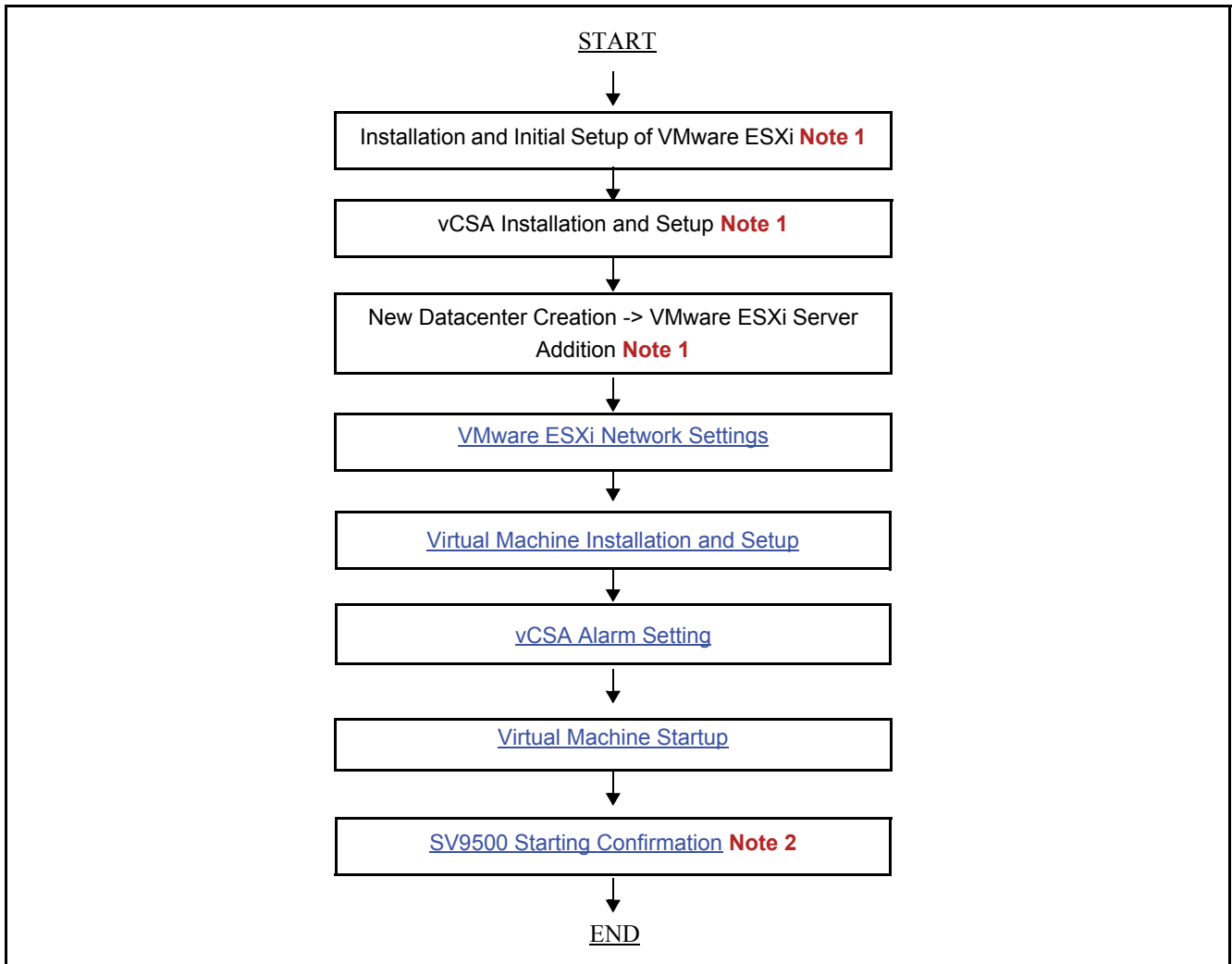
- [3] If Software-based MG-SIP or Software-based VS32 are operated with a virtual platform that uses VMware ESXi 6.0, vSphere Client installation in the maintenance PC is required.

1.3 Flow of Software Model Installation

Follow the flow chart below for instructions on the installation procedure of Software Model.

Note: This installation process uses the SV9500 Software Model as an example. When installing the Software-based VS32 or Software-based MG-SIP, follow the SV9500 Software Model installation process. Differences in the installation process between the SV9500 Software Model, Software-based VS32 and the Software-based MG-SIP have also been included.

Note: There may be a difference in the parameters depending on the system environment and software version used.



Note 1: For the VMware software, consult the installation process in the VMware manuals.

Note 2: Not required for Software-based MG-SIP and Software-based VS32.

1.4 VMware ESXi Network Settings

In this section vSwitches are created (vSwitch operates between the physical NICs used by the host server and the virtual NICs of the virtual machine). For the connection diagram of the vSwitches, refer to [Network Configuration Example Data](#).

1.4.1 vSwitch1 Creation

The vSwitch1 created in this installation procedure is used for the following purposes for each virtual machine.

Virtual Machine	Purpose of Use
SV9500	LAN1
Software-based MG-SIP	LAN1
Software-based VS32	LAN

Proceed as follows to create vSwitch1.

- 1 In the Home screen of vSphere Web Client, click on [Host and Clusters]
- 2 Click on [192.168.1.1] (the VMware ESXi host server) in [Datacenter].
- 3
 - (1) Move to [Manage] tab.
 - (2) Select [Networking].
 - (3) Select [Virtual switches].
 - (4) Click the [Add host networking] icon.
- 4 The [Add Networking] screen is displayed. Select [Virtual Machine Port Group for a Standard Switch] and click [Next].
- 5 Select [New standard switch]. Click [Next].
- 6 Select [Active adapters] and click [Add adapters] icon.
- 7 Check that [vmnic1] is selected. Click [OK].
- 8 Verify that [(New)vmnic1] is in [Active adapters] and click [Next].
- 9 Assign the data as shown below. Click [Next].

Network label: **LAN1**
VLAN ID (Optional): **None (0)**

Note: In this network example, the name of the datacenter is Datacenter.

10 Verify the settings, and if there are no problems, click [Finish].

Standard Switch 1 (vSwitch1) creation is finished.

1.4.2 vSwitch2 Creation

The vSwitch2 created in this installation procedure is used for the following purposes for each virtual machine.

Virtual Machine	Purpose of Use
SV9500	LAN2
Software-based MG-SIP	Not used
Software-based VS32	Not used

Proceed as follows to create vSwitch2.

- 1 After verifying [vSwitch1] is shown on the [Virtual switches] screen, click the [Add host networking] icon (the first one from the left).
- 2 The [Add Networking] screen is displayed. Select [Virtual Machine Port Group for a Standard Switch] and click [Next].
- 3 Select [New standard switch]. Click [Next].
- 4 Select [Active adapters] and click the [Add adapters] icon.
- 5 Check that [vmnic2] is selected. Click [OK].
- 6 Verify that [(New)vmnic2] is in [Active adapters] and click [Next].
- 7 Assign the data as shown below. Click [Next].
Network label: LAN2
VLAN ID (Optional): None (0)
- 8 Verify the settings, and if there are no problems, click [Finish].

Standard Switch 2 (vSwitch2) creation is finished.

1.4.3 vSwitch3 Creation

The vSwitch3 created in this installation procedure is used for the following purposes for each virtual machine.

Virtual Machine	Purpose of Use
SV9500	Not used
Software-based MG-SIP	LAN3
Software-based VS32	Not used

Proceed as follows to create vSwitch3.

- 1 After verifying [vSwitch2] is shown on the [Virtual Switches] screen, click [Add host networking] icon (the first one from the left).
- 2 [Add Networking] screen is displayed. Select [Virtual Machine Port Group for a Standard Switch] and click [Next].
- 3 Select [New standard switch]. Click [Next].
- 4 Select [Active adapters] and click the [Add adapters] icon.
- 5 Check that [vmnic3] is selected. Click [OK].
- 6 Verify that [(New)vmnic3] is in [Active adapters] and click [Next].
- 7 Assign the data as shown below. Click [Next].
Network label: LAN3
VLAN ID (Optional): None (0)
- 8 Verify the settings, and if there are no problems, click [Finish].

Standard Switch 3 (vSwitch3) creation is finished.

1.5 Virtual Machine Installation and Setup

1.5.1 Virtual Machine Creation

Follow the steps below to create a virtual machine (the example uses SV9500 Software Model).

Note: Although the process in this section is basically the same as the SV9500, follow the indications for the minor differences if using it for a Software-based VS32 or Software-based MG-SIP.

- 1** Select and right-click [Datacenter]. Select [New Virtual Machine].
- 2** Select [Create a new virtual machine] and click [Next].
- 3** Enter "SV9500" as the virtual machine name (you can choose the name that you want).
For the location of the virtual machine, select [Datacenter] and click [Next].
- 4** Select [192.168.1.1] (the ESXi IP address) and click [Next].
- 5** Select [datastore1] and click [Next].
- 6** Set [Compatibility with:] according to the used version of ESXi and click [Next].
- 7** Enter the data as shown below and click [Next].

Guest OS Family: Linux
Guest OS Version: For VMware ESXi 6.5, select [CentOS 6 (32-bit)]
For VMware ESXi 6.0, select [CentOS 4/5/6 (32-bit)]

8

In the [Virtual Hardware] tab, set the fields as below.

[CPU]

- (1) In case of SV9500/Software-based MG-SIP
 - CPU: 2
 - Cores per Socket: 2
 - Reservation: Two times the value of the CPU MHz (2 Cores value)
 - Limit: Two times the value of the CPU MHz (2 Cores value)
 - CPU/MMU Virtualization: Hardware CPU and MMU
- (2) In case of Software-based VS32
 - CPU: 1
 - Cores per Socket: 1
 - Reservation: The value of the CPU MHz
 - Limit: The value of the CPU MHz
 - CPU/MMU Virtualization: Hardware CPU and MMU

[Memory]

- (1) In case of SV9500/Software-based MG-SIP
 - RAM: 2048 MB
 - Reserve all guest memory (All locked): checked
 - Limit: 2048 MB
- (2) In case of Software-based VS32
 - RAM: 1024 MB
 - Reserve all guest memory (All locked): checked
 - Limit: 1024 MB

[New Hard disk]

- (1) In case of SV9500/Software-based MG-SIP
 - New Hard disk: 8 GB
 - Disk Provisioning: Thick provision eager zeroed
- (2) In case of Software-based VS32
 - New Hard disk: 4 GB
 - Disk Provisioning: Thick provision eager zeroed

[New Floppy drive]

- Click [X] on the right and erase the floppy drive.

[New Network]

Set as follows for [LAN1] [LAN2] [LAN3].

- Connect At Power ON: checked
- Adapter Type: E1000 **Note 1**
- MAC Address: Enter the MAC Address that you want to use

Note1: When a NEC Express 5800 FT server is used as the host server, set to [VMXNET3].

Note: The SV9500, LAN1 and LAN2 needs to be set. For Software-based VS32, only LAN1 needs to be set. For Software-based MG-SIP, LAN1 and LAN3 need to be set.

Note: For adding a New network, Select [Network] from the drop down menu of the [Network] button (2) (shown at the bottom of the screen) and then click [Add].

Note: MAC addresses need to be unique.

[Device Mode]

- Select Emulate CDROM.

9

A screen for verifying the settings is displayed. If there are no problems, click [Finish].

10

[SV9500] is created on the menu shown on the left side of the screen.

11

Right-click [SV9500] and select [Edit Settings].

12

Click [VM Options] tab on the [Edit Settings] screen. Mark the [Synchronize guest time with host] checkbox and click [OK].

Note: For Software-based VS32 and Software-based MG-SIP, verify that there is not a mark in [Synchronize guest time with host]. If there is a mark, click to remove it.

The virtual machine creation process is finished.

1.5.2 Virtual Machine Software Install

This section explains how to install the virtual machine software using the SV9500 Software Model as an example.

- 1 On the server insert the DVD for SV9500 installation.
- 2 Verify that SV9500 is powered on (the green triangle is displayed in the machine). If it is not powered on, right-click [SV9500] on the menu on the left side of the home screen and select [Power] -> [Power On].
- 3 Select [SV9500] and in the menu on the center of the screen click [Summary] tab. Select [CD/DVD drive 1] -> [Connect to Host CD device].
- 4 Select and right-click [SV9500]. Click on [Open Console].
- 5 A loading screen is displayed for about three minutes,

Note: If a screen for host device selection is displayed, click [OK].

Note: A warning message can appear. In that case to continue click on [Continue to this website (not recommended)].

```
Network boot from Intel E1000
Copyright (C) 2003-2014 VMware, Inc.
Copyright (C) 1997-2008 Intel Corporation

CLIENT MAC ADDR: 00 50 56 10 16 01 GUID: 421D08F2-DDA2-A2A3-7D83-D1197D4B7C3F
PXE-E51: No DHCP or proxyDHCP offers were received.

PXE-M0F: Exiting Intel PXE ROM.

Network boot from Intel E1000 #2
Copyright (C) 2003-2014 VMware, Inc.
Copyright (C) 1997-2008 Intel Corporation

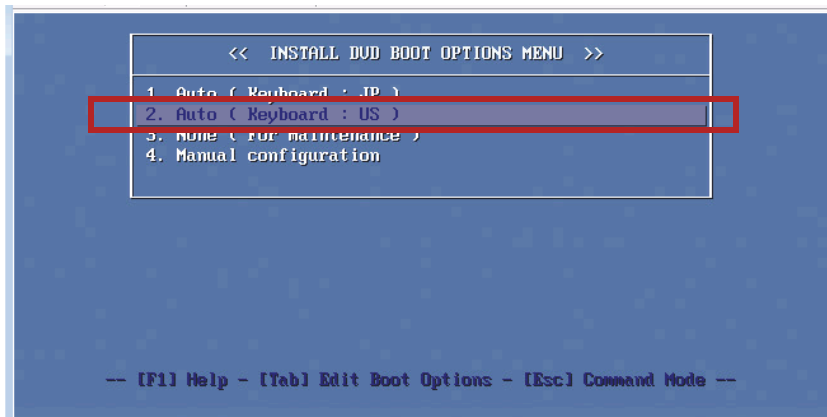
CLIENT MAC ADDR: 00 50 56 10 06 02 GUID: 421D08F2-DDA2-A2A3-7D83-D1197D4B7C3F
PXE-E51: No DHCP or proxyDHCP offers were received.

PXE-M0F: Exiting Intel PXE ROM.
Operating System not found
-
```

6

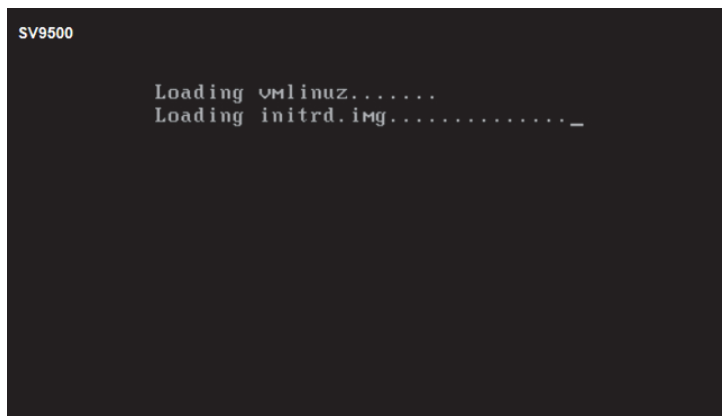
After a few minutes the Install DVD Boot Menu is displayed in the console screen. When Install DVD Boot Menu appears, click anywhere inside the console screen. The control is moved to the console screen.

Select [2], for the US keyboard and press [Enter].



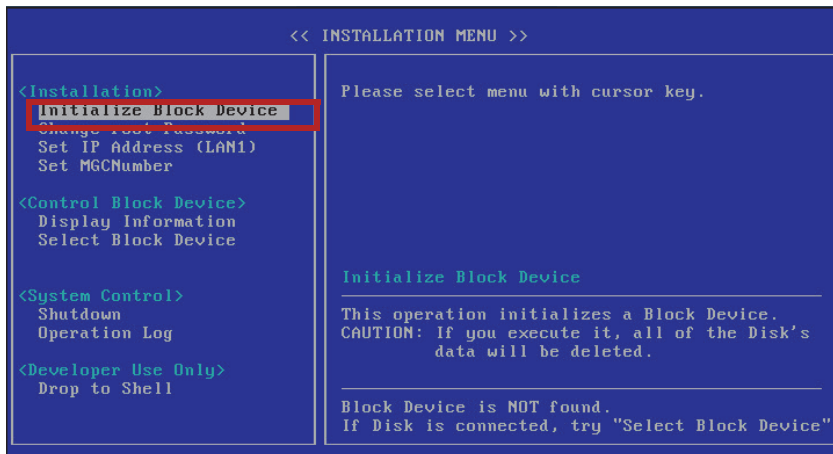
7

A loading screen is displayed for about three minutes.



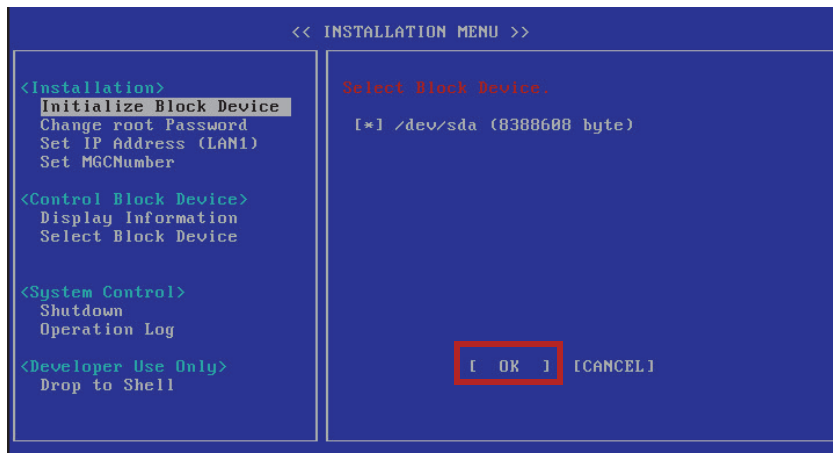
8

Eventually the [INSTALLATION MENU] screen of SV9500 is displayed. Select [Initialize Block Device] by using the arrow keys on the keyboard and then press [Enter].



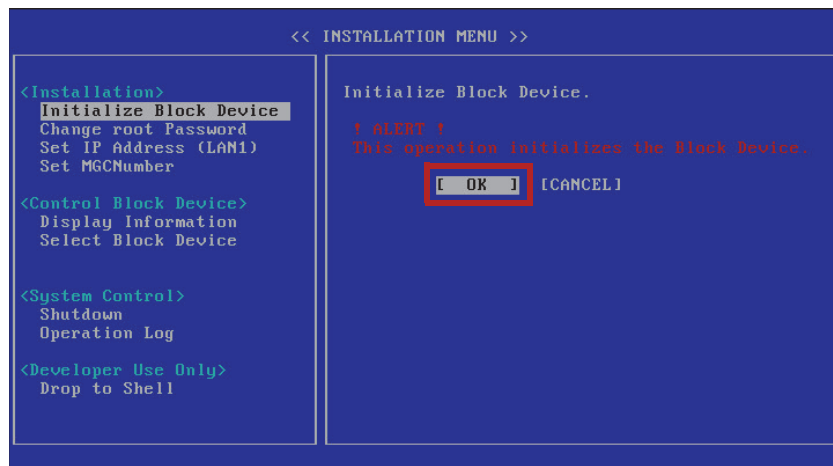
9

When the screen shown below is displayed, select [OK] and press [Enter].

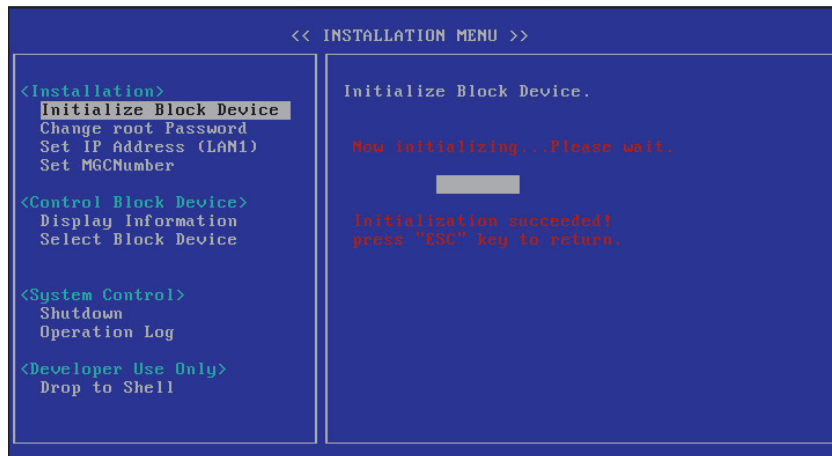


10

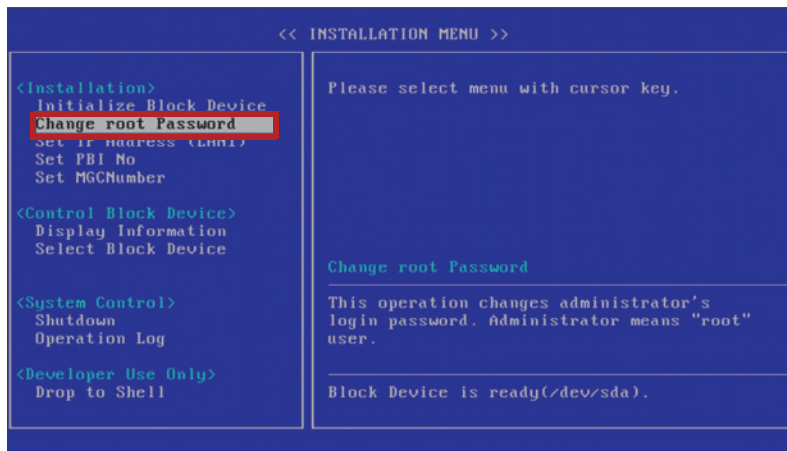
Confirmation screen is displayed. Select [OK] and press [Enter].



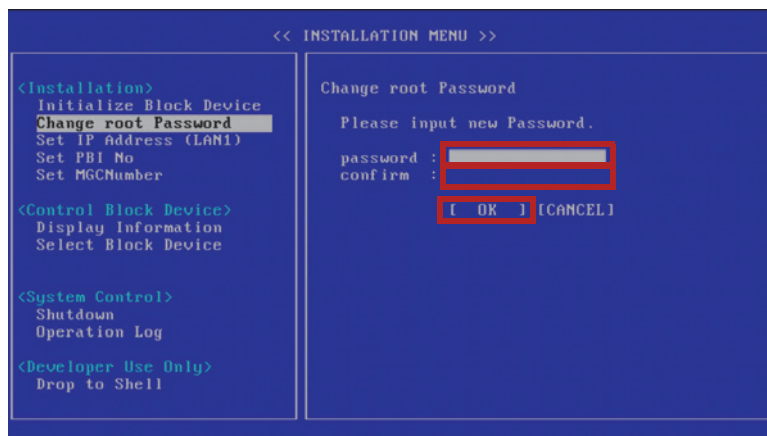
- 11** When the screen shown below is displayed, the initialization process is finished. Press [ESC].



- 12** Select Change root Password and press [Enter].

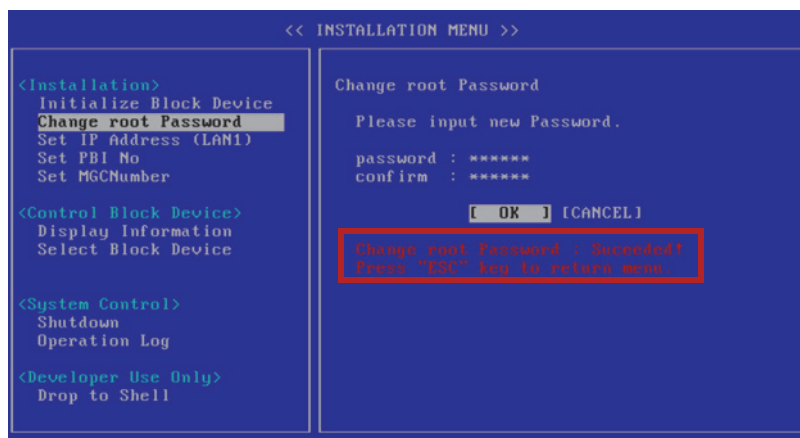
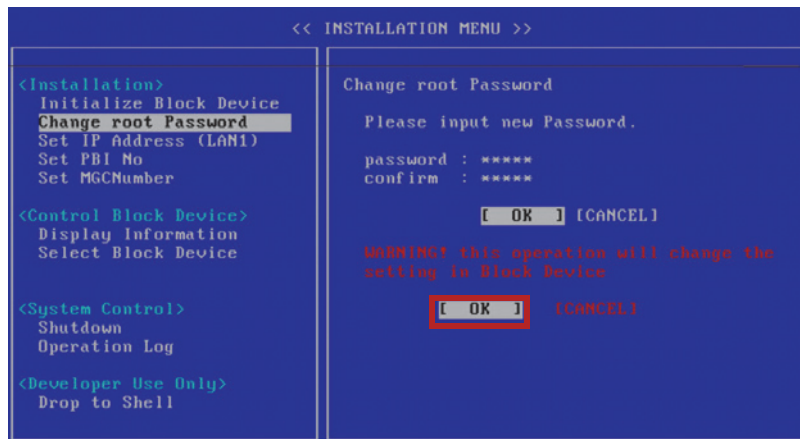


- 13** Enter a password (any password that you want to use), confirm it and select [OK]. Press [Enter].

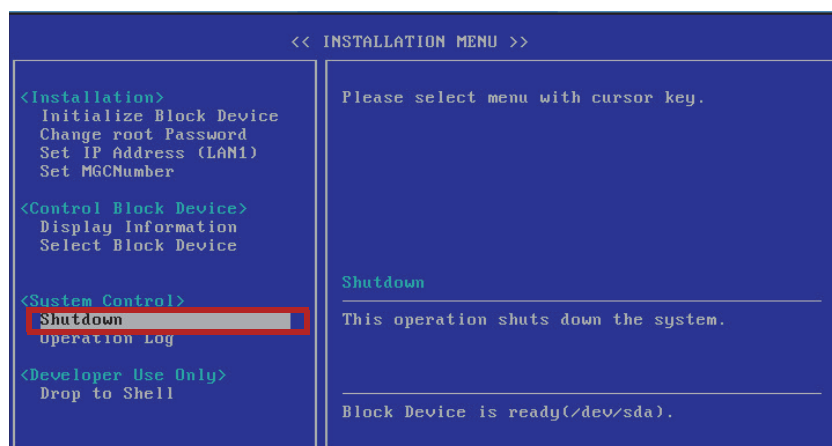


Note:
Do not forget the root password once it is changed.

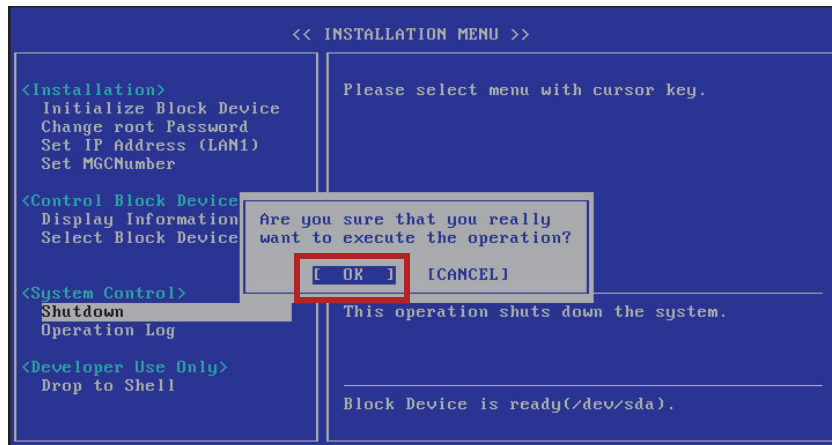
- 14** Select [OK] for the warning message displayed regarding changing the setting for the block device and press [Enter]. When the message for a successful password change is displayed, press [ESC].



- 15** Select [Shutdown] and press [Enter].



- 16** The screen shown below is displayed to confirm the shutdown. Select [OK] and the shutdown will start.



- 17** The DVD is automatically ejected. A remote device interruption screen is displayed. Remove the DVD.
- 18** Press [Ctrl] and [Alt]. The control is moved from the console screen to the maintenance PC.

Software installation for SV9500 Software Model is finished.

1.6 vCSA Alarm Setting

This section describes how to set the alarm for the virtual machine using the SV9500 Software Model as an example.

Note: vCSA alarm setting process is the same for the SV9500 Software Model, Software-based MG-SIP and the Software-based VS32.

1 Select [SV9500] and click [Alarm Definitions] on the [Manage] tab. Click [Add] (+) icon.

2 The [New Alarm Definition] screen is displayed. Set the data for each field as shown below.

1. General

Alarm name: Suspension of Guest OS

Description: (blank)

Monitor: Virtual Machine

Monitor for: specific conditions or state, for example CPU usage

Enable this alarm: checked

After finishing, click [Next].

2. Trigger

Trigger if All of the following conditions are satisfied:

Trigger: VM Memory Usage

Operator: is below

Warning Condition: 2% for 1 minutes

Critical Condition: 1% for 1 minutes

Click [+] and set the following.

Trigger: VM Heartbeat

Operator: is equal to

Warning Condition: Intermittent Heartbeat

Critical Condition: No Heartbeat

After finishing, click [Next].

3. Actions

Click [+] and set the following.

Action: Reset VM

Configuration: (blank)

  : (blank)

  : **Repeat**

  : (blank)

  : (blank)

Repeat actions every: 5 minutes.

After finishing, click [Finish].

Note:
Alarm names must be unique.

Note:
3. Actions settings are not required for Software-based MG-SIP.

3

Click the [Add] (+) icon again as shown in the screen below. The [New Alarm Definition] is displayed.

4

On the [New Alarm Definition] screen Enter the settings as shown below.

1. General

Alarm name: Suspension of Virtual Machine

Description: (blank)

Monitor: Virtual Machine

Monitor for: specific conditions or state, for example CPU usage

Enable this alarm: checked

After finishing, click [Next].

2. Trigger

Trigger if ANY of the following conditions are satisfied:

Trigger: VM State

Operator: is equal to

Warning Condition: None

Critical Condition: Powered off

After finishing, click [Next].

3. Actions

Click [+] icon and set the following.

Action: Power on VM

Configuration: (blank)

  : (blank)

  : **Repeat**

  : (blank)

  : (blank)

Repeat actions every **5** minutes

After finishing, click [Finish].

Note:

Alarm names must be unique.

The vCSA alarm setting process is finished.

1.7 Virtual Machine Startup

Proceed as follows for the startup of the virtual machine (this example uses the SV9500 Software Model).

Note: For Software-based MG-SIP, just install VMware Tools as explained from [STEP 12](#) (ignore other procedures).

Note: For Software-based VS32, refer to [Software Model Peripheral Equipment Description] - [Software-based VS32] and after performing the Telephony Server data settings and the Software-based VS32 setup settings, just install VMware Tools as explained from [STEP 12](#) (ignore other procedures).

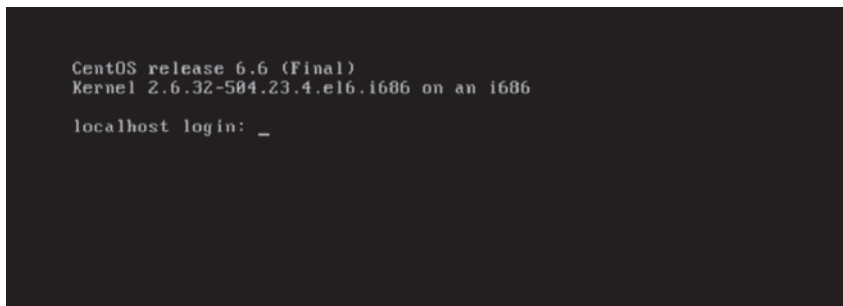
1 On the VMware vSphere Web Client screen, verify that SV9500 is powered on (the green triangle is displayed in the machine). If it is not powered on, right-click [SV9500] on the menu on the left side of the home screen and select [Power] -> [Power On].

2 Select and right-click [SV9500]. Click on [Open Console].

3 The console screen is displayed. To change the focus of the mouse from the local machine to the console of the virtual machine, click the mouse inside the console window. Log in with the following data and press [Enter].

Login: **root**

Password: (root password for SV9500 as created in [STEP 13](#) of [1.5.2 Virtual Machine Software Install](#))



```
CentOS release 6.6 (Final)
Kernel 2.6.32-504.23.4.el6.i686 on an i686

localhost login: _
```

4 Execute the command shown on the screen below.

```
[root@localhost ~]$ console.app
```

Note: A warning message can appear. In that case to continue click on [Continue to this website (not recommended)].

Note: The characters for the password are not displayed when entered.

5 After accessing, press [F1].

```
Menu(F1)
PBI No      = 00
MGCNumber   = 0
-- /etc/sysconfig --
LAN1 Address = 0.0.0.0
NetMask     = 0.0.0.0
Gateway     = 
-- LDM01.DAT --
LAN1 Address = 0.0.0.0
NetMask     = 0.0.0.0
Gateway     = 0.0.0.0
LAN2 Address = 0.0.0.0
NetMask     = 0.0.0.0
Gateway     = 0.0.0.0
PBX Service  = off

Press F1 to open a menu. ESC to quit.
```

6 Select [IP Address] and press [Enter].

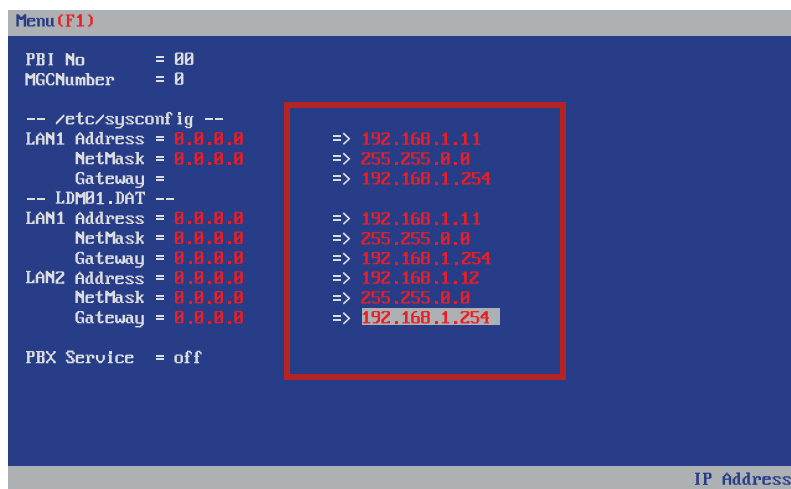
```
Menu(F1)
PBI No      = 00
MGCNumber   = 0
IP Address  = 
PBX Service  = off
- Exit
LAN1 Address = 0.0.0.0
NetMask     = 0.0.0.0
Gateway     = 
-- LDM01.DAT --
LAN1 Address = 0.0.0.0
NetMask     = 0.0.0.0
Gateway     = 0.0.0.0
LAN2 Address = 0.0.0.0
NetMask     = 0.0.0.0
Gateway     = 0.0.0.0
PBX Service  = off

Press F1 to open a menu. ESC to quit.
```

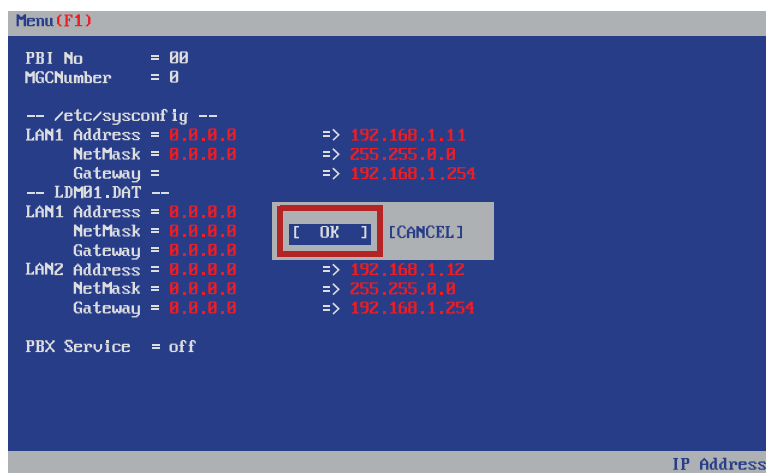
7 Set the IP address as follows.

```
-- /etc/sysconfig --
LAN1 Address:192.168.1.11
NetMask:255.255.0.0
Gateway:192.168.1.254
-- LDM01.DAT --
LAN1 Address:192.168.1.11
NetMask:255.255.0.0
Gateway:192.168.1.254
LAN2 Address:192.168.1.12
NetMask:255.255.0.0
Gateway:192.168.1.254
```

Note: Make sure the LAN1 IP Address for etc/sysconfig and LDM01.DAT are the same.



8 After entering all the data on the LAN2 Gateway line, press [Enter]. select [OK] and press [Enter].



- 9 Press [F1] to open the menu tab, select [PBX Service] and press [Enter].

```
Menu(F1)
PBI No
P MGCNumber
M IP Address
PBX Service
LAN1 Address = 192.168.1.11
NetMask = 255.255.0.0
Gateway = 192.168.1.254
-- LDM01.DAT --
LAN1 Address = 192.168.1.11
NetMask = 255.255.0.0
Gateway = 192.168.1.254
LAN2 Address = 192.168.1.12
NetMask = 255.255.0.0
Gateway = 192.168.1.254
PBX Service = off

Press F1 to open a menu. ESC to quit.
```

- 10 Change PBX service from off to on and press [Enter].

```
Menu(F1)
PBI No = 00
MGCNumber = 0
-- /etc/sysconfig --
LAN1 Address = 192.168.1.11
NetMask = 255.255.0.0
Gateway = 192.168.1.254
-- LDM01.DAT --
LAN1 Address = 192.168.1.11
NetMask = 255.255.0.0
Gateway = 192.168.1.254
LAN2 Address = 192.168.1.12
NetMask = 255.255.0.0
Gateway = 192.168.1.254
PBX Service = off => off on
PBX Service
```

- 11 Press [ESC] to quit.

- 12 Next step requires to install VMware Tools. On the VMware vSphere Web Client screen, first select and right-click [SV9500], select [Guest OS] -> [Install VMware Tools].

- 13 With the console, enter the command shown on the screen below.

```
[root@localhost~]$ mount -t iso9660 /dev/sr0 /media
```

Note: Whether or not you are prompted to mount VMware Tools, select mount.

- 14** For opening the file [VMwareTools-x.x.x-x.x.x.x.x.x.x.tar.gz] saved in the media directory, enter the following command:

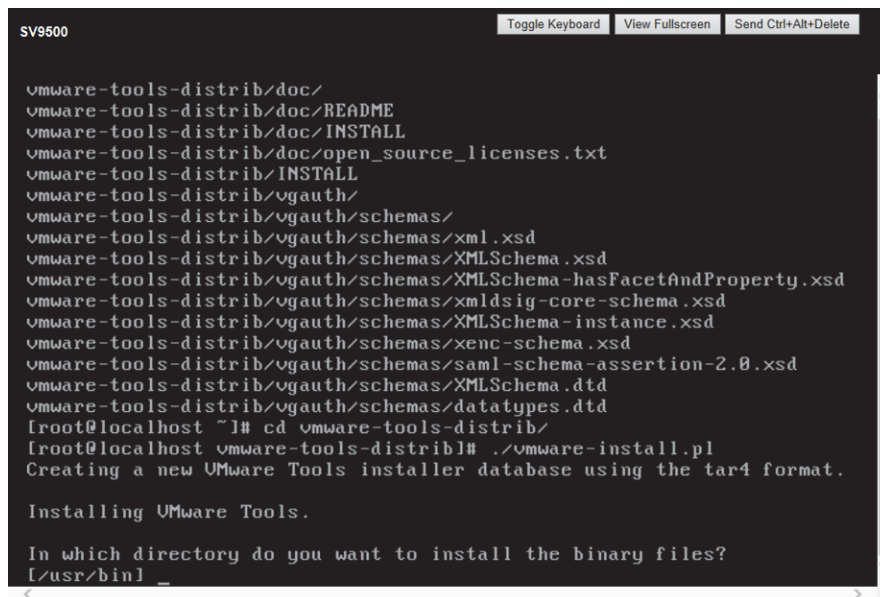
```
[root@localhost~]$ tar zxvf /media/VMwareTools-X.X.X-XXXXXX.tar.gz
```

Note: In the command line given in this manual, X stands for the actual name of your VM ware Tools file.

- 15** Move to the vmware-tools-distrib directory and execute vmware-install.pl file for installation as explained below.

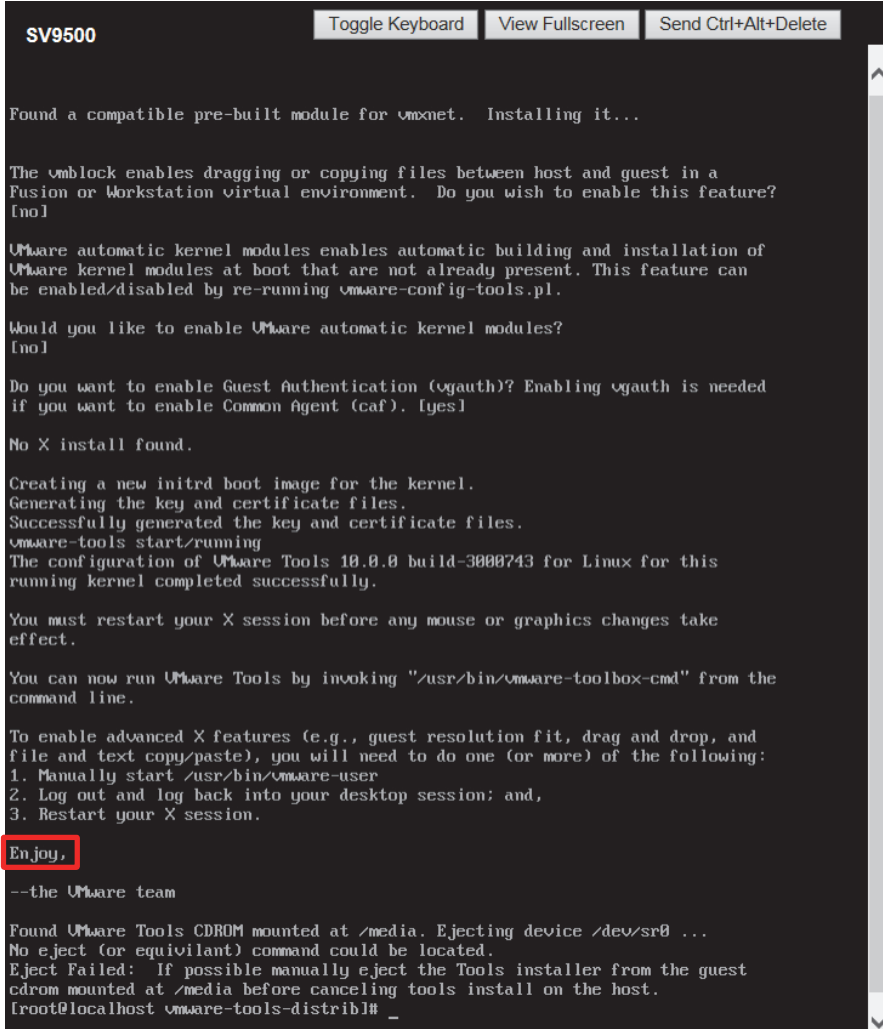
```
[root@localhost~]$ cd vmware-tools-distrib  
[root@localhost vmware-tools-distrib]$ ./vmware-install.pl
```

- 16** Press [Enter] for the question you are given at the bottom of the screen.



```
SV9500 Toggle Keyboard View Fullscreen Send Ctrl+Alt+Delete  
vmware-tools-distrib/doc/  
vmware-tools-distrib/doc/README  
vmware-tools-distrib/doc/INSTALL  
vmware-tools-distrib/doc/open_source_licenses.txt  
vmware-tools-distrib/INSTALL  
vmware-tools-distrib/vgauth/  
vmware-tools-distrib/vgauth/schemas/  
vmware-tools-distrib/vgauth/schemas/xml.xsd  
vmware-tools-distrib/vgauth/schemas/XMLSchema.xsd  
vmware-tools-distrib/vgauth/schemas/XMLSchema-hasFacetAndProperty.xsd  
vmware-tools-distrib/vgauth/schemas/xmlsig-core-schema.xsd  
vmware-tools-distrib/vgauth/schemas/XMLSchema-instance.xsd  
vmware-tools-distrib/vgauth/schemas/xenc-schema.xsd  
vmware-tools-distrib/vgauth/schemas/saml-schema-assertion-2.0.xsd  
vmware-tools-distrib/vgauth/schemas/XMLSchema.dtd  
vmware-tools-distrib/vgauth/schemas/datatypes.dtd  
[root@localhost ~]# cd vmware-tools-distrib/  
[root@localhost vmware-tools-distrib]# ./vmware-install.pl  
Creating a new VMware Tools installer database using the tar4 format.  
  
Installing VMware Tools.  
  
In which directory do you want to install the binary files?  
[/usr/bin] _
```

- 17** Press [Enter] anytime the screen displays a question. After the installation is finished, [Enjoy] is displayed.

A screenshot of a terminal window titled 'SV9500' with buttons for 'Toggle Keyboard', 'View Fullscreen', and 'Send Ctrl+Alt+Delete'. The terminal shows the installation progress of VMware Tools. It starts with finding a compatible pre-built module for vmxnet and installing it. Then it asks if the user wants to enable file sharing (vmblock), automatic kernel modules, and guest authentication (vgauth). After several 'no' responses, it reports that no X install was found. It then creates a new initrd boot image, generates key and certificate files, and successfully generates them. It shows the configuration of VMware Tools 10.0.8 build-3000743 for Linux. It informs the user that they must restart their X session for changes to take effect. It provides instructions on how to run VMware Tools and lists steps to enable advanced X features. The word 'Enjoy,' is highlighted with a red box. The terminal ends with the VMware team's signature and a message about ejecting the CDROM.

```
SV9500 Toggle Keyboard View Fullscreen Send Ctrl+Alt+Delete

Found a compatible pre-built module for vmxnet. Installing it...

The vmblock enables dragging or copying files between host and guest in a
Fusion or Workstation virtual environment. Do you wish to enable this feature?
[no]

VMware automatic kernel modules enables automatic building and installation of
VMware kernel modules at boot that are not already present. This feature can
be enabled/disabled by re-running vmware-config-tools.pl.

Would you like to enable VMware automatic kernel modules?
[no]

Do you want to enable Guest Authentication (vgauth)? Enabling vgauth is needed
if you want to enable Common Agent (caf). [yes]

No X install found.

Creating a new initrd boot image for the kernel.
Generating the key and certificate files.
Successfully generated the key and certificate files.
vmware-tools start/running
The configuration of VMware Tools 10.0.8 build-3000743 for Linux for this
running kernel completed successfully.

You must restart your X session before any mouse or graphics changes take
effect.

You can now run VMware Tools by invoking "/usr/bin/vmware-toolbox-cmd" from the
command line.

To enable advanced X features (e.g., guest resolution fit, drag and drop, and
file and text copy/paste), you will need to do one (or more) of the following:
1. Manually start /usr/bin/vmware-user
2. Log out and log back into your desktop session; and,
3. Restart your X session.
Enjoy,

--the VMware team

Found VMware Tools CDROM mounted at /media. Ejecting device /dev/sr0 ...
No eject (or equivalent) command could be located.
Eject Failed: If possible manually eject the Tools installer from the guest
cdrom mounted at /media before canceling tools install on the host.
[root@localhost vmware-tools-distrib]# _
```

- 18** Erase the file used with the installation. Enter the commands below.

```
[root@localhost vmware-tools-distrib]# cd ../
[root@localhost~]# rm -rf vmware-tools-distrib/
```

- 19** Log out. After entering the command below, the console goes back to the login screen. Close the console screen.

```
[root@localhost~]# exit
```

- 20** On vSphere Web Client, click the [Go Home] icon. The display returns back to the [Home] screen.

- 21** In the Home screen, click on [Host and Clusters].

- 22** Click on [192.168.1.1] (the VMware ESXi host server) in [Datacenter].
- 23** (1) Select [198.168.1.1] from the tree.
(2) Move to [Manage] tab.
(3) Select [Settings]
(4) Select [VM Startup/Shutdown].
(5) Click [Edit].
- 24** The [Edit VM Startup and Shutdown] screen is displayed. Set the data as shown below and click [OK].
- System Influence: checked
Startup Delay: 20 seconds(s)
Continue immediately if VMware Tools starts.: not checked
Shutdown Delay: 20 seconds(s)
Shutdown Action: Guest Shutdown
- 25** Arrange the order of the machines as follows (the following considers a full set of machines):
- 1) Select [Guest Shutdown] on [Shutdown action].
 - 2) Select the virtual machines
 - 3) Click on the arrow pointing up and go to [Automatic Startup].
 - 4) Click [OK].
- Set the order of the virtual machines as shown below:
- 1) vCSA
 - 2) SV9500
 - 3) Software-based MG-SIP
 - 4) Software-based VS-32

Software installation process is concluded.

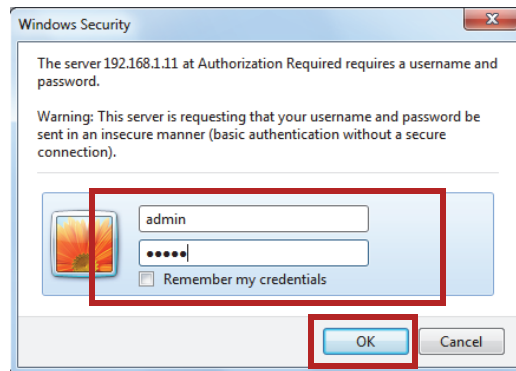
1.8 SV9500 Starting Confirmation

Proceed as follows to confirm the SV9500 has started properly (this explanation is only for the SV9500 Software Model).

- 1 Connect to [http://192.168.1.11:9801] from a web browser and log in by clicking [OK] after entering the following data.

User name: admin

Password: admin



- 2 Check that the [NEC Telephony Server Maintenance Menu] screen is displayed.

- 3 Launch PCPro and click the [Connection Account Settings] button.



4

Enter the settings as shown below and click the [Setup] button.

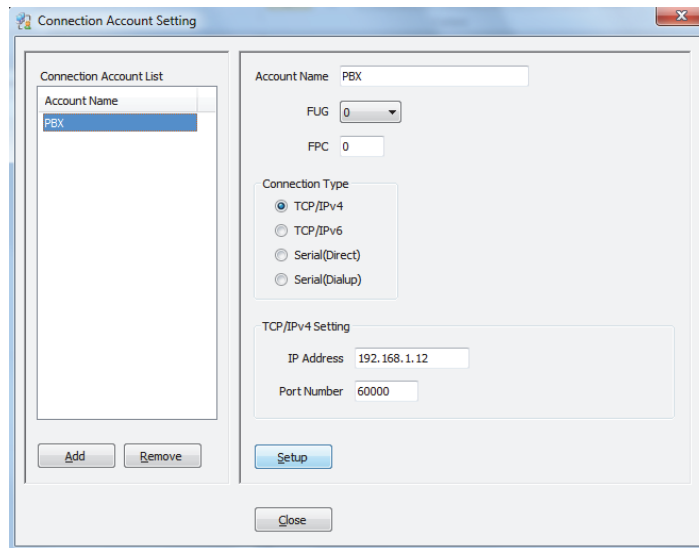
Account Name: (enter the name that you want to use, in this example we will use PBX).

FPC: 0

Connection Type: TCP/IPv4

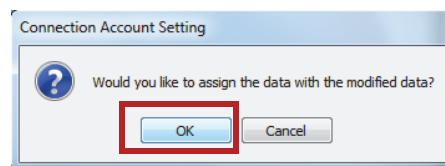
IP Address: 192.168.1.12 (LAN2 IP address)

Port Number: 60000



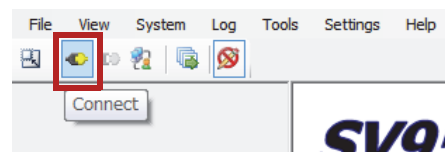
5

Click [OK] on the confirmation screen and [Close] at the bottom of the [Connection type] screen.



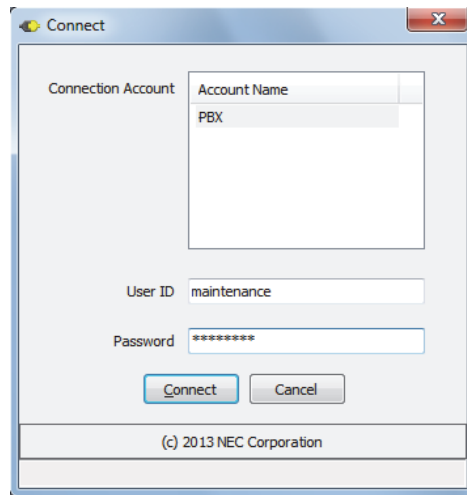
6

Click the [Connect] button.

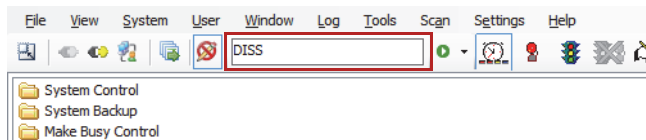


7 Enter the user ID and password as follows.

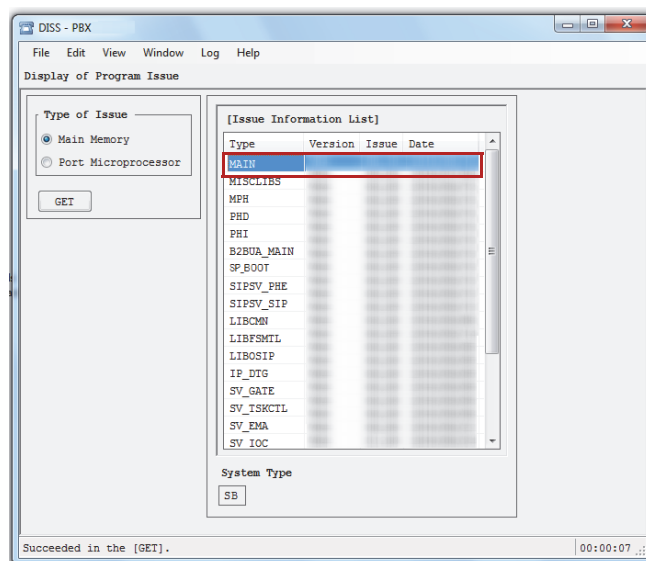
User ID: maintenance
Password: ty8*#02F



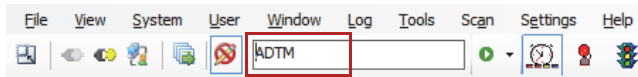
8 Enter the [DISS] command.



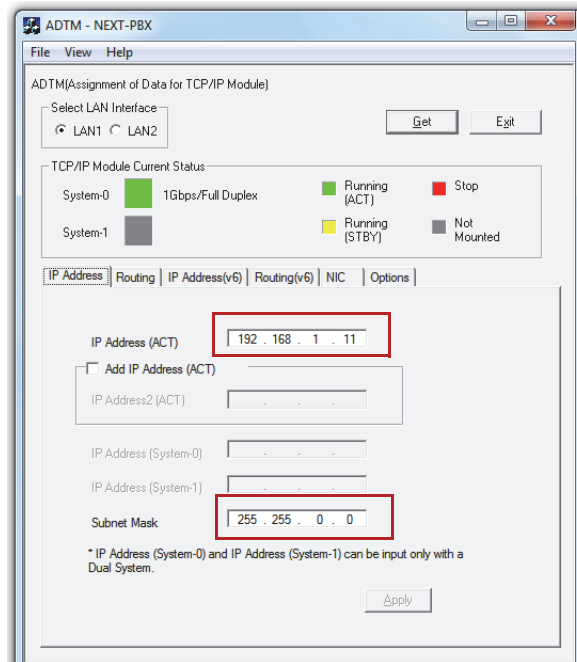
9 Select [Main Memory] and click [Get]. Confirm that the latest version and issue for [MAIN] are shown and then close the screen.



10 Enter the [ADTM] command.

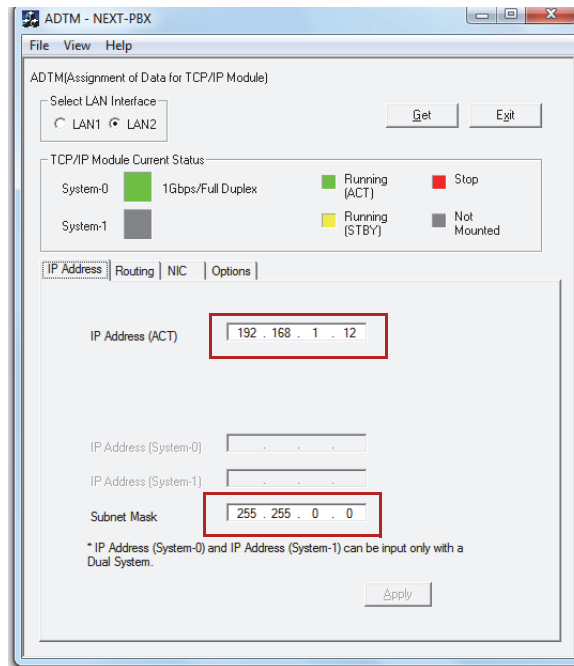


11 Select [LAN1] and click [Get]. Verify that the IP Address (ACT) is [192.168.1.11] and the subnet mask [255.255.0.0].



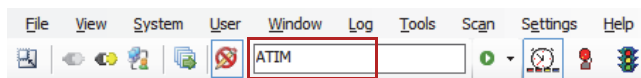
12

Select [LAN2] and click [Get]. Verify that the IP Address (ACT) is [192.168.1.12] and the subnet mask [255.255.0.0].



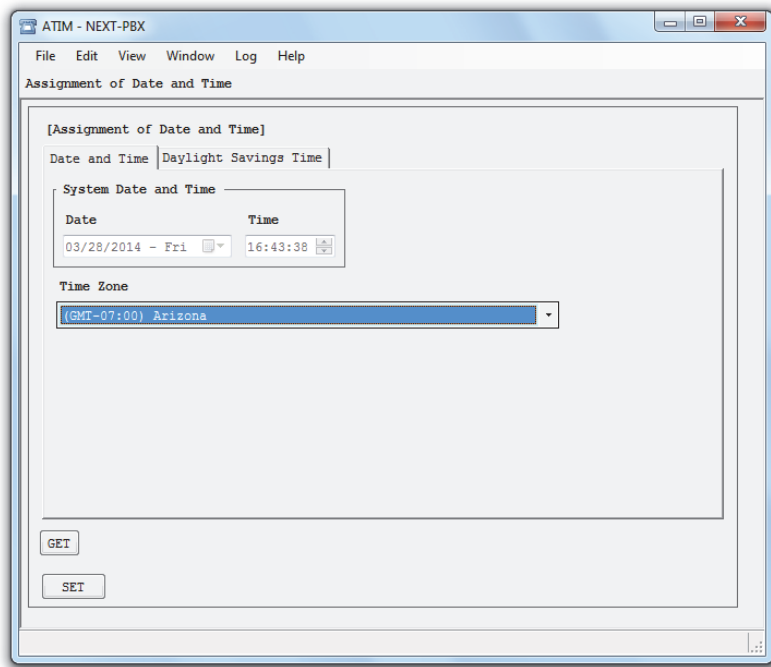
13

Enter the [ATIM] command.



14

Confirm that the date and hour is the same as in VMware ESXi.



Note: For checking VMware ESXi time, if Host Client is used, select [Host] from the tree on the left side of the screen and check on the [Date/time on host] section of [System Information]. To verify the time matches, click on [Refresh]. If VMWare Sphere Client is used, log in to VMWare Sphere Client, select [192.168.1.1] from the tree on the left side of the screen and click the [Configuration] tab. By clicking [Time Configuration] on the software column, the time is displayed. To verify the time matches, click on [Refresh].

15

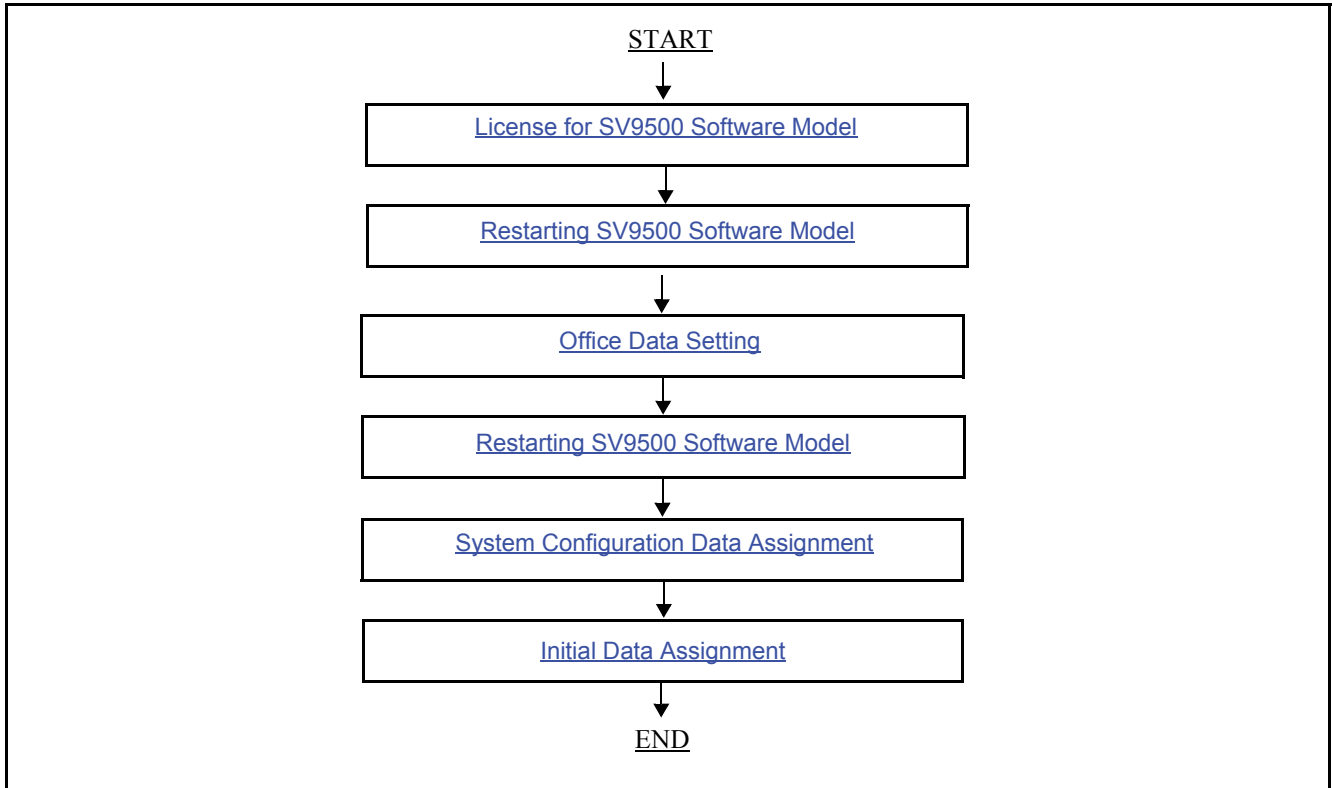
Log out from PCPro.

SV9500 Software Model starting confirmation is finished.

2. SV9500 Software Model Setup

2.1 Flow of SV9500 Software Model Setup

Follow the flow chart below for instructions on the setup procedure for the SV9500 Software Model.



2.2 Telephony Server Maintenance Menu

This section gives an explanation of the Telephony Server Maintenance Menu which is used as a tool to upload, download or delete the data to/from the SV9500 Software Model.

This tool can be accessed and operated from the maintenance PC to the SV9500 Software Model via a Web browser.

2.2.1 Screen Layout and Functions of Each Component

The following is the screen layout of the Telephony Server Maintenance Menu and functional descriptions of each component.

<< NEC Telephony Server Maintenance Menu >>

(1) [System Status]
Memory: XX.X% used
XXXXMB Total / XXXMB Free

(2) CPU: XX%
(3) Load Average: XXX/XXX/XXX

(4) LAN1 IP: XXX.XXX.XXX.XXX
(5) -- Mask: XXX.XXX.XXX.XXX
(6) -- Speed: XXXXXX/XXX
(7) LAN2 IP: XXX.XXX.XXX.XXX
-- Mask: XXX.XXX.XXX.XXX
-- (Drive X LDM)

(13) Storage Capacity: XX.X% used
XXXXMB Total / XXXMB Free
Log Capacity: XX.X% used
XXXXKB Total/ XXXXKB Free

Kernel:X.X.XX-XX.X.X.XX.XXX
XXXXXX
CPU board: XXXXX board

Date: XXXX-XX-XX XX:XX-XX

	Upload	Download	Delete
(2) Program	✓		
(3) Office Data	✓	✓	
(4) License	✓	✓	
(5) Patch	✓		✓
(6) Log files		✓	✓
(7) Language Data	✓	✓	✓

Office Data Upload

☒ Drive B ☐ Drive C

SYSTEM CONTROL

☒ Shutdown **(8)**

☒ Reboot **(9)**

☒ Program Rollback **(10)**

☒ Read Version **(11)**

☒ Advanced Menu **(12)**

No.	Item	Description
(1)	System Status Display Area	Displays the current status of the connecting SV9500 Software Model. This information will be updated in real-time while Telephony Server Maintenance Menu is executed. Refer to “ 2.2.2 System Status Indication ” for details on each parameter.

CHAPTER 2 SOFTWARE MODEL INSTALLATION AND SETUP
2. SV9500 Software Model Setup

No.	Item	Description
(2)	Program Menu	Uploads the program including upgrading versions. Note 1 , Note 2 The Program Upload dialog box appears in (13) Configuration Dialog Box Display Area by clicking the Upload button.
(3)	Office Data Menu	Uploads or downloads the Office Data. The Office Data Upload dialog box appears in (13) Configuration Dialog Box Display Area by clicking the Upload button and the Office Data Download dialog box for the Download button.
(4)	License Menu	Uploads or downloads the license. The License Upload dialog box appears in (13) Configuration Dialog Box Display Area by clicking the Upload button and the License Download dialog box for the Download button.
(5)	Patch Menu	Uploads or deletes the patch. The Patch Upload dialog box appears in (13) Configuration Dialog Box Display Area by clicking the Upload button and the Patch Delete dialog box for the Delete button.
(6)	Log files Menu	Downloads or deletes the log files. The Log files Download dialog box appears in (13) Configuration Dialog Box Display Area by clicking the Download button and the Log files Delete dialog box for the Delete button.
(7)	Language Data Menu	Uploads, downloads or deletes the language data. The Language Data Upload dialog box appears in (13) Configuration Dialog Box Display Area by clicking the Upload button, Language Data Download dialog box for the Download button, and the Language Data Delete dialog box for the Delete button.
(8)	Shutdown Menu	Shuts down the SV9500 Software Model. The Shutdown dialog box appears in (13) Configuration Dialog Box Display Area.
(9)	Reboot Menu	Reboots the SV9500 Software Model. The Reboot dialog box appears in (13) Configuration Dialog Box Display Area.
(10)	Program Rollback Menu	If there is a problem after performing a version upgrade, it allows to go back to the previous version. Note 2 The Switch image dialog box appears in (13) Configuration Dialog Box Display Area.
(11)	Read Version Menu	Reads out the program version of the currently connecting SV9500 Software Model. The Read Version dialog box appears in (13) Configuration Dialog Box Display Area. - Show results in new window: Place a checkmark to display the information of the program version in a new window. - Auto copy to clipboard: Place a checkmark to automatically copy the information of the program version to a clipboard. Note 5

No.	Item		Description
(12)	Advanced Menu	Change Maintenance Menu's Password	You can change user name and password for login. Note 3, Note 4
		Show Memory Details	Displays how much of the SV9500 Software Model's memory is currently being used.
		Lock release of Maintenance Menu	Release the lock state when the Telephony Server Maintenance Menu is locked due to an unexpected event.
		Change root password	Changes Linux administrator (root) password. Note 3
		Remove host keys	Delete the host keys of the Telephone Server.
		ACD Program Upload	Uploads the program for ACD system. Note 6, Note 7
(13)	Configuration Dialog Box Display Area		Displays the dialog box for processes of each function according to the menu you have selected.

Note 1: Do not operate the Telephony Server Maintenance Menu while the upload is still being processed. Wait until the message [Operation successfully completed.] appears. If any operation is performed before the uploading process is completed, the Telephony Server Maintenance Menu turns to a locked status with a message [Process is busy now] indication and operations will all be denied. In this case, release the lock state from [Lock release of Maintenance Menu] under [Advanced Menu].

Note 2: The SV9500 Software Model is forced to restart when this process is executed.

Note 3: Contact NEC maintenance personnel if you need to confirm your User Name and Password.

Note 4: See [How to Change User Name and Password](#) for changing user name or password.

Note 5: The Telephony Server Maintenance Menu will not display the [Auto Copy to Clipboard] option when using Internet Explorer 10 or later is used. For copying the displayed result, check the [Show results in new window] box under Read Version. Then copy and paste the desired information.

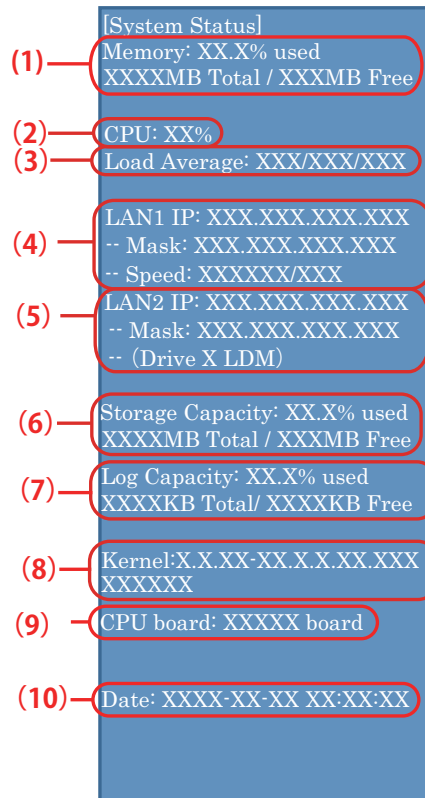
Note 6: Available from FP95-115 V5.

Note 7: Not applicable for North America.

2.2.2 System Status Indication

The current status of the connecting SV9500 Software Model is displayed in the System Status area.

This section explains the details on each status displayed in the System Status area.



No.	Item		Description
(1)	Memory		Displays the capacity and an amount of free space of the memory mounted in the SV9500 Software Model.
(2)	CPU		Displays the usage rate of the CPU.
(3)	Load Average		Displays the load factor of the CPU. Note: Load Average: the three numbers represent averages over progressively longer periods of time (one, five, and fifteen minute averages).
(4)	LAN1	IP	Displays the IP address of LAN1.
		Mask	Displays the Subnet Mask of LAN1.
		Speed	Displays the communication mode of LAN1.

No.	Item	Description
(5)	LAN2	IP
		Displays the IP address of LAN2.
		Mask
		Displays the Subnet Mask of LAN2.
		Drive
		Displays the drive retrieving the IP address of LAN2.
(6)	Storage Capacity	Displays the usage rate, the capacity, and an amount of free space for the virtual machines under operation.
(7)	Log Capacity	Displays the usage rate, the capacity, and an amount of free space for the log storage area.
(8)	Kernel	Displays the version of the current Linux kernel.
(9)	CPU board	Displays the type of a CPU board (fix to Virtual Machine).
(10)	Date	Displays the date time information of the SV9500 Software Model.

2.2.3 Operating Environment

This section explains the specifications on operating environment for the Telephony Server Maintenance Menu.

2.2.3.1 Specification on Operating Environment

Common Operating Environment

Item	Specification
Hard Disk	2.0GB of free disk space minimum
Monitor	1,024 x 768 dots or more, 16-bit colors (65,536) at least. Note 1
OS	Note 2
CPU	
Memory	
DVD-ROM drive	Required to install the program.
Mouse	Mouse, or equivalent pointing device
LAN Port	10BASE-T/100BASE-TX/1000BASE-T (Depending on an intermediate device such as HUB) Note 3
PCMCIA Card Slot	Type II (Required for writing a program for CF card.)
Browser	Internet Explorer 7 or higher Note 4, Note 5
Number of Concurrent Access	Only one at a time

Note 1: When using desktop, 1,280 x 1,024 dots or more are recommended.

Note 2: For details of OS and specific operating environments, refer to [PCPro Setup Manual] - [PC-Pro Overview] - [OS-Specific Operating Environments].

Note 3: Required for LAN/WAN connection with the SV9500 Software Model.

Note 4: Internet Explorer 8 or higher is recommended. Internet Explorer 7 is supported but the processing may take longer time. A warning message will appear when using Internet Explorer 6 or lower. Note that this is not available for Modern UI on Internet Explorer 10 or higher.

Note 5: Microsoft Edge is not supported. When operating Windows 10, use Internet Explorer.

2.2.4 How to Change User Name and Password

This section explains how to change User Name and Password.

Note: When you change the user name and password, note the following points.

- Before you change a user name and password, you need to log into the Telephony Server Maintenance Menu.
- After logging into the Telephony Server Maintenance Menu, do not use the Back button on the browser.

Step1: Start Internet Explorer and type “http://xxx.xxx.xxx.xxx:9801/” into the address bar to access the Telephony Server Maintenance Menu. (xxx.xxx.xxx.xxx represents the LAN1 IP address.)

Step2: [Telephony Server Maintenance Menu Login] screen appears. Type the user name and password.

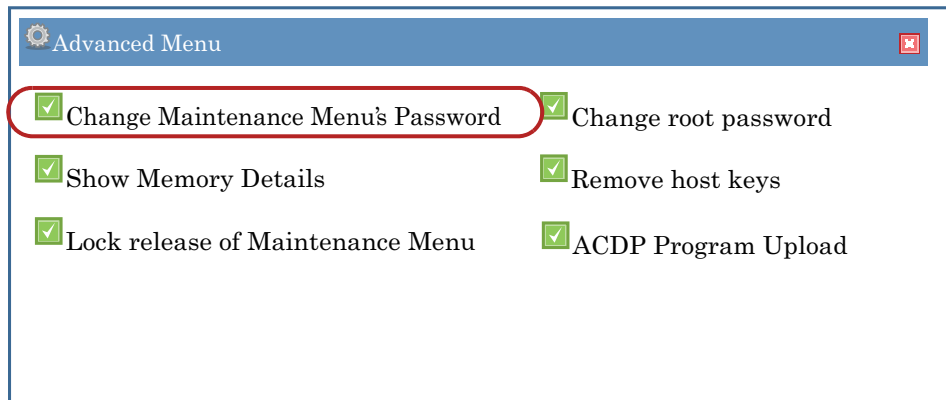
Note: When you type the user name and password, note the following points.

- The default for both user name and password is “admin”.
- Contact NEC maintenance personnel if you need to confirm your user Name and password.

Step3: After the login, [Telephony Server Maintenance Menu] screen appears. Click the [Advanced Menu] button in the [SYSTEM CONTROL] area (in the upper right-hand part of the screen).



Step4: The [Advanced Menu] dialog box appears. Click the [Change Maintenance Menu's Password] button on the dialog box.



Step5: The [Change Password] dialog box appears. Configure each setting.

Screen Item	Type Item
Current username:	Type your current user name. Note 1
Current password:	Type your current password. Note 1
New username:	Type a new user name. Note 2
New password:	Type a new password. Note 2
Confirm new password:	Type a new password again to confirm the new password.

Note 1: The default for both user name and password is “admin”.

Note 2: Up to 64 alphanumeric characters including "-", "_", and "." can be included in a user name and password (case-sensitive).

Step6: Click the [Change] button.

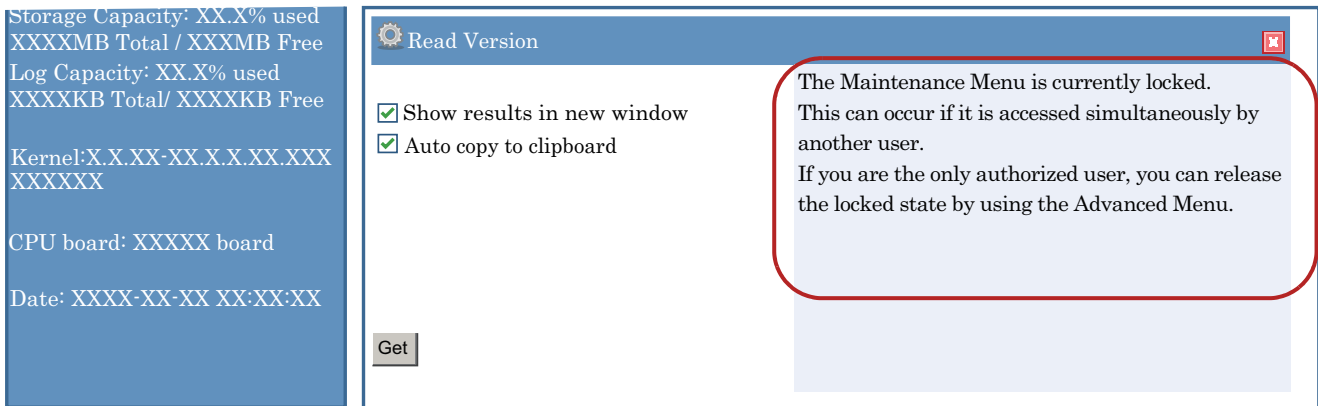
Note: The password in the **Confirm new password** field must match the password you entered in the **New password** field above.

Step7: Check that a message [Username and Password change success.] is displayed.

Changing of the user name and password is complete.

2.2.5 How to Unlock the Locked Telephony Server Maintenance Menu

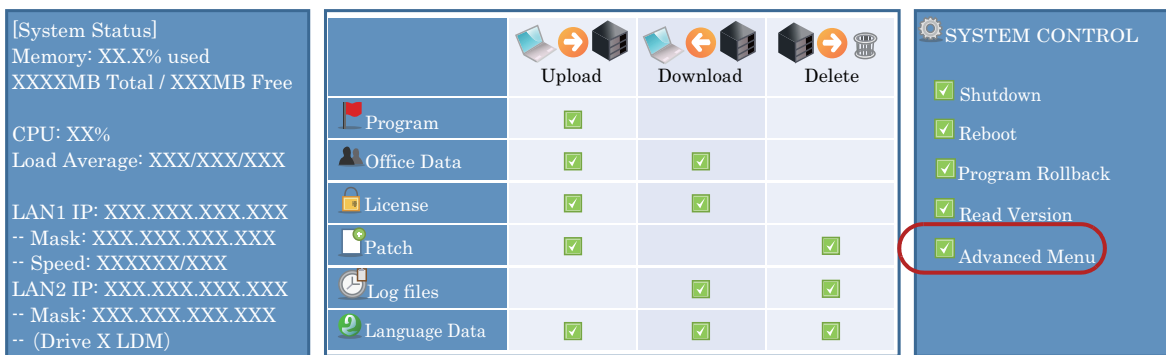
If you attempt to perform another action on the Telephony Server Maintenance Menu before program upload is completed (the message [Operation successfully completed.] appears), the menu may be locked and you will get the error message [Process is busy now. Please access later.]. Once the menu is locked, only the unlock function is available



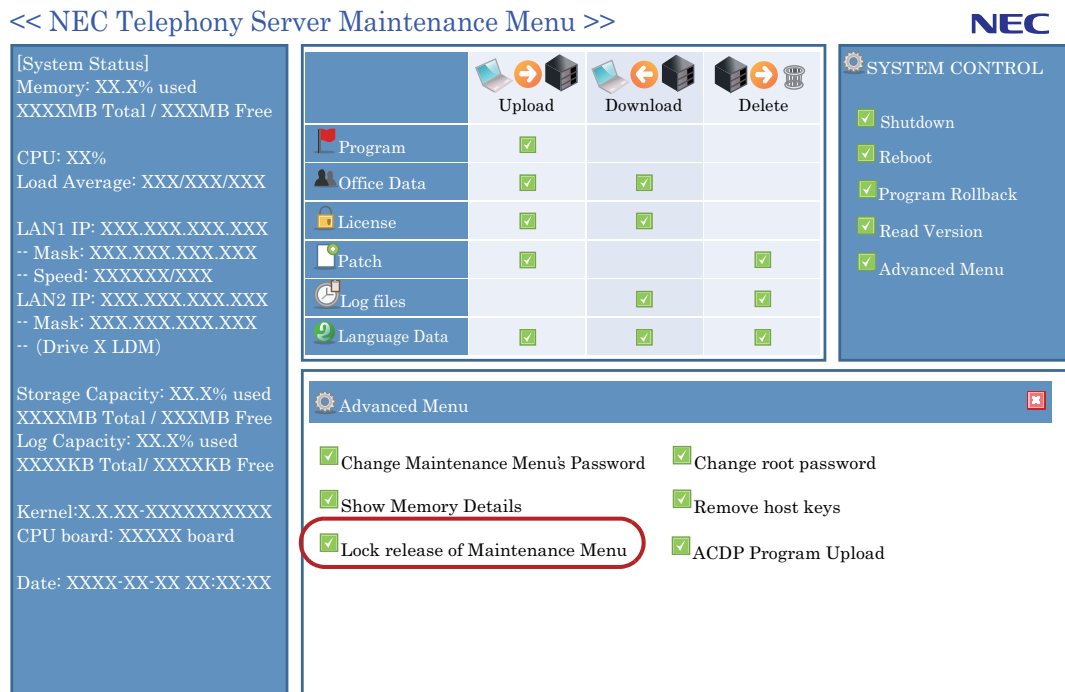
This section explains how to unlock the locked Telephony Server Maintenance Menu.

Note: When the message [Process is busy now. Please access later.] appears, first ensure that no other PC users are accessing the same Telephony Server, and then unlock the menu by following the steps below:

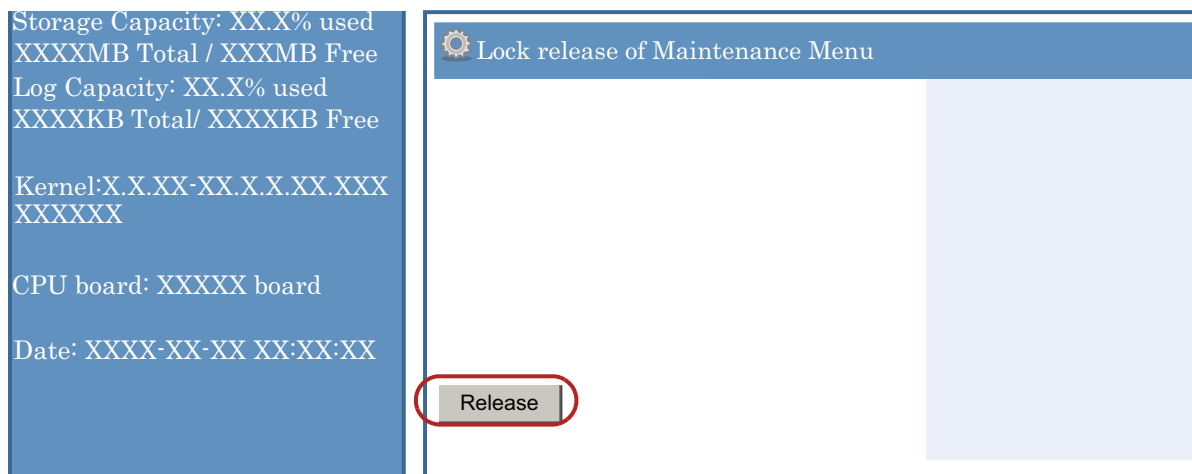
Step1: Click the [Advanced Menu] button in the [SYSTEM CONTROL] area.



Step2: The [Advanced Menu] dialog box appears. Click the [Lock release of Maintenance Menu] button on the dialog box.



Step3: The [Lock release of Maintenance Menu] dialog box appears. Click the [Release] button on the dialog box.



- Step4:** A confirmation message appears. Ensure that no other PC users are accessing the same SV9500 Software Model, and click [OK].
- Step5:** A message appears, saying [Operation successfully completed.]. Click [OK] to close the message box.

2.3 License for SV9500 Software Model

2.3.1 License Downloading

Access the License Management Server (LMS) to download a license file (svi.zip) and obtain an Activation Code.

Note: Be sure to note the following conditions.

- A new Registration Activation code is necessary when the license is upgraded.
- The SVI file is downloaded in a zip format. Do not unzip the SVI file since this file is used as it is.
- You can rename the saved SVI file, but do not change the extension of the file.

2.3.2 Installing License for SV9500 Software Model

License has to be installed on SV9500 Software Model.

1

Log in to the Telephony Server Maintenance Menu from the maintenance PC web browser.

- (1) Launch the web browser from the maintenance PC, and connect to the Telephony Server Maintenance Menu (<http://192.168.1.11:9801/>). (the LAN1 IP address (ACT) of SV9500 as created in [1.7 Virtual Machine Startup](#).)
- (2) Enter user name as created in [STEP5](#) of [2.2.4 How to Change User Name and Password](#).
- (3) Enter password as created in [STEP5](#) of [2.2.4 How to Change User Name and Password](#). Press [OK].

2

- (1) Click the [Upload] button for [License]. The [License Upload] dialog box appears in the lower right portion of the screen.
- (2) Click the [Browse] button on the dialog box and locate the License file downloaded in [2.3 License for SV9500 Software Model](#).
- (3) Click the [Upload] button. When the uploading is complete, "Operation successfully completed" will be displayed. Click [OK].

<< NEC Telephony Server Maintenance Menu >>

[System Status]
Memory: XX.X% used
XXXXMB Total / XXXMB Free

CPU: XX%
Load Average: XXX/XXX/XXX

LAN1 IP: XXX.XXX.XXX.XXX
-- Mask: XXX.XXX.XXX.XXX
-- Speed: XXXXXX/XXX

LAN2 IP: XXX.XXX.XXX.XXX
-- Mask: XXX.XXX.XXX.XXX
-- (Drive X LDM)

Storage Capacity: XX.X% used
XXXXMB Total / XXXMB Free
Log Capacity: XX.X% used
XXXXKB Total / XXXKB Free

Kernel:X.X.XX-XXXXXXXXXX
CPU board: XXXXX board

Date: XXXX-XX-XX XX:XX:XX

	Upload	Download	Delete
Program	✓		
Office Data	✓	✓	
License	✓ (1)	✓	
Patch	✓		✓
Log files		✓	✓
Language Data	✓	✓	✓

License Upload

Browse (2)

Upload (3)

SYSTEM CONTROL

- ✓ Shutdown
- ✓ Reboot
- ✓ Program Rollback
- ✓ Read Version
- ✓ Advanced Menu

Note:

When the writing of license file ends in failure, [An error occurred! Please check the logs.] is displayed and the details are displayed in the lower right portion of the screen.

Point:

The Language Data button needs to be clicked only when Optional Language Pack Loading [O-42] is used. For more details on Optional Language Pack Loading [O-42], see [Data Programming Manual - Business].

2.4 Restarting SV9500 Software Model

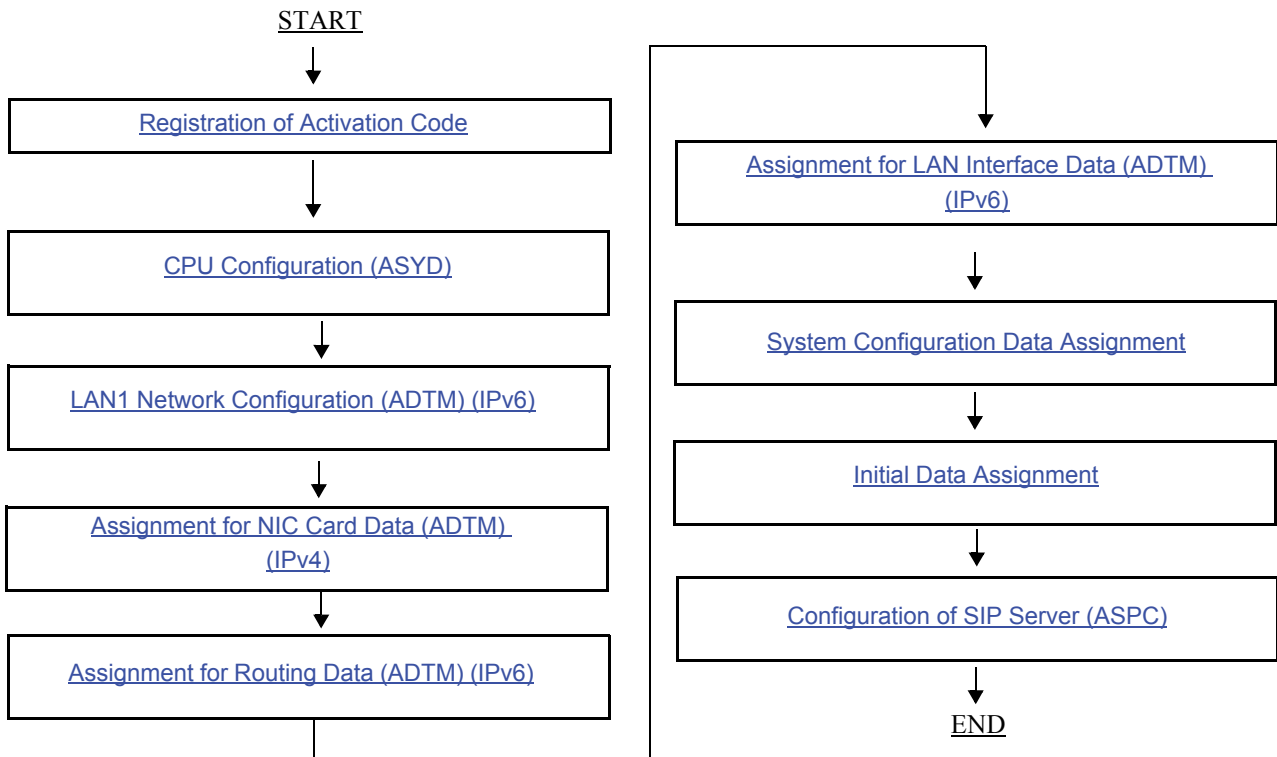
To activate the license installation of the guest SV9500 Software Model, it must be restarted.

- 1** Launch the web browser from the maintenance PC and connect to the vCSA IP address (<https://192.168.1.2:9443/>) as root user.
- 2**
 - (1) Click [Hosts and Clusters (Inventories)] on [Home] tab.
 - (2) Right-click in the SV9500 Software Model virtual machine and select from the appeared menu [Power] -> [Restart GuestOS].
- 3** Use the PING command from the maintenance PC and verify there is a response from the IP addresses of SV9500 Software Model LAN1 and LAN2.
- 4** Launch the web browser from the maintenance PC, connect to the Telephony Server Maintenance Menu (<http://192.168.1.11:9801/> (the LAN1 IP address (ACT) of SV9500 Software Model)) and verify that the Login screen is displayed.

The license installation process is finished.

2.5 Office Data Setting

This section explains the procedure to set the Office Data used to operate the SV9500 Software Model.
Follow the flow chart below to set the Office Data.



Note: The following settings are only for the IPv6 connection. If you use only IPv4 addresses, these settings are not required.

[2.5.3 LAN1 Network Configuration \(ADTM\) \(IPv6\)](#)

[2.5.5 Assignment for Routing Data \(ADTM\) \(IPv6\)](#)

[2.5.6 Assignment for LAN Interface Data \(ADTM\) \(IPv6\)](#)

2.5.1 Registration of Activation Code

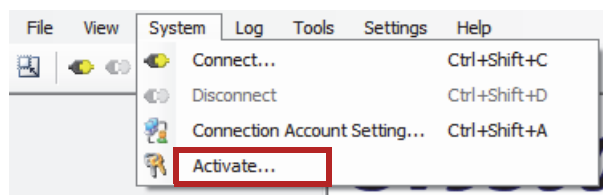
The following section explains how to register the activation code.

Note: You cannot be logged into PCPro to use these steps.

Note: Register the Activation Code after you set the IP address of LAN1 (ACT). If you change the IP address of LAN1 (ACT) after the Certify Status was [Certify OK], the status will change to [Certify NG (HKC)] (only for IPv4). In that case, see [APPENDIX A LICENSE FOR THE SV9500 SOFTWARE SERVER MODEL](#).

1

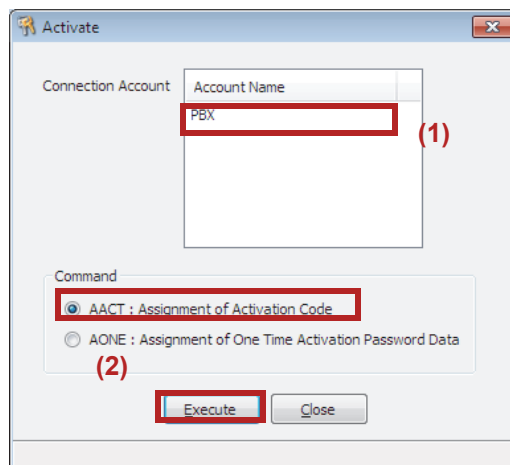
Launch PCPro and select [System] -> [Activate] on the menu bar.



2

The [Activate] screen will launch.

- (1) Highlight the [Connection Account] configured for the IP address of LAN2
- (2) Select the [AACT: Assignment of Activation Code] radio button and click [Execute].



3

The AACT command will launch.

- (1) Select the [Register Activation Code] radio button and press Get.
- (2) Enter the Activation Code you have received from the LMS server, into the [Activation Code] field and press Set.
- (3) Verify you receive the [Certify OK] confirmation message.
- (4) Close the AACT command and the [Activate] screen.

4

You can now log into PCPro; remember to backup the Activation Code using the MEM_HDD command.

Note: If the Activation Code is not available, the SV9500 Software Model may be unlocked by selecting the AONE option instead of the AACT option. Once unlocked using the AONE option, the PCPro connection will be valid for 7 days. After 7 days, PCPro access will be denied until the SV9500 Software Model is registered. Please note that the AONE option can only be used once.

2.5.2 CPU Configuration (ASYD)

This section explains the procedure to configure the CPU for single configuration.

1

Connect to PCPro using the connection account assigned to the IP address of LAN2.
The user ID and the password shown below need to be entered.

User ID: maintenance

Password:ty8*#02F

2

(1) Execute the ASYD command.

(2) Set the following data.

SYS1 INDEX58 bit0=0 (configuration of CPU=Single)

(3) Exit the ASYD command.

Note:

- If the user ID and the password are not entered, login is unavailable.
- After the first time login is performed, it is recommendable to change the password.

Point:

No modification is required since the default value is set for this data in normal cases.
If a different value is set, modify the data to the value as given.

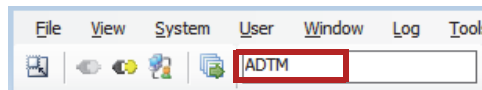
2.5.3 LAN1 Network Configuration (ADTM) (IPv6)

This section explains how to set IPv6 addresses (e.g. 2001:db8::c) for LAN1.

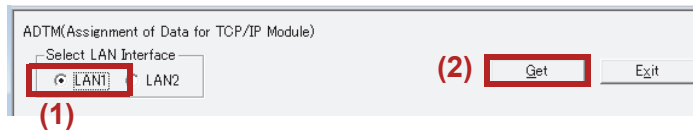
- Note:** Note the following conditions for this setting.
- This data setting is for the IPv6 connection with PCPro. If you use only IPv4 addresses, this setting is not required.
 - Do not delete the setting of IPv4 addresses, because it is required when you use IPv6 addresses.
 - For detailed conditions of IPv6 addresses, refer to [System Description] - [IPv6 Connection with PCPro].

1 Launch PCPro and connect it to the SV9500 Software Model by using the connection account assigned to the IP address of LAN2 connector.
To connect, use the previously set user name and password.

2 Execute the ADTM command.



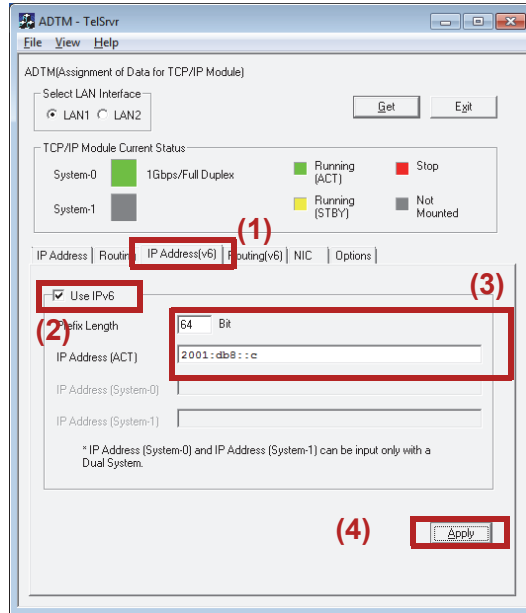
3 (1) Select [LAN1] under [Select LAN Interface].
(2) Click the [Get] button.



Note:
If the user ID and the password are not entered, login is unavailable.

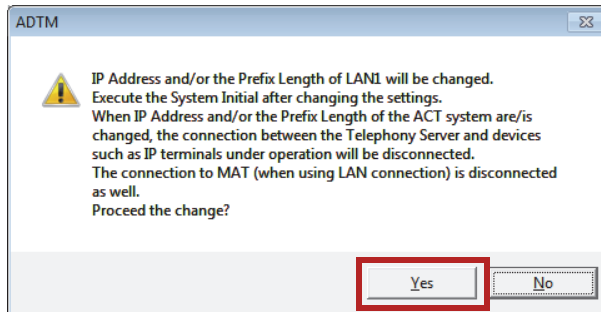
4

- (1) Click the [IP Address (v6)] tab.
- (2) Select the [Use IPv6] check box.
- (3) Set the values corresponding to your actual network environment for [Prefix Length and IP Address (ACT)].
- (4) Click the [Apply] button.



5

The following confirmation message is displayed.
Click the [Yes] button to apply the new setting.



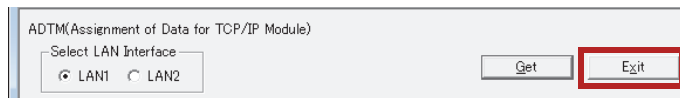
Note:

- Do not execute a system initialization even though the message recommends you to initialize the system.
- The data setting for the IPv6 address becomes valid after the change is applied.

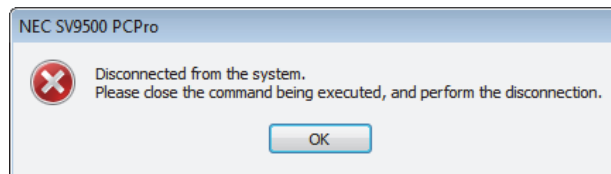
Point:

The connection to PC-Pro is disconnected when the data is modified.

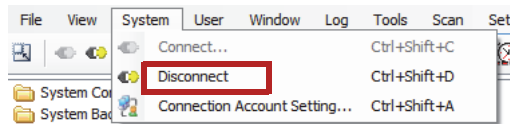
- 6 Click the [Exit] button to exit the ADTM command.



- 7 The following message is displayed on PCPro.
Click [OK] to close the message.



- 8 Select [Disconnect] on the System menu on PCPro.



Point:

For detailed disconnecting procedure, refer to [PCPro Setup Manual] - [Setting Up PCPro] - [Disconnecting the Communication Link].

2.5.4 Assignment for NIC Card Data (ADTM) (IPv4)

This section explains the procedure for configuring the network of the SV9500 Software Model to conform with the actual network environment.

- 1 Connect to PCPro using the connection account assigned for the IP address of LAN2. Enter the user ID and the password that have been previously assigned to connect with PC-Pro.

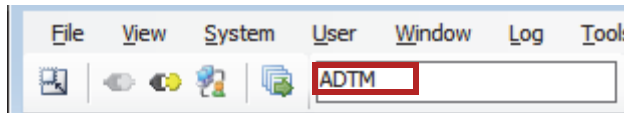
Note:

If the user ID and password are not entered, login is unavailable.

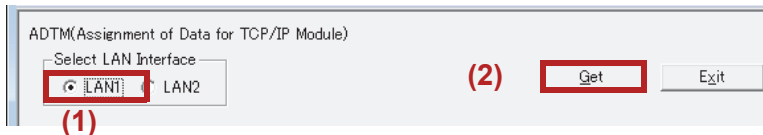
Point:

For detailed procedure to connect to PC-Pro, refer to [PCPro Setup Manual] - [Setting Up PCPro] - [Communication Link with the Telephony Server].

- 2 Execute the ADTM command.

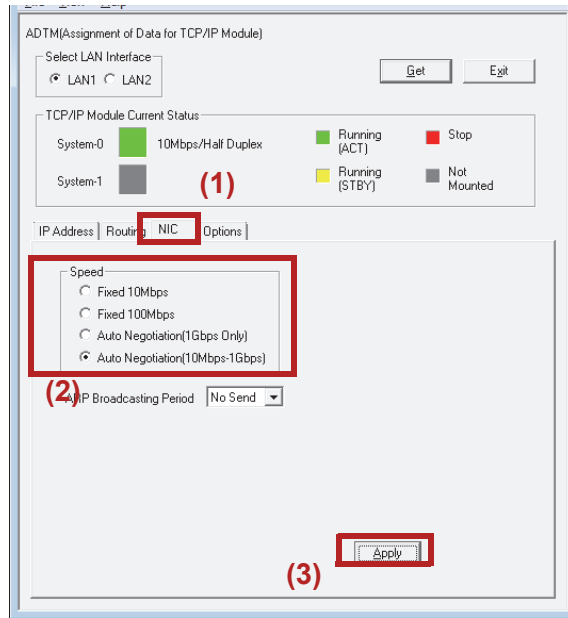


- 3
 - (1) Select [LAN1] for [Select LAN Interface].
 - (2) Click the [Get] button.



4

- (1) Click the [NIC] tab.
- (2) Select [Auto Negotiation (10Mbps-1Gbps)] for [Speed].
- (3) Click the [Apply] button.



Note:

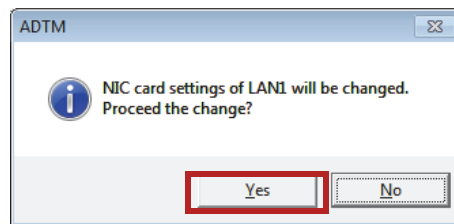
Do not change the setting [Auto Negotiation (10Mbps-1Gbps)].

Note:

When NEC Express 5800 FT server is used as a host server, the values set here are not used. For an explanation, see condition [2] of [1.2 Before Installation](#).

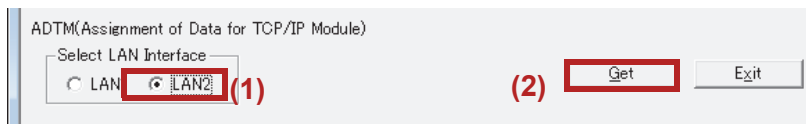
5

The confirmation message is displayed. Click the [Yes] button to apply the change.



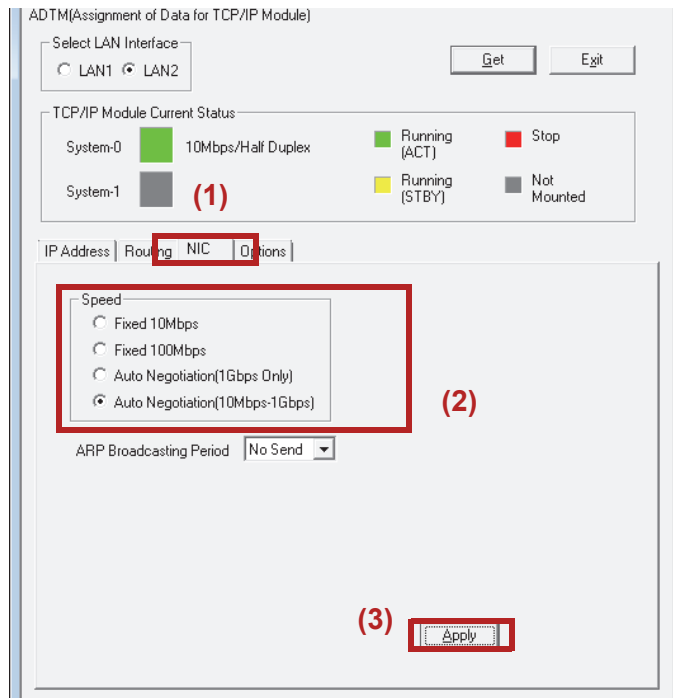
6

- (1) Select [LAN2] for [Select LAN Interface].
- (2) Click the [Get] button.



7

- (1) Click the [NIC] tab.
- (2) Select [Auto Negotiation (10Mbps-1Gbps)] for [Speed].
- (3) Click the [Apply] button.



Note:

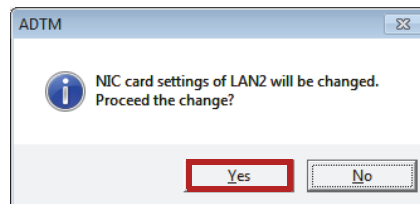
Do not change the setting [Auto Negotiation (10Mbps-1Gbps)].

Note:

When NEC Express 5800 FT server is used as a host server, the values set here are not used. For an explanation, see condition [2] of [1.2 Before Installation](#).

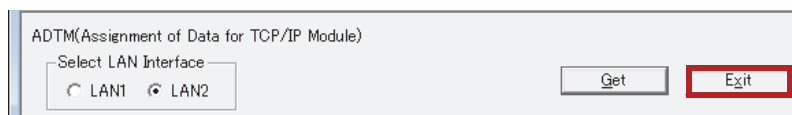
8

The confirmation message is displayed. Click the [Yes] button to apply the change.



9

Click the [Exit] button to exit the ADTM command.



2.5.5 Assignment for Routing Data (ADTM) (IPv6)

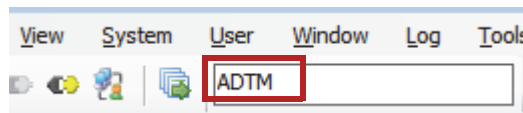
This section explains the procedure for configuring the network of the SV9500 Software Model to conform with the actual network environment.

Note: Programming for IPv4 must be done before programming in this section can be done.

Note: This data setting is for the IPv6 connection with PCPro. If you use only IPv4 addresses, this setting is not required.

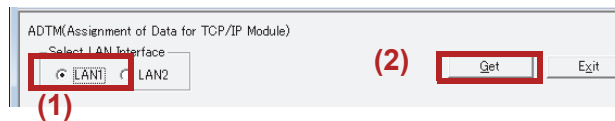
1

Execute the ADTM command.



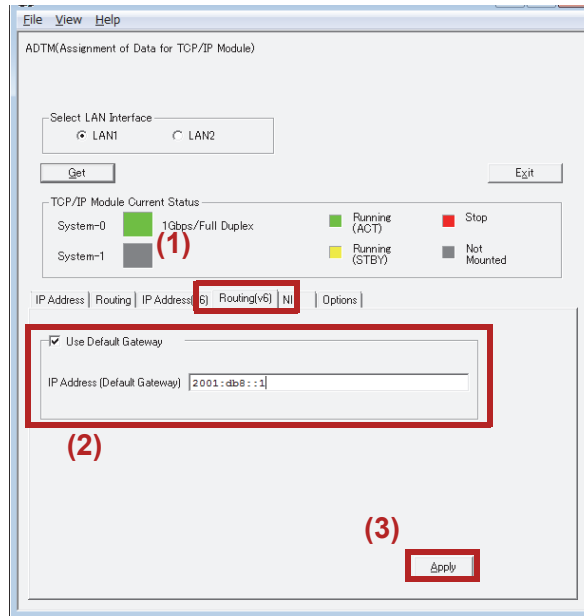
2

- (1) Select [LAN1] under [Select LAN Interface].
- (2) Click the [Get] button.



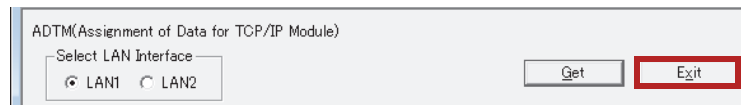
3

- (1) Click the [Routing (v6)] tab.
- (2) Set the value corresponding to your actual network environment.
- (3) Click the [Apply] button.



4

- Click the [Exit] button to exit the ADTM command.

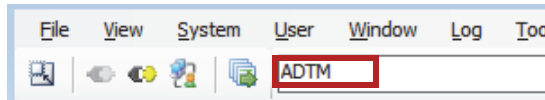


2.5.6 Assignment for LAN Interface Data (ADTM) (IPv6)

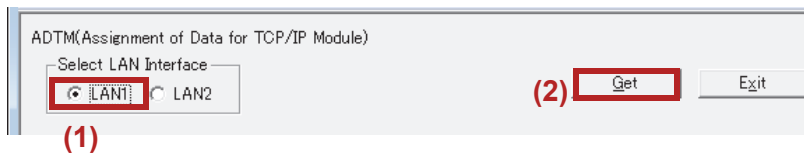
This section explains the procedure for configuring the LAN interface to connect to PCPro with IPv6 addresses.

- Note:**
- Programming for IPv4 must be done before programming in this section can be done.
 - This data setting is for the IPv6 connection with PCPro. If you use only IPv4 addresses, this setting is not required.

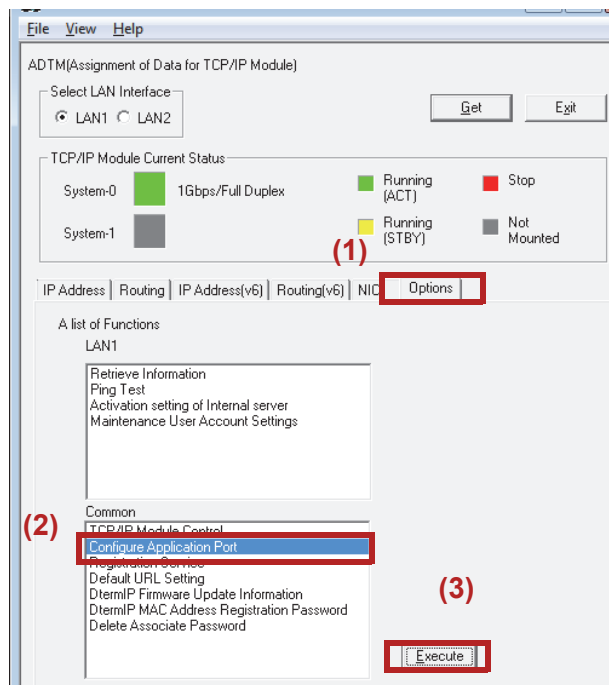
1 Execute the ADTM command.



- 2**
- (1) Select [LAN1] under [Select LAN Interface].
 - (2) Click the [Get] button.



- 3**
- (1) Click the [Options] tab.
 - (2) In the [Common] list, select [Configure Application Port].
 - (3) Click the [Execute] button.



4

- (1) Select [LAN1] under [LAN Interface to be used] in [MAT].
- (2) Click the [Apply] button.

Configure Application Port

Configure Application Port	LAN Interface to be used	Port Number (1024-65534)	Default Value
MAT	(TCP) ☒ LAN1 ☐ LAN2	0	60000
SMDR	(TCP) ☐ LAN1 ☒ LAN2	0	60010
MCI	(TCP) ☐ LAN1 ☒ LAN2	0	60020
OAI	(TCP) ☐ LAN1 ☒ LAN2	0	60030
MIS	(TCP) ☐ LAN1 ☒ LAN2	0	60040
CS Report	(TCP) ☐ LAN1 ☒ LAN2	0	60080
PMS	(TCP) ☐ LAN1 ☒ LAN2	0	60050
MCC	(TCP) ☐ LAN1 ☒ LAN2	0	60190
CCIS Cluster	(TCP) ☒ LAN1 ☐ LAN2	0	60001
FCCS Cluster	(TCP) ☐ LAN1 ☒ LAN2	0	60210

*If you want to change Port Number of "FCCS Cluster", you must use AFCCMN command.

Internal PHI-PRI	(TCP) ☐ LAN1 ☒ LAN2	0	64000
Internal PHC	☐ LAN1 ☒ LAN2		
Client	(TCP)	0	65030
Server	(TCP)	0	57000
Internal PHF	(UDP) ☒ LAN1 ☐ LAN2	0	60180
	☒ LAN1 ☐ LAN2		
REG	(UDP)	0	3456
Internal PHE	(UDP)	0	60130
Internal PHI-BRI	(UDP)	*If "Internal PHI-PRI" and "Internal PHI-BRI" use the same Port Number.	
SR-MGC/NMS			
NMS	(TCP)	0	60060
Health Check Receive MGC - SR-MGC (Server)	(UDP)	0	60110
Health Check Send MGC - SR-MGC (Client)	(UDP)	0	60120
SR-MGC Charge MGC Side	(TCP)	0	60140
SR-MGC Charge SR-MGC Side	(TCP)	0	60150
DNS	(UDP) ☐ LAN1 ☒ LAN2	0	53
SNTP	(UDP) ☐ LAN1 ☒ LAN2	0	123
PBUS over IP	(UDP) ☒ LAN1 ☐ LAN2	0	60220
Internal SIP Handler	☐ LAN1 ☐ LAN2 ☒ LAN1(ACT2)		
SIP Signaling	(UDP/TCP Server)	0	5060
DRS Registration	(UDP)	0	60300
Negotiation	(UDP/TCP Server)	0	60301
TLS	(TCP Server)	0	5061

*When the Port Number of "REG" is changed, it is necessary to set the same Port Number as DrsPort by the ASPC command. (SPconfig.conf,StaticInfo.txt)

*When "Internal PHI-PRI" or "Internal PHI-BRI" or "Internal PHC" or "Internal PHF" or "Internal SIP Handler" is changed, it is necessary to initialize the module.

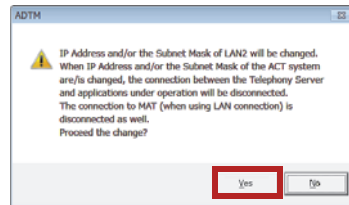
*When the Port Number of "Internal PHE" is changed, it is necessary to set the same Port Number as PHEPort by the ASPC command. (SPconfig.conf)

*Port Number=0:Using the default value.

(2)

Apply Close

- 5 The confirmation message is displayed. Click the [Yes] button to apply the change.

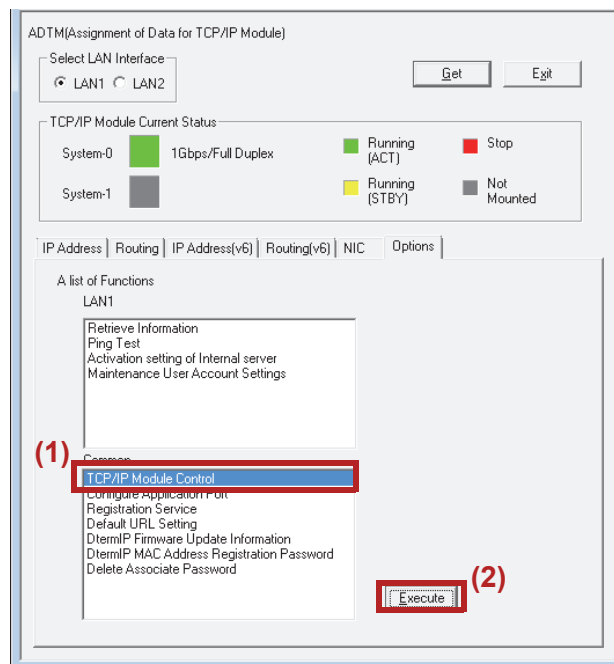


- 6 Click the [Close] button to close the [Configure Application Port] dialog box.

*When the Port Number of "REG" is changed, it is necessary to set the same Port Number as DrsPort by the ASPC command. (SPconfig.conf.StaticInfo.txt)
*When "Internal PHI-PRI" or "Internal PHI-BRI" or "Internal PHC" or "Internal PHF" or "Internal SIP Handler" is changed, it is necessary to initialize the module.
*When the Port Number of "Internal PHE" is changed, it is necessary to set the same Port Number as PHEPort by the ASPC command. (SPconfig.conf)
*Port Number=0:Using the default value.

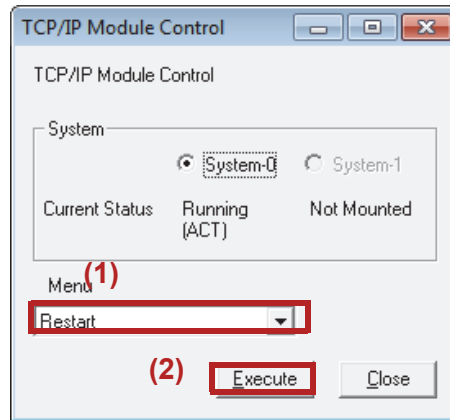
Apply Close

- 7 (1) Select [TCP/IP Module Control] in the [Common] list.
(2) Click the [Execute] button.



8

- (1) Select [Restart] in the [Menu] box.
- (2) Click the [Execute] button.



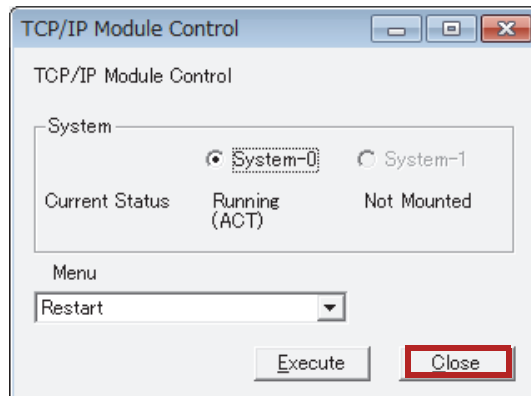
9

The following message is displayed. Click [OK] to close the message.



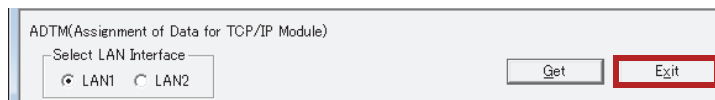
10

Click the [Close] button to close the [TCP/IP Module Control] dialog box.

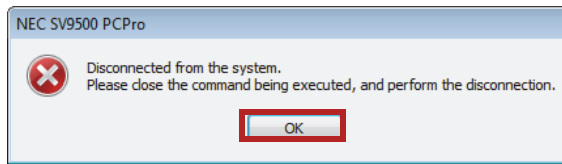


11

Click the [Exit] button to exit the ADTM command.



- 12** The following message is displayed on PCPro. Click [OK] to close the message.



- 13** Select [Disconnect] on the [System] menu on PCPro.



Point:

For detailed disconnecting procedure, refer to [PCPro Setup Manual] - [Setting Up PCPro] - [Disconnecting the Communication Link].

2.5.7 System Configuration Data Assignment

Basic data assignment of the Office Data must be set to start up the system.

Refer to [2.7 System Configuration Data Assignment](#) for instructions on data assignment.

2.5.8 Initial Data Assignment

Initial data assignment is required to be set on the SV9500 Software Model by PCPro.

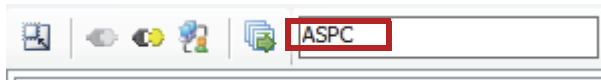
Refer to [2.8 Initial Data Assignment](#) for instructions on data assignment.

2.5.9 Configuration of SIP Server (ASPC)

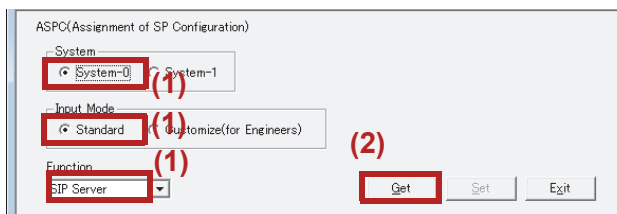
This section explains the procedure to configure the SP part of the system.

Note: The configuration of SIP Server must be set when using IP equipment (IP stations) within the system.

1 Execute the ASPC command.



2 (1) Click [System-0] for [System], [Standard] for [Input Mode] and [SIP Server] from the [Function] list.
(2) Click the [Get] button.

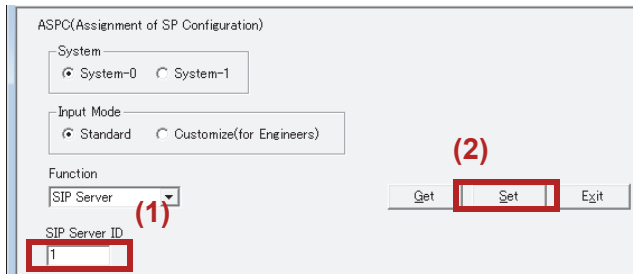


Note:

- System which does not exist cannot be selected for [System].
- Customize mode is for engineers only.

3

- (1) Type the SIP Server Identifier for [SIP Server ID].
- (2) Click the [Set] button.



Note:

- Unique SIP-Server Identifier must be assigned in the network within the range from 1 to 127.
- Always assign SIP-Server Identifier when initializing the SV9500 Software Model regardless of whether the SP Controlled SIP terminals are used or not. If ASSDL or ASSDN are assigned, the number set for the SIP-Server Identifier in ASSDL/ASSDN command must match the data in the ASPC command as well.

4

- 4 Disconnect PCPro from the system.

Point:

For detailed disconnection procedure, refer to [PCPro Setup Manual] - [Setting Up PCPro] - [Disconnecting the Communication Link].

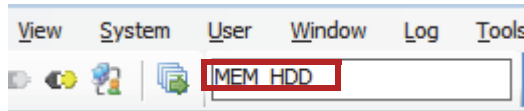
The basic office data assignment is completed.

2.6 Restarting SV9500 Software Model

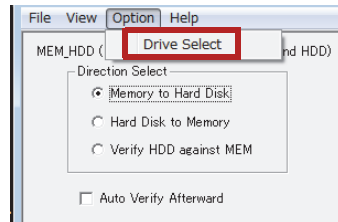
Backup the Office Data using MEM_HDD command and restart the SV9500 Software Model.

Point: The Office Data backed up in the guest OS can be stored on a maintenance PC by using the Telephony Server Maintenance Menu.

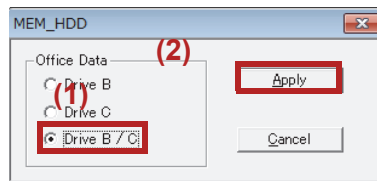
- 1** Execute the MEM_HDD command.



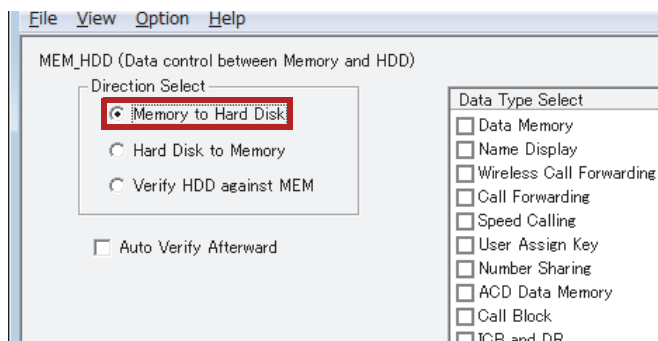
- 2** Select [Drive Select] from the [Option] menu.



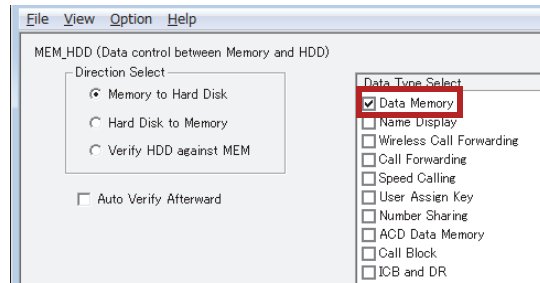
- 3** (1) Select [Drive B / C] for [Office Data].
(2) Click the [Apply] button.



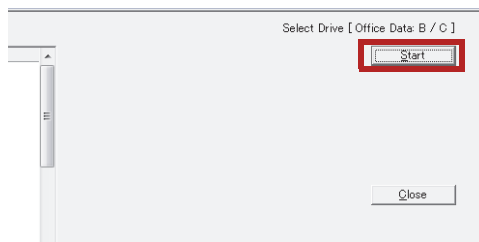
- 4** Select [Memory to Hard Disk] for [Direction Select].



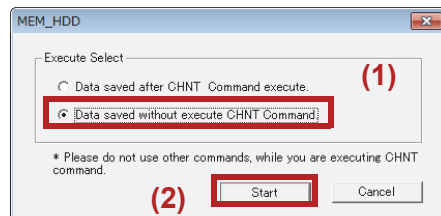
- 5 Select [Data Memory] for [Data Type Select].



- 6 Click the [Start] button.



- 7 (1) Select [Data saved without execute CHNT Command] for [Execute Select].
(2) Click the [Start] button.
The data backup begins.



- 8 After the backup is completed, click the [Close] button to exit the MEM_HDD command.

- 9 Launch the web browser from the maintenance PC, and connect to vCSA IP address (<https://192.168.1.2:9443/>) as root user.

- 10 (1) Click [Hosts and Clusters (Inventories)] on Home tab.
(2) Right-Click the SV9500 Software Model virtual machine and click [Power]-> [Restart Guest OS].

- 11 Use the PING command from the maintenance PC and verify there is a response from the IP address of SV9500 Software Model LAN1 and LAN 2.

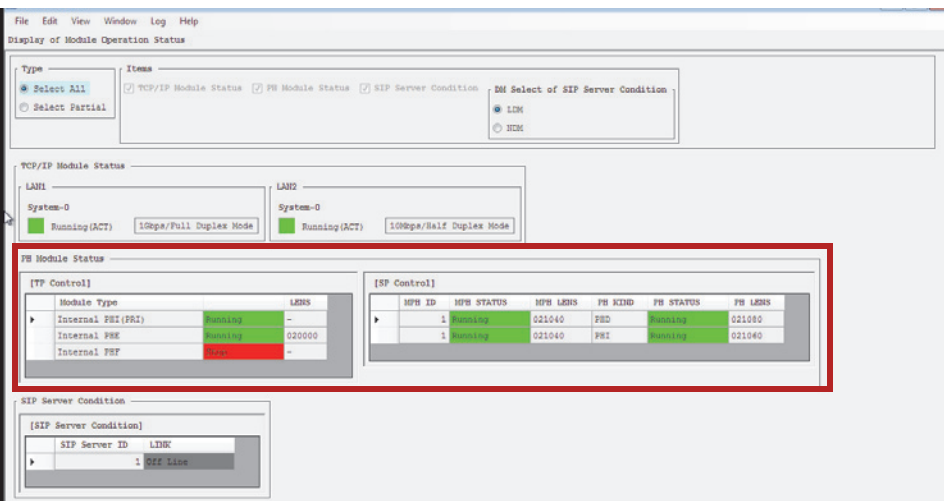
12 Launch the web browser from the maintenance PC, connect to the Telephony Server Maintenance Menu (<http://192.168.1.11:9801/> (the LAN1 IP address (ACT) of SV9500 Software Model)) and verify that the login screen is displayed.

13 Connect to PCPro and log in.

14 Start the DMOS command.



15 Confirm on [Module Operation Status] screen that TP Control and SP Control are operating normally.



The rebooting of the guest OS is completed.

2.7 System Configuration Data Assignment

Basic data assignment for starting up the system is explained here. System configuration data such as system time, number of modules and units, #0/#1 configuration of controlling system, and data memory capacity are assigned.

2.7.1 System Time - ATIM

ATIM - Date and Time Setting

Only Time Zone and Daylight Savings Time are valid for the SV9500 Software Model using the ATIM command. The Date and Time are configured in VMware ESXi.

2.7.2 System Data - ASYD, ASYDL (LDM), and ASYDN (NDM)

System Data assigned by ASYD consists of three major categories - SYS1 (Index 0 ~ 511), SYS2 (Index 0 ~ 15) and SYS3 (Index 0 ~ 31). The data of each index is entered in hexadecimal format (00 to FF). Each bit, 0 or 1 (in binary), has its meaning, such as “Use of Service A: 0=No, 1=Yes”.

- **ASYD SYS1:**

INDEX	SYSTEM CONFIGURATION	BIT	DATA
0	Number of Module Group (MG) Note 1	0-7	08 Hex
1	Number of Main Processor	0-7	01 Hex
3	Configuration of Time Division Switching (TSW) network	0-7	00 Hex
30	Capacity of Data Memory (DM) Note 2	0-7	06 Hex
31	Capacity of Common Memory (CM)	0-7	02 Hex
58	Configuration of CPU	0	Bit 0=0 (Fixed)
79	OAI/ACD Service	6	Bit 6=0 (In service) Bit 6=1 (Out of service)
194	MP (CPU) Mounting Status	0-7	01 Hex (Fixed)
198	IMG0, IMG1 Mounting Status	0-7	11 Hex (Fixed)
199	IMG2, IMG3 Mounting Status	0-7	11 Hex (Fixed)
256	Bit 2=1 (Fixed) Bit 3=0 (Fixed) Bit 4=1 (Fixed) Bit 5=0 (Fixed)	0-7	14 Hex

• ASYDL SYS1:

INDEX	SYSTEM CONFIGURATION	BIT	DATA
513	Capacity of Local Data Memory (LDM)	0-7	See Command Manual
514	Capacity of Network Data Memory (NDM)	0-7	See Command Manual
556	PIR0 ~ PIR3 mounting status on IMG0, IMG1	0-7	FF Hex Note 3
557	PIR0 ~ PIR3 mounting status on IMG2, IMG3	0-7	FF Hex Note 3
1026	UNIT use on MG00-MG03	0-7	FF Hex
1027	UNIT use on MG04-MG07	0-7	FF Hex

Note 1: As shown in the figure below, a Module Group (MG) consists of two virtual PIRs.



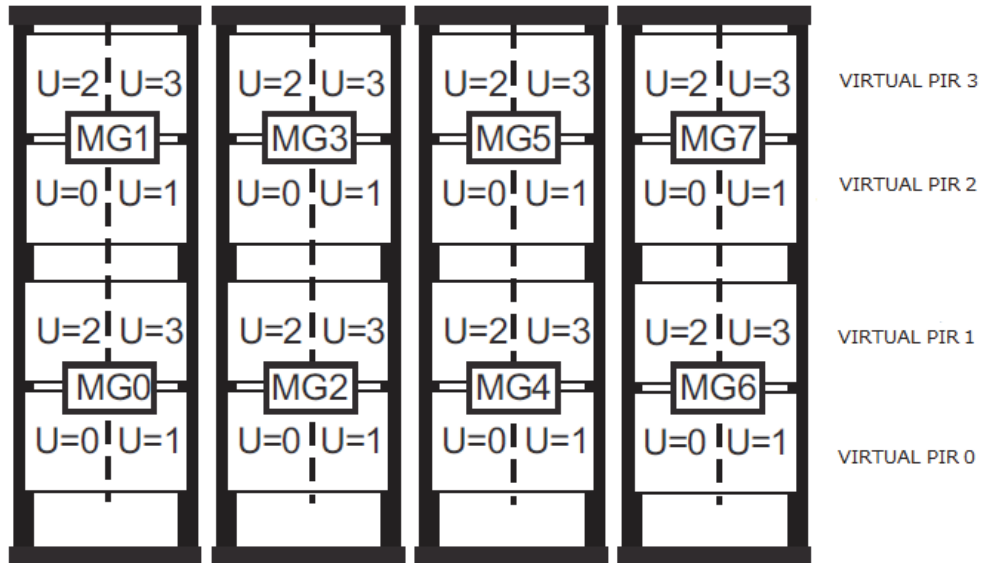
Note 2: Set to 06 Hex for systems that use PS or SIP terminals.

Note 3: SV9500 Software Model only uses virtual PIRs. For more information about virtual PIRs see ASSIGNMENT OF BASIC OFFICE DATA in the Data Programming Manual - Business.

2.7.3 Unit Data - AUNT

Assign the Unit (U) data by using AUNT.

The Unit (U) is the second element of the Line Equipment Numbers (LENS) that specifies the accommodated location of station/trunk, and is a minimum requirement to be assigned before the entry of station/trunk and other office data. The pattern of the Unit (U) allocation is shown below:



[Programming]

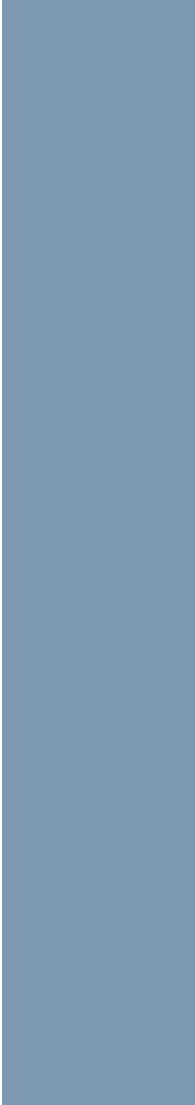
MG: Module Group Number

TYPE: 1 (Select 1 for Unit data assignment)

UNIT 0-3: 1 (Enter 2 for UNITS that are not mounted)

2.8 Initial Data Assignment

This section explains how to assign data with PCPro to enable terminal use. The procedures are the same for SV9500 Software Model and SV9500 Appliance Model, therefore, see Initial Data assignment in Appliance Model Installation Manual.



APPENDIX A LICENSE FOR THE SV9500 SOFTWARE SERVER MODEL

1. License File for SV9500 Software Model

An Activation Code for the SV9500 Software Model is calculated based on the IP address (IPv4) of LAN1 (ACT). Keep the Certify Status in the AACT command at [Certify OK]. When the Certify Status is [Certify NG], the PCPro connection restriction will be implemented (you will be locked out of the MAT). Certify Status of the license can be checked by using the AACT command.

[Conditions subject to PCPro connection restriction]

PCPro connection is restricted in the following cases:

(a) Initial Startup

When the SV9500 Software Model is started up with factory default settings, the PCPro connection is not in a restricted state. Certify Status becomes [Certify NG (A.C)] when the SV9500 Software Model is started up with a license file that has been downloaded from the License Management Server.

Solution: Register an Activation Code. For more information, see [2.5.1 Registration of Activation Code](#) in Chapter 2.

(b) License Update

Certify Status becomes [Certify NG (A.C)] when the license information is updated (for example, due to an increase in number of clients).

Solution: Register an Activation Code. For more information, see [2.5.1 Registration of Activation Code](#) in Chapter 2.

(c) Change of IP address (IPv4) of LAN1 (ACT)

Certify Status becomes [Certify NG (HKC)] when the IP address (IPv4) of LAN1 (ACT) is modified.

Solution: Visit the License Management Server (LMS) and update LMS with the new IP Address information and obtain a new Activation Code.

Note: Be sure that LMS has been updated with the current LAN1(ACT) IP Address.

(d) Loading office data

The Activation Code registered with the AACT command is stored in the office data. Certify Status may become [Certify NG (A.C)] when the office data was saved before the AACT command was assigned, or the office data of another node has been loaded.

Solution: Register an Activation Code. For more information, see [2.5.1 Registration of Activation Code](#) in Chapter 2.

[Solutions when PCPro connection is restricted]

(a) Certify NG (HKC)

Before performing this procedure, ensure that the IP address (IPv4) of LAN1 (ACT) is modified to the one used for the actual environment. If the IP address (IPv4) of LAN1 (ACT) is modified after the Certify Status shows [Certify OK], a new Activation Code will be required.

Visit the License Management Server (LMS) and obtain a new Activation Code.

(b) Certify NG (A.C)

Before performing this procedure, ensure that the IP address (IPv4) of LAN1 (ACT) is modified to the one used for the actual environment. If the IP address (IPv4) of LAN1 (ACT) is changed after the Certify Status shows [Certify OK], an Activation Code is required to be registered again.

Step1: Visit the License Management Server (LMS) and update LMS with the new IP Address information. Download the license file and obtain a new Activation Code.

Note: Be sure that LMS has been updated with the current LAN1(ACT) IP Address.

Step2: Select [Register Activation Code] in the AACT command and click the [GET] button. Enter the Activation Code and click the [SET] button. The registration is completed when Certify Status shows “Certify OK”.

[Temporary measures when PCPro connection is restricted]

When the PCPro connection is restricted due to [Certify NG] status, it can be temporarily released for seven days (168 hours). The temporary release is allowed only once. Seven days after the temporary release, the PC-Pro connection restriction is in effect again until registration of the Activation Code has been completed.

Step1: In the PCPro tool bar, select [System], then [Activate].

Step2: Select the AACT command and press [Execute].

Step3: Select [Confirm License Data] and [Create File] and then press [Get].

Step4: Select [File Save] and save the KeyCode.act file to your PC.

Step5: Close the AACT command.

Step6: From the same Activate screen in Step 1, select the AONE command and press [Execute].

Step7: Open the KeyCode.act file from Step 4.

Step8: Copy and paste the first Software Key Code from the file into the AONE command and press [Set].

Step9: Verify you receive the Certify OK confirmation message.

Step10: Close the AONE command and the Activate screen.

Step11: SV9500 is now temporarily unlocked.

[Limitations]

If Certify Status changes from [Certify OK] to [Certify NG] due to the modification of the IP address (IPv4) of LAN1 (ACT) or a license file, the PCPro connection will not be restricted immediately. PCPro connection restriction is applied for the reasons stated above and at the following times:

- After power off and on or initialization of SV9500
- After entering an incorrect Activation Code with the AACT command
- At midnight (00:00 a.m.)



APPENDIX B PROGRAM VERSION UPGRADE

1. Program Version Upgrade

This section explains the procedure to upgrade the program version of the system program.

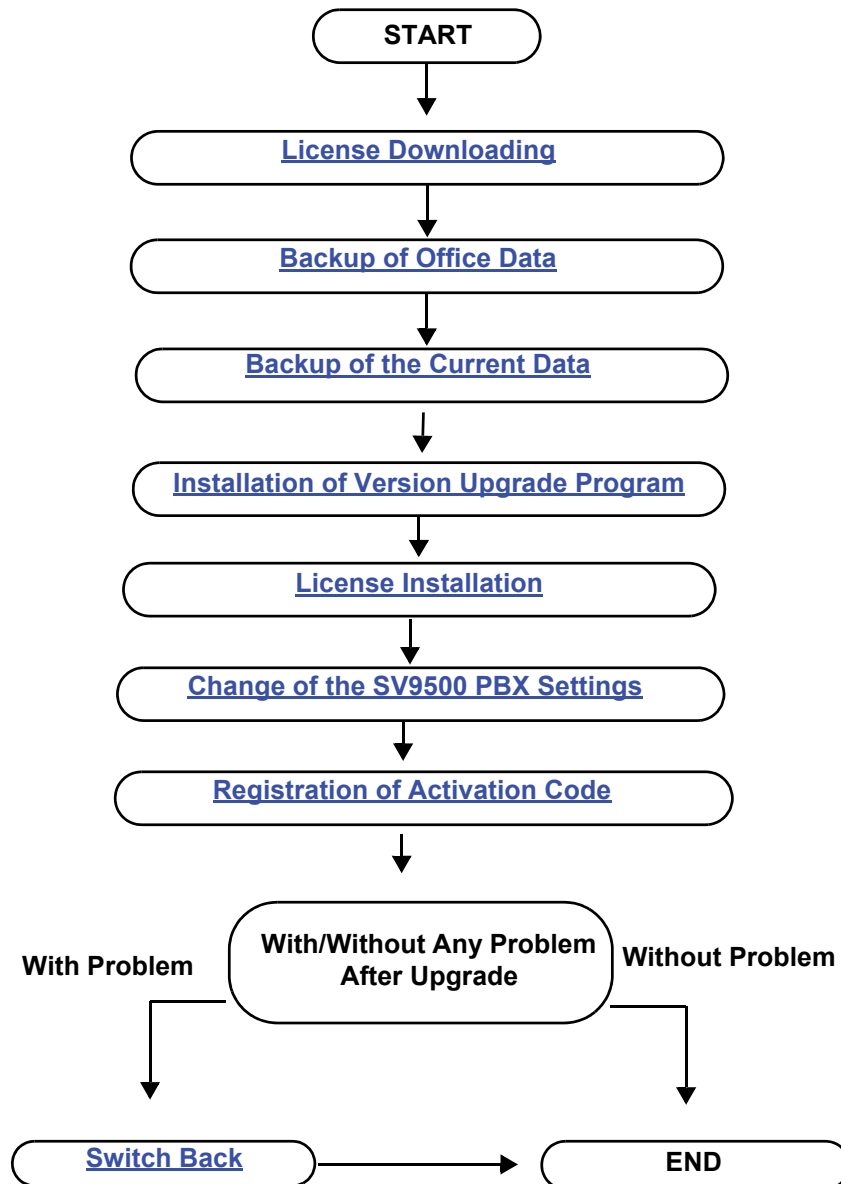
In the section, **Note** states the precautions required when performing each procedure. An error or failure may occur if these precautions are missed. Be sure to follow each precaution without exception. **Point** states tips and supplemental remarks to be considered when performing each procedure.

Note: For use by or as indicated by a certified technician.

1.1 Conditions of Use

- (1) Major version upgrade for the SV9500 software is available from FP95-114 V4 Issue 4.0.
- (2) Downgrading is not available:
(Example of not possible downgrading): V5 (1.00) -> (version down)-> V4 (4.00)
- (3) If there is any problem with the upgraded version, it is possible to switch back to the previous version. It is only possible to switch back to the version from where the upgrade was performed but not to previous versions. Therefore, in the example below, it is possible to switch back to V4 (4.00) but not to V4 (3.00):
V4 (3.00) -> (version up) -> V4 (4.00) -> (version up) -> V5 (1.00).
- (4) If an upgrade is performed after switching back, file uploading is required.
V4 (4.00) -> (first version up) -> V5 (1.00) -> (switch back) V4 (4.00) -> (second version up) -> V5 (1.00).
In the second version up above, file uploading is required.
- (5) If an upgrade is performed right after switching back, one of the messages below may be displayed:
 - It is currently running a merge.
 - To exit because backup is not make.In that case try upgrading again after a few minutes (no more than 20 minutes may be necessary).
- (6) License and data office are not lost during the upgrading.
- (7) After switching back, data is restored to its settings before the upgrade. Collect the logs before switching back.

1.2 Procedure for the Program Version Upgrade



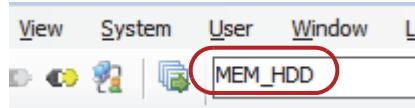
1.3 License Downloading

Download a license as explained in [2.3.1 License Downloading](#).

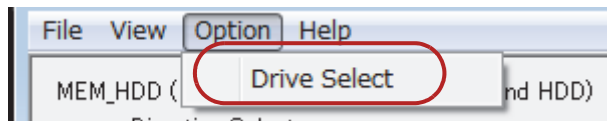
1.4 Backup of Office Data

This section explains the procedure to backup the Office Data using the MEM_HDD command.

- 1** Execute the MEM_HDD command.



- 2** Select [Drive Select] from [Option] menu.

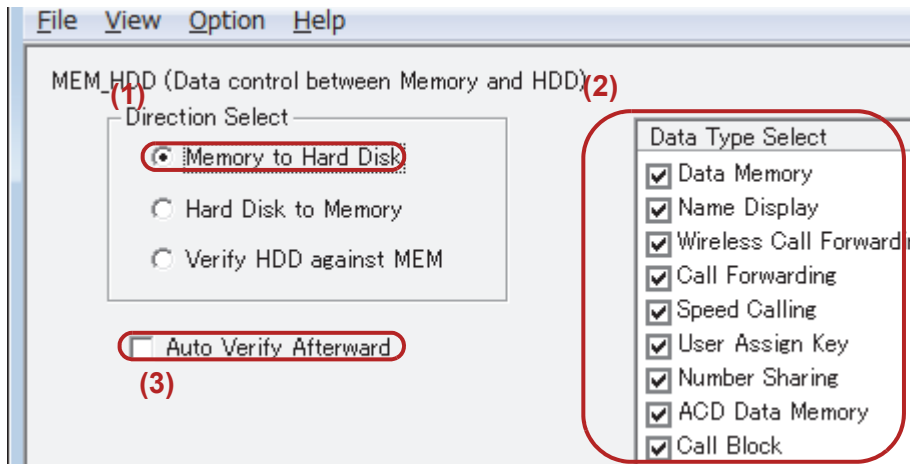


- 3**
- (1) Select the drive which is currently used from [Office Data]. Which drive to select depends on your configuration. As an example, Office Data will be saved in Drive B in the figure below.
 - (2) Click the [Apply] button.



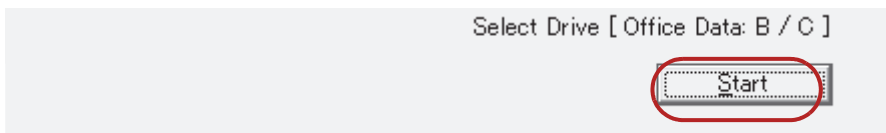
4

- (1) Select [Memory to Hard Disk] for [Direction Select].
- (2) Place a check mark for applicable data type on [Data Type Select].
- (3) Place a check mark on [Auto Verify Afterward].



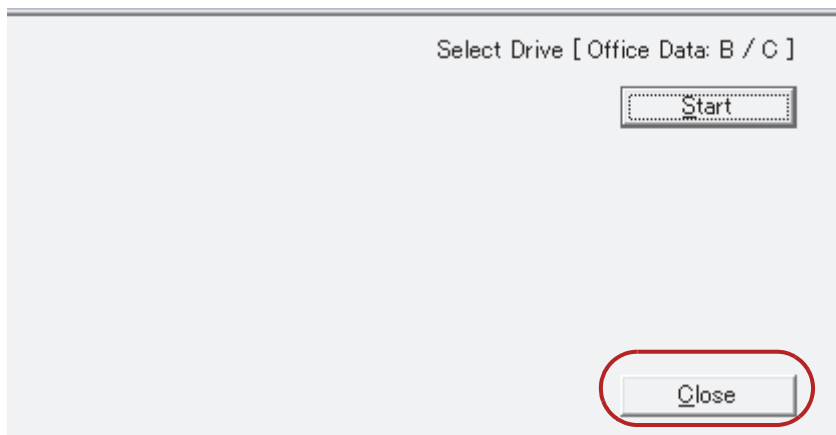
5

Click the [Start] button.



6

After the backup is completed, click the [Close] button to exit the MEM_HDD command.



The backup process of office data is completed.

1.5 Backup of the Current Data

This section explains the procedure to back up the data (including the program, office data and license) currently used for operation to the maintenance PC in case of an emergency (such as when restoring the program).

1

Start Internet Explorer and type <http://192.168.1.11:9801/> (the LAN1 IP address (ACT) of SV9500).

Note:

- Microsoft Internet Explorer 7.0 or higher is required to access the Telephony Server Maintenance Menu.

2

- (1) [Telephony Server Maintenance Menu Login] screen appears. Type the user name and password.
- (2) Click the [OK] button to log into the [Telephony Server Maintenance Menu].

Note:

- Contact NEC maintenance personnel if you need to confirm User Name and Password.
- After logging into the Telephony Server Maintenance Menu, do not use the [Back] button on the browser.

3

- (1) Click the [Download] button for [Office Data]. The [Office Data Download] dialog box appears in the lower right portion of the screen.
- (2) Choose a drive (Drive B or Drive C) which you specified [STEP3](#) of [1.4 Backup of Office Data](#).
- (3) Click the [Download] button on the dialog box and save the data in the desired folder.

<< NEC Telephony Server Maintenance Menu >>

[System Status]
Memory: XX.X% used
XXXXMB Total / XXXMB Free

CPU: XX%
Load Average: XXX/XXX/XXX

LAN1 IP: XXX.XXX.XXX.XXX
-- Mask: XXX.XXX.XXX.XXX
-- Speed: XXXXXX/XXX

LAN2 IP: XXX.XXX.XXX.XXX
-- Mask: XXX.XXX.XXX.XXX
-- (Drive X LDM)

Storage Capacity: XX.X% used
XXXXMB Total / XXXMB Free
Log Capacity: XX.X% used
XXXXKB Total / XXXKB Free

Kernel: X.X.XX-XXXXXXXXXX
CPU board: XXXXX board

Date: XXXX-XX-XX XX:XX:XX

	Upload	Download	Delete
Program	☒		
Office Data	☒	☒ (1)	
License	☒	☒	
Patch	☒		☒
Log files		☒	☒
Language Data	☒	☒	☒

Office Data Download

☒ Drive B ☐ Drive C

SYSTEM CONTROL

- ☒ Shutdown
- ☒ Reboot
- ☒ Program Rollback
- ☒ Read Version
- ☒ Advanced Menu

Note:

If a download of the office data ends in failure, [An error occurred! Please check the logs.] is displayed and the details are displayed in the lower right portion of the screen.

4

- (1) Click the [Download] button for [License]. The [License Download] dialog box appears in the lower right portion of the screen.
- (2) Click the [Download] button on the dialog box and save the license file in the desired folder.

<< NEC Telephony Server Maintenance Menu >>

[System Status]
Memory: XX.X% used
XXXXMB Total / XXXMB Free

CPU: XX%
Load Average: XXX/XXX/XXX

LAN1 IP: XXX.XXX.XXX.XXX
-- Mask: XXX.XXX.XXX.XXX
-- Speed: XXXXXX/XXX

LAN2 IP: XXX.XXX.XXX.XXX
-- Mask: XXX.XXX.XXX.XXX
-- (Drive X LDM)

Storage Capacity: XX.X% used
XXXXMB Total / XXXMB Free
Log Capacity: XX.X% used
XXXXKB Total / XXXKB Free

Kernel: X.X.XX-XXXXXXXXXX
CPU board: XXXXX board

Date: XXXX-XX-XX XX:XX:XX

	Upload	Download	Delete
Program	✓		
Office Data	✓	✓	
License	✓	(1) ✓	
Patch	✓		✓
Log files		✓	✓
Language Data	✓	✓	✓

License Download

(2) Download

SYSTEM CONTROL

- ✓ Shutdown
- ✓ Reboot
- ✓ Program Rollback
- ✓ Read Version
- ✓ Advanced Menu

Note:

If a download ends in failure, [An error occurred! Please check the logs.] is displayed and the details are displayed in the lower right portion of the screen.

The backup process of the current data is completed.

However, if your system provides the OPTIONAL LANGUAGE PACK LOADING [O-42] service, backing up the following language data is also required:

<When customized language file is used for Extension Language>

- Extension Language file (for example, "English_0001.txt")
- Information file of Extension Languages (exlang_info)

For further information, see [Data Programming Manual - Business] - [BUSINESS FEATURES] - [OPTIONAL LANGUAGE PACK LOADING [O-42]] - [Updating Extension Language File (Customized Language File)].

<When Sample Language file is used for Extension Language>

- Information file of Extension Languages (exlang_info)

For further information, see [Data Programming Manual - Business] - [BUSINESS FEATURES] - [OPTIONAL LANGUAGE PACK LOADING [O-42]] - [Updating Extension Language File (Sample Language File)].

1.6 Installation of Version Upgrade Program

This section explains the procedure to install a version upgrade program in the SV9500.

1.6.1 Checking the Version Information (Before Upgrading)

This section explains how to check the version in use.

1

Start Internet Explorer and type <http://192.168.1.11:9801/> (the LAN1 IP address (ACT) of SV9500).

Note:

- Microsoft Internet Explorer 7.0 or higher is required to access the Telephony Server Maintenance Menu.

2

- (1) [Telephony Server Maintenance Menu Login] screen appears. Type the user name and password.
- (2) Click the [OK] button to log into the [Telephony Server Maintenance Menu].

Note:

- Contact NEC maintenance personnel if you need to confirm your User Name and Password.
- After logging into the SV9500 Maintenance Menu, do not use the [Back] button on the browser.

3

- (1) Click the [Read Version] button in the [SYSTEM CONTROL] area. The [Read Version] dialog box appears in the lower right portion of the screen.
- (2) Select both the [Show results in new window] and the [Auto copy to clipboard] check boxes.
- (3) Click the [Get] button to display the program version list.

<< NEC Telephony Server Maintenance Menu >>

[System Status]
Memory: XX.X% used
XXXXMB Total / XXXMB Free

CPU: XX%
Load Average: XXX/XXX/XXX

LAN1 IP: XXX.XXX.XXX.XXX
-- Mask: XXX.XXX.XXX.XXX
-- Speed: XXXXXX/XXX

LAN2 IP: XXX.XXX.XXX.XXX
-- Mask: XXX.XXX.XXX.XXX
-- (Drive X LDM)

Storage Capacity: XX.X% used
XXXXMB Total / XXXMB Free
Log Capacity: XX.X% used
XXXXKB Total / XXXKB Free

Kernel: X.X.XX-XXXXXXXXXX
CPU board: XXXXX board

Date: XXXX-XX-XX XX:XX:XX

	Upload	Download	Delete
Program	✓		
Office Data	✓	✓	
License	✓	✓	
Patch	✓		✓
Log files		✓	✓
Language Data	✓	✓	✓

Read version

☒ Show results in new window

☒ Auto copy to clipboard

Get

SYSTEM CONTROL

☒ Shutdown

☒ Reboot

☒ Program Rollback

☒ Read Version

☒ Advanced Menu

Note:

For Internet Explorer 10 and later [Auto copy to clipboard] is not displayed. If it is necessary to attach the results to a clipboard, copy them from the new window that opens when [Show results in new window] is checked.

A new screen is opened where the program version is displayed.

4

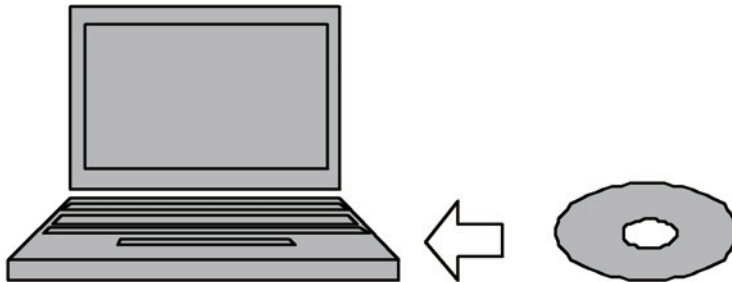
Check the software version (currently-operated program version) for MAIN.

```
## Date : 2016-03-04 10:00:00
## Read Version
-----
MAIN V04 02.00 000 20150212
ACDP V04 02.00 000 20150115
MISCLIBS V04 02.00 000 20150121
MPH V04 02.00 000 20141120
PHD V04 02.00 000 20141120
PHI V04 02.00 000 20141120
B2BUA_MAIN V04 02.00 000 20141120
SP_BOOT V04 02.00 000 20141120
SIPSV_PHE V04 02.00 000 20141120
SIPSV_SIP V04 02.00 000 20141120
LIBCMN V04 02.00 000 20141120
LIBFSMTL V04 02.00 000 20141120
LIBOSIP V04 02.00 000 20141120
IP_DTG V04 02.00 000 20140716
SV_GATE V04 02.00 000 20140717
SV_TSKCTL V04 02.00 000 20140717
SV_EMA V04 02.00 000 20140717
SV_IOC V04 02.00 000 20140717
SV_CPLD V04 02.00 000 20140717
PBXWATCHD V04 02.00 000 20140716
SVSYSSUB V04 02.00 000 20141009
BASE_SYS V04 02.00 000 20150128
95SYS_First V04 02.00 000 20141125
```

1.6.2 Data Copy from Install DVD

Copy the files in the install DVD to the maintenance PC.

- 1 Insert the "GENERIC SOFTWARE" DVD containing with the new version into the disk drive.



- 2 Copy all the files from the Install DVD into a desired folder on the maintenance PC.

The data copy from the DVD is completed.

1.6.3 Performing the Version Upgrade

This section explains how perform the upgrade.

- 1 Start Internet Explorer and type <http://192.168.1.11:9801/> (the LAN1 IP address (ACT) of SV9500).

- 2
 - (1) [Telephony Server Maintenance Menu Login] screen appears. Type the user name and password.
 - (2) Click the [OK] button to log into the [Telephony Server Maintenance Menu].

Note:

Microsoft Internet Explorer 7.0 or higher is required to access the Telephony Server Maintenance Menu.

Note:

- Contact NEC maintenance personnel if you need to confirm your User Name and Password.
- After logging into the SV9500 Maintenance Menu, do not use the [Back] button on the browser.

3

- (1) Click the [Upload] button for [Program]. The [Program Upload] dialog box appears in the lower right portion of the screen.
- (2) Click the [Browse] button on the dialog box and then select the following two files (located in the folder where you copied the new program files as in [Data Copy from Install DVD](#)).
 - SC Number_Major Version_Issue Number_the date the file is created (Ex: 4439_020_0182_150220.tgz)
 - work.zip

<< NEC Telephony Server Maintenance Menu >>

NEC

[System Status]
Memory: XX.X% used
XXXXMB Total / XXXMB Free

CPU: XX%
Load Average: XXX/XXX/XXX

LAN1 IP: XXX.XXX.XXX.XXX
-- Mask: XXX.XXX.XXX.XXX
-- Speed: XXXXXX/XXX
LAN2 IP: XXX.XXX.XXX.XXX
-- Mask: XXX.XXX.XXX.XXX
-- (Drive X LDM)

Storage Capacity: XX.X% used
XXXXMB Total / XXXMB Free
Log Capacity: XX.X% used
XXXXKB Total / XXXKB Free

Kernel:X.X.XX-XXXXXXXXXX
CPU board: XXXXX board

Date: XXXX-XX-XX XX:XX:XX

	Upload	Download	Delete
Program	(1) ☒		
Office Data	☒	☒	
License	☒	☒	
Patch	☒		☒
Log files		☒	☒
Language Data	☒	☒	☒

SYSTEM CONTROL

- ☒ Shutdown
- ☒ Reboot
- ☒ Program Rollback
- ☒ Read Version
- ☒ Advanced Menu

Program Upload (Update)

Browse (2)

Upload

Note:

From Internet Explorer 10, you can select multiple files at the same time by holding down the Control key and click each file using your mouse. Both files must appear under the Browse field (as shown in [STEP4](#)). You cannot upload the files one at a time.

4

Check that the correct files are selected and click the [Upload] button.

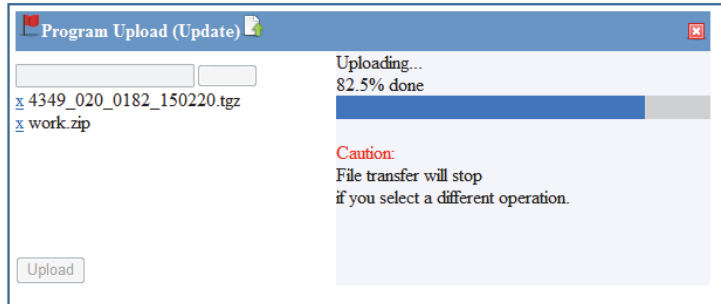
Program Upload (Update)

4439_020_0182_150220.tgz

work.zip

Upload

- 5** A screen is displayed. To confirm the start of the update, click [OK] and the upload starts.

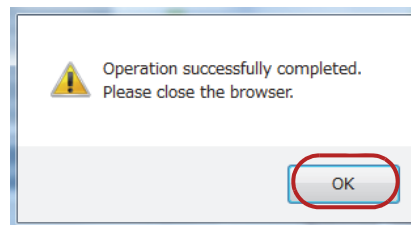


Note:

By clicking OK, the file upload and reboot are executed.

Do not perform any action until the confirmation screen is displayed.

- 6** A confirmation message appears. Click [OK].



Note:

If the program upload ends in failure, [An error occurred! Please check the logs.] is displayed and the details are displayed in the lower right portion of the screen.

1.6.4 Checking the Version Information (After Upgrading)

This section explains how to check the version in use.

- 1** Start Internet Explorer and type `http://192.168.1.11:9801/` (the LAN1 IP address (ACT) of SV9500).

Note:

- Microsoft Internet Explorer 7.0 or higher is required to access the Telephony Server Maintenance Menu.

2

- (1) [Telephony Server Maintenance Menu Login] screen appears. Type the user name and password.
- (2) Click the [OK] button to log into the [Telephony Server Maintenance Menu].

Note:

- Contact NEC maintenance personnel if you need to confirm User Name and Password.
- After logging into the SV9500 Maintenance Menu, do not use the [Back] button on the browser.

3

- (1) Click the [Read Version] button in the [SYSTEM CONTROL] area. The [Read Version] dialog box appears in the lower right portion of the screen.
- (2) Select both the [Show results in new window] and the [Auto copy to clipboard] check boxes.
- (3) Click the [Get] button to display the program version list.

Note:

For Internet Explorer 10 or later [Auto copy to clipboard] is not displayed. If it is necessary to attach the results to a clipboard, copy them from the new window that opens when [Show results in new window] is checked.

<< NEC Telephony Server Maintenance Menu >>

NEC

[System Status]
Memory: XX.X% used
XXXXMB Total / XXXMB Free
CPU: XX%
Load Average: XXX/XXX/XXX
LAN1 IP: XXX.XXX.XXX.XXX
-- Mask: XXX.XXX.XXX.XXX
-- Speed: XXXXXX/XXX
LAN2 IP: XXX.XXX.XXX.XXX
-- Mask: XXX.XXX.XXX.XXX
-- (Drive X LDM)
Storage Capacity: XX.X% used
XXXXMB Total / XXXMB Free
Log Capacity: XX.X% used
XXXXKB Total/ XXXXKB Free
Kernel: X.X.XX-XXXXXXXXXX
CPU board: XXXXX board
Date: XXXX-XX-XX XX:XX:XX

	Upload	Download	Delete
Program	✓		
Office Data	✓	✓	
License	✓	✓	
Patch	✓		✓
Log files		✓	✓
Language Data	✓	✓	✓

SYSTEM CONTROL

- ✓ Shutdown
- ✓ Reboot
- ✓ Program Rollback
- ✓ Read Version
- ✓ Advanced Menu

Read version

☒ Show results in new window
☒ Auto copy to clipboard

Get

A new screen is opened where the program version is displayed.

4

Check the software version (currently-operated program version) for MAIN.

```
## Date : 2016-03-04 11:30:00
## Read Version
-----
MAIN V04 02.01 000 20150304
ACDP V04 02.00 000 20150115
MISCLIBS V04 02.00 000 20150121
MPH V04 02.00 000 20141120
PHD V04 02.00 000 20141120
PHI V04 02.00 000 20141120
B2BUA_MAIN V04 02.00 000 20141120
SP_BOOT V04 02.00 000 20141120
SIPSV_PHE V04 02.00 000 20141120
SIPSV_SIP V04 02.00 000 20141120
LIBCMN V04 02.00 000 20141120
LIBFSMTL V04 02.00 000 20141120
LIBOSIP V04 02.00 000 20141120
IP_DTG V04 02.00 000 20140716
SV_GATE V04 02.00 000 20140717
SV_TSKCTL V04 02.00 000 20140717
SV_EMA V04 02.00 000 20140717
SV_IOC V04 02.00 000 20140717
SV_CPLD V04 02.00 000 20140717
PBXWATCHD V04 02.00 000 20140716
SVSYSSUB V04 02.00 000 20141009
BASE_SYS V04 02.00 000 20150304
95SYS_First V04 02.00 000 20141125
```

After checking the version proceed to the next section (Change of the Guest OS (SV9500) Settings).

1.7 License Installation

Install the licenses as explained in [2.3.2 Installing License for SV9500 Software Model](#).

1.8 Change of the SV9500 PBX Settings

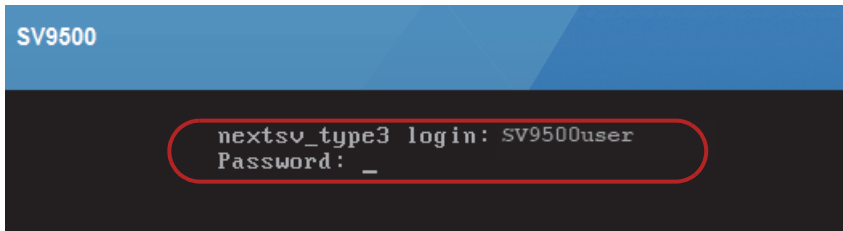
1 Log in to vCSA using vCSA IP address (<https://192.168.1.8:9443/>) as root user from the web browser.

2 (1) Click [Hosts and Clusters] on [vCenter]-> [Inventory Trees] from the menu on the left side of the home screen.

(2) Right-click on SV9500 and select Open Console.

3 Log in to the SV9500 as user:

- Login: SV9500user
- Password: P@ssw0rd

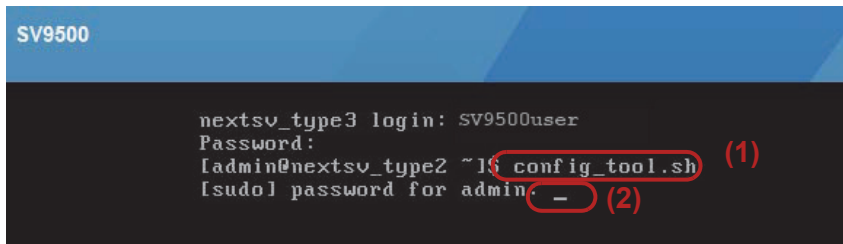


SV9500

```
nextsv_type3 login: SV9500user
Password: _
```

4 (1) Execute [config_tool.sh].

(2) Enter the password for user again.



SV9500

```
nextsv_type3 login: SV9500user
Password:
[admin@nextsv_type2 ~]# config_tool.sh (1)
[sudo] password for admin: _ (2)
```

5

- (1) Press [F1].
- (2) Select [PBX Service].

```
Menu(F1)
PBI No
P MGCNumber
M IP Address
PBX Service (2)
- Exit
LAN1 Address = 172.16.7.11
NetMask = 255.255.0.0
Gateway =
-- LDM01.DAT --
LAN1 Address = 172.16.7.11
NetMask = 255.255.0.0
Gateway = 0.0.0.0
LAN2 Address = 172.16.7.12
NetMask = 255.255.0.0
Gateway = 0.0.0.0
PBX Service = off
Press F1 to open a menu. ESC to quit.
```

6

Select [ON] for [PBX Service].

```
Menu(F1)
PBI No = 00
MGCNumber = 0
-- /etc/sysconfig --
LAN1 Address = 172.16.7.11
NetMask = 255.255.0.0
Gateway =
-- LDM01.DAT --
LAN1 Address = 172.16.7.11
NetMask = 255.255.0.0
Gateway = 0.0.0.0
LAN2 Address = 172.16.7.12
NetMask = 255.255.0.0
Gateway = 0.0.0.0
PBX Service = off => off on
PBX Service
```

Verify [ON] for [PBX Service].

```
Menu(F1)
PBI No = 00
MGCNumber = 0
-- /etc/sysconfig --
LAN1 Address = 172.16.7.11
NetMask = 255.255.0.0
Gateway =
-- LDM01.DAT --
LAN1 Address = 172.16.7.11
NetMask = 255.255.0.0
Gateway = 0.0.0.0
LAN2 Address = 172.16.7.12
NetMask = 255.255.0.0
Gateway = 0.0.0.0
PBX Service = on
Press any key.
```

7

- (1) Press [F1].
- (2) Select [Exit].

```
Menu(F1)
PBI No
P MGCNumber
M IP Address
PBX Service
- Exit
LAN1 Address = 172.16.7.11
NetMask = 255.255.0.0
Gateway =
-- LDM01.DAT --
LAN1 Address = 172.16.7.11
NetMask = 255.255.0.0
Gateway = 0.0.0.0
LAN2 Address = 172.16.7.12
NetMask = 255.255.0.0
Gateway = 0.0.0.0

PBX Service = on
```

8

- (1) Verify that SV9500@localhost is displayed.
- (2) Type exit and press [Enter].

```
Menu(F1)

PBI No      = 38
MGCNumber   = 0

-- /etc/sysconfig --
LAN1 Address = 172.16.7.11
NetMask      = 255.255.0.0
Gateway      =
-- LDM01.DAT --
LAN1 Address = 172.16.7.11
NetMask      = 255.255.0.0
Gateway      = 0.0.0.0
LAN2 Address = 172.16.7.12
NetMask      = 255.255.0.0
Gateway      = 0.0.0.0

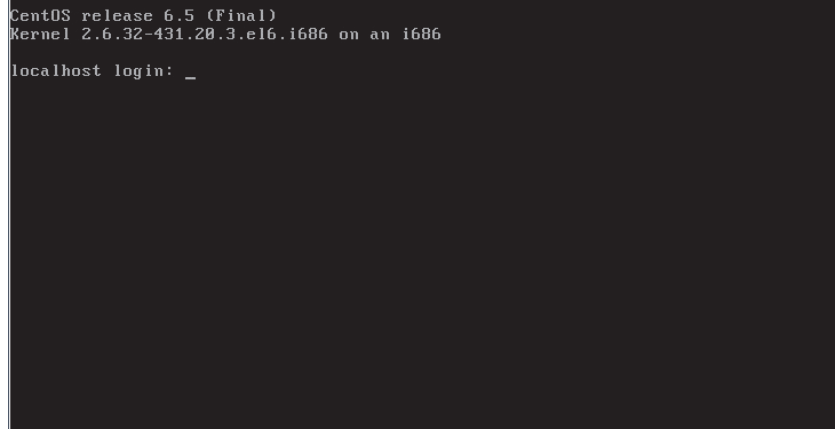
PBX Service  = on

Exit

admin@localhost ~1$ exit
```

9

After being returned to the log in screen, close the console screen.



```
CentOS release 6.5 (Final)  
Kernel 2.6.32-431.20.3.el6.i686 on an i686  
localhost login: _
```

1.9 Registration of Activation Code

Register the activation code as explained in [2.5.1 Registration of Activation Code](#).

1.10 Switch Back

If you encounter any troubles, and you need to switch back the upgraded program to the original, follow the procedures below.

Note: After switching back, the generated logs and the office data modified after the upgrade returns to the previous state. Before switching back, collect all the logs.

1.10.1 Switch Back

To switch back the version follow the steps below.

- 1** Start Internet Explorer and type `http://192.168.1.11:9801/` (the LAN1 IP address (ACT) of SV9500).
- 2**
 - (1) [Telephony Server Maintenance Menu Login] screen appears. Type the user name and password.
 - (2) Click the [OK] button to log into the [Telephony Server Maintenance Menu].

Note:

Microsoft Internet Explorer 7.0 or higher is required to access the Telephony Server Maintenance Menu.

Note:

- Contact NEC maintenance personnel if you need to confirm your User Name and Password.
- After logging into the SV9500 Maintenance Menu, do not use the [Back] button on the browser.

3

- (1) Click the [Program Rollback] button in the [SYSTEM CONTROL] area. [Program Rollback] screen is displayed.
- (2) Click the [Browse] button and select [work.zip].

<< NEC Telephony Server Maintenance Menu >>

NEC

[System Status]
Memory: XX.X% used
XXXXMB Total / XXXMB Free
CPU: XX%
Load Average: XXX/XXX/XXX
LAN1 IP: XXX.XXX.XXX.XXX
-- Mask: XXX.XXX.XXX.XXX
-- Speed: XXXXXX/XXX
LAN2 IP: XXX.XXX.XXX.XXX
-- Mask: XXX.XXX.XXX.XXX
-- (Drive X LDM)
Storage Capacity: XX.X% used
XXXXMB Total / XXXMB Free
Log Capacity: XX.X% used
XXXXKB Total/ XXXXKB Free
Kernel:X.X.XX-XXXXXXXXXX
CPU board: XXXXX board
Date: XXXX-XX-XX XX:XX:XX

	Upload	Download	Delete
Program	✓		
Office Data	✓	✓	
License	✓	✓	
Patch	✓		✓
Log files		✓	✓
Language Data	✓	✓	✓

SYSTEM CONTROL

- ✓ Shutdown
- ✓ Reboot
- ✓ Program Rollback
- ✓ Read Version
- ✓ Advanced Menu

Program Rollback

Browse

Rollback

4

- Click [Rollback].

Program Rollback

work.zip

Rollback

5

- Click the [OK] button for the confirmation screen.

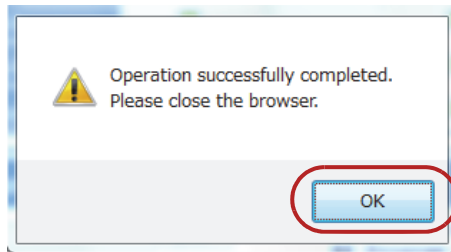
Note:

By clicking [OK], the switching back and the restarting are executed.

Note: Do not perform any action until the confirmation screen is displayed.

6

Click the [OK] button for the screen reporting a successful completion.



7

Confirm that the version is correct with the same process of [Checking the Version Information \(Before Upgrading\)](#).

Switching back of the program is completed.

UNIVERGE SV9500

Software Model Installation Manual

GVT-016672-001

Revision Sheet

V5: DATE OCTOBER, 2017

CHAPTER 1

4,5,6,7,8,9,10,11

CHAPTER 213,14,15,16,17,18,19,20,21,22,
23,24,25,27,28, 29,30,31,32,34,
35,36,37,38,39, 41,42,43,44,45,
46,48,50,51,53,55,57,58,59,61,
62,64,66,67,68, 69,76,78,79,81,
82**APPENDIX A**

1,2,3,4

APPENDIX B5,6,7,8,10,11,12,13,14,15,17,18,
19,20,21,22,24,25,26**V4:** DATE MARCH, 2017

CHAPTER 1

4,5,7,8

CHAPTER 2

13,36

APPENDIX D

40