aXsGUARD Gatekeeper

Hyper-V Installation Guide
# Table of Contents

1. **Introduction** .................................................................................................................. 1
   1.1. About this Document ................................................................................................. 1
   1.2. Documentation Sources ........................................................................................... 1
   1.3. About the aXsGUARD Gatekeeper ........................................................................... 1
       1.3.1. What is it? ........................................................................................................... 1
       1.3.2. Spare Units ........................................................................................................ 2
       1.3.3. Licensed Units ................................................................................................... 2
       1.3.4. Configuration Wizards ..................................................................................... 2
   1.4. About VASCO .......................................................................................................... 2

2. **Getting Started** ............................................................................................................. 3
   2.1. Prerequisites and Requirements ................................................................................ 3
   2.2. Creating a new VM .................................................................................................... 3
   2.3. Adding Network Adapters ....................................................................................... 5

3. **Installing the aXsGUARD Gatekeeper OS** .................................................................. 7
   3.1. Starting Up Your Appliance ...................................................................................... 7
   3.2. Partitioning the Hard Drive ....................................................................................... 7
   3.3. Umounting the Installation ISO ............................................................................... 8
   3.4. Network Configuration ............................................................................................. 9
   3.5. Accessing the Configuration Tool ............................................................................ 9

4. **Support** ........................................................................................................................ 11
   4.1. Overview .................................................................................................................. 11
   4.2. If you encounter a problem ...................................................................................... 11
   4.3. Return procedure if you have a hardware failure ................................................... 11

Alphabetical Index .................................................................................................................. 13
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Chapter 1. Introduction

1.1. About this Document

• This document has been written for aXsGUARD Gatekeeper version 7.7.1 and is based on changes and features that have been implemented since version 7.7.0.
• This document was last updated on 23 Oct 2013.

This manual is intended for system administrators. It explains how to install the aXsGUARD Gatekeeper virtual appliance using the Hyper-V Manager.

1.2. Documentation Sources

Other documents in the set of aXsGUARD Gatekeeper documentation include:

• aXsGUARD Gatekeeper Installation Guide, which explains how to set up the aXsGUARD Gatekeeper, and is intended for technical personnel or system administrators.
• How to guides, which provide detailed information on the configuration of each of the features available as add-on modules (explained in Section 1.3.1, “What is it?”). These guides cover specific features such as:
  • aXsGUARD Gatekeeper Authentication
  • aXsGUARD Gatekeeper Firewall
  • aXsGUARD Gatekeeper Single Sign-On
  • aXsGUARD Gatekeeper VPN
  • aXsGUARD Gatekeeper Reverse Proxy
  • aXsGUARD Gatekeeper Directory Services

Access to aXsGUARD Gatekeeper guides is provided through the permanently on-screen Documentation button in the aXsGUARD Gatekeeper Administrator Tool.

Further resources available include:

• Context-sensitive help, which is accessible in the aXsGUARD Gatekeeper Administrator Tool through the Help button. This button is permanently available and displays information related to the current screen.
• Training courses covering features in detail can be organized on demand. These courses address all levels of expertise. Please see http://www.vasco.com for further information.

1.3. About the aXsGUARD Gatekeeper

1.3.1. What is it?

The aXsGUARD Gatekeeper is an authentication appliance, intended for small and medium sized enterprises. In addition to strong authentication, the aXsGUARD Gatekeeper has the potential to manage all of your Internet security needs. Its modular design means that optional features can be purchased at any time to support, for example, e-mail and Web access control. The aXsGUARD Gatekeeper can easily be integrated into existing IT infrastructures as a stand-alone authentication appliance or as a gateway providing both authentication services and Internet Security.

Authentication and other features such as firewall, e-mail and Web access, are managed by security policies, which implement a combination of rules, for example, whether a user must use a DIGIPASS One-Time Password in combination with a static password for authentication. Security Policies are applied to specific users or groups of users and can also be applied to specific computers and the entire system.
1.3.2. Spare Units

A Spare Unit is an unlicensed appliance, with limited configuration possibilities and allows you to swiftly replace a defective appliance. It can also be licensed as a new appliance. In fact, all appliances can be considered spare units until they are licensed.

Restoring to a Spare Unit is restricted to:

- the same hardware version (e.g. AG-3XXX, AG-5XXX or AG7XXX) as the unit being replaced.
- the same software version as the appliance being replaced (or a higher version on which data migration is supported; please contact VASCO support (support@vasco.com) for guidance.

Once a backup is restored on a Spare Unit, full functionality is available. The configuration tool of the appliance can then be accessed by any user with administrative privileges (see the aXsGUARD Gatekeeper System Administration How To.)

The license from the backup is also restored on the Spare Unit. However, an appliance with a restored license only remains operational for a grace period of 30 days, during which the System Administrator needs to acquire a new license. If a new license has not been issued after this grace period, all services on the appliance will be stopped. Only the Administrator Tool will remain accessible.

Contact VASCO support (support@vasco.com) to release the restored license of the original appliance. To relicense the appliance, follow the same procedure as used during first-time licensing.

1.3.3. Licensed Units

With a licensed appliance, a user with full administrative privileges has access to all the configuration options on the aXsGUARD Gatekeeper. Use the sysadmin account to create a user with administrative privileges. Since the sysadmin user can create new administrators, you should change the default password of this account when you log in to the appliance for the first time.

Licensing and accessing a fully operational in-service appliance requires the following steps:

1. Logging on to the aXsGUARD Gatekeeper as the default sysadmin user and changing the sysadmin password
2. Creating a new user with full administration rights, which is required to configure the aXsGUARD Gatekeeper
3. Licensing the appliance

1.3.4. Configuration Wizards

As of version 7.6.5, configuration wizards are available. They allow you to configure the system essentials more easily and faster. You can, of course, also configure your system manually.

1.4. About VASCO

VASCO is a world leader in strong authentication and e-signature solutions, specializing in online accounts, identities and transactions. As a global software company, VASCO serves a customer base of approximately 10,000 companies in over 100 countries, including approximately 1,500 international financial institutions. In addition to the financial sector, VASCO’s technologies secure sensitive information and transactions for the enterprise security, e-commerce and e-government industries.

For further information, please visit http://www.vasco.com.
Chapter 2. Getting Started

2.1. Prerequisites and Requirements

You must enable the Hyper-V Manager on your Windows server. See your Microsoft documentation for instructions.

**VM Requirements**

- System memory: at least 512 MB. More is recommended.
- Only 1 HDD is allowed, 40 GB or more is required to load the image.
- At least 1 NIC. Up to 8 network devices are supported.

2.2. Creating a new VM

1. Start Hyper-V Manager.

```
Figure 2.1. New Virtual Machine
```

3. This will start the new virtual machine wizard. Follow the steps as indicated.
   - Enter a name for your virtual appliance, e.g. aXsGUARD Gatekeeper.
   - Change the default location of the machine (optional) and click next.

```
Figure 2.2. Name and Location
```
4. Specify the amount of memory that must be allocated for the new virtual machine. 512 MB is the required minimum.

Specify the amount of memory to allocate to this virtual machine. You can specify an amount from 8 MB through 6288 MB. To improve performance, specify more than the minimum amount recommended for the operating system.

Startup memory: 32 MB

☐ Use Dynamic Memory for this virtual machine.

When you decide how much memory to assign to a virtual machine, consider how you intend to use the virtual machine and the operating system that it will run.

Figure 2.3. Memory to be Allocated

5. Select the appropriate virtual switch and click next.

Each new virtual machine includes a network adapter. You can configure the network adapter to use a virtual switch, or it can remain disconnected.

Connection: Intel(R) PRO/1000 PM Network Connection - Virtual Switch

Figure 2.4. Network Connection Settings

6. Create a new virtual hard disk. 40 GB is the required minimum.

A virtual machine requires storage so that you can install an operating system. You can specify the storage now or configure it later by modifying the virtual machine’s properties.

☐ Create a virtual hard disk

Use this option to create a dynamically expanding virtual hard disk with the default format (VHDX).

Name: aXsGUARD Gatekeeper.vhdx

Location: C:\Users\Public\Documents\Hyper-V\Virtual Hard Disks\ Browse...

Size: 40 GB (Maximum: 64 TB)

Figure 2.5. Creating a new Hard Disk

7. Select the aXsGUARD Gatekeeper ISO file as the installation source.

☐ Install an operating system from a boot CD/DVD-ROM

Media

☐ Physical CD/DVD drive: E:  

☐ Image file (.iso): strator\Downloads\axsguard-7.7.0PL1_install.iso  

Browse...

Figure 2.6. Selecting the Installation Source

8. You will be shown an installation summary. Go back if you need to adjust your settings or click finish to create the virtual machine.

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2.3. Adding Network Adapters

1. Right-click on the virtual machine you have created and select "settings" to add the amount of required network adapters.

Figure 2.7. VM Settings

2. Click on "add hardware"
3. Select "network adapter"
4. Click "add"

Figure 2.8. Adding Network Adapters

3. Connect the new network adapter to the appropriate virtual switch and apply your settings.
Repeat the procedure to add more network adapters.
Chapter 3. Installing the aXsGUARD Gatekeeper OS

3.1. Starting Up Your Appliance

1. Right-click on your appliance.
2. Select "start".

![Virtual Machines](image)

*Figure 3.1. Starting Up*

3.2. Partitioning the Hard Drive

1. When starting up for the first time, the system will ask you to partition your hard drive. Simply enter **yes**.
2. After partitioning the appliance’s hard drive, the software packages will be installed automatically.

![Partitioning the System HDD](image)

*Figure 3.2. Partitioning the System HDD*

⚠️ Please be patient. Do not turn off your virtual appliance while the hard drive is being partitioned. The installation of the packages takes a while. The machine will halt when the installation is finished.
3.3. Umounting the Installation ISO

As soon as the machine halts, you must unmount the aXsGUARD Gatekeeper ISO file to prevent it from loading when your reboot.

1. Right-click and select "Settings".

   ![Figure 3.3. Unmounting the Installation ISO](image)

2. Select "DVD drive".

3. Specify "none" as the media to use with your virtual DVD drive and apply.

   ![Figure 3.4. Unmounting the Installation ISO](image)

4. Reboot the VM and configure the network for remote management.

   ![Figure 3.5. Restarting your VM](image)
3.4. Network Configuration

The default LAN IP of your appliance is 192.168.250.254/24.

1. Press Alt F2 to go to a console.
2. Log in with the following credentials:
   • User: sysadmin
   • Password: sysadmin
3. Select Interfaces and configure your network settings as explained in the aXsGUARD Gatekeeper CLI How To.

![Figure 3.6. Network Settings](image)

You must reboot the appliance after changing your network settings.

3.5. Accessing the Configuration Tool

1. Start your favorite browser
2. Enter the following in the URL field:
   ```
   https://appliance_LAN_IP:82
   ```
   The LAN IP is the one you configured in Section 3.4, “Network Configuration”.
3. Accept the self-signed certificate
4. Log in with the following credentials:
   • User: sysadmin
   • Pass: sysadmin

![Figure 3.7. Tool Login](image)
5. Follow the instructions in the System Installation Guide and the other documentation sources listed in the introduction to further configure your appliance.
Chapter 4. Support

4.1. Overview

In this section we provide instructions on what to do if you have a problem, or experience a hardware failure.

4.2. If you encounter a problem

If you encounter a problem with a VASCO product, follow the steps below:

1. Check whether your problem has already been solved and reported in the Knowledge Base at the following URL: http://www.vasco.com/support
2. If there is no solution in the Knowledge Base, please contact the company which supplied you with the VASCO product.
3. If your supplier is unable to solve your problem, they will automatically contact the appropriate VASCO expert.

For details about support capabilities by user, visit: http://www.vasco.com/support/support_services/types_of_customers.aspx

4.3. Return procedure if you have a hardware failure

If you experience a hardware failure, contact your VASCO supplier.
List of Figures

2.1. New Virtual Machine ................................................................. 3
2.2. Name and Location ................................................................. 3
2.3. Memory to be Allocated ........................................................... 4
2.4. Network Connection Settings .................................................. 4
2.5. Creating a new Hard Disk ......................................................... 4
2.6. Selecting the Installation Source ................................................ 4
2.7. VM Settings ............................................................................. 5
2.8. Adding Network Adapters ........................................................ 5
2.9. Selecting the Virtual Switch ....................................................... 6
3.1. Starting Up .............................................................................. 7
3.2. Partitioning the System HDD ..................................................... 7
3.3. Unmounting the Installation ISO ................................................ 8
3.4. Unmounting the Installation ISO ................................................ 8
3.5. Restarting your VM ................................................................. 8
3.6. Network Settings .................................................................... 9
3.7. Tool Login .............................................................................. 9
Alphabetical Index

A
aXsGUARD Gatekeeper, 1

D
Documentation, 1

L
Licensed appliance, 2

S
Spare unit, 2
Support, 11