

SyMRI®

SyntheticMR AB

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SyConnect
System Requirements
Version: 2.2.4.147.765

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1 Introduction

SyConnect is a system that can run automated workloads based on input and rules.

SyConnect® is the property of and produced by [SyntheticMR AB](#).

SyConnect uses other 3rd party products/packages. A full list can be found in the SyConnect's About view when logged in as an administrator.

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2 System Requirements

SyConnect can be installed in two forms: as a Virtual Appliance or directly on physical hardware. For both forms of installation, the following system requirements apply:

Requirement	Description
Processor	x86-64-v2 or newer, 4 cores or more
Memory	Memory requirement depends on the size of the data loaded, the in-plane resolution and number of slices: • Datasets up to 256x256x190: 16 GB • Datasets up to 256x256x190: 24 GB • Datasets up to 512x512x380: 40 GB
Disk	300 GB or larger
TPM	TPM 2.0 required for encryption
Internet Download Speed	3Mbps, for upgrades to be downloaded before timeout

Additional requirements for an Virtual Appliance installation:

Requirement	Description
Hypervisor	Type 1 Hypervisor with EFI support
TPM	Virtual TPM 2.0 (vTPM) required for encryption

2.1 Network

SyConnect is configured to use the following listening ports by default.

Port	Description
8443	First time installation (FTI), disabled after FTI is complete
443	HTTPS dashboard and administrative web UI
104	DICOM (port number configurable)
80	HTTP to HTTPS redirect
22	SSH for CLI administration

A single NIC can be assigned to the VM. A static IP address or fixed DHCP is required, system defaults to DHCP. DNS access is required. Internet access is required.

2.2 External Endpoints Required

For SyConnect to install and later update itself, it needs access to the following external endpoints.

For sites in the EU:

- <https://syconnect-containers.syconnect-home-eu.syntheticmr.com>
- <https://syconnect-management.syconnect-home-eu.syntheticmr.com>
- <https://syconnect-packages.syconnect-home-eu.syntheticmr.com>

For sites in the US:

- <https://syconnect-containers.syconnect-home-us.syntheticmr.com>
- <https://syconnect-management.syconnect-home-us.syntheticmr.com>
- <https://syconnect-packages.syconnect-home-us.syntheticmr.com>

Third-party online services (global):

- <https://files.pythonhosted.org>
- <https://github.com/anchore/syft/releases>
- <https://pypi.org/simple/>
- <https://raw.githubusercontent.com/anchore/syft>
- <https://releases.hashicorp.com>

In order to synchronize time, SyConnect also needs access to the following endpoints:

- 0.ubuntu.pool.ntp.org
- 1.ubuntu.pool.ntp.org
- 3.ubuntu.pool.ntp.org

Optional, for future components:

- https://*.syntheticmr.com

2.3 EFI and Secure Boot

SyConnect requires EFI firmware. For VMware platforms, EFI settings are embedded in the OVA. For other virtualization platforms, EFI firmware may need to be enabled after deploying the OVA. For physical hardware, the BIOS may have to be configured to support EFI boot.

SyConnect optionally supports Secure Boot. For VMware platforms, Secure Boot is enabled by default. For other virtualization platforms, Secure Boot may be enabled after deploying the OVA.

Contact your hypervisor provider to learn what options are available to you.

2.4 Security Recommendations

DICOM network communication established by SyConnect is not encrypted. It is strongly advised to only run the application on dedicated secured networks, preferably with point-to-point encryption between the nodes.

It is strongly advised to have the hypervisor encrypt the virtual machines' virtual drives as part of its storage policy. In VMware vSphere, the feature is called "Virtual Machine Encryption". Nutanix calls the feature "Data-at-Rest Encryption (DaRE)". Similar effects can be accomplished with Proxmox.

SyConnect uses TPM to manage secrets. For VMware vCenter Server 7.0 Update 2 and later, configured with a key provider, settings for a virtual TPM device is embedded in the OVA. For other virtualization platforms, a virtual TPM device may be added after deploying the OVA.

Contact your hypervisor provider to learn what options are available to you.

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