



Synerion System Requirements

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1 Overview

This document specifies the system requirements necessary to install:

- Synerion Mobile Pro

2 Synerion Mobile Pro

Synerion Mobile Pro requires a complete installation of Synerion WFM 4G to add, view and update managers and employee's mobile devices.

Important	Review Appendix D: Synerion Mobile Pro Network Requirement before installing Synerion Mobile Pro.
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Notes

- At least one computer has to be connected to the network where Synerion WFM 4G is located. This machine must be running Windows x64 and have PowerShell 3.0+ installed. The machine can be same as the one where Synerion WFM 4G is located. When the system installed locally (on premise) and azure hybrid connection is in use, the minimum requirement is IIS server is **MS Windows Server 2012 R2**
- Core HR may not be part of your standard Synerion WFM 4G package. Consult your account manager.
- Synerion Mobile pro not supported in 32bit - operation system.

2.1 Internet Access

To operate Synerion Mobile Pro, it must have access to the organization's Synerion server. There are two options:

- | | |
|-------------|---|
| Cloud | The Synerion WFM 4G is installed in the cloud or publicly accessible location. In this case, no additional server configuration is required as the mobile application is able to access it directly. |
| On-Premises | <p>The Synerion server is installed on premises. In this case, a Microsoft Azure Hybrid Connection must be set up. Your organization's IT must open ports for outbound connectivity only as specified in the Security and Ports section at https://azure.microsoft.com/enus/documentation/articles/integration-hybrid-connectionoverview.</p> <p>The configuration of Microsoft Azure and the installation of the Hybrid Connection Manager are carried out by the Synerion support team.</p> |

2.2 Supported Operating Systems

Operating System	Version	Notes
IOS	9 and higher	
Android	7 and higher	Not supported on Android tablets

3 Client Requirements

Component	Minimum	Recommended
Processor	Any Intel® Core™ 2 Duo Processor and higher	
Memory	4 GB	8 GB
Hard Disk	At least 1GB of free disk space	
Screen Display	1280 x 1024	1680 x 1050 ¹
Network Card	100/1000 Mbps	
Bandwidth to server	At least 2.5 Mb	
Video adapter	Support DirectX 9 with 256 MB memory	Support DirectX 9 with 512 MB memory
Operating Systems	Windows 8 Windows 8.1 Windows 10 Windows 11 OS X 10.10 Mac OS 10.12	
Additional Components	Microsoft Office is required for opening excel exported files and word documents properly.	
Web Browsers	See Appendix A: Operating System and Web Browser Requirements .	

¹ For wide screen

Appendix A: Operating System and Web Browser Requirements

The table below lists the **client operating system/web browser requirements** for the Synerion Workforce Management 4G.

Operating System							
	IE9 ²	IE10	IE11	Edge	Firefox	Chrome	safari
Windows 11							
Windows 10 ³							
Windows 8.1							
Windows 8							
Windows Server 2012 R2							
Windows Server 2016							
OS X 10.10 "Yosemite"							
macOS 10.12 "Sierra"							

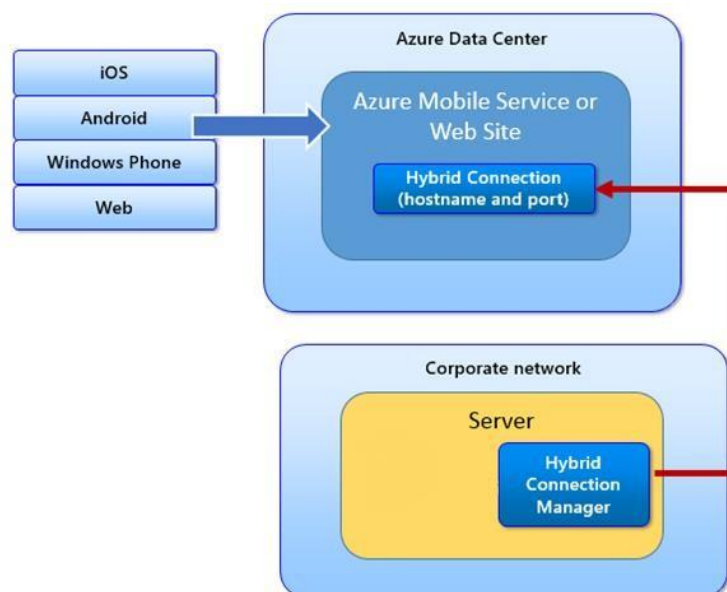
Basically, every browser supports html5 Suitable as a client infrastructure

Appendix B: Synerion Mobile Network Requirements

Preface The Synerion Mobile application leverages Hybrid Connections in order to securely connect to the on-premise resources that are behind a firewall, while requiring minimal TCP ports to be open.

This document provides a brief description of the Hybrid Connection feature and details the firewall requirements to allow it to function properly. For a complete description of Hybrid Connections, please refer to <https://azure.microsoft.com/en-us/documentation/articles/integration-hybrid-connection-overview/>

Architecture The Hybrid Connection Manager is a Microsoft component that is being installed inside the corporate network. This component is the gateway within the network through which the internal resources are consumed by Synerion Mobile application outside of the network. The following drawing simplifies and illustrates how it works:



For the communication between the Synerion Mobile application and the corporate network to be established, a connection between the in-premise Hybrid Connection Manager and the Hybrid Connection in Azure must be established. For that, the following TCP ports must be open:

To support the Hybrid Connections it is configured with, HCM requires:

- TCP access to Azure over port 443.
- TCP access to the Hybrid Connection endpoint.
- The ability to do DNS look-ups on the endpoint host and the Service Bus namespace.

① Note

Azure Relay relies on Web Sockets for connectivity. This capability is only available on Windows Server 2012 or later. Because of that, HCM is not supported on anything earlier than Windows Server 2012.

Note

- No inbound ports need to be open in the corporate network, which is a major security advantage.
- Since the destination host for these outbound ports is in the Azure cloud services, and Azure host names and IP address are dynamic, it is not possible to designate a specific host or IP range to which these ports have to be open.

Appendix C: Synerion Hasp Free driver Requirements for client & servers

The new login program does not use HASP or the services that supported it (hasp loader)

Therefore, there is no longer a need to install drivers for Safenet dongle.

On the other hand, the new login program should be registered with regasm.exe (Assembly Registration Tool) which is not available in win10 by default.

Adding the tool is done by activating the .net feature **Examples:**

```
"%windir%\Microsoft.NET\Framework\v2.0.50727\RegAsm.exe" c:\TKSQL\LvLicense.dll
```

```
"%windir%\Microsoft.NET\Framework\v4.0.30319\RegAsm.exe" c:\TKSQL\LvLicense.dll
```

Appendix C: Synerion Hasp Free driver Requirements for client & servers