

innerspace

THE SIMULATOR COMPANY

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Configuration requirements

This document outlines the specifications for setting up the HTC Vive Pro, detailing the necessary network requirements, minimum hardware specifications, and required software applications for the VR equipment.




Network requirements

Minimum bandwidth

- Download: 30MBit/s
- Upload: 10MBit/s

Endpoints and Ports

This are the endpoints and ports that need to be open in the firewall in order to ensure smooth operation of the Innerspace Simulator Solution.

Service	Endpoint	Port	Direction
Microsoft Intune <i>Device Management for Simulator Station</i> <i>Not required when the VR equipment is managed by the Customer.</i>	Required for authentication: <ul style="list-style-type: none"> • login.windows.net • login.microsoftonline.com • sts.windows.net • innerspacecustomers.onmicrosoft.com Requirements for Intune device management:  Network endpoints for Microsoft Intune Requirements for Win32 app deployment:  Network endpoints for Microsoft Intune Requirements for Windows Push Notifications:  Hinzufügen von WNS-Datenverkehr zur Firewall-Zulassungsliste - Windows apps	443	Outbound (LAN > Internet)
Innerspace Application Insights <i>Analytics</i>	metrics.innerspace.at	443	Outbound (LAN > Internet)

Service	Endpoint	Port	Direction
Bomgar Cloud <i>Remote assistance</i> <i>Only required when Innerspace remote support solution is used.</i>	innerspace.bomgarcloud.com	443	Outbound (LAN > Internet)
Simulator Platform <i>Ensuring change control compliant content management</i>	<ul style="list-style-type: none"> • https://*.innerspace.at • https://innerspace-applications.s3.eu-central-1.amazonaws.com/ • https://innerspace-uploads.s3.eu-central-1.amazonaws.com/ • https://innerspace-applications.s3.eu-central-1.amazonaws.com/ • http://api-js.mixpanel.com/ 	443	Outbound (LAN > Internet)

Minimum Hardware Specification

The VR workstation needs to fulfill following minimum requirements in order to ensure smooth operation of the Innerspace Simulator Solution.

As in standard case Innerspace will be the VR Equipment Administrator and manages the VR-equipment this will be ensured by Innerspace.

Component	Minimal requirement
Operating System	Windows 10 or Windows 11
CPU	Intel i7 (8th gen)
RAM	32GB
GPU	Nvidia RTX 3080 Ti
Local Storage	256 GB SSD

Component	Minimal requirement
Ports	<ul style="list-style-type: none"> • 2x USB-A 3.0 • 1x USB-C • 1x HDMI

Software applications

To run the Innerspace Simulator, the Innerspace Simulator Launcher App and supporting third party software needs to be installed, including:

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Application	Supported Version	Functionalities
Innerspace Simulator Launcher App (Innerspace Hub)	3.6.0	<ul style="list-style-type: none"> • Authenticate with Simulator Cloud Services • Download content from content storage • Provide UI to start anonymous and e-documentation with PDF Simulator trainings • Start selected training module in one of the following use cases <ul style="list-style-type: none"> ◦ UC-1: Perform a VR Simulator training via LMS ◦ UC-2: Perform VR Simulator training with e-documentation via Simulator Launcher App (PDF) ◦ UC-3: Anonymous Simulator training - Perform VR Simulator training without e-documentation via the Simulator Launcher app: <p>Use cases (UC-x) described in FS document</p> <ul style="list-style-type: none"> • Process received data from VR trainings and store it in LMS and Simulator Cloud Services

Application	Supported Version	Functionalities
SteamVR (Enterprise)	1.18.7	<p>Streaming solution to connect the VR Headset to the PC (works together with ALVR)</p> <ul style="list-style-type: none"> • Establish interface to hardware based on open XR standards • System calibration • Configuration of specific VR software settings
Vive Wireless Offline Installer (Enterprise)	1.20191127.1	<p>Streaming solution to display the Simulator content to the headset (works together with SteamVR)</p> <ul style="list-style-type: none"> • Establish wireless communication with VR device • Configuration of specific VR software settings
Nvidia Driver	546.29	Supported driver for the GPU
DirectX	9.29.1974.1	Package needed to run the Streaming of the VR content to the headset
Visual C++ Redistributable for Visual Studio	2015	Package needed to run the Streaming of the VR content to the headset
Bomgar Remote support	Latest	Software for remote support