# **Granta MI 2022 R1 System Requirements**



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## 1 Introduction

In this document, configurations are referred to as either **certified** or **supported**.

- Certified means a full set of functional regression tests have been run on this configuration.
- **Supported** means some tests have been run on this configuration, and/or it is a configuration for which we would investigate issues and, where possible, provide fixes.

Our general support policy is to make every effort possible to get the software working in the environment in which it has been deployed, irrespective of whether it has been certified for or tested in that type of environment. However, if a reported issue appears to be due to the environment in which the software is running rather than a fault with the software itself (i.e., the fault cannot be reproduced in a certified environment), then it may not be possible to resolve the issue and any attempt to do so may require extended reciprocal support from the customer's IT organization, and fees may be payable.

# 2 Software requirements

## 2.1 Granta MI application server

The MI Server application and the MI application web server can be installed on the following 64-bit platforms.

Table 1. Supported platforms for Granta MI application and web server

Operating system	Certified/Supported
Windows Server 2019 with Desktop Experience	Certified
Windows Server 2022 with Desktop Experience	Supported
Windows Server 2016	Supported
Windows Server 2012 R2	Supported. Note that support will be discontinued from January 2023 (Granta MI 2023 R1).
Windows 10, version 1607 or later	Supported for trial installations

Note that Granta MI Machine Learning server requirements are covered separately in the *Granta MI Machine Learning Installation and Configuration Guide*.

## 2.2 Granta MI Windows client platforms

Granta MI PC client applications such as MI Toolbox, MI Admin, and Data Flow Designer can be installed on the following 64-bit platforms.

Table 2. Supported platforms for Granta MI PC client applications

Operating system	Certified/Supported
Windows Server 2019	Certified
Windows Server 2016	Supported
Windows Server 2012 R2	Supported
Windows 10, version 1607 or later	Supported

#### 2.3 Granta MI database server platforms

Granta MI databases can be hosted on the following 64-bit Windows and Microsoft SQL Server platforms. Granta MI databases can also be hosted on Microsoft SQL Server 2017 and 2019 for Linux.

Table 3. Supported Windows platforms for hosting Granta MI SQL Server databases

	SQL Server 2019 Windows	SQL Server 2017 Windows	SQL Server 2016	SQL Server 2014	SQL Server 2012 <sup>a</sup>
Windows Server 2019	Certified	Certified	Certified	Supported	Supported
Windows Server 2016	Supported	Supported	Supported	Supported	Supported
Windows Server 2012 R2		Supported	Supported	Supported	Supported
Windows 10, version 1607 or later	Su	ipported for e	valuation/test	deployments	only

<sup>&</sup>lt;sup>a</sup> Microsoft is ending SQL Server 2012 Extended Support on July 12, 2022. In light of this Microsoft decision, we have decided to discontinue support for SQL Server 2012 after this release:

- Granta MI 2022 R2 will be the last version to support SQL Server 2012 R2.
- Subsequent Granta MI versions will not support SQL Server 2012 R2.

Microsoft SQL Server Express may be used for evaluation purposes, and for small-scale production environments.

## 2.4 Browser support

We test against recently-released browser versions prior to releasing a given version of Granta MI. The following browser versions have been tested and certified as compatible with Ansys Granta MI 2022 R1 web applications.

Table 4. Compatible browser versions

Microsoft Edge	Mozilla Firefox®	Google® Chrome
Microsoft Edge Chromium 91 or later	89 or later	91 or later

#### Important browser notes

 You may still be able to run Granta MI web applications without major issues on older versions of these supported browsers; however, we do not test Granta MI against older versions. This means you may encounter unexpected user interface behavior and appearance, and some components may not function correctly. We will endeavor to provide technical assistance with the configuration of older browsers to mitigate compatibility issues, but some issues may only be resolved by upgrading your browser.

- 2. While the MI Viewer web application can still be run on Internet Explorer 11, your Granta MI experience may be suboptimal. IE11 is not a supported browser for any other Granta MI web applications. IE's utility as a browser for Granta MI is limited by comparison with Microsoft Edge, and it is known to be unsuitable for many Granta MI use cases. For end-user MI Viewer operations that cause problems for IE, we recommend using Edge, Firefox or Chrome instead.
- 3. Firefox must be configured to enable Negotiate authentication in order to run the User Manager application; see the *Granta MI Configuration Guide* for further details of required additional configuration for User Manager.

#### 2.5 Microsoft Internet Information Services (IIS)

Microsoft Internet Information Services (IIS) is an optional component of the Windows operating system. It is used to host the Granta MI website and must be installed before installing Granta MI. The Installation Manager will attempt to install and configure IIS for you, if it is not already installed.

#### 2.6 Microsoft .NET Framework

Granta MI utilizes many .NET Framework services, and a version of .NET Framework is installed with Windows Server.

Granta MI 2022 R1 requires .NET Framework version 4.7.2. If your system has an older version of .NET Framework, you will be prompted to upgrade prior to the Granta MI installation.

**Note:** The next Granta MI release will require .NET Framework version 4.8.

#### 2.7 Java Runtime Environment

The MI Search Server component is built on the Elasticsearch search engine, which is installed as a separate service on the Granta MI application server and which requires a Java runtime environment (Java 8 or later). Granta MI ships with an OpenJDK JRE for internal use by MI Search Server and this is installed as part of MI Search Server.

# 2.8 Granta MI Linux client platforms

Two Granta MI client applications are supported on Linux platforms for 2022 R1:

Application	Platforms
Python Scripting Toolkit (STK)	RHEL/Centos 7.9
	Ubuntu 1804LTS
	Debian 9.11
	SUSE Enterprise 15.2
	Note that CentOS support will not be maintained in
	the future
MI Materials Gateway for ANSA	Red Hat Enterprise Linux Workstation, 7.4 or later

# 2.9 Virtualization platforms

Granta MI is supported on the following virtual environments:

- VMware vSphere
- Citrix<sup>®</sup> XenServer<sup>®</sup>
- Microsoft Hyper-V<sup>®</sup>

The virtual environment must be configured to have the same resources available as a typical physical server for running Granta MI.

# 3 Hardware requirements for Granta MI

Granta MI is deployed with a wide variety of types of database, user audience, and patterns of use.

### 3.1 Application server hardware

The minimum hardware requirements listed below are for a small enterprise using a database containing a typical range of data types, with an even spread of tool usage by users. Deployments in medium and large enterprises will require more processor and memory; contact Ansys Granta Technical Support for advice.

Table 5. Granta MI Server Hardware Requirements

Component	Requirement
Processor	Intel® Xeon® 4 core minimum
	8 core server recommended
RAM	16 GB minimum (e.g. for a test server)
	32 GB to 128 GB recommended for a production server
Disk space	100 GB minimum
	300 GB recommended

#### 3.2 Clients

Granta MI web clients have no particular hardware requirements.

Machines running rich clients such as MI Toolbox and MI Admin should have at least 8 GB of memory. While these tools will run with less memory, they may have issues with manipulating large databases.

## 3.3 Private Cloud deployment

Granta MI is certified for private cloud IaaS deployment on Microsoft Azure. Requirements are:

- Azure Infrastructure as a service (IaaS) cloud service;
- MS SQL Server licensed and installed on the Azure cloud.

Note that Azure SQL PaaS is not currently supported.

Granta Support will provide best effort to support other private cloud deployments, but may be unable to reproduce cloud-specific issues.

## 3.4 Port requirements

Figure 1 shows the ports required for Granta MI communication in your network.

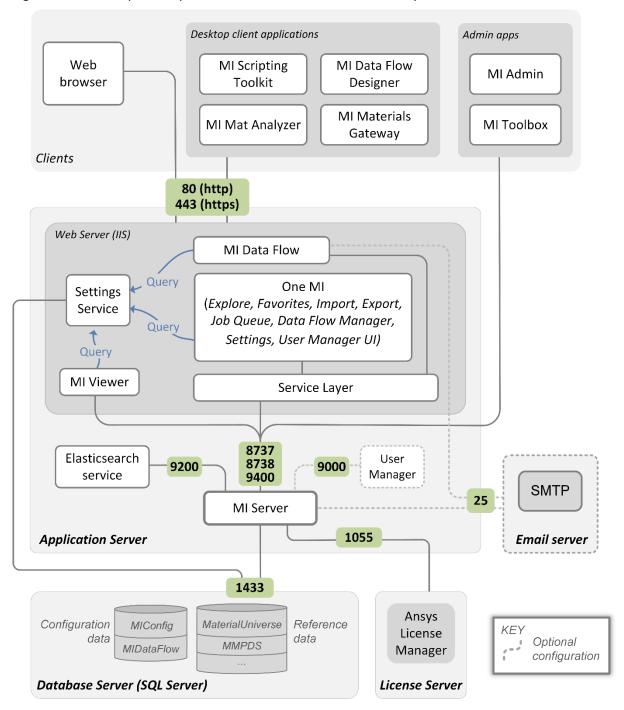


Figure 1 Required communication ports

# 4 Ansys License Manager Server Hardware and Network Requirements

Ansys License Manager Release 2022 R1 is required for Granta MI Release 2022 R1.

Details are provided in the document *Ansys License Manager Server Hardware and Network Requirements*, available under <u>Downloads</u> on the online Ansys Customer Portal (you will need to log in with an Ansys customer portal account).

Note that customers who purchased a license of Granta MI, or renewed maintenance, before December 2019, and who are still using a 16 character Granta MI license key, can continue to use their existing license key, and do not need Ansys License Manager.