

Ansys Granta MI 2022 R2

Granta MI 2022 R2 System Requirements

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Table of Contents

1	Introduction.....	4
2	Software requirements	5
2.1	Granta MI application server requirements.....	5
2.2	SQL Server requirements.....	6
2.3	Granta MI client platforms	7
2.4	Supported browsers	8
2.5	Virtual Desktop Infrastructure (VDI) support.....	8
2.6	Authentication methods	9
3	Hardware requirements for Granta MI.....	10
3.1	Granta MI application server hardware	10
3.2	Clients	10
3.3	Private Cloud deployment.....	10
3.4	Port requirements	11
4	Licensing requirements	12

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

Note that *MI Machine Learning* and *Ansys Material Calibration* ‘compute servers’ have different/additional system requirements from the MI application server, and these are documented separately in the installation documentation for those products.

2.1 Granta MI application server requirements

2.1.1 Operating system

The Granta MI application server can be installed on the following 64-bit Microsoft Windows platforms.

Table 1. Supported platforms for Granta MI application server

Operating system	Certified/Supported
Windows Server 2022 with Desktop Experience	Supported
Windows Server 2019 with Desktop Experience	Certified
Windows Server 2016	Supported
Windows Server 2012 R2	Supported ^a
Windows 11 Windows 10, version 1607 or later	Supported for testing and evaluation, not for production use

^a Windows Server 2012 R2 will no longer be supported from January 2023 (Granta MI 2023 R1).

2.1.2 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 web applications, 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.

2.1.3 Microsoft .NET Framework

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

The computer on which Granta MI 2022 R2 is installed (*the Granta MI application server*) 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.

2.1.4 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 11 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.

2.2 SQL Server requirements

Granta MI databases are hosted on SQL Server. The following 64-bit Windows and Microsoft SQL Server platforms are supported for use as a Granta MI database server.

Table 2. Supported Windows/SQL Server versions for Granta MI database servers

Windows Version/SQL Version	SQL Server 2019 Windows	SQL Server 2017 Windows	SQL Server 2016	SQL Server 2014	SQL Server 2012 ^b
Windows Server 2022	Supported	Supported			
Windows Server 2019	Certified	Certified	Certified	Supported	Supported ^b
Windows Server 2016	Supported	Supported	Supported	Supported	Supported ^b
Windows Server 2012 R2 ^c		Supported ^c	Supported ^c	Supported ^c	Supported ^{bc}
Windows 11	Supported ^a	Supported ^a			
Windows 10	Supported ^a	Supported ^a	Supported ^a	Supported ^a	Supported ^a

^a Supported for testing and evaluation only, not for production use

^b SQL Server 2012 will no longer be supported from January 2023 (Granta MI 2023 R1).

^c Windows Server 2012 R2 will no longer be supported from January 2023 (Granta MI 2023 R1).

Also supported:

- Microsoft SQL Server 2017 and 2019 for Linux.
- Microsoft SQL Server Express may be used for evaluation purposes, and for small-scale production environments.

2.3 Granta MI client platforms

2.3.1 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 3. Supported Windows platforms for Granta MI PC client applications

Operating system	Certified/Supported
Windows 11	Supported
Windows 10, version 1607 or later	Supported
Windows Server 2022 with Desktop Experience	Supported
Windows Server 2019 with Desktop Experience	Certified
Windows Server 2016	Supported
Windows Server 2012 R2	Supported ^a

^a Windows Server 2012 R2 will no longer be supported from January 2023 (Granta MI 2023 R1).

2.3.2 Linux client platforms

The following Granta MI client applications are supported on Linux platforms for 2022 R2.

Table 4 Supported Linux platforms for for Granta MI PC client applications

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 ^b or later ^b Certified on version 7.7; supported on versions 7.4, 7.8 and later
MI Materials Gateway for Ansys Workbench	Red Hat Enterprise Linux Workstation, 7.4 ^b or later ^b Certified on version 7.7; supported on versions 7.4, 7.8 and later

2.4 Supported browsers

We test Granta MI web applications against recently-released browser versions prior to releasing a given version of Granta MI. The following minimum browser versions have been tested and certified as compatible with Ansys Granta MI 2022 R2.

Table 5. Compatible browser versions

Browser	Version
Microsoft Edge Chromium	93 or later
Mozilla Firefox®	92 or later
Google® Chrome	93 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.
- 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.

End of support for Internet Explorer 11 as browser for MI Viewer

Please note that, from Granta MI release 2023 R1, Internet Explorer 11 (IE11) will no longer be a supported browser for the MI Viewer web application. MI Viewer is the only Granta MI web application currently still supported on IE11. While the MI Viewer web application may continue to work on IE11 in future Granta MI releases, the experience overall is not optimal, and you will not be able to receive technical support to resolve any issues found. Note that the IE11 desktop application will be retired by Microsoft and [goes out of support](#) on June 15, 2022, for certain versions of Windows. Customers are encouraged to move to Microsoft Edge, Firefox or Chrome.

2.5 Virtual Desktop Infrastructure (VDI) support

Ansys Granta MI is supported on the following virtual desktop environments:

- VMware vSphere
- Citrix Hypervisor

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

2.6 Authentication methods

Granta MI supports the following authentication mechanisms:

- **Windows Authentication** – users authenticate against Windows Active Directory, logging in to Granta MI applications using their Windows credentials. A user’s Windows group memberships determine what they can do, and the resources they can access, within Granta MI.
- **MI User Manager Authentication** – users authenticate against MI User Manager, an internal Granta MI authentication provider. MI user accounts and privileges are all managed in MI User Manager.
- **OpenID Connect authentication** – users authenticate against an external identity provider system using industry standard OpenID Connect with OAuth 2.0 (OIDC). We have tested with the following OpenID Connect-capable identity providers:
 - [PingFederate 10.1](#)
 - [Azure AD](#)
 - [Okta](#)
 - [Auth0](#)
 - [IdentityServer4](#)
 - [Keycloak](#)

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 Granta MI 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 6. 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 or supported for private cloud IaaS deployment on the following platforms, with Microsoft SQL Server licensed and installed on the Azure or AWS cloud; note that Azure SQL and Amazon RDS PaaS are not currently supported.

Platform	Status
Azure 'Infrastructure as a Service' (IaaS)	Certified
Amazon Web Services (AWS)	Supported

Our Technical Support team 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.

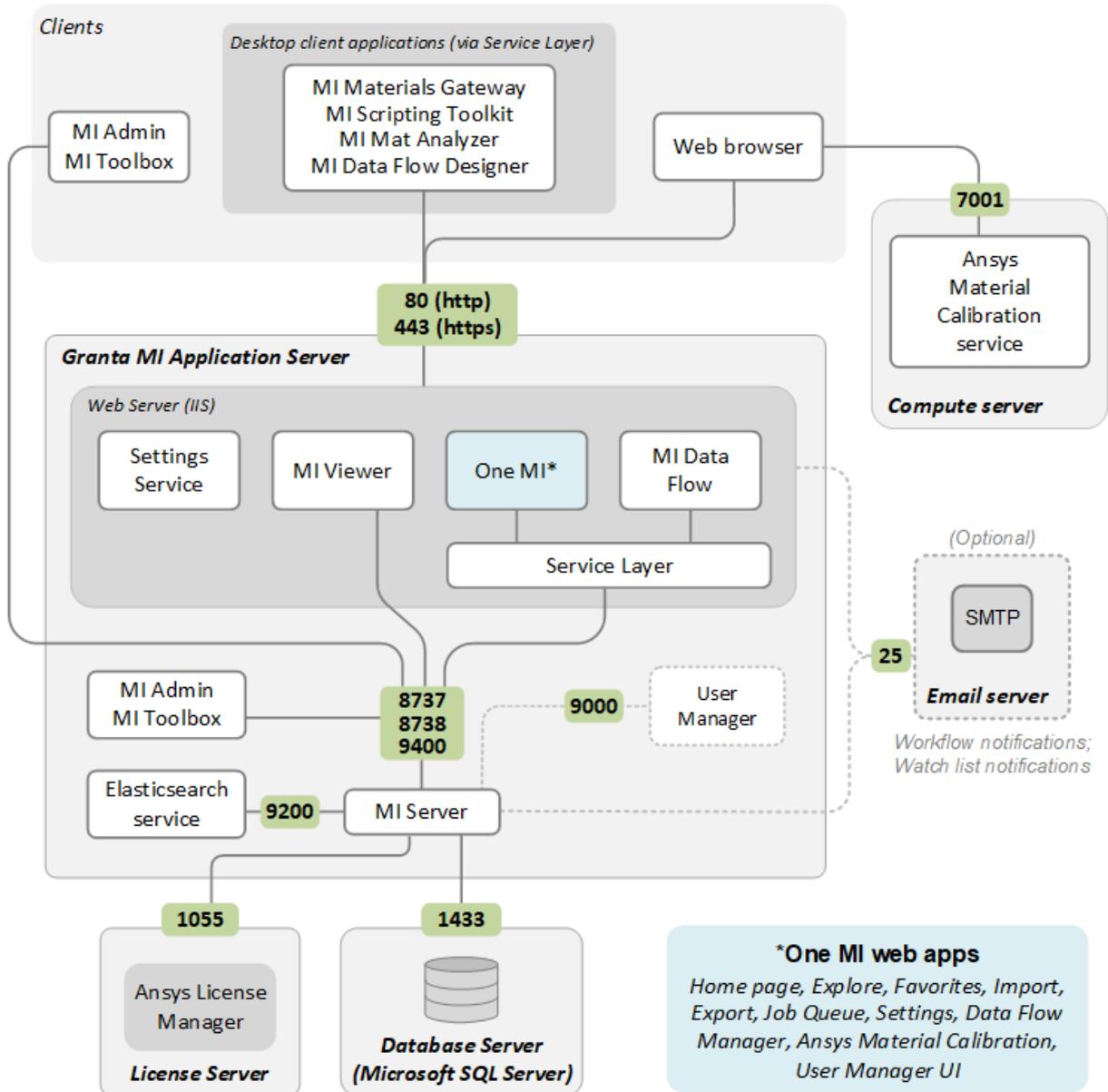


Figure 1 Required communication ports

4 Licensing requirements

Monthly Active User (MAU) licensing for Granta MI Release 2022 R2 is managed with Ansys License Manager Release 2022 R2. See the document *Ansys License Manager Server Hardware and Network Requirements* for information on software and hardware requirements for Ansys license servers; this document can be found under [Downloads](#) 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 in this release, and do not need Ansys License Manager. From Granta MI Release 2023 R2 (July 2023) we will no longer be supporting this old license model – see below for more information.

Transitioning to the Monthly Active User (MAU) licensing model

Ansys introduced a flexible Monthly Active User (MAU) licensing model in January 2020, with a three-phased plan for transitioning customers from the old, named user model.

Phase 1 – Jan 2020 - All new Paid-Up licenses using MAU model

Phase 2 – Jan 2021 - All new lease licenses using MAU model

Phase 3 – Jan 2022 - All new maintenance licenses using MAU model

We are now in the final transition phase. The **next** release of Granta MI – 2023 R1 – will be the final release to support the old license model. After that, customers who are still using a 16 character Granta MI license key, and downloading software through My Granta, will need to transition to the Ansys license model, which will require Ansys License Manager. The old license model will not be supported from Release 2023 R2, scheduled for July 2023.