Ansys GRANTA MI 2021 R1

GRANTA MI Help & Documentation

Copyright and Trademark Information

© 2021 ANSYS, Inc. Unauthorized use, distribution or duplication is prohibited.

ANSYS, ANSYS Workbench, AUTODYN, CFX, FLUENT and any and all ANSYS, Inc. brand, product, service and feature names, logos and slogans are registered trademarks or trademarks of ANSYS, Inc. or its subsidiaries located in the United States or other countries. ICEM CFD is a trademark used by ANSYS, Inc. under license. CFX is a trademark of Sony Corporation in Japan. All other brand, product, service and feature names or trademarks are the property of their respective owners. FLEXIm and FLEXnet are trademarks of Flexera Software LLC.

Disclaimer Notice

THIS ANSYS SOFTWARE PRODUCT AND PROGRAM DOCUMENTATION INCLUDE TRADE SECRETS AND ARE CONFIDENTIAL AND PROPRIETARY PRODUCTS OF ANSYS, INC., ITS SUBSIDIARIES, OR LICENSORS.

The software products and documentation are furnished by ANSYS, Inc., its subsidiaries, or affiliates under a software license agreement that contains provisions concerning non-disclosure, copying, length and nature of use, compliance with exporting laws, warranties, disclaimers, limitations of liability, and remedies, and other provisions. The software products and documentation may be used, disclosed, transferred, or copied only in accordance with the terms and conditions of that software license agreement.

ANSYS, Inc. and ANSYS Europe, Ltd. are UL registered ISO 9001: 2015 companies.

U.S. Government Rights

For U.S. Government users, except as specifically granted by the ANSYS, Inc. software license agreement, the use, duplication, or disclosure by the United States Government is subject to restrictions stated in the ANSYS, Inc. software license agreement and FAR 12.212 (for non-DOD licenses).

Third-Party Software

See the legal information in the product help files for the complete Legal Notice for ANSYS proprietary software and third-party software. If you are unable to access the Legal Notice, contact ANSYS, Inc.

Published in the U.S.A.

Contents

1	User a	issistance for GRANTA MI	4
2	Applic	ation Help	5
3	GRAN	TA MI Reference Documentation	6
	3.1	How do I find the documentation?	6
	3.2	What documents are available?	7

Ansys GRANTA MI 2021 R1 - © Ansys, Inc. All rights reserved. Contains proprietary and confidential information of Ansys, Inc. and its subsidiaries and affiliates.

1 User assistance for GRANTA MI

User assistance for GRANTA MI is delivered in two forms:

• **Help** – aimed at application end users, delivering information on how to use the application when and where users need it. This can be accessed from the application's Help menu.

Welcome	About the Explore window
About the Explore window	About the Explore window
Text search	Here's a quick guide to the main user interface features in the Explore app.
Search filters	
Collections	MI Explore > Mt2/training Materials >
List view	Image: Collections Thumbhalls Lat Scatter plot Curves 3 Ch Search. (7) Q 1 12 13 14 15
Thumbnail view	
Scatter plots	(3→ · · · · · · · · · · · · · · · · · · ·
Plot curve data	
Link Visualizer	
View record datasheets	
Edit data	
Create new records	
Run reports	6 • 8 Sach Bar Stown 7 d 7
Export data for CAE	1. Current data view—click here to choose a different data view
Switch data view	Current data view—click here to choose a different data view 2. New—create a new record
Preferences	3. Report-generate reports on the data

• **Reference Documentation** (PDFs) – reference documentation aimed at IT Administrators, Granta System Admins, Granta Database Administrators, people importing/exporting data and/or maintaining importer and exporter templates.

4

Ansys GRANTA MI 2021 R1 – \bigcirc Ansys, Inc. All rights reserved. Contains proprietary and confidential information of Ansys, Inc. and its subsidiaries and affiliates.

2 Application Help

GRANTA MI client applications have HTML-based help, accessed from the Help menu:

- MI:Admin
- MI:Server Manager
- MI:Server Connection tool
- MI:Viewer Configuration tool
- MI:Service Layer Configuration tool
- MI:Toolbox
- MI:Remote Import
- MI:Viewer

HTML-based Help installed on the application server alongside the product software

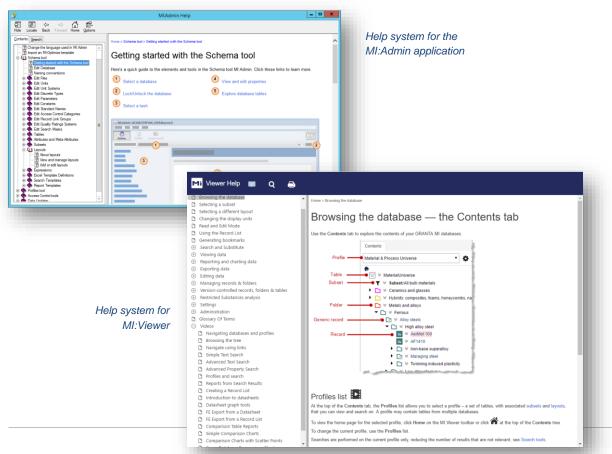
software on the client PC

Online help

embedded 'HTML Help' (CHM) installed with the

- One MI home page
- One MI apps (Explore, Favorites, Import, Job Queue, Settings, Workflow Manager)
- User Manager

The Help system includes help topics on how to use the different features of the application, and search and navigation tools help users to find the information they need quickly and get back on task.



Ansys GRANTA MI 2021 R1 – \bigcirc Ansys, Inc. All rights reserved. Contains proprietary and confidential information of Ansys, Inc. and its subsidiaries and affiliates.

3 GRANTA MI Reference Documentation

Reference documentation for GRANTA MI provides information on system installation, configuration, and administration for IT Admins, Granta System Admins and Database Admins, customizers, and people importing/exporting data and/or writing importer and exporter templates. Granta reference documentation is supplied in Adobe[®] PDF format.

3.1 How do I find the documentation?

You can view the reference documentation for GRANTA MI from the following locations.

3.1.1 On the MI:Server or MI:Toolbox host

The GRANTA MI PDF documentation is installed in the MI:Server and MI:Toolbox host servers during product installation.

- On the MI:Server host, by default the documentation will be located in a *Documentation* subfolder in the MI:Server installation folder, typically: *C:\Program Files\Granta\GRANTA MI\Server\Documentation*
- For MI:Toolbox, the relevant PDF documentation is installed in a *Documentation* subfolder within the plugin installation folder on the Toolbox server.

3.1.2 In MI:Viewer

The GRANTA MI PDF documentation can be accessed in MI:Viewer from the **Help** menu: click **Help** > **Reference Documentation** and then click on a document to download the PDF file. For example:



GRANTA MI Configuration Guide.pdf

Ansys GRANTA MI 2021 R1 – © Ansys, Inc. All rights reserved. Contains proprietary and confidential information of Ansys, Inc. and its subsidiaries and affiliates.

3.1.3 On the Granta Support website

Reference documentation for GRANTA MI may be downloaded from the <u>GRANTA MI Support page</u>. Log in to your My Granta account to access release notes, installation and configuration guides, and technical training videos.

3.2 What documents are available?

Table 1. Core documentation for GRANTA MI

GRANTA MI Release Notes

Provides an overview of major changes and enhancements in each release, with information about any issues that may require attention when upgrading from earlier releases.

GRANTA MI System Requirements

A standalone document that includes information on the hardware and third-party software requirements for GRANTA MI. You can get hold of the latest version of this document on the Granta website, or from Granta Technical Support.

GRANTA MI Installation Guide

Takes you through a complete installation of the GRANTA MI software components. It covers installing and updating GRANTA MI software components and reference databases.

GRANTA MI Configuration Guide

Information on configuring GRANTA MI for User Manager authentication and/or authorization, and also for use of custom authenticators. Also covers port and default data location configuration for Elasticsearch, and recommended IIS settings for the Service Layer.

GRANTA MI Access Control and Security Guide

Describes how system and database security for GRANTA MI are implemented, and covers how to configure access control schemas on GRANTA MI databases for permission-based or attribute based access control.

GRANTA MI Administrator's Guide

Detailed information on the administration and management of the GRANTA MI components and databases during normal operation of a standard configuration.

GRANTA MI:Viewer Home Page Author Guide

Describes how to construct customized application, profile, and database home pages for MI:Viewer users.

GRANTA MI Record Version Control

Describes how version control is implemented in GRANTA MI, allowing changes to a record and its data to be tracked.

GRANTA MI Schema Guide

Detailed information about the GRANTA MI schema, and best practice tips on how to ensure that your company's materials data can be captured, maintained, analyzed, and deployed effectively.

Ansys GRANTA MI 2021 R1 – \bigcirc Ansys, Inc. All rights reserved. Contains proprietary and confidential information of Ansys, Inc. and its subsidiaries and affiliates.

NSTALLATION & CONFIGURATION

GRANTA MI Excel Importer Reference Guide

Describes the required structure and format of the Microsoft Excel workbooks used by the MI:Toolbox Excel Importer to import data into a GRANTA MI database. Also covers how to run the Excel Importer from the command line (CLI).

GRANTA MI Excel Exporter Reference Guide

Describes the required structure and format of Microsoft Excel template workbooks used to export data from a GRANTA MI database to Excel.

GRANTA MI Text Importer Reference Guide

Describes the required structure and format of the template files used by the MI:Toolbox Text Importer to import data from text files into a GRANTA MI database. Also covers how to run the Text Importer from the command line (CLI).

GRANTA MI FEA Exporter Author Guide

Describes the required structure and format for exporter files that can be used to output data from a GRANTA MI database in a neutral XML format, for subsequent analysis in a Finite Element Analysis (FEA) package.

GRANTA MI:Toolbox Bulk Data Importer

Describes how to run the Bulk Data Importer command-line tool for batch importing data from text or Excel files into a GRANTA MI database.

CAE Exporters for Granta Reference Data

Details the CAE exporters available for each of the Granta reference data modules and summarises what type of data can be exported using each.

MI:Explore Configuration Guide

In-depth information about how to create different MI:Explore configurations that allow users to see different data and different application features

MI:Workflow Configuration Guide

System configuration and troubleshooting information for MI:Workflow.

MI:Workflow Designer Guide

Designing and implementing GRANTA MI workflows using the MI:Workflow Designer tool.

OTHER DOCUMENTS

APPS

GRANTA MI Automatic Link Creator CLI

Describes how to use the Automatic Link Creator, a command-line tool for creating static record links within a GRANTA MI database.

GRANTA MI Tabular Roll-up Module CLI

Describes how to use the Tabular Roll-up Module, a command-line tool for converting the data in a specified column of a tabular attribute to a single value using a roll-up rule, using this value to populate another attribute within the same record.

Ansys GRANTA MI 2021 R1 - © Ansys, Inc. All rights reserved. Contains proprietary and confidential information of Ansys, Inc. and its subsidiaries and affiliates.

Table 2. Resources for application developers

GRANTA MI Public API Overview

Overview of MI application structure and objects (tables, attributes, records, data, units, links, subsets. layouts, etc.)

GRANTA MI Server API Getting Started

.NET Framework and Visual Studio requirements for GRANTA MI application developers.

GRANTA MI Server API Writing a Custom Authenticator Information on implementing custom authentication for MI:Server and MI:Viewer based on the IAuthenticator interface. GRANTA MI Service Layer API Guide

Service Layer interface, versions, hosting options, WCF configuration; integration with MI:Server; custom reports API.

GRANTA MI Service Layer SDK Developer Guide

How to use the SDK as a basis for development of client applications and Custom Reports.

GRANTA MI Service Layer SDK Revisions

Describes the most important changes between releases of the Service Layer SDK.

MI:Scripting Toolkit Release Notes

Key enhancements and new features in this reelase.

MI:Scripting Toolkit Installation and Overview

Installation; overview of Scripting Toolkit services; class reference.

MI:Scripting Toolkit online help

Detailed online help covering the Services and classes provided, including exmple scripts and downloadable interactive notebooks.

API DOCUMENTATION

Ansys GRANTA MI 2021 R1 – \bigcirc Ansys, Inc. All rights reserved. Contains proprietary and confidential information of Ansys, Inc. and its subsidiaries and affiliates.