



Trimble MX

SOFTWARE

SIMPLICITY, EFFICIENCY, AND INTELLIGENCE

Mobile mapping operations collect massive data sets very quickly. It is important to have the right software tools to simplify data organization, feature extraction, and customer collaboration. Trimble® MX software makes mobile mapping data processing and project management simple and efficient.

Limitless Imagery, Point Clouds

Trimble MX software supports a variety of mobile mapping data—standalone imagery or imagery with point clouds. Neatly organize all single runs, bundle raw data into manageable projects, clean up artefacts, control positional accuracy, consolidate vital details and deliver excellent results.

Produce, Extract and Share

Manage your content, extract features, perform measurements and collaborate with stakeholders, all within one platform. Maximize your return by letting Trimble MX software do the work.

Publish to the Web and Mobile Devices

The Trimble MX Publisher provides the tools to publish both Mobile Mapping content and extracted features and assets to the web. Mobile Apps such as the free iOS PanoViewer access published data for easy collaboration.

Navigate Terabytes With Ease

Trimble MX software optimizes all data for performance. Examine terabytes of Mobile Mapping data easily and combine with your own imagery, vector and raster data.

Measure, Overlay, Extract Assets, Profiles, Volumes, Clash Detection, Blurring

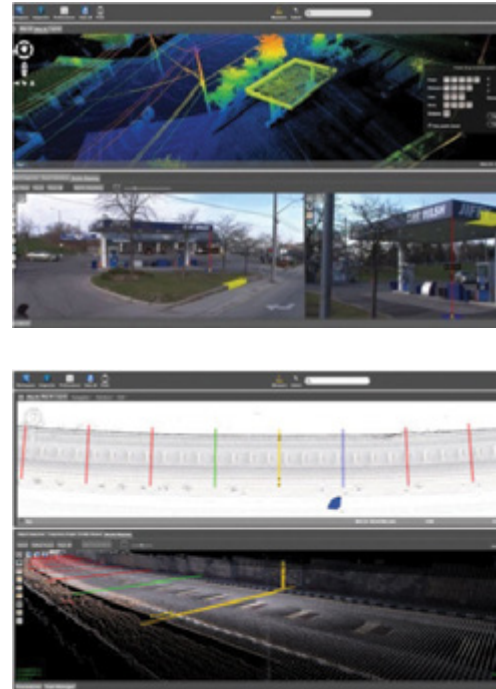
Trimble MX software's intelligent tools support feature extraction, measurements, overlays, asset inventory workflows, clash detection, profiles and cross sections, volumetric analysis, and blurring of faces and number plates.

Maintain Standard Workflows

Trimble MX's Publisher Plug-ins allow anyone to access mobile mapping content from within their standard workflows and business intelligence tools including popular GIS or CAD systems such as ArcGIS, AutoCAD, MicroStation and more.

Key Components

- ▶ **Trimble MX Content Manager** efficiently cleans and organizes data for deliverable production
- ▶ **Trimble MX Asset Modeler** easily extracts features and measurements to populate geodatabases and other systems of record
- ▶ **Trimble MX Publisher** simplifies the sharing of mobile mapping results with project stakeholders
- ▶ **Trimble MX Publisher Plug-ins** simplify accessing mobile mapping data in many popular GIS and CAD environments



System Requirements

Trimble MX software does not require special hardware. Minimum and recommended system specifications are detailed below. Additional storage space, processing capability, and RAM will improve performance in most applications. For large volumes of processed data and reduced processing times, higher specification computers are strongly recommended.

Trimble MX Content Manager and Trimble MX Asset Modeler

General Requirements

Operating SystemMicrosoft® Windows® 7, 8 or 10
 Processor64-bit, 2.8 GHz dual-core (Quad-core recommended)
 Memory4 GB RAM (8 GB or more recommended)
 Graphics Card1 GB of memory (3 GB or more preferred)
 Trimble MX software products use the Java Runtime Engine (JRE) and CPU to process graphic requests. The used JRE is embedded in the MX installation so you do not need separate installations for Java. If used, DirectX should be version 9 or higher. Trimble MX desktop products will use the 3D graphics card (GPU) to render complex 3D graphics, e.g. 3D TIN models.

If no 3D graphics card is available, complex 3D requests will be processed by the JRE using the CPU. Virtual environments (like Citrix, Virtualbox, VMWare, etc.) can have issues supporting videos or the use of moving high resolution images and may thus cause the MX Asset Modeler Client to slow. When using Citrix, XenApp is recommended, including video optimization and a 1 GB network connection.

Disk Space2 GB free space for installation
 (Much more space is needed to organize large volumes of mobile mapping data)

Data Storage and File Access

- **Storage** — Trimble MX software requires a file-based storage system. This can be either local or network storage system that supports direct file access. On importing, Trimble MX software will process all mapping data into performance-optimized resource files, which may need a bit more storage capacity. This optimized storage reduces other hardware burdens.
- **File Access and Disk** — Trimble MX software requests result in direct file access, performance is particularly determined by the disc speed and disc access times. Slow discs or slow connections will create a bottleneck.
- **Large File Considerations** — When processing large mobile mapping datasets your file system should be able to store big files. Processing errors may occur due to:
 1. lack of disk-space to complete
 2. file size limitation of file system (FAT32 is limited up to 4 GB, NTFS is advised)
 3. extreme fragmentation of storage volume.
- **Internet Connection** — The Trimble MX desktop software requires online connectivity to a License Service to operate. Trimble MX desktop software Clients do not require online access but require connectivity with the Trimble MX desktop software Server.

Trimble MX Asset Modeler Server

General Requirements

Operating SystemMicrosoft® Windows® 7, 8 or 10
 Processor64-bit, 2.8 GHz quad-core (more than quad-core recommended)
 Memory8 GB RAM (16 GB or more recommended)
 Graphics CardNo requirements

Data Storage and File Access

The Trimble MX Asset Modeler Server will require file access. An exception occurs for mobile mapping resources where data access can be either direct client file access or served by the Trimble MX Asset Modeler Server itself. When doing feature production in Client-Server scenario, a single central database is required. Trimble MX Asset Modeler supports any Java Spatial Databases. Open source and community databases are supported as well, MySQL is advised.

- **Internet Connection** — The Trimble MX Asset Modeler Server requires online connectivity to the License Service to operate.

Connection Between Trimble MX Asset Modeler Server – Desktop Client

- **Network Connection** — In a production environment it is important to have a fast network connection between Trimble MX Asset Modeler Clients, the Server and, if applicable, the data server. At least a 1 GBit connection is recommended.
- **Port Connection** — Trimble MX Asset Modeler Server - desktop Client communication requires one port to operate, default configuration port 1100. If required this can be reconfigured.

Trimble MX Publisher Server

General Requirements

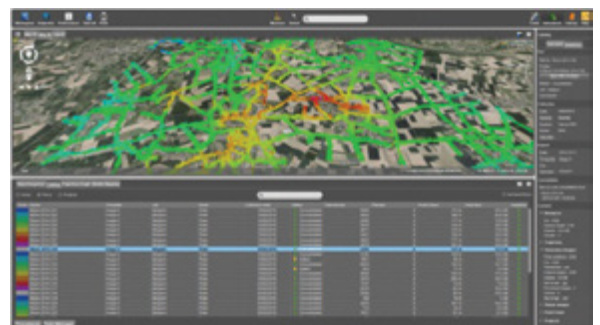
Same as Trimble MX Asset Modeler Server

Memory Required RAM for the Trimble MX Publisher can be calculated at about 7.5 MB per concurrent user (per image).

Connection Between Trimble MX Asset Modeler Publisher - Publishing Clients

- **Internet/Intranet Connection** — When hosting a Publisher, take the Server upload and Client download speed into account relative to the average size of the images and the amount of images to be served within a given time frame.
- **Port** — Trimble MX Publisher (server) - publishing Client communication requires one port to operate, default configuration port 1100. If required this can be reconfigured, but we do advise to use a reverse proxy.
- **Flash** — Flash 11.0 or higher is required to load the server management tool "EOS Console". The EOS Console can be started via http on any connecting device.
- **HTTP/HTTPS** — The Trimble MX Publisher includes a Web Server supporting HTTP or HTTPS.
- **Client access to publications** — If you would like to make your Trimble MX Publications available via the internet, public access to the Trimble MX Service is required. Publication can also be configured for intranet systems.

Please consult with a Trimble representative for more details on Trimble MX Publisher configurations.



Contact your local Trimble Authorized Distribution Partner for more information

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