This manual explains the functions and operations of GateMX/MW. To ensure correct use, please read this manual thoroughly before beginning operation. After reading the manual, keep it in a convenient location for quick reference whenever a question arises during operation.

GateMX/MW is a software program that monitors measured data from the MX100/ MW100 Data Acquisition Unit and supplies the data to DAQLOGGER or remote monitors.

Notes

• The contents of this manual are subject to change without prior notice as a result of continuing improvements to the instrument’s performance and functions.
• Every effort has been made in the preparation of this manual to ensure the accuracy of its contents. However, should you have any questions or find any errors, please contact your nearest YOKOGAWA dealer.
• Copying or reproducing all or any part of the contents of this manual without the permission of Yokogawa Electric Corporation is strictly prohibited.
• Use of this software on more than one computer at the same time is prohibited. Use by more than one user is also prohibited.
• Transfer or lending of this software to any third party is prohibited.
• Yokogawa Electric Corporation provides no guarantees other than for physical deficiencies found on the original disk upon opening the product package.
• License numbers will not be reissued. Please keep the license number in a safe place.

Trademarks

• DAQWORX, DAQLOGGER, and DAQEXPLORER are registered trademarks or trademarks of Yokogawa Electric Corporation.
• Microsoft, Windows, and Windows Vista are registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
• Adobe and Acrobat are registered trademarks or trademarks of Adobe Systems Incorporated.
• Company and product names that appear in this manual are registered trademarks or trademarks of their respective holders.
• The company and product names used in this manual are not accompanied by the registered trademark or trademark symbols (® and ™).

Revisions

• 1st Edition December 2003
• 2nd Edition February 2005
• 3rd Edition March 2006 (Cover title changed)
• 4th Edition June 2007
• 5th Edition March 2008
• 6th Edition January 2009
• 7th Edition January 2011
• 8th Edition October 2011
• 9th Edition June 2014
Software License Agreement

IMPORTANT - PLEASE READ CAREFULLY BEFORE INSTALLING OR USING:

THANK YOU VERY MUCH FOR SELECTING SOFTWARE OF YOKOGAWA ELECTRIC CORPORATION ("YOKOGAWA"). BY INSTALLING OR OTHERWISE USING THE SOFTWARE PRODUCT, YOU AGREE TO BE BOUND BY THE TERMS AND CONDITIONS OF THIS AGREEMENT. IF YOU DO NOT AGREE, DO NOT INSTALL NOR USE THE SOFTWARE PRODUCT AND PROMPTLY RETURN IT TO THE PLACE OF PURCHASE FOR A REFUND, IF APPLICABLE.

Software License Agreement

1. Scope
This Agreement applies to the following software products and associated documentation of Yokogawa (collectively, "Software Product"). Unless otherwise provided by Yokogawa, this Agreement applies to the updates and upgrades of the Software Product which may be provided by Yokogawa.

2. Grant of License
2.1 Subject to the terms and conditions of this Agreement, Yokogawa hereby grants to you a non-exclusive and non-transferable right to use the Software Product on a single or, the following specified number of, computer(s) and solely for your internal operation use, in consideration of full payment by you to Yokogawa of the license fee separately agreed upon.

2.2 Unless otherwise agreed or provided by Yokogawa in writing, the following acts are prohibited:
   a) to reproduce the Software Product, except for one archival copy for backup purpose, which shall be maintained with due care subject to this Agreement;
   b) to sell, lease, distribute, transfer, pledge, sublicense, make available via the network or otherwise convey the Software Product or the license granted herein to any other person or entity;
   c) to use the Software Product on any unauthorized computer via the network;
   d) to cause, permit or attempt to dump, disassemble, decompile, reverse-engineer, or otherwise translate or reproduce the Software Product into source code or other human readable format, or to revise or translate the Software Product into other language and change it to other formats than that in which Yokogawa provided;
   e) to cause, permit or attempt to remove any copy protection used or provided in the Software Product;
   f) to remove any copyright notice, trademark notice, logo or other proprietary notices or identification shown in the Software Product.

2.3 Any and all technology, algorithms, know-how and process contained in the Software Product are the property or trade secret of Yokogawa or licensors to Yokogawa. Ownership of and all the rights in the Software Product shall be retained by Yokogawa or the licensors and none of the rights will be transferred to you hereunder.

2.4 You agree to maintain the aforementioned property and trade secret of Yokogawa or licensors and key codes in strict confidence, not to disclose it to any party other than your employees, officers, directors or similar staff who have a legitimate need to know to use the Software Product and agreed in writing to abide by the obligations hereunder.

2.5 Upon expiration or termination of this Agreement, the Software Product and its copies, including extracts, shall be returned to Yokogawa and any copies retained in your computer or media shall be deleted irretrievably. If you dispose of media in which the Software Product or its copy is stored, the contents shall be inestimably deleted.

2.6 The Software Product may contain software which Yokogawa is granted a right to sublicense or distribute by third party suppliers, including affiliates of Yokogawa ("Third Party Software"). If suppliers of the Third Party Software ("Supplier") provide special terms and conditions for the Third Party Software which differ from this Agreement, the special terms and conditions separately provided by Yokogawa shall prevail over this Agreement. Some software may be licensed to you directly by Supplier.

2.7 The Software Product may contain open source software ("OSS"), for which the special terms and conditions separately provided by Yokogawa shall take precedence over this Agreement.

3. Restrictions on Application
3.1 Unless otherwise agreed in writing between you and Yokogawa, the Software Product is not intended, designed, produced or licensed for use in relation to aircraft operation or control, sea navigation or marine equipment control, or ground facility or device for support of the aforesaid operation or control, or for use in relation to rail facility, nuclear related facility, radiation-related equipment, or medical equipment or facility, or under any other circumstances which may require high safety standards.

3.2 If the Software Product is used for the abovementioned purposes, neither Yokogawa nor Supplier assumes liability for any claim or damage arising from the said use and you shall indemnify and hold Yokogawa, Supplier, their affiliates, subcontractors, officers, directors, employees and agents harmless from any liability or damage whatsoever, including any court costs and attorney's fees, arising out of or related to the said use.

4. Limited Warranty
4.1 The Software Product shall be provided to you on an "as is" basis at the time of delivery and except for physical damage to the recording medium containing the Software Product, Yokogawa and Supplier shall disclaim all the warranties whatsoever, express or implied, and all liabilities therefrom. If any physical defect is found on the recording medium not later than twelve (12) months from delivery, Yokogawa shall replace such defective medium free of charge, provided that the defective medium shall be returned to the service office designated by Yokogawa at your expense within the said twelve (12) months. THIS LIMITED WARRANTY PROVIDED IN THIS CLAUSE IS IN LIEU OF ALL OTHER WARRANTIES OF ANY KIND WHATSOEVER AND YOKOGAWA HEREBY DISCLAIMS ALL OTHER WARRANTIES RELATING TO THE SOFTWARE PRODUCT, WHETHER EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, NON-INFRINGEMENT, QUALITY, FUNCTIONALITY, APPROPRIATENESS, ACCURACY, RELIABILITY AND REGENCY. IN NO EVENT SHALL YOKOGAWA WARRANT THAT THERE IS NO INCONSISTENCY OR INTERFERENCE BETWEEN THE SOFTWARE PRODUCT AND OTHER SOFTWARE NOR SHALL BE LIABLE THEREFOR. The warranty provisions of the applicable law are expressly excluded to the extent permitted.

4.2 At the sole discretion of Yokogawa, Yokogawa may upgrade the Software Product to the new version number ("Upgrade") and make it available to you at your expense or free of charge as Yokogawa deems fit. In no event shall Yokogawa be obliged to upgrade the Software Product or make the Upgrade available to you.

4.3 Certain maintenance service may be available for some types of Software Product at Yokogawa's current list price. Scope and terms and conditions of the maintenance service shall be subject to those separately provided by Yokogawa. Unless otherwise provided in Yokogawa catalogues or General Specifications, maintenance services will be available only for the latest version and the immediately preceding version. In no event will service for the immediately preceding version be available for more than 5 years after the latest version has been released. In addition, no service will be provided by Yokogawa for the Software Product which has been discontinued for more than 5 years. Notwithstanding the foregoing, maintenance service may not be available for non-standard Software Product. Further, in no event shall Yokogawa provide any service for the Software Product which has been modified or changed by any person other than Yokogawa.
5. Infringement
5.1 If you are warned or receive a claim by a third party that the Software Product in its original form infringes any third party's patent (which is issued at the time of delivery of the Software Product), trade mark, copyright or other intellectual property rights ("Claim"), you shall promptly notify Yokogawa thereof in writing.
5.2 If the infringement is attributable to Yokogawa, Yokogawa will defend you from the Claim at Yokogawa’s expense and indemnify you from the damages finally granted by the court or otherwise agreed by Yokogawa out of court. The foregoing obligation and indemnity of Yokogawa shall be subject to that i) you promptly notify Yokogawa of the Claim in writing as provided above, ii) you grant to Yokogawa and its designees the full authority to control the defense and settlement of such Claim and iii) you give every and all necessary information and assistance to Yokogawa upon Yokogawa’s request.
5.3 If Yokogawa believes that a Claim may be made or threatened, Yokogawa may, at its option and its expense, either a) procure for you the right to continue using the Software Product, b) replace the Software Product with other software product to prevent infringement, c) modify the Software Product, in whole or in part, so that it become non-infringing, or d) if Yokogawa believes that a) through c) are not practicable, terminate this Agreement and refund you the paid-up amount of the book value of the Software Product as depreciated.
5.4 Notwithstanding the foregoing, Yokogawa shall have no obligation nor liability for, and you shall defend and indemnify Yokogawa and its suppliers from, the Claim, if the infringement is arising from a) modification of the Software Product made by a person other than Yokogawa, b) combination of the Software Product with hardware or software not furnished by Yokogawa, c) design or instruction provided by or on behalf of you, d) not complying with Yokogawa’s suggestion, or e) any other causes not attributable to Yokogawa.
5.5 This section states the entire liability of Yokogawa and its suppliers and the sole remedy of you with respect to any claim of infringement of a third party’s intellectual property rights. Notwithstanding anything to the contrary stated herein, with respect to the claims arising from or related to the Third Party Software or OSS, the special terms and conditions separately provided for such Third Party Software or OSS shall prevail.

6. Limitation of Liability
6.1 EXCEPT TO THE EXTENT THAT LIABILITY MAY NOT LAWFULLY BE EXCLUDED IN CONTRACT, YOKOGAWA AND SUPPLIERS SHALL NOT BE LIABLE TO ANY PERSON OR LEGAL ENTITY FOR LOSS OR DAMAGE, WHETHER DIRECT, INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES, OR OTHER SIMILAR DAMAGES OF ANY KIND, INCLUDING WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OR DESTRUCTION OF DATA, LOSS OF AVAILABILITY AND THE LIKE, ARISING OUT OF THE USE OR INABILITY TO USE OF THE SOFTWARE PRODUCT, OR ARISING OUT OF ITS GENERATED APPLICATIONS OR DATA, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHETHER BASED IN WARRANTY (EXPRESS OR IMPLIED), CONTRACT, STRICT LIABILITY, TORT (INCLUDING NEGLIGENCE), OR ANY OTHER LEGAL OR EQUITABLE GROUNDS. IN NO EVENT YOKOGAWA AND SUPPLIERS AGGREGATE LIABILITY FOR ANY CAUSE OF ACTION WHATSOEVER (INCLUDING LIABILITY UNDER CLAUSE 5) SHALL EXCEED THE DEPRECIATED VALUE OF THE LICENSE FEE PAID TO YOKOGAWA FOR THE USE OF THE CONCERNED PART OF THE SOFTWARE PRODUCT. If the Software Product delivered by Yokogawa is altered, modified or combined with other software or is otherwise made different from Yokogawa catalogues, General Specifications, basic specifications, functional specifications or manuals without Yokogawa’s prior written consent, Yokogawa shall be exempted from its obligations and liabilities under this Agreement or law.
6.2 Any claim against Yokogawa based on any cause of action under or in relation to this Agreement must be given in writing to Yokogawa within three (3) months after the cause of action accrues.

7. Export Control
You agree not to export or provide to any other countries, whether directly or indirectly, the Software Product, in whole or in part, without prior written consent of Yokogawa. If Yokogawa agrees such exportation or provision, you shall comply with the export control and related laws, regulations and orders of Japan, the United States of America, and any other applicable countries and obtain export/import permit and take all necessary procedures under your own responsibility and at your own expense.

8. Audit; Withholding
8.1 Yokogawa shall have the right to access and audit your facilities and any of your records, including data stored on computers, in relation to the use of the Software Product as may be reasonably necessary in Yokogawa’s opinion to verify that the requirements of this Agreement are being met.
8.2 Even after license being granted under this Agreement, should there be any change in circumstances or environment of use which was not foreseen at the time of delivery and, in Yokogawa’s reasonable opinion, is not appropriate for using the Software Product, or if Yokogawa otherwise reasonably believes it is too inappropriate for you to continue using the Software Product, Yokogawa may suspend or withhold the license provided hereunder.

9. Assignment
If you transfer or assign the Software Product to a third party, you shall expressly present this Agreement to the assignee to ensure that the assignee comply with this Agreement, transfer all copies and whole part of the Software Product to the assignee and shall delete any and all copy of the Software Product in your possession irrevocably. This Agreement shall inure to the benefit of and shall be binding on the assignees and successors of the parties.

10. Termination
Yokogawa shall have the right to terminate this Agreement with immediate effect upon notice to you, if you breach any of the terms and conditions hereof. Upon termination of this Agreement, you shall promptly cease using the Software Product and, in accordance with sub-clause 2.5, return or irretrievably delete all copies of the Software Product, certifying the same in writing. In this case the license fee paid by you for the Software Product shall not be refunded. Clauses 2.4 and 2.5, 3, 5, 6 and 11 shall survive any termination of this Agreement.

11. Governing Law; Disputes
This Agreement shall be governed by and construed in accordance with the laws of Japan.

Any dispute, controversies, or differences which may arise between the parties hereto, out of, in relation to or in connection with this Agreement ("Dispute") shall be resolved amicably through negotiation between the parties based on mutual trust. Should the parties fail to settle the Dispute within ninety (90) days after the notice is given from either party to the other, the Dispute shall be addressed in the following manner:

(i) If you are a Japanese individual or entity, the Dispute shall be brought exclusively in the Tokyo District Court (The Main Court) in Japan.

(ii) If you are not a Japanese individual or entity, the Dispute shall be finally settled by arbitration in Tokyo, Japan in accordance with the Commercial Arbitration Rules of the Japan Commercial Arbitration Association. All proceedings in arbitration shall be conducted in the English language, unless otherwise agreed. The award of arbitration shall be final and binding upon both parties, however, each party may make an application to any court having jurisdiction for judgment to be entered on the award and/or for enforcement of the award.

12. Miscellaneous
12.1 This Agreement supersedes all prior oral and written understandings, representations and discussions between the parties concerning the subject matter hereof to the extent such understandings, representations and discussions should be deemed or inconsistent with this Agreement.
12.2 If any part of this Agreement is found void or unenforceable, it shall not affect the validity of the balance of the Agreement, which shall remain valid and enforceable according to its terms and conditions. The parties hereby agree to attempt to substitute for such invalid or unenforceable provision a valid or enforceable provision that achieves to the greatest extent possible the economic, legal and commercial objectives of the invalid or unenforceable provision.
12.3 Failure by either party to insist on performance of this Agreement or to exercise a right when entitled does not prevent such party from doing so at a later time, either in relation to that default or any subsequent one.

End of document
How to Use This Manual

Structure of This Manual

This user’s manual consists of the following sections.

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overview</td>
<td>Gives an overview of the GateMX/MW functions. Describes the PC system requirements and system configuration that are required to use GateMX/MW.</td>
</tr>
<tr>
<td>2</td>
<td>Operating Procedure</td>
<td>Describes the operating procedures of GateMX/MW.</td>
</tr>
<tr>
<td>3</td>
<td>Error Messages and Corrective Actions</td>
<td>Describes the error messages and their corrective actions.</td>
</tr>
<tr>
<td></td>
<td>Index</td>
<td>An alphabetical index of the manual’s contents.</td>
</tr>
</tbody>
</table>

Scope of the Manual

This manual does not explain the basic operations of your PC’s operating system (OS). For information regarding the basic operations of Windows, see the user’s guide that came with Windows.

Conventions Used in This Manual

• Unit
  K Denotes 1024. Example: 10 KB
  M Denotes 1024 K. Example: 10 MB
  G Denotes 1024 M. Example: 2 GB

• Bold Characters
  Bold characters are used for characters displayed on the software program screen.

• Subheadings
  On pages that describe the operating procedure in Chapter 2, the following symbols are used to distinguish the procedure from their explanations.

  Procedure This subsection contains the operating procedure used to carry out the function described in the current section. All procedures are written with inexperienced users in mind; experienced users may not need to carry out all the steps.

  Note Calls attention to information that is important for proper operation of the instrument.
Contents

Chapter 1  Overview
1.1  Functional Overview of the GateMX/MW ........................................... 1-1
    Features ...................................................................................... 1-1
    Procedure ................................................................................... 1-1
1.2  System Overview ........................................................................... 1-2
    Software Requirements ................................................................ 1-2
    Hardware Requirements .............................................................. 1-2
    System Configuration ................................................................. 1-3
    Software Configuration .............................................................. 1-3

Chapter 2  Operating Procedure
2.1  Starting and Exiting GateMX/MW .................................................. 2-1
2.2  Registering MX100s/MW100s ....................................................... 2-2
2.4  Starting/Stopping Data Monitoring ............................................... 2-6
2.5  Connecting to GateMX/MW from DAQLOGGER, Remote Monitor, or Add-on Software 2-9
    Connecting to GateMX/MW from DAQLOGGER .......................... 2-9
    Connecting to GateMX/MW from the remote monitor .................. 2-9
    Connecting to GateMX/MW from the Add-on Software ............... 2-9
2.6  Changing the Port Number and Saving the Settings ...................... 2-10
2.7  Showing Version Information ...................................................... 2-11

Chapter 3  Error Messages and Corrective Actions
3.1  Error Messages and Corrective Actions ......................................... 3-1

Index
1.1 Functional Overview of the GateMX/MW

GateMX/MW is a software program that monitors data from the MX100/MW100 Data Acquisition Unit (MX100/MW100) and supplies the data to DAQLOGGER or remote monitors (software programs). GateMX/MW enables you to monitor and logging the data that can be measured by the MX100/MW100 using DAQLOGGER or a remote monitor.

**Note**

DAQLOGGER is a software application that can connect various recorders (µR, VR, DARWIN, DX, MV, and CX models) and a PC for you to scan, record, and monitor the data. Remote Monitor is a software application that is included in the DAQLOGGER Client Package or DAQ32Plus Client Package. It can be used to monitor the data that has been acquired by the recorder or data acquisition software programs. Add-on software includes a variety of programs for customized monitors, network remote monitors, data acquisition and saving on a group basis, monitoring of measured data and triggered data acquisition, and other functions.

**Features**

- Up to 32 MX100s/MW100s can be connected.
- The maximum number of connections from client programs (DAQLOGGER and remote monitors) is also 32.
- The monitor interval matches the measurement interval of the connected MX100.
  * However, the fastest interval on DAQLOGGER is 1 second.
- The maximum number of data points that can be held per channel is 1800.

**Note**

- GateMX/MW does not contain functions for configuring the MX100/MW100. To configure the MX100, use the MX100 Standard Software that comes standard with the MX100 or MXLOGGER, a software program sold separately. Enter MX100 settings using the browser.
- GateMX/MW does not contain computation functions.
- GateMX/MW does not contain service functions that are available on other Gate programs.
- If you use the MX100 Standard Software or MXLOGGER, GateMX100 or GateMX/MW are displayed under the Software columns.

**Procedure**

To scan and record data from MX100/MW100 on DAQLOGGER, carry out the procedure given below. If you are monitoring the data on a remote monitor, follow the instructions below and start the data monitoring on GateMX/MW.

**Operations on GateMX/MW**

- Turn ON the MX100/MW100
- Start the MX100 Standard Software or Browser
- Set the MX100/MW100 measurement conditions, etc.
- Close the MX100 Standard Software or Browser
- Start GateMX/MW
- Register target MX100s/MW100s
- Retrieve info about the target MX100s/MW100s
- Start data monitoring on GateMX/MW
- Connect to GateMX/MW from DAQLOGGER
- Set tags and other items on DAQLOGGER
- Start logging on DAQLOGGER

**Note**

If you are changing the module configuration on the target MX100/MW100, stop the data monitoring on GateMX/MW and turn off the MX100/MW100 beforehand. After changing the module configuration, turn ON the MX100/MW100 and reconfigure using the MX100 Standard Software or the browser.
1.2 System Overview

Software Requirements

Run DAQWORX under any of the following operating systems.
- Windows Vista Home Premium SP2 (excluding the 64-bit editions)
- Windows Vista Business SP2 (excluding the 64-bit editions)
- Windows 7 Home Premium, SP1 (32-bit and 64-bit editions)
- Windows 7 Professional, SP1 (32-bit and 64-bit editions)
- Windows 8 (32-bit and 64-bit) (Supports the desktop mode)
- Windows 8 Pro (32-bit and 64-bit) (Supports the desktop mode)

The language displayed by the software under different language versions of the OS are as follows.

<table>
<thead>
<tr>
<th>OS Language</th>
<th>Software Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japanese</td>
<td>Japanese</td>
</tr>
<tr>
<td>Other</td>
<td>English</td>
</tr>
</tbody>
</table>

Hardware Requirements

The following hardware is required for running GateMX/MW.
- PC: A PC that runs one of the OS above, and that meets the following CPU and memory requirements.
  - **When Using Windows Vista**
    Pentium 4, 3 GHz or faster Intel x64 or x86 processor; 2 GB or more of memory
  - **When Using Windows 7 or Windows 8**
    32-bit edition: Intel Pentium 4, 3 GHz or faster x64 or x86 processor; 2 GB or more of memory
    64-bit edition: Intel x64 processor that is equivalent to Intel Pentium 4, 3 GHz or faster; 2 GB or more of memory
- Free disk space: 200 MB or more
- Communication device: Ethernet port supported by the OS
- CD-ROM drive: The CD-ROM drive is needed to install the software.
- Peripheral devices: Mouse supported by the OS
- Monitor: A video card that is recommended for the OS and a display that is supported by the OS, has a resolution of 1024×768 or higher, and that can show 65,536 colors (16-bit, high color) or more.
1.2 System Overview

**System Configuration**

![System Configuration Diagram]

It is recommended that GateMX/MW and DAQLOGGER be run on different PCs to distribute the load.

**Software Configuration**

GateMX/MW monitors data from multiple MX100s/MW100s that are connected. It also acts as a monitor server to deliver the data to DAQLOGGER, remote monitors, or Add-on Software.

GateMX/MW does not contain functions for configuring the MX100/MW100. To configure the MX100, use the MX100 Standard Software that comes standard with the MX100 or MXLOGGER, a software program sold separately. Enter MW100 settings using the browser. In addition, GateMX/MW does not contain computation functions.
2.1 Starting and Exiting GateMX/MW

Starting GateMX/MW

Choose Programs > YOKOGAWA DAQWORX > GateMXMW > GateMXMW from the Windows Start menu.

The window shown below opens.

![GateMX/MW Window](image)

**Note**

- GateMX/MW starts up in the condition that existed immediately before you closed GateMX/MW the previous time.
- If the program is closed while a process or service is running, the license will be considered to be “in use.” If the message, “Invalid license number. Please reinstall.” appears when restarting the program, it may indicate that the user is attempting to run a Gate program in excess of the number of available licenses.

Starting GateMX/MW in Acquisition Start Mode

1. From the Windows Start menu, choose Programs > YOKOGAWA DAQWORX > GateMX/MW > GateMX/MW, then right-click GateMXMW and select Create Shortcut.
2. Right-click the shortcut icon and select Properties.
3. Choose the Shortcut tab, then add /START (space and /START) to the right of the path in the Target box and click OK.

![Shortcut Properties](image)

4. Choose the shortcut from the Windows Start menu. The connection status of the previous session is restored, and acquisition begins.

Exiting GateMX/MW

Choose Exit from the File menu or click the “X” button at the right corner of the title bar.
2.2 Registering MX100s/MW100s

Before carrying out the procedure below, connect the target MX100/MW100 to the Ethernet network and turn its power ON. Configure the MX100 in advance using the MX100 Standard Software that comes standard with the MX100 or MXLOGGER, a software program sold separately. Enter MW100 settings using the browser.

**Procedure**

1. Click the Search button.
   MX100s connected to the network are listed under MX100 nearby.

   ![MX100/MW100 list]

   **Click to sort by the item name**

   ![MX100/MW100 list]

   **Note**

   - If a user is already connected to an MX100/MW100, the corresponding computer name and MX100/MW100 software application name are displayed under the User and Software columns, respectively. You cannot use GateMX/MW to connect to an MX100/MW100 that already has a connected user.

2. Drag the machine name of the MX100/MW100 you wish to connect from the MX100/MW100 nearby list and drop it onto the MX100/MW100 unit list area.

   When registered, the IP address of the target MX100/MW100 appears in the IP Address/Host column in the MX100/MW100 unit list area.
Note

- You can also register MX100s by entering the IP address or host name directly in the IP Address/Host column.
- As shown in the figure below, you can select multiple numbers in the No. column and click the button below the IP Address/Host column to register incrementing IP addresses starting from the IP address of the first number in the selected range. If a host name is displayed for the first number in the selected range, the same host name is registered for all the numbers in the selected range.

Select

<table>
<thead>
<tr>
<th>No.</th>
<th>IP Address/Host</th>
<th>Info.</th>
<th>Column</th>
<th>Option</th>
<th>System</th>
<th>Hardware</th>
<th>Machine Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>192.168.10.100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Click
2.3 Retrieving Information about the Target MX100s/MW100s and Setting the Number of Channels and the Monitor Interval

Before carrying out the procedure below, register the target MX100s in advance according to the instructions given in section 2.2, “Registering MX100s/MW100s.”

**Procedure**

1. Click the Get Info. button in the Info column in the MX100/MW100 unit list area. When the retrieval of the information is complete, the MX100/MW100 machine name appears in the Machine Name column.

   ![Image of MX100/MW100 unit list area]

**Note**

- If the MX100/MW100 from which you are attempting to retrieve information is already connected by another user or if the MX100/MW100 does not exist on the network, the information cannot be retrieved. The number of the channel is displayed as 0 and the system, hardware, and machine name do not appear.

- As shown in the figure below, you can select multiple numbers in the No. column and click the button below the Info. column to retrieve information of multiple registered units.

2. Click

   - The information is retrieved again from the registered MX100/MW100 when data monitoring is started.

2. To change the number of channels after information is retrieved, click in the Num. of Ch. column and enter the number. If you wish to change the monitor interval settings, click the button in the System column to display the list and select a monitor interval. When the number of channels is changed, the display in the Channel tab will be modified.

   ![Image of MX100/MW100 unit list area with selected channels]

   - Click here to enter the value
   - Click here to select from the list

   Copy the settings of the first channel in the selected range to all other channels in the range
### 2.3 Retrieving Information about the Target MX100s/MW100s and Setting the Number of Channels and the Monitor Interval

**Note**

You can set multiple monitor intervals in the same system. If the same monitor interval is set for the MW100, it is assigned to each system in order from smallest measurement group number. Also, if the number of same monitor intervals is greater than the actual number of measurement groups, only the actual number of measurement groups is valid.

2. To display channel information, click the **Channel** tab.

You can also choose **Channel** from the **View** menu.

- Click the number to highlight the channel information of the corresponding unit

**Note**

- The channel information is displayed only for channels that are set to acquire data in the MX100/MW100 settings.
- If the number of channels set in step 2 exceeds the actual number of channels that exists in the MX100/MW100, the portion of nonexistent channels is left blank. If the number of channels is less than the actual number of MX100/MW10 channels, only the set channels are displayed.
- If the connection fails, the channel information for the corresponding MX100/MW100 appears as a blank line.
- If the channels of the modules installed to the MX100/MW100 do not match the channels displayed in the Channel tab, perform reconfiguration using the MX100 Standard Software or the Browser.
- The System No. from the channel information display is shown when information is retrieved or when setting the System column in the System Configuration screen.
- Click System No. to sort the channel information by system number. Click System No. again to sort the channel information by channel number.
2.4 Starting/Stopping Data Monitoring

Before carrying out the procedure below, retrieve the channel information of the target MX100s in advance according to the instructions given in section 2.3, “Retrieving Information about the Target MX100s/MW100s.”

**Procedure**

**Starting Data Monitoring**

Click the Start Monitoring button or choose **Start Monitoring** from the Monitoring menu.

**Note**
- If GateMX/MW is connected to the MX100, Backup mode will not be enabled when the communication is cut while monitoring data. Even if the /DS option is enabled, the Dual Save feature will not operate.
- If the initial communication with the target fails, retry ten seconds after the communication failure is confirmed. Additional time is required from the start of communication until the failure is recognized.

**Displaying Run Status While Monitoring Data**

Click the Run tab.

You can also choose **Run** from the View menu.

- **Computer name of the PC running the client software that is connected** (Maximum number of connections: 16)
- **Acquisition Status**
  - Green: Normal (running)
  - Red: Error (stopped, not able to connect, or there is no corresponding channel to monitor data.)
- **Monitor interval specified on the MX100**
- **The maximum and minimum channel numbers of the channel range assigned to the same monitor interval.**
- **Number registered in the MX100 unit list under System.**
- **Assigned system number**
2.4 Starting/Stopping Data Monitoring

**Note**

- The color of the unit numbers under Communication Status indicates the following conditions.
  - Gray (characters in dark gray): There is no IP address or host name specified for the MX100/MW100 with that unit number (specification is blank). Or, there is an IP address or host name specified but the number of channels and system is not specified.
  - Green: Communication with the MX100/MW100 is normal, and data is being monitored.
  - Red: There is an IP address or host name specified for the MX100/MW100 with that unit number, but the connection failed. Or, communication was cut while monitoring data, and now attempting to reconnect.
  - Black: There was an IP address or host name specified for the MX100 with the unit number and connection succeeded, but there were no channels set to acquire data.

If the icon is displayed in red, try the connection again. If reconnection is successful, the icon turns green and acquisition resumes. When acquisition stops, all characters turn gray (characters in dark gray). When acquisition resumes, registered items blink. The gray color of unregistered items remains unchanged (characters in dark gray).

- The status of GateMX/MW is displayed in the status bar. You can check the communication status displayed in the Run tab.

### Condition status

- Connection with MX100/MW100 normal
- Connection with MX100/MW100 abnormal
- Reconnecting with MX100s/MW100s (only displayed during communication)

- System numbers are assigned on the GateMX/MW System Configuration screen as shown in the figure below. Since four monitor intervals can be specified on each MX100/MW100, the system numbers are assigned in the range from 0 to 127.

- Interval groups with the same monitor interval can be configured on the MX100 Standard Software (See the MX100 Standard Software User’s Manual (IM MX180-01E)). A single interval group is displayed as a single system on GateMX/MW.
2.4 Starting/Stopping Data Monitoring

**Settings on the MX100 Standard Software**

<table>
<thead>
<tr>
<th>Interval group 1</th>
<th>Interval group 2</th>
<th>Interval group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 s</td>
<td>100 ms</td>
<td>1 s</td>
</tr>
</tbody>
</table>

**Displayed on GateMX/MW**

<table>
<thead>
<tr>
<th>System No.</th>
<th>Unit No.</th>
<th>Channel Range</th>
<th>Interval</th>
<th>Num. of Ch.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>00</td>
<td>100 ms</td>
<td>1 s</td>
<td></td>
</tr>
</tbody>
</table>

**MX100**

- If a monitor interval longer than 1 minute is specified on the MX100 Standard Software, the monitor interval on the MX100 is set to 1 minute and the monitor interval longer than 1 minute is achieved by decimating the data on the MX100 Standard Software. Therefore, even if a monitor interval longer than 1 minute is specified on the MX100 Standard Software, the monitor interval is displayed as 1 minute on GateMX/MW, and the data is monitored at 1-minute intervals.

**Settings on the MX100 Standard Software**

<table>
<thead>
<tr>
<th>Interval group 1</th>
<th>Interval group 2</th>
<th>Interval group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 s</td>
<td>100 ms</td>
<td>1 s</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interval group 1</th>
<th>Interval group 2</th>
<th>Interval group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 s</td>
<td>100 ms</td>
<td>1 s</td>
</tr>
</tbody>
</table>

**Displayed on GateMX/MW**

<table>
<thead>
<tr>
<th>System No.</th>
<th>Unit No.</th>
<th>Channel Range</th>
<th>Interval</th>
<th>Num. of Ch.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>00</td>
<td>100 ms</td>
<td>1 s</td>
<td></td>
</tr>
</tbody>
</table>

**MX100**

- If the interval group of different monitor intervals are set on the MX100 Standard Software, the MX100 sorts them by monitor intervals from fastest to slowest. Consequently, the GateMX/MW also assigns system numbers in order from fastest to slowest monitor interval when retrieving the information on the System Configuration screen. If the system is set or changed on the System Configuration screen, the system numbers are assigned in the set order.

**Settings on the MX100 Standard Software**

<table>
<thead>
<tr>
<th>Interval group 1</th>
<th>Interval group 2</th>
<th>Interval group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 s</td>
<td>100 ms</td>
<td>1 s</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interval group 1</th>
<th>Interval group 2</th>
<th>Interval group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 s</td>
<td>100 ms</td>
<td>1 s</td>
</tr>
</tbody>
</table>

**Displayed on GateMX/MW**

<table>
<thead>
<tr>
<th>System No.</th>
<th>Unit No.</th>
<th>Channel Range</th>
<th>Interval</th>
<th>Num. of Ch.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>00</td>
<td>100 ms</td>
<td>1 s</td>
<td></td>
</tr>
</tbody>
</table>

**MX100**

- Click the Stop Monitoring button or choose **Stop Monitoring** from the **Monitoring** menu.
2.5 Connecting to GateMX/MW from DAQLOGGER, Remote Monitor, or Add-on Software

While data is being monitored by GateMX/MW, DAQLOGGER and remote monitors can log or monitor the MX100/MW100 data via the Ethernet network. GateMX/MW operates as a monitor server for DAQLOGGER, remote monitor clients, and Add-on software.

Connecting to GateMX/MW from DAQLOGGER

See section 2.6 in the WX101 DAQLOGGER WX81 DAQLOGGER Client Package User’s Manual (IM WX101-01E).

**Note**

There are two methods to connect to GateMX/MW from DAQLOGGER. One method is to specify the system number; the other is not to specify the system number. For the procedure of selecting the connection method, see section 2.6 in the WX101 DAQLOGGER WX81 DAQLOGGER Client Package User’s Manual (IM WX101-01E).

- **Connecting to GateMX/MW by specifying the system number**
  
  Of the MX100s/MW100s connected to GateMX/MW, only the channel data with the specified system number is monitored.

- **Connecting to GateMX/MW without specifying the system number**
  
  The data of all the channels of the MX100s/MW100s connected to GateMX/MW is monitored using one connection.

Connecting to GateMX/MW from the remote monitor

If you are connecting to GateMX/MW from the remote monitor of the DAQLOGGER Client Package, see section 8.1 in the WX101 DAQLOGGER WX81 DAQLOGGER Client Package User’s Manual (IM WX101-01E).

If you are connecting to GateMX/MW from the remote monitor of the DAQ32Plus Client Package, see section 9.2 in the WX102 DAQ32Plus WX82 DAQ32Plus Client Package User’s Manual (IM WX102-01E).

Connecting to GateMX/MW from the Add-on Software

If you are connecting to GateMX/MW from the Add-on software, see the user’s manual for the relevant product.
2.6 Changing the Port Number and Saving the Settings

**Procedure**

**Changing the Port Number**

Carry out the procedure below if you wish to change the TCP/IP port number that is used by DAQLOGGER or remote monitors to connect to GateMX/MW.

1. From the **File** menu, choose **Port No.**
   
   The Port No. dialog box opens.

2. Enter the port number used for the monitor server.
   
   The default value is 50297.

3. Click OK and restart GateMX/MW.
   
   You must restart GateMX/MW to activate the new port number.

**Saving the Settings**

From the **File** menu, choose **Save** or **Save As**.

If you choose Save As, enter the file name in the dialog box that appears and save the file.

---

**Note**

If you choose Save when you have not saved to a specific file name before, the same dialog box that opens as when you choose Save As opens.

**Changing to the Saved Settings**

From the **File** menu, choose **Open**. Select and open the desired file in the dialog box that appears.
2.7 Showing Version Information

**Procedure**

Click the About button on the toolbar or choose **About** from the **Help** menu.

Display version information

The About dialog box opens as shown below.

![About dialog box](image)
# Chapter 3  Error Messages and Corrective Actions

## 3.1 Error Messages and Corrective Actions

This section describes the messages and their corrective actions when errors occur.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>E0002</td>
<td>Insufficient memory. Please exit immediately.</td>
<td>Close other software programs and restart GateMX/MW. Or, restart Windows.</td>
</tr>
<tr>
<td>E0211</td>
<td>Cannot write to the file.</td>
<td>Check whether there is sufficient space on the hard disk, whether writing is permitted, and whether the file system is operating normally.</td>
</tr>
<tr>
<td>E4800</td>
<td>The maximum limit of Gate programs running simultaneously has been exceeded.</td>
<td>The number of Gate programs that you can run simultaneously is limited by the Gate software license that you have purchased. Close a Gate program that is already running or purchase a new license and reinstall the program.</td>
</tr>
</tbody>
</table>