



Matrix 3 Troubleshooting & How-To Guide

Identifying Matrix 3 Computers

General Overview

Matrix 3 is a software-based Fluid Management System that runs on one or more of your facilities computers (PC's). This guide only applies to the Graco Matrix 3 Fluid Management System and walks you through issues and the solutions to remedy them.

Throughout this guide, there will be colored text entries, they are:

Links – These are links to other support resources that may be needed to accomplish the task you are working on.

Green Text – These are navigational commands directing you to skip to or reference another section in the guide. If the command is underlined, clicking it will direct you to the location it describes.

Red Text – These are STOP points where you will need assistance from IT, Graco or your Graco distributor.

Specific troubleshooting topics can be found in the instruction manuals below. This guide will provide more theory of operation and detail on addressing specific issues. Click the links or type the numbers into the [Graco.com](https://www.graco.com) search box.

[313046](#) - Meters

[313008](#) - Transceivers

[312964](#) - Tank Level Monitors

[312417](#) - Pump Air Controls

[313013](#) - Matrix 3 Oil Bars

[313104](#) - Basic Software

[313106](#) - Professional Software (includes 3rd Party Interface capability)

[313108](#) - Premier Software (includes 3rd Party Interface capability)

[313112](#) - Premier Software with CDK Interface

[313114](#) - Premier Software with Reynolds & Reynolds Interface

[334786](#) - Premier Software with Procede/Excede Interface

[3A4999](#) - Premier Software with DealerTrack Interface (As an addendum to the Premier Software Manual)

Notes:

- All PC related references used in this guide are based on the Microsoft Windows 10 Operating System conventions, other versions of Windows operating systems may vary.
- Troubleshooting efforts may require help from your IT/IS staff or vendor. Having them available is highly recommended.
- If you need Matrix software, contact Graco and they will get you a direct download link. All PC's must be running the same version of Matrix software, delete or discard any different versions you have.
- Check for new and updated content by visiting [graco.com/matrixsupport](https://www.graco.com/matrixsupport), scroll down to the "Guides" section.
- If you find you still need help, contact a Graco Tech Assistance Agent by using the information found at the bottom of each page of this guide.



Identifying Matrix 3 Computers

Overview

A Matrix system can consist of just one computer (PC), or more depending on the business need. If you have more than one PC running the Matrix software, but are not sure which one is which, this guide will help you identify each as the Server or a Client. All PCs with Matrix installed should have the “Matrix Client” program icon on the “Desktop” and in the PC “Start” menu; it is a large, black, capital letter “M”.

Definitions:

1. The Matrix “Server” is the main PC that holds the database (required).
2. Matrix “Clients” are all secondary, optional PC’s that can access the Matrix Server on your network.
3. “Matrix Client” is also the name of the Desktop & Start Menu icons for opening the Matrix user interface on *any* PC.

Notes:

- If you are not familiar with the “Quick” reference methods listed below, continue reading to get detailed instructions.
- In multiple Matrix PC environments, be aware that Matrix can be installed incorrectly where some or all PC’s are accidentally installed as Servers. This can be configured to work, but will make identification and troubleshooting a system more difficult. If you find this to be the case, Graco recommends reinstalling the software correctly after identifying the roles of each, visit graco.com/matrixsupport and find the “Installing Matrix 3 Software” guide for help.
- In rare cases, there can be more than one Matrix Server at a facility based on the end user’s needs.

Quick Reference	SERVER	CLIENT
Single or only PC in the system	X	
Backups found in the default folder - “C:\MatrixDbBackups” are growing in size (showing activity)	X	
Has 3 running Matrix “Services” (Computer Services Menu)	X	
Has only Matrix Transceiver “Service”		X
Does NOT have “Setup & Reports” option under “Go To”		X
Does NOT have “Backup Program” in “Edit Matrix Settings” (found through PC “Start” Menu)		X

If there is only 1 PC running Matrix, this IS the Matrix Server

1. **Stop here** if you are satisfied.
2. Continue if still unsure or confirm by reading through the following sections.

Discovery

Using “Edit Matrix Settings” - This tool shows you how Matrix is configured for the PC you are at, it is the most reliable if Matrix is working correctly and you can see all your devices (Meters, TLMs & PACs). You can visit graco.com/matrixsupport and find the “Edit Matrix Settings” guide for a more complete explanation of the tool.

Note: If anyone reinstalled Matrix or opened “Edit Matrix Settings and made changes prior to this in an effort to fix something, it could be installed incorrectly, make sure the real Matrix Server is absolutely identified before making further changes. Visit graco.com/matrixsupport and find the “Installing Matrix 3 Software guide for help.

1. Click the PC “Start” button.
2. Type “Edit”.
3. The PC should find “Edit Matrix Settings”, click to open it.

Contact Graco LED Tech Assistance at 800-533-9655, option 2 or LEDtech@graco.com



4. In the pop up window, there will be 2 columns, in the left column, look for:
 - a. Backup Program.
 - i. If this is present, Matrix was installed as a Server, continue to confirm.
 - b. Matrix Database Server host name.
 - c. Matrix Server MSE host name.
5. To the right of items b & c above, BOTH should have the same value (the PC name or IP address of the Server).
 - a. If PC name is used:
 - i. Click the PC "Start" button and type "About your PC".
 - ii. The PC should find it, click to open it.
 - iii. In the pop up window, down the right side, find "Device Specifications>Device name".
 - iv. If the PC name matches values in lines 4>b & c above, **this is the Server**.
 - v. If it is different than the PC name, then the value listed is the Server name and you need to find it.
 1. If it is different **and** "Backup Program" is also present, Graco recommends reinstalling the software on this PC as a Client to avoid future confusion, visit graco.com/matrixsupport and find the "Installing Matrix 3 Software" guide for help.
 - b. If an IP address is used:
 - i. Click the PC "Start" button and type "CMD" (not case sensitive).
 - ii. The PC should find "Command Prompt", click to open it.
 - iii. In the pop up window, type "IPCONFIG" (not case sensitive) and press "Enter".
 - iv. There may be multiple entries, look for "Ethernet adapter Ethernet".
 - v. Find the line "IPv4 Address".
 - vi. If the IP address matches values in lines 4>b & c above, **this is the Server**.
 - vii. If it is different from the PC IP address, then the value listed is the Server's IP address.
 1. If it is different **and** "Backup Program" is also present, Graco recommends reinstalling the software on this PC as a Client to avoid future confusion, visit graco.com/matrixsupport and find the "Installing Matrix 3 Software" guide for help.

Using the Database Backup Files - This is a good indicator that you are at the Server if the backup files are current and growing in size as an indication of it being used.

1. Determine the location of the backup folder first (the factory default is "C:\MatrixDbBackups").
2. Navigate to it to display the contents
 - a. Click the PC "Start" button and type "File Explorer".
 - b. The PC should find "File Explorer", click to open it.
 - c. In the pop up window, down the left side, find "This PC>Windows (C:)" and highlight it
 - i. The name preceding "C" may be different than "Windows", just navigate to "C" either way.
 - d. If the folder is not there, the backup location may have been changed, to check:
 - i. Click the PC "Start" button.
 - ii. Type "Edit".
 - iii. The PC should find "Edit Matrix Settings", click to open it.
 - iv. In the pop up window, look at the value opposite the "Database export file directory" field.
 1. If there is no "Database export file directory" field, then **this is a Client**.
 - v. If the "Database export file directory" is different from the factory default, navigate to it next.
 - e. Once found, look for a list of at least 3 backups.
 - i. If all three are there and growing in size, this is most likely the Server.
 2. If there are no backups, or they are all the same size (about 110kb), then this was most likely installed wrong and Graco recommends reinstalling the software on this PC as a Client to avoid future confusion, visit graco.com/matrixsupport and find the "Installing Matrix 3 Software" guide for help.



Using computer "Services" - This is pretty reliable, but not guaranteed.

- f. Click the PC "Start" button and type "Services".
- g. The PC should find "Services", click to open it.
- h. In the pop up window, down the right side, find the entries that start with "Matrix".
 - i. If there is only 1 (Matrix Transceiver Server), then **this is a Client**.
 - ii. If there are 3 services, then:
 1. If you can see all your devices when you open Matrix, then it is most likely the Server.
 2. If you can NOT see all your devices when you open Matrix, this is a Server, but not **the** Server
 - a. It may have recently been reinstalled and has no data in it yet.
 - b. It is not the real Server and was just installed as a Server and should be reinstalled as a client instead (do not do this until the real Server has been identified). For help on installing Matrix correctly, visit graco.com/matrixsupport and find the "Installing Matrix" guide.

Notes:

- It can be tricky identifying the Matrix Server depending on how it was setup or altered. Remember to use multiple methods to confirm the Server before uninstalling or reinstalling software.
- If you are still unsure, Visit graco.com/matrixsupport and find the "Edit Matrix Settings" guide to learn more about all the settings and how they should be set up.