GenWatch3®
Client Deployment
Software Version 2.23.5

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Support

Customer satisfaction is our number one priority at Genesis. We are here to provide you with the best software possible, and we want to know when you have any questions, concerns or problems with GenWatch3 so that we can make it a better product for everyone.

Refer to the Troubleshooting & Support section of this manual for complete support and contact information.

Document History

Revision	Description	Author
Revision #1.0	Initial Release	Jeff Schubert

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About this Manual

Goals

This manual describes the process for remotely deploying or automatically upgrading client installations.

Who Should Read This Manual?

This manual is written for the intended audience of domain/system administrators.

How This Manual Is Organized

This manual is organized as follows:

- **Introduction**: Provides information about the objectives, underpinning principles, and generic definitions.
- **Automatic Client Upgrade**: Describes automatically upgrading existing client installations upon logging into GenWatch3.
- **Active Directory/Domain Deployment**: Describes remotely installing and upgrading clients.

This manual contains the following images, used to indicate that a segment of text requires special attention:

Additional Information: Additional information is used to indicate shortcuts or tips.

Warning: Warnings are used to indicate possible problem areas. Such as a risk of data loss, or incorrect/unexpected function.

Chapter 1 Introduction

This chapter will provide information about the objectives, underpinning principles, and generic definitions for deploying GenWatch3 clients.

This chapter contains the following sections:

- **Preamble:** Describes the structure of this document.
- **Objectives:** Describes the goals of this document.
- **Definitions:** A list of terms and definitions used within this manual.

Preamble

This Client Deployment document is for GenWatch3 clients.

This document aims to provide the process for the automatic deploying and upgrading of client installations of GenWatch3.

Objectives

The objectives of this document are to:

- Document how clients can be automatically upgraded upon logging in to GW_Alert.
- Document how to remotely deploy a GenWatch3 client installation via an Active Directory Group Policy.

Definitions

GenWatch3 – Core GenWatch3 software distributed by The Genesis Group

Chapter 2 Automatic Client Upgrade

This chapter outlines the process in which a client automatically checks for updates and upgrades itself.

This chapter contains the following sections:

- **Requirements:** Describes requirements needed to be able to automatically update a client.
- **Process:** Describes the process of automatically upgrading a client.

Requirements

The client(s) must already be at version 2.15.2 or greater of GenWatch3 to check for newer versions. Additionally, the host must also be at least at that version. The network must also be configured to allow any client to connect to the REST API port on the host. This port is configured during the installation of the host.

Process

Installer Files

When the GenWatch3 Host is installed or updated, it copies the necessary files to a central location, so they can be served to clients needing to upgrade. These files contain any prerequisites and the client installer itself, along with upgrade settings. These are accessed and downloaded automatically by the clients during the automatic upgrade process below.

Clients

When a user attempts to log into a host, the client will verify that its version matches the host's. If they differ, the client will prompt the user to upgrade. Once the user continues, the client will download and install any prerequisites. It will then download and install the GenWatch3 client software. Once the client is upgraded, the user will be able to open GW_Alert again and log in.

Chapter 3 Active Directory/Domain Deployment

This chapter outlines the process for remotely deploying a client in an Active Directory or domain-based environment.

This chapter contains the following sections:

- **Requirements:** Describes requirements needed to be able to remotely deploy a client.
- **Process:** Describes the process for remotely deploying a client.

Requirements

The client(s) must be installed on computers that are a part of a Windows domain. This process relies on Windows' built-in Active Directory Global Policy Software Installation feature available only in a domain environment. A domain administrator or other user with sufficient permissions to access and manage the Group Policy Management tool is required to complete the remote install/upgrade.

Process

Installer File Share

To remotely install/update clients, the client installer image must reside in a network location accessible from all clients. If such a folder is not already available, it can be set up as follows:

1. Create a folder in the appropriate location.
2. Right-click on the folder and choose *Properties*.
3. Under the *Sharing* tab, click on *Advanced Sharing*.
4. Check the *Share this folder* checkbox.
5. Click on *Permissions*.
6. Add the appropriate computers, users, or groups that will need access and ensure they have the *Read* permission.
7. Click OK through the dialogs to share the folder.

Installer Files

The installer file and any prerequisites must be copied to the shared folder. Navigate to the *ProgramData\Genesis\GenWatch3\Files\ClientInstaller* folder on the host's system drive and copy the contents of that folder to the shared folder. The folder should contain the following at a minimum:

- *GW3_InstallFramework.ps1*
  - Script to install the required .NET Framework prerequisite.
- *GW3* folder
  - *ClientInstaller.msi*
    - The installer that will install or update the client and subsequently configure it.
- *Redist* folder
  - *ndp48-x86-x64-allos-enu.exe*
    - The .NET Framework 4.8 prerequisite installed by the above script.
  - *CRRuntime_64bit_13_0_21.msi*
    - The Crystal Reports Runtime prerequisite that may be required by the client (for installations with the Trio module only).

Software installation

The client will be updated using a Global Policy Object (GPO) created and managed in the Windows' *Group Policy Management* tool.

1. As a Windows user with domain administrator rights or other sufficient rights, Open the *Group Policy Management* tool.
    a. It can be found as a shortcut in the Start window or by searching for 'Group Policy Management'.
    b. It may be required to do so from a domain controller.
2. Expand the appropriate domain under the appropriate forest in the list.
3. Create a new GPO by right-clicking on the *Group Policy Objects* item and clicking *New*.
4. Specify an appropriate name such as GW3 Client Update Policy'.
    a. Leave the *Source Starter GPO* as 'none'.
5. Right-click the new Policy and select *Edit*.
6. There are two aspects of the policy that need to be set:
    a. .NET Framework prerequisite installed as a Computer Startup PowerShell script
    b. GenWatch3 Client (and prerequisite) MSIs installed as per Computer software installation packages.
7. The following steps (8-15) will ensure the 4.8 version of the.NET Framework is installed on each client.
    a. If all clients are already guaranteed either by the OS version or via other GPOs, these steps can be skipped.
    b. The GenWatch3 client software will not successfully install without at least this version of the framework.
8. Expand Computer Configuration→Policies→Windows Settings and select *Scripts (Startup/Shutdown)*.
9. Double-click on *Startup*.
10. In the Properties window, click on the *PowerShell Scripts* tab.
11. From the *For this GPO, run scripts in the following order:* option, select *Run Windows PowerShell scripts first*.
12. Click Add to add a new script.
13. Click Browse and navigate to the previously created shared network folder to select the *GW3_InstallFramework.ps1* file.
    a. This script will detect if at least version 4.8 of the .NET Framework is installed.
    b. If it is, it will not make any changes to the computer.
    c. If not, it will install the framework.
    d. Under some circumstances, the computer will need to be rebooted to finish installing the framework. In this case, the script will reboot the computer. After the restart, the policy will finish being applied and the GenWatch3 client installed/updated.

14. In the Script Parameters box, enter the path of the network share containing the above PowerShell script so that the script can find the framework installer.
    a. Surround the path with double-quotes (") if there are any spaces or special characters in the path.
    b. If the *GW3_InstallFramework.ps1* script is hosted in the *\\server\fileshare\GW3ClientInstaller* folder, enter that as the parameter.
15. Click **OK** twice to return to the Group Policy Management Editor window.
16. The following steps (17-26) will ensure the GenWatch3 client installer will be deployed as well as any additional *MSI* based prerequisites.
17. Expand Computer Configuration→Policies→Software Settings and select *Software installation.*
18. Right-click and select *New→Package.*
19. In the Open window, browse to the previously created shared network folder and select the *ClientInstaller.msi* file.
20. Click Open.
    a. If the location chosen is not a network location, it will prompt you to pick the correct location. Ensure that you browsed over the network and not via a local drive or hidden share.
21. In the *Deploy Software* window, select *Assigned* and click **OK**.
22. Once the installer appears on the screen, double-click it to open its properties.
23. Under the *Deployment* tab, select Basic as the *Installation user interface option* if that option is enabled.
24. Click **OK** to save.
25. Repeat Steps 18-24 for any of the following prerequisites required by the client.
    a. If the Trio module is licensed and in use in this installation, add the CRRuntime MSI under the *Redist\CrystalReports* folder.
26. Close the *Group Policy Management Editor* window and return to the *Group Policy Management* window.
27. In the left sidebar, select the Operational Unit that contains the computer(s) needing to be installed/upgraded.
    a. An existing group of computers can be used, or a new group can be created.
    b. Alternatively, each pertinent computer can be selected, and the following steps repeated for each.
28. Right-click on the select OU or computer and click *Link an Existing GPO?*
29. Select the GW3 policy from the list and click **OK**.
30. The policy will be deployed, and the software installed when the client computer is next restarted.