

**Description:** Guide to using GENESIS32 with Windows Terminal Services

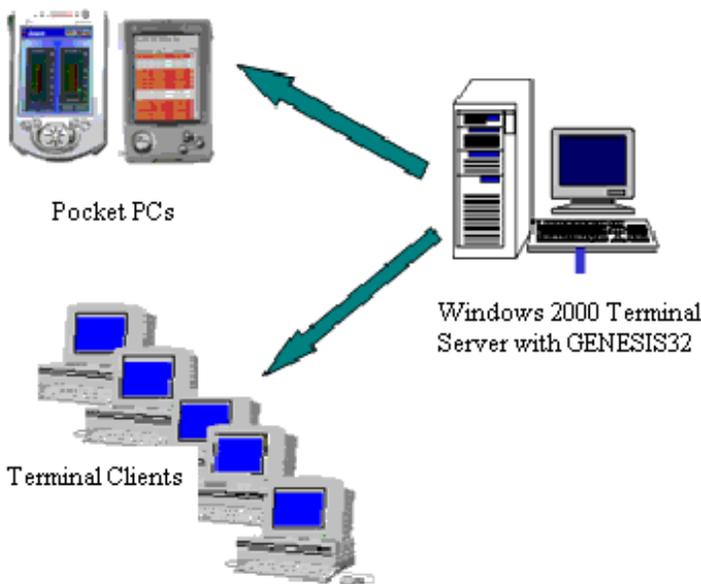
**OS Requirement:** Win 2000 Server

**General Requirement:** General understanding of GENESIS32 and some understanding of Windows Terminal Services.

## Introduction

Windows Terminal Services is a thin client technology that allows remote application execution on a Windows 2000/2003 based server from a wide range of devices over virtually any type of network connection. With the integration of Windows Terminal Services into the core server operating system, you can choose to deploy the latest Windows-based applications, like GENESIS32, in a fully server-centric mode where applications run entirely on the server. This would mean using the server's memory and system resources even while logged in from another computer.

An immediate advantage is that when Terminal Services is enabled on Windows 2000/2003 Server, administrators do not have to install GENESIS32 (or any Windows-based 32-bit applications) on each desktop computer. Instead, the application is only installed on the server, and the clients automatically have access to the new or upgraded software package through Terminal Services Client software.



**Figure 1 - Windows Terminal Services**

## Enabling Terminal Services

1. Go to Start → Control Panel, and open Add/Remove Programs
2. Click on Add/Remove Windows Components to open the Windows Components wizard.
3. Select the Terminal Services check box and then click “Next”



**Figure 2 - Installing Windows Terminal Services**

**NOTE:** Terminal Services must be licensed through Microsoft. Please refer to the Microsoft Website for more information

4. In Terminal Services Setup, choose Application Server Mode

**NOTE:** You may see programs listed that will not work properly when Terminal Services is enabled. You need to reinstall these programs for multi-session access using Add/Remove Programs after Terminal Services is enabled.

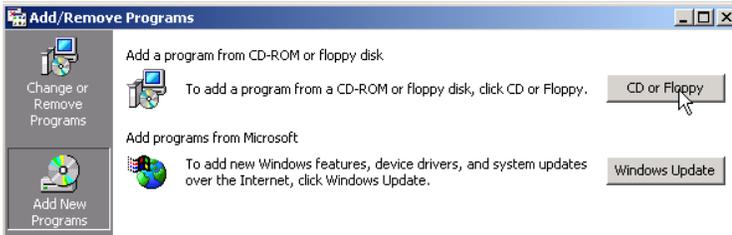
5. Specify whether you want permissions to be compatible with Windows 2000 users or with Terminal Server 4.0 users. Select Permissions compatible with Windows 2000 Users for the most secure environment in which to run applications.
6. In Terminal Services Licensing Setup, specify whether you want the license serve to server your entire enterprise or your domain/workgroup and then provide the directory location for the database.
7. Click Next and then Finish.
8. The required files are copied to your hard disk and the server software can be used after restarting the system.

**NOTE:** Terminal Services and Terminal Services Licensing can also be enabled by running Windows 2000 Server Setup.

## Installing GENESIS32

There are two modes in Terminal Services: execute and install. Any applications that need multi-session access via Terminal Services should install in the install mode. Because of this, **DO NOT** install GENESIS32 from auto-run application that comes up when you insert the disk. We will install by using Add/Remove Programs instead to automatically put Terminal Services in install mode.

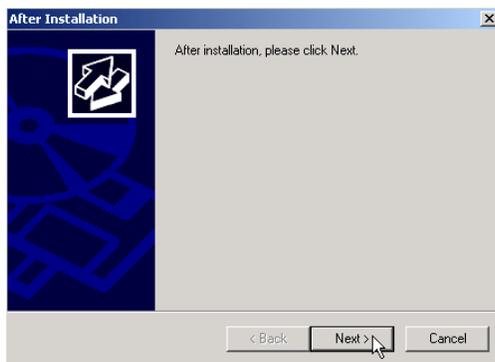
1. Go to Start → Control Panel → Add/Remove Programs.
2. Click Add New Programs on the left hand side and browse to the ICONICS product disk and run Setup.exe (\GENESIS32\Software\GENESIS32 EE\setup.exe on the disk).



**Figure 3 - Add New Programs**

**NOTE:** The installation may ask for ADO components (MDAC) to be installed prior to installing GENESIS32. Continue with the MDAC installation and once you are done, you may be required to restart the system. Repeat step 1-2 after reboot to install GENESIS32.

3. Once you have installed GENESIS32, the installation will prompt you to install the Software Licensing. **DO NOT** install Licensing at this point.
4. Click Finish to exit out of the installation program and click Next in the Add/Remove Programs to complete the installation as shown in Figure 4.



**Figure 4 - Finish Installation through Add/Remove Programs**

5. We will now install ICONICS Software Licensing through Add/Remove Programs. Browse to the Software Licensing Setup.exe

(\GENESIS32\Software\GenLic32\Disk1Setup.exe) and run it.

**NOTE:** Don't forget to complete the installation in Add/Remove Programs once setup.exe informs you that the installation is completed.

6. Once the installation Close Add/Remove Programs to return Terminal Services to execute mode. Terminal Clients will now be able to run Internet Explorer within terminal sessions in order to view WebHMI displays.

## Terminal Server Settings

Before using your GENESIS32 applications through terminal sessions, you will need to do the following user, application, and DCOM setup on the Terminal Server machine.

### User Setup

All users that will log into the Terminal Server through terminal sessions and run GENESIS32 should be Power Users on the Terminal Server machine. For this reason, you should make a list of all of these users (and their passwords) and add them under the Power Users user-group in the Windows User Accounts setup in the Control Panel of your Terminal Server machine.

### Application Setup

You should start all server-type applications such as the AlarmWorX32 Server, AlarmWorX32 Logger, OPC Servers, DataWorX32, etc. by as an Automatic NT Service. This will ensure that only one instance of the service is running at a time and the service is started by the Terminal Service server instead within the Terminal Service session.

**NOTE:** If configuration changes are to be made to these applications from within a terminal session, you must stop the applications from the services list before you make any configuration changes. The services must then be restarted on the server. You cannot simply click the traffic light from a terminal client to stop and start the service.

**NOTE:** You need to set the security server (security.exe) to run as "This User" in DCOM so that all of the COM clients are talking to the same instance.

## DCOM Setup

You need to assign a DCOM Identity with administrative privileges to each of the applications that you have setup as Automatic NT Services. This means that only one instance of these applications can be launched and it will be launched under the same administrative user.

If you ran the Application Setup Utility during installation, DCOM should be all set on your computer. You can find out

more about the application setup utility in the application note *GENESIS32 – Application Setup Utility*.

## Terminal Clients

These are machines that have the terminal client software installed on them. They serve as dumb stations that use none of their system resources to run GENESIS32 and or other applications on the server. They return mouse clicks and screen updates to the server. By logging into a terminal session from a terminal client, you are actually logged into the server itself. For this, all you need to have is a Power User account on the server.

Refer to the Microsoft documentation and support for information on setting up terminal clients.

If you have further questions which have not been answered in regard to using ICONICS applications on Windows 2000 terminal server, please contact our Technical Support Department: [support@iconics.com](mailto:support@iconics.com)