



Description: Quick start information about using GENESIS32 with Windows Terminal Services.

OS Requirement: Windows 2000 Server.

General Requirement:

- General understanding of GENESIS32 and its applications.
- Some understanding of Windows Terminal Services.
- Be logged into the computer as Administrator.

Background Information

Windows Terminal Services is a thin client technology that lets you remotely execute applications 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 V8.0, 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 (Windows-based 32-bit applications) on each desktop computer. Instead, the application is installed once on the server, and the clients automatically have access to the new or upgraded software package through Terminal Services Client software.

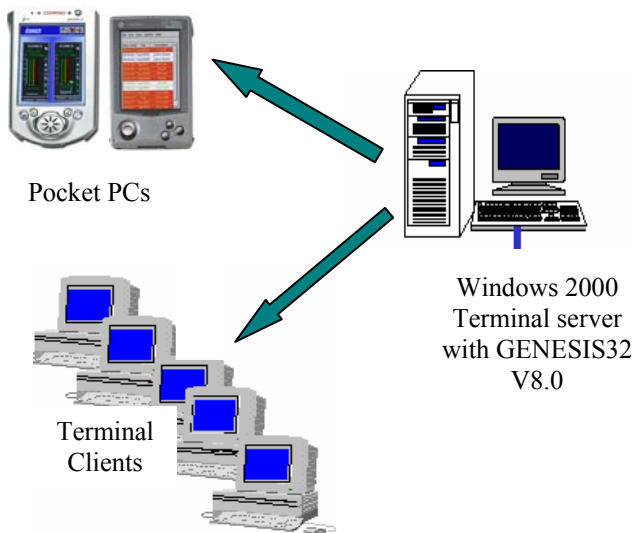


Fig. 1: Windows Terminal Services

Enabling Terminal Services

In order to allow multisession use of GENESIS32 and other applications, Terminal Services should be enabled in **Application Server Mode**.

To enable Terminal Services in Application Server Mode:

1. Open **Add/Remove Programs** from the **Control Panel**.
2. Click **Add/Remove Windows Components** to open the **Windows Components** wizard.
3. In **Windows Components**, select the **Terminal Services** check box, and then click **Next**.

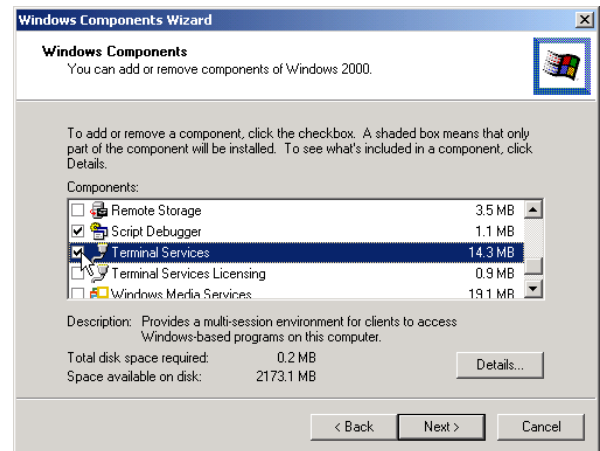


Fig. 2: Enabling Windows Terminal Services

Terminal Services must be licensed through Microsoft. Please refer to the Microsoft Web site for more information.

4. In **Terminal Services Setup**, choose **Application server mode**.
5. In **Terminal Services Setup**, you may see programs listed that will not work properly when Terminal Services is enabled. You need to reinstall these programs for multisession access using **Add/Remove Programs** after Terminal Services is enabled.
6. In the next screen, 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.
7. In **Terminal Services Licensing Setup**, specify whether you want the license server to serve your entire enterprise or your domain/workgroup, and then provide the directory location for the database. Click **Next**, and then click **Finish**.



8. The required files are copied to your hard disk, and server software can be used after restarting the system.

NOTE: Terminal Services and Terminal Services Licensing can also be enabled when Windows 2000 Server Setup is run.

Installing GENESIS32

There are two modes in Terminal Services: execute and install. When you want to install applications for use by everyone, the Administrator should switch to install mode. Any applications that will need multisession access via Terminal Services needs to be installed in this mode. For this reason, **DO NOT** install GENESIS32 from the autorun application on the installation CD.

Installing applications using **Add/Remove Programs** will automatically put Terminal Services in install mode:

1. Open **Add/Remove Programs** from your **Control Panel**.

1. Click **Add New Programs** on the left hand side, and browse to the ICONICS product CD and run Setup.exe (\Genesis32\Software\Genesis32 EE\Setup.exe on the CD).

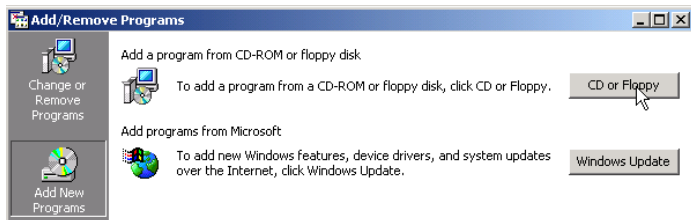


Fig. 1: Add New Programs

2. The installation may ask for ADO components to be installed prior to installing Genesis (MDAC). Continue with the MDAC installation and once you are done, you may be required to restart the system.
3. After starting back up, return to **Add/Remove Programs** and browse for the CD to run setup.exe again. This time, GENESIS32 will be installed.
4. Once Genesis is installed, you will be prompted to install the Software Licensing. However, **DO NOT** do so at this point. Any installation NOT done from **Add/Remove Programs** (or the Terminal Services add programs option) will not support multisessions and cannot be run by terminal clients.
5. Click **Finish** to exit out of the installation program, and click **Next** in **Add/Remove Programs** to complete the installation, as shown in Fig. 2.

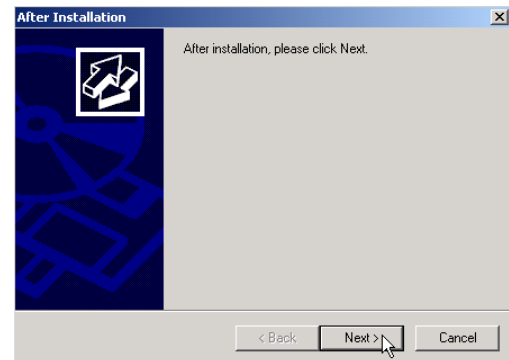


Fig. 2: Finish Installation through Add/Remove Programs

6. Now, install ICONICS Software Licensing through **Add/Remove Programs** in the same way we just did GENESIS32. This time, browse the CD for and run the Software Licensing setup.exe (\Genesis32\Software\Genlic32\Disk1\Setup.exe).
7. 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 (from terminal clients) 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

All server-type applications such as the AlarmWorX32 Server, AlarmWorX32 Logger, OPC Servers, DataWorX32, etc. (that only one instance of should be running at a time) need to be started by the Terminal Server, and not from within a terminal session. For this reason, all of these types of applications that will be used should be set as Automatic NT Services. This assures that it is started on the server, not within the Terminal Services session.



NOTE: If configuration changes are to be made to these applications from within a terminal session that would require the applications to be stopped (like in the Alarm Logger, or an OPC Server), the applications must be stopped from the Services list (in Administrative Tools) before configurations are made. The services must then be restarted there as well (not simply by clicking the traffic light, which would start the service from the Terminal Services session).

NOTE: Security.exe needs to be run as "This User" in DCOM config so that all of the COM clients are talking to the same instance

DCOM Setup

Each of the applications that you set as Automatic NT Services need to be assigned a DCOM identity with administrative privileges. This means that only one instance of these applications can be launched, and it will be launched under the same administrative user (from the Terminal Server because of the previous configurations).

To configure the DCOM identity of applications:

1. Run the DCOM configurator from **Start→Run** by typing in **DCOMCNFG**. The **Distributed COM Configuration Properties** window will open, as shown in Fig. 2.

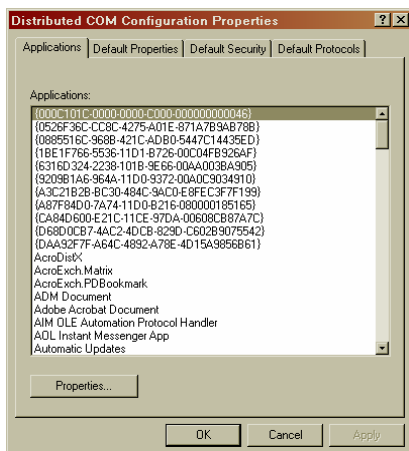


Fig. 2: Distributed COM Configuration Properties

2. Find the application to be configured in the list on the Applications, and click **Properties**.
3. Select the **Identity** tab in the application **Properties** window, and choose **This User**.
4. Enter a username and password with administrative permissions (you may want to create a user specifically for this, for example OPCUser). This will need to be done in

your **User Names and Passwords** configurator, found in the **Control Panel**.

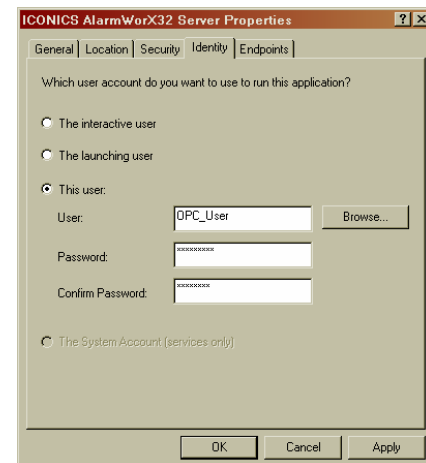


Fig. 3: Application Identity Properties

5. Repeat steps 1-4 for every application that will run continually on this computer (those applications set as Automatic NT Services earlier).

NOTE: All of these applications should have their identities set as the same user.

6. Restart the system (DCOM changes always require a system restart).

Applications such as ICONICS Security, GraphWorX32, etc. should be left with their default user settings, since these applications should allow more than one instance to be run when different clients or applications access them.

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 (discussed earlier).

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

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