Pocket Genesis – Store and Forward

APPLICATIONS NOTE

April 2010

Description: Guide to setting up Pocket Store and Forward technology by using the Pocket GenBroker.
OS Requirement: Win 2000, XP Pro, Server 2003, Vista, Server 2008, Windows 7
General Requirement: Pocket PC, Active Sync, Genesis32, Pocket Genesis CD v9.x or greater, Pocket Genesis license.

Introduction

The Pocket GENESIS toolkit enables certain options that are already available inside your copy of the GENESIS32 Application Suite. When you open GraphWorX32, AlarmWorX32 and the other desktop applications you will find a new submenu that lets you create pocket sized layouts and save that layout to your handheld device. If you need more details about Desktop configuration look at the application note entitled *Pocket Genesis32 – Quick Start.*

With Pocket Store and Forward, your mobile device connects to a wireless network when it becomes available, updating your data automatically and keeping your current. With Pocket GenBroker you can communicate to many types of data sources; and Security Login makes sure that you do so safely. Set up redundant nodes, tunneling, and more to make your mobile applications powerful and robust.

Pocket GenBroker Settings

Pocket GenBroker acts as a bridge that links the Pocket GENESIS applications on a Windows Mobile device to a GenBroker Server using OPC over TCP/IP. This enables you to remotely access real-time OPC data, HMI/SCADA operator displays, trends, alarm-management data for your plant or facility from your handheld as well as reading the license remotely. The setup screen for Pocket GenBroker with Store and Forward and License Server is shown below.

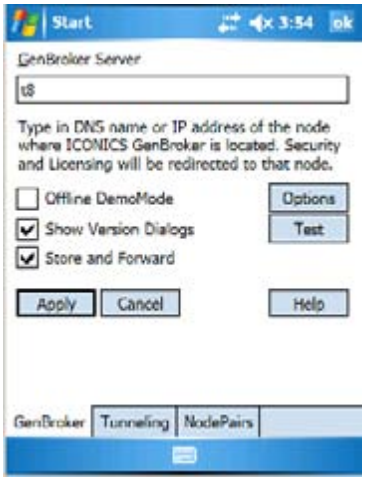

Figure 1 - Pocket GenBroker Setup

NOTE: Don't forget to uncheck the "Offline Demo Mode" which allows you to read the data only locally. Also run the GenBroker Server on your desktop.

To test the connectivity between your Pocket and Desktop PC click on **Test** button. You should get the TCP/IP and Genbroker Ping Result: **OK** similar to picture below.

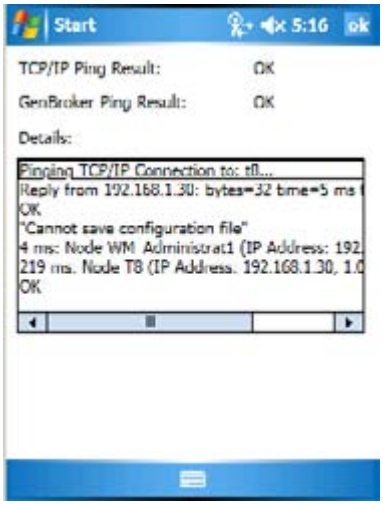

Figure 2 - GenBroker Ping

To double check the Pocket GenBroker settings you can click on **Options** button. You can find the Advanced Settings there with mediator or connection parameters like pooling rate or timeout.

Store and Forward in use

Because you successfully established the GenBroker connection, you can start to use Store and Forward. Follow these steps to be sure that you will not miss any important steps:

1. Start GraphWorX32 on your desktop by going to **Start → Programs → ICONICS GENESIS32 → GraphWorX32 → GraphWorX32.**
2. Create a **New** network accessible **Display** with one PPT (data entry). For example the following tag: `\\T8\ICONICS.Simulator.1\SimulatePLC.OUTPUTS.FLOAT`
3. Go to menu **Format → Display Properties → Runtime** and uncheck the box "Point Failed character" and Save it to your Pocket PC.
4. If your display is not automatically synchronized with your device, turn-off Wi-Fi for a while and synchronize again.
5. Turn on Wi-Fi connection if you temporary disabled it.
6. Run **Pocket GraphWorX** and **Open the display** that you just created.
7. **Write the value** to your PPT (e.g. 1).
8. Leave the GraphWorX display as it is and try to **turn-off** the **Wi-Fi** connection on your device for a while to simulate

no GenBroker connection. Or go (with your device) to the place where you don't have a Wi-Fi signal. ☺

9. You should receive message "Connection lost" from the GenBroker which indicates that you lost he Wi-Fi connection. See the picture below for more details.

Figure 3 - Pocket GraphWorX Display without GenBroker Connection

10. Try to **write some values** to your PPT again and confirmed.
11. These values will be stored locally.
12. Turn-on Wi-Fi on your device and wait until Forward confirmation window comes.
13. Select one of those values that you already written in off-line mode and click on **Forward** button. You can also delete the rest of them that you are not interested in. See the picture below for more details:

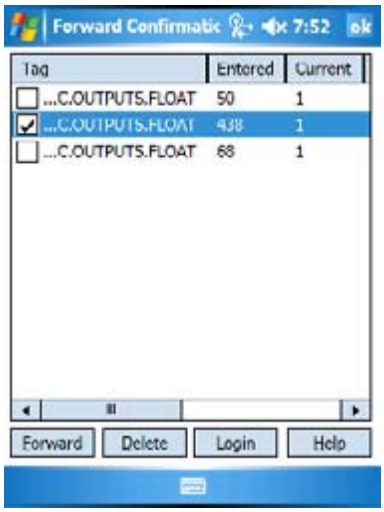

Figure 4 - Forward Confirmation

14. Selected value will be immediately forwarded back to your tag that means, you will see the last value, written in offline mode, in Pocket GraphWorX display.

Figure 5 - Pocket GraphWorX Display with Forwarded Value