



# Installation Guide

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# System Requirements

This section describes the system requirements needed to install and run PANARAY.

## Minimum PC Configuration

<b>Operating System</b>	Microsoft Windows XP – Service Pack 3
<b>Application Framework</b>	Microsoft .Net Framework version 4.0 Full
<b>CPU</b>	Intel or AMD dual-core processor or Intel single-core processor with hyper-threading technology
<b>RAM</b>	2 Gb
<b>Available Disk Space</b>	100 Mb
<b>Display Resolution</b>	1280 X 1024
<b>Video Card</b>	Video card with support for DirectX 9
<b>Software</b>	Adobe Acrobat Reader – Version 9 Microsoft Excel – Version 2002 / Office XP / Office 10 Microsoft Windows Media Player – Version 10

## Recommended PC Configuration

<b>Operating System</b>	Microsoft Windows 7 – 64 bit
<b>Application Framework</b>	Microsoft .Net Framework version 4.0 Full
<b>CPU</b>	Intel or AMD dual-core processor
<b>RAM</b>	6 Gb
<b>Available Disk Space</b>	100 Mb
<b>Display Resolution</b>	1920 X 1200; multiple monitors are supported
<b>Video Card</b>	Video card with support for DirectX 10
<b>Software</b>	Adobe Acrobat Reader – Version 9 or later Microsoft Excel – Version 2002 / Office XP / Office 10 or later Microsoft Windows Media Player – Version 10 or later

## High-End PC Configuration

<b>Operating System</b>	Microsoft Windows 7 – 64 bit
<b>Application Framework</b>	Microsoft .Net Framework version 4.0 Full
<b>CPU</b>	Intel or AMD quad-core processor or greater
<b>RAM</b>	8 Gb or more
<b>Available Disk Space</b>	100 Mb
<b>Display Resolution</b>	2560 X 1600; multiple monitors are supported
<b>Video Card</b>	Video card with support for DirectX 11
<b>Software</b>	Adobe Acrobat Reader – Version 9 or later Microsoft Excel – Version 2002 / Office XP / Office 10 or later Microsoft Windows Media Player – Version 10 or later

If you have any questions regarding PANARAY system requirements, please contact Institutional Client Services at [support@williamoneil.com](mailto:support@williamoneil.com).

## Network Ports & Firewalls

PANARAY sends and receives financial data over the internet through TCP ports 80 and 8080. Sign-on and change password transactions are always transmitted via SSL using ports 443 and 8443.

The application can optionally be configured to send and receive all data through SSL using ports 443 and 8443. To use SSL for all transactions, see the SSL Settings section of this document after installing the application.

Personal firewall and filter programs such as the Windows® firewall, Norton™ Firewall (Internet Security), ZoneAlarm®, and Ad-Aware® may block PANARAY access to the Internet. To determine if your access is blocked by a personal firewall, try running PANARAY with the firewall disabled.

To add PANARAY to your firewall's exception list, please consult the help files or the manufacturer's manual for your personal firewall software.

## Directory & Registry Permissions

PANARAY requires read and write access to the following directories and registry entries on the client PC.

**Application Installation Directory** – The directory where the PANARAY application is installed must be readable and writable by the application. The installation directory is configurable during the installation process. The default locations are listed below.

**C:\Program Files (x86)\William O'Neil + Co\PANARAY\** – for 64 bit operating systems

**C:\Program Files\William O'Neil + Co\PANARAY\** – for 32 bit operating systems

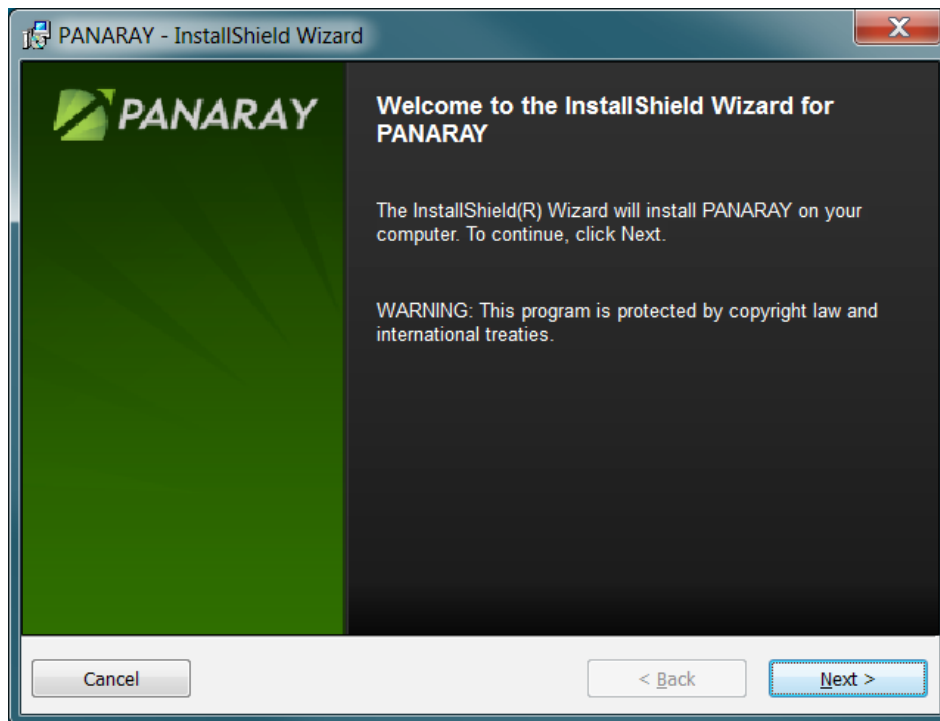
**Application Error Log Directory** – The application error log directory must be readable and writable by the PANARAY application. The error logs are located under the user’s directory.  
**C:\Users\[username]\AppData\Roaming\Panaray**

**Windows Registry** – PANARAY reads and writes the following Windows Registry locations.  
**HKEY\_CURRENT\_USER\Software\Panaray**

## Installation Procedure

This section describes the steps to install PANARAY on a client machine.

1. **Download PANARAY** – Download the PANARAY installation package from panaray.com:  
<http://www.panaray.com/downloads>
2. **Run the Installation Wizard** – Run the installation package executable file. The account used to run the installation must have the ability to write to the PC’s hard disk and modify registry entries. If prompted for administration privileges — please click Yes.



**Installation Password** – The installation process is password-protected. Please contact Institutional Client Services at [support@williamoneil.com](mailto:support@williamoneil.com) or (800) 419-6632 for the installation password.

**.NET Framework** – PANARAY requires Microsoft® .NET Framework version 4.0. This can add up to 10 minutes to the installation time.

**License Agreement** – Please read the license agreement and acknowledge your acceptance of the license terms by selecting the “I accept the terms in the license agreement” checkbox.

**Destination Folder** – The program installs to the C:\Program Files (x86)\William O’Neil + Co\ PANARAY\ folder by default. You can change the install folder by clicking the Change button.

**Installation Confirmation** – When the install process completes successfully, you will see the confirmation screen. Select the Launch PANARAY checkbox and click the Finish button.

- 3. Run PANARAY** – When the application starts, you will be prompted to enter your email address and password (see below). The email address and password for your account must be set up before you log in for the first time. Your email address and initial password will be sent to you via a PANARAY welcome email. If you have trouble accessing your PANARAY account, please contact Institutional Client Services at (800) 419-6632 or support@williamoneil.com.



**PANARAY**  
Version 1.0.1

Email   Remember

Password

Workspace **Default** ▼

Advanced Options

**SIGN IN**

# Application Configuration

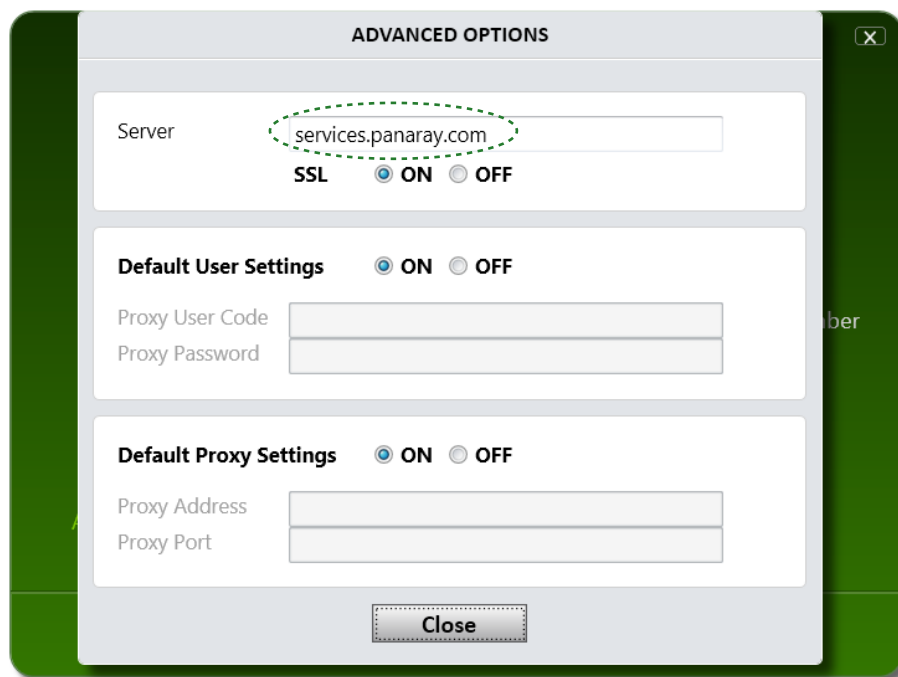
## SSL Settings

Secure Sockets Layer (SSL) is a protocol developed for transmitting private information via the internet. SSL works by using a private key to encrypt data that is transferred over the SSL connection. In PANARAY, SSL uses different TCP ports to transmit data. Depending on your network setup, you may need to enable SSL in PANARAY to transmit and display data correctly.

By default, SSL is not used in PANARAY, except for sign-on and password update transactions which are always transmitted via SSL. You can enable SSL for all data transmission via the Advanced Options link on the PANARAY login screen.

To configure SSL in PANARAY:

1. **Start the application.** If you are already logged into PANARAY, you must exit and then restart the application in order to change the SSL setting.
2. **From the Login Screen,** click the Advanced Options link.



3. **The SSL on/off setting is located under the Server address field.** Set this field as needed.
4. **Click the Close button in the Advanced Options rollover.** The application is now configured to use the selected SSL settings.

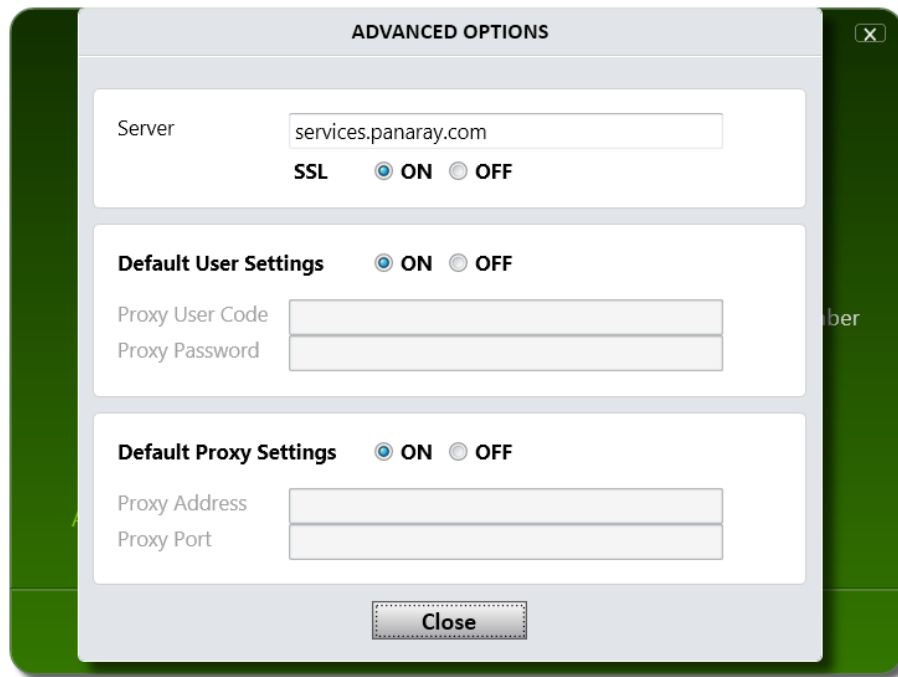
## Proxy Settings

In network environments that use a proxy server, PANARAY can automatically detect and use the PC's default Proxy Setting to communicate over the internet. In certain cases, however, the user will need to override the default proxy settings for PANARAY.

The Proxy Settings are configured via the Advanced Options link on the PANARAY login screen.

To configure the proxy setting in PANARAY:

1. **Start the application.** If you are already logged into PANARAY, you must exit and then restart the application in order to change the Proxy Settings.
2. **From the Login Screen,** click the Advanced Options link.



The screenshot shows a dialog box titled "ADVANCED OPTIONS" with a close button in the top right corner. The dialog is divided into three main sections:

- Server:** A text input field containing "services.panaray.com". Below it, the "SSL" option is set to "ON" (indicated by a selected radio button).
- Default User Settings:** This section has a radio button set to "ON". It contains two text input fields: "Proxy User Code" and "Proxy Password".
- Default Proxy Settings:** This section has a radio button set to "ON". It contains two text input fields: "Proxy Address" and "Proxy Port".

At the bottom center of the dialog is a "Close" button.

3. **The Proxy Settings are organized into two separate sections:**

**Default Proxy User Settings** – This control enables the user to override the default Proxy Username and Password. The default for this field is ON, which means that the application will use the Windows default Proxy Username and Password. By setting this field to OFF, the user can force PANARAY to access the internet using the Proxy User Code and Proxy Password provided in this section.

**Default Proxy Server Settings** – This section enables the user to override the default Proxy Server and Port Number. The default for this field is ON, which means that the application will use the default Proxy Server configured in the OS network settings. By setting this field to OFF, the user can force PANARAY to access the internet using the Proxy Server and Port Number provided in this section.

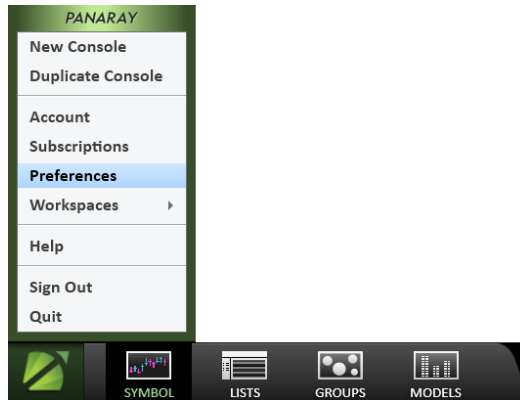
4. **Click the Close button in the Advanced Options rollover.** The application is now configured to use the selected Proxy Settings.

# Quote Service Settings

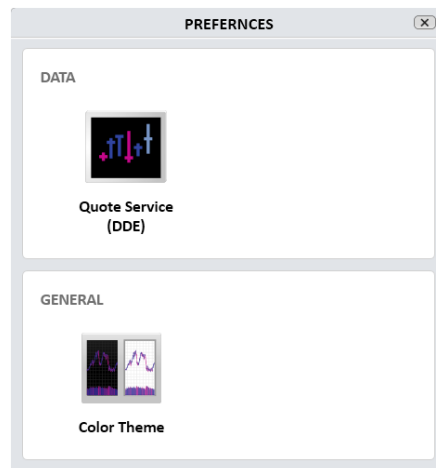
PANARAY has the ability to integrate with a Quote Service provider via a Dynamic Data Exchange (DDE) connection. This feature enables real-time price and volume data from a Quote Service provider application to be displayed on the PANARAY Datagraph. The settings for Quote Server are configured within the Preferences screen once the user is logged into PANARAY.

To configure the Quote Service Provider:

1. **Start and sign in to the PANARAY application.**
2. **From the PANARAY Application Menu, select Preferences.**

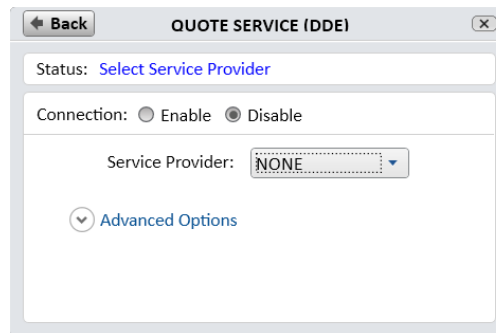


3. **From the Preferences dialog box, select Quote Service (DDE).**

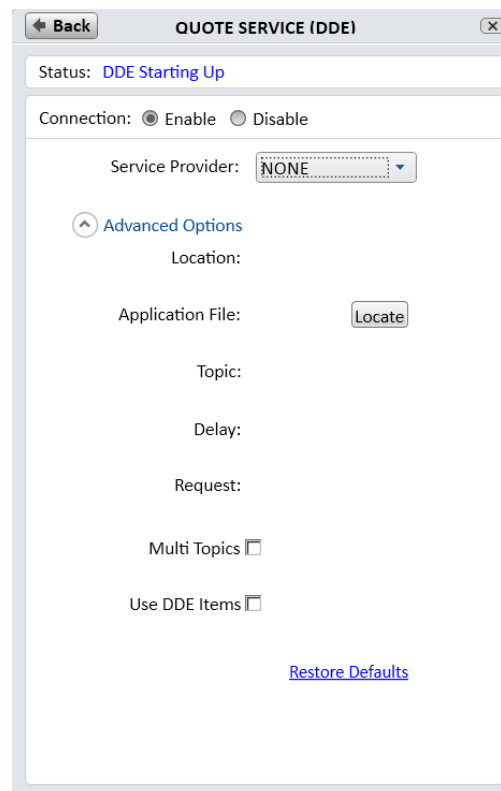




4. **From the Quote Service (DDE) dialog box**, select your Quote Service provider from the service provider drop down list.



5. **There are default settings for each provider that will work in most situations.** The Advanced Options menu enables you to configure the location of the Quote Service Provider app and change the DDE parameters.



6. **To enable the Quote Service Provider**, select the Enable radio button for the Connection field. The status of the connection is displayed at the top of the dialog box. The status of a working connection will display as "Connected" in green text to indicate that the connection is present and able to receive quote data.

For questions, contact Institutional Client Services at [support@williamoneil.com](mailto:support@williamoneil.com) or call 800.419.6632.