

# **T7<sup>®</sup> PrecISE Intallation & Technical Guide**

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## Abstract

*This document provides technical information about the PrecISE Trade software and is intended to assist in the support of the PrecISE Trade application.*

*This version also is applicable for Member Simulation.*

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# 1. PrecISE Trade Introduction

This document describes how to download, install, and configure PrecISE to work on the T7® production platform.

## 1.1 Technical Requirements

To use the T7 test and production platform, members must meet the technical requirements described in **Section 2: PrecISE Technical Requirements** on **page 6**.

PrecISE users must upgrade to the Microsoft .NET 4.0 Framework, as described in **Section 3: Downloading and Installing Microsoft's .NET Framework Software** on **page 8**.

For report FTP connectivity information, refer to the **Member Reports Guide**. The **Member Connectivity Guide** also has information about PrecISE and member reports FTP connections.

All documents are available on the Members Area site (<https://members.ise.com>).

## 1.2 Support

If you encounter problems or have questions, please contact the Technology Member Services team at [tms@ise.com](mailto:tms@ise.com) or call (212) 897-0244.

## 2. PrecISE Technical Requirements

This chapter is intended to provide technical information about the PrecISE Trade application.

The International Securities Exchange has developed a Front End trading application known as PrecISE Trade which provides for the online trading of options and stock-option combinations. The application is installed on the trader's PC and connects to servers at the ISE.

### 2.1 Configuration Overview

PrecISE Trade is a Microsoft .Net application that is installed on the traders PC. When started, the user enters a UserID, Password and server network address. The application will connect to the specified server at the ISE. Trading commands result in messages being sent to the ISE server to perform the requested action. Messages are sent back to the application to update the status of orders and trades. The application is constantly communicating to the ISE server to obtain market data updates for the options that are currently on display.

PrecISE Trade does not store any trading information on the local PC. The only locally saved information are log files that record all trading related messages sent and received.

### 2.2 Supported Platforms

PrecISE Trade requires the following:

- Operating System:
  - Windows XP, Vista, and Windows 7
  - Microsoft Framework .NET v4.0 – PrecISE is built on Microsoft's .NET framework. For additional information see Microsoft's website
- Minimum Hardware Requirements:
  - 1 GHz PIII
  - 60 MB Hard Disk Drive space
  - 512 MB RAM
- Application:
  - 100 MB memory
  - 60 MB of disk storage, 15MB for application and 45MB for log files
  - Will poll for market data updates twice per second and will use approximately 30 kbps per user.

### 2.3 Network Details

There are three methods to establish network connectivity to the ISE server.

- Dedicated line – The trader installs a dedicated line to the ISE.
- Internet Connection – A connection to the ISE using an Internet connection.

Connectivity is initiated by the trader. ISE never attempts to connect to the workstation. The Trader must have a public IP address when connecting to the ISE. The IP address does not need to be unique. The application will poll for updates twice per second. The normal data rate is 30kbps per user. The application secures information over the network using SSL (port 443) and is compressed using GZIP compression.

No data is broadcast into the member's network. The ISE server will only respond to a poll or transaction initiated by the front end application. The server will only send data that changes for the options that are being watched.

## 2.4 Security

Each trader must enter a unique UserID and Password. The Password must conform to standard "strong" security guidelines with a minimum length and the requirement to change it every 30 days. The password will not be remembered by the application.

The application requires two factor identification. The first is the UserID and strong password, the second is a known network address.

The network connection is secured by 256-bit SSL. Each PrecISE trade server has a digital certificate that is issued by VeriSign. The keys are exchanged upon session initiation and must be valid for the session to continue.

There is no confidential data stored on the PC other than that in the trace logs.

There is no inactivity timeout as many traders use the application to monitor prices.

The application uses a proprietary protocol. There is no file transfer. It is not susceptible to viruses.

### 3. Downloading and Installing Microsoft's .NET Framework Software

PrecISE is built on Microsoft's .NET Framework. Users must have this framework software installed to properly run PrecISE.

The latest version of PrecISE is developed using Microsoft's .NET Framework version 4.0. The Microsoft .NET Framework version 4.0 (x86) redistributable package installs the .NET Framework runtime and associated files required to run applications developed to target the .NET Framework v4.0.

To verify the current Microsoft .NET version installed on the computer, locate this folder:

- If using a 64 bit machine, C:\WINDOWS\microsoft.net\Framework64\v4.0
- If using a 32 bit machine, C:\WINDOWS\microsoft.net\Framework\v4.0

If there is no folder named v4.0, it will be necessary to upgrade. Please refer to Microsoft's Download center. Look for the following package:

**Microsoft .NET Framework Version 4.0 Redistributable Package (x86)**

<http://www.microsoft.com/en-us/download/details.aspx?id=17718>



## 4. PrecISE Connectivity

Users should contact their network administrators to ensure proper connectivity is in place before attempting to connect to the ISE via PrecISE.

### 4.1 Production Connections

To connect to the ISE via PrecISE there are several points of access. Refer to the table below for your preferred or required connectivity option.

**Table 1: Production Connections**

Connection Description	T7 IP
Production access via direct lines or service providers such as Savvis	207.231.197.37
Production access via the internet	precise.iseoptions.com 74.120.84.118 – ISE Primary Site (Equinix-Preferred Path) 74.120.84.250 – ISE Disaster Recovery Site

### 4.2 Member Test Connections

Please refer to the table below to connect to the ISE member test environments with PrecISE.

**Table 2: Member Test Connections**

Connection Description	T7 IP
Member Test 1 Environment access via direct lines or service providers such as Savvis	207.231.198.17
Member Test 2 Environment access via direct lines or service providers such as Savvis	207.231.198.18
Member Test 1 Environment access via the internet	74.120.84.92
Member Test 2 Environment access via the internet	74.120.84.91

### 4.3 Network Checks For Proper Connectivity

There are several network checks to confirm connectivity to the PrecISE host.

#### 4.3.1 Ping

The first network connectivity test is to ping the selected PrecISE Host IP address.

To ping a PrecISE IP address, follow these steps:

1. Click the Windows Start button on the lower left corner of your computer screen. The Start menu appears.
2. On the Start menu, select Program, then Accessories, then Command Prompt. The Command Prompt will appear.

3. At the blinking prompt type: *ping servername* where *servername* is the URL or IP address to ping. Press the Enter key. The Command Prompt will ping the IP address four times and display results before returning to a blinking cursor.
4. Type exit then press Enter in the Command Prompt to close it.

### 4.3.2 Telnet

A second network connectivity test is to open a telnet session to the selected PrecISE Host IP address with port 443.

To telnet to the PrecISE host with an IP address, follow these steps:

1. Click the Windows Start button on the lower left corner of your computer screen. The Start menu appears.
2. Select Program, then Accessories, then Command Prompt. The Command Prompt will appear.
3. At the blinking prompt type: *telnet servername 443* where *servername* is the URL or IP address to connect with telnet and *443* is the port address. Press the Enter key. The Command Prompt will open a telnet session, a black screen with a single blinking cursor.
4. Type q or quit or close to end the telnet session.
5. Type exit then press Enter in the Command Prompt to close it.

### 4.3.3 Proxy Settings

Connection to the PrecISE Host might be subject to Proxy settings at member's site.

Member firms may be required to adjust their proxy server/firewall configuration to allow connectivity with the PrecISE host. Member firms may also choose to re-configure proxy settings on their local workstations or change the global proxy configuration script to allow PrecISE Trade to bypass a proxy server and connect to the PrecISE host directly.

To summarize, there are four options to allow PrecISE software to connect to the PrecISE host:

- Proxy/Firewall server configuration
- Global Proxy Configuration Script
- Local Workstation Configuration
- PrecISE Supported Configuration

Coming soon, the ISE will support a connectivity tool to help verify your proxy settings.

#### 4.3.3.1 Network / Firewall Configuration

This option is recommended if your company has a policy in place to direct workstation's internet traffic to a specific proxy server or a firewall. Your company network administrators should contact the ISE networks department and configure the proper firewall or proxy server settings to allow PrecISE traffic through.

#### 4.3.3.2 Configuration Script

This option is available if your company controls workstation's proxy settings by an automated proxy script. The script will have to be altered to allow PrecISE traffic to bypass your proxy server and reach PrecISE host directly. Contact your network and or systems administrator for assistance.

#### 4.3.3.3 Local Workstation Configuration

If the previous two options do not apply and you still need to by-pass proxy, your system administrator can configure your workstation, by following the steps below....

1. Click Start / Control Panel / Internet Options or open an internet browser window and select Tools / Internet Options

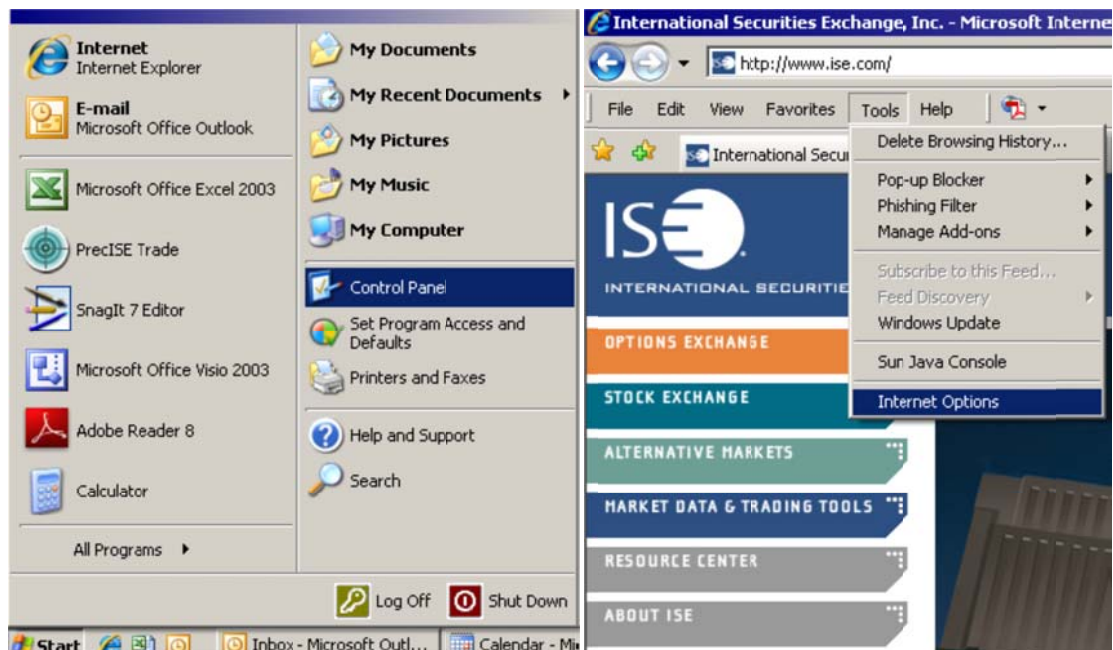


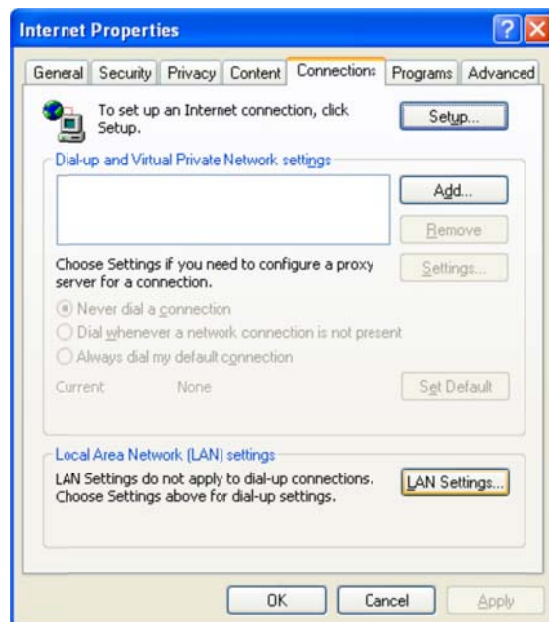
Figure 1: Accessing Internet Options

2. Click the Connections tab in the internet Properties window



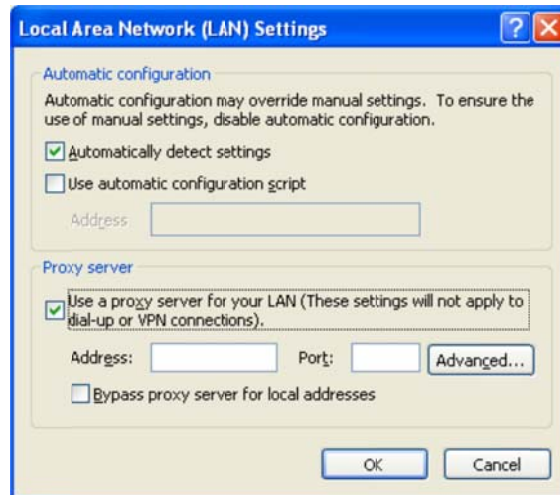
**Figure 2: Internet Properties Window**

3. Click the LAN Settings button



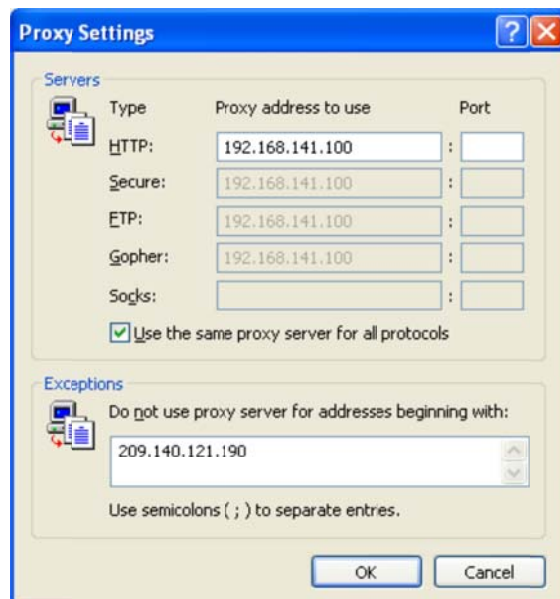
**Figure 3: Internet Properties Window / Connections Tab / LAN Settings**

- Click the Advanced button



**Figure 4: Local Area Network (LAN) Settings Window**

- Add the PrecISE Host IP Address to the text box in the "Exceptions" section. Click "OK" button. Try to login to PrecISE again.



**Figure 5: Proxy Settings Window**

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**NOTE:** In the Exceptions text box, type the T7 test and/or production IP addresses if appropriate. These additional IP addresses are listed in **Section 4.2: Member Test Connections** on **page 9**.

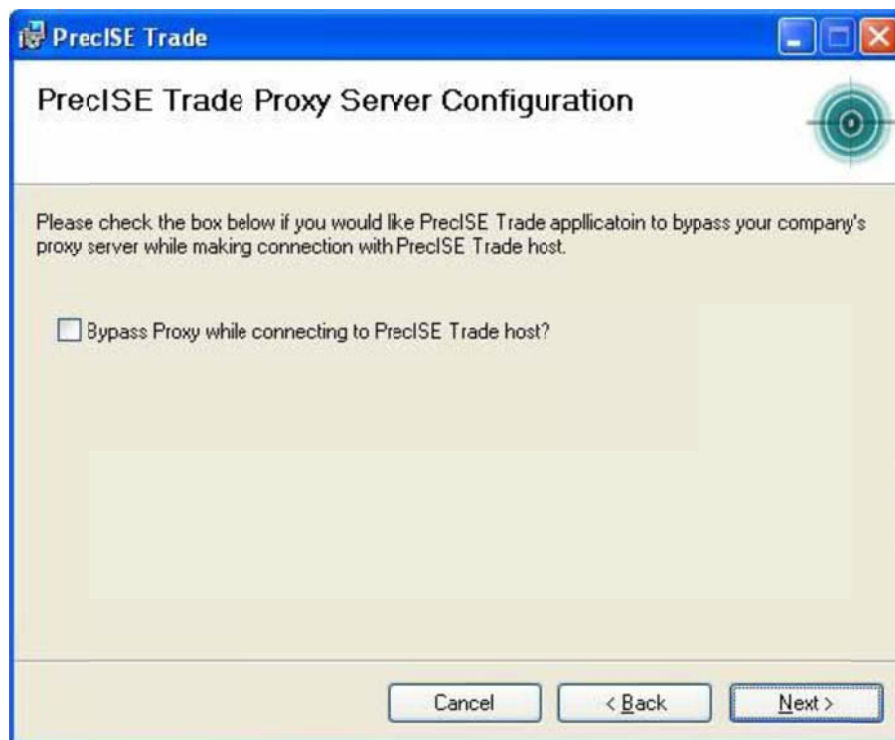
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#### 4.3.3.4 PrecISE Supported Configuration

It is recommended users apply the previous suggested options, however PrecISE does offer a limited solution as an option for users to by-pass their proxy settings.

The new **Full Download or Stand Alone** version of the software now provides support on an application level. Beginning with Release 2.1.1.; there is an option to Bypass Proxy during the installation process as shown in the figure below.

If this option is selected the configuration is adjusted automatically to Bypass Proxy. Please consult your Network and Systems administrator for assistance.



**Figure 6: PrecISE Trade Proxy Server Configuration**

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**NOTES:**

- This option must be re-applied with each installation of a new Release.
  - This option is not available for the Smart Updater and only applies to the Full Download version of the PrecISE software.
  - If you have the Smart Updater version and you have made proxy setting adjustments, contact your system and or network administrator to re-apply those settings for any upgrade or downgrade.
-

## 4.4 Connectivity Issues

If you are experiencing connectivity problems follow the recommended solutions prescribed in this document.

Additional support can also be provided by sending the Itradebootstrapper log. The exact file is titled, "ISE.ITradebootstrapper\_month\_day.log" and can usually be located in the following installed directory: C:\program files\ise\precise.trade\logs. The user can also do a search for it.

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**NOTE:** if PrecISE has been installed in a different directory contact your systems administrator who did the PrecISE installation.

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## 5. Add / Remove Existing PrecISE Installations

If this is a first time installation you can skip this chapter.

For users with an existing PrecISE installation it is recommended you uninstall the current version for a clean upgrade.

You must be logged on as an administrator or a member of the Administrators group in order to complete this procedure. If your computer is connected to a network, network policy settings might also prevent you from completing this procedure.

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**NOTE:** Installing with the Smart Updater version of PrecISE includes the option to uninstall the software automatically without the steps below. Install again with the Smart Updater and select uninstall when you are presented with the option to install, overwrite the existing installation, or uninstall the PrecISE software.

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To add or remove an existing PrecISE installation, follow these steps:

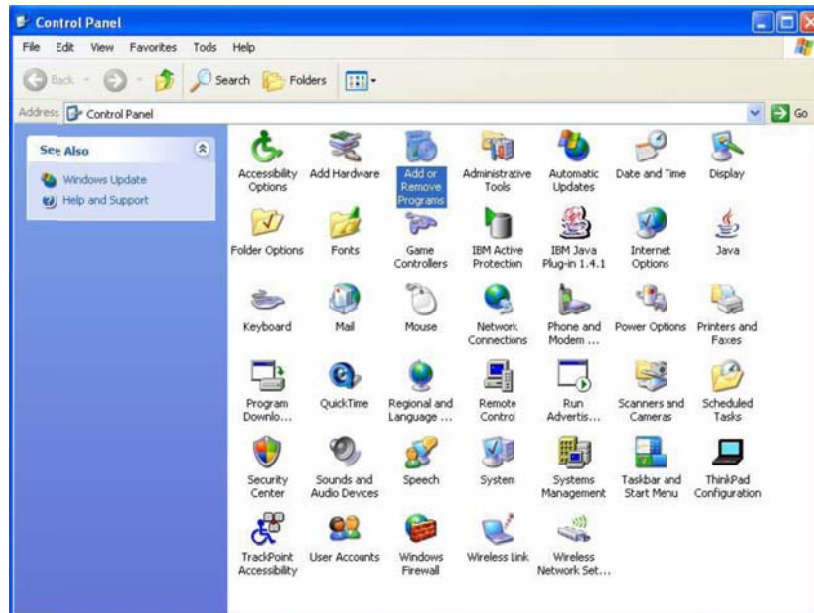
1. Click the Windows **Start** button and select **Control Panel**



**Figure 7: Start / Control Panel**

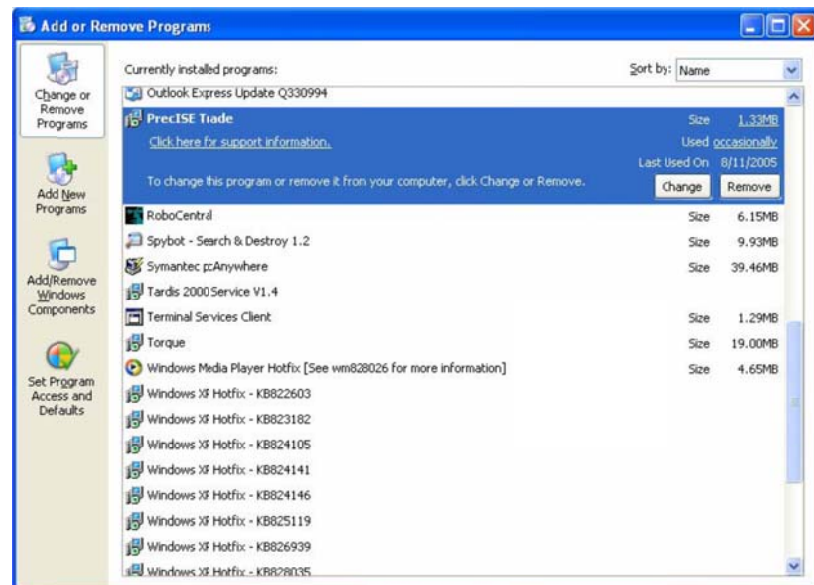


- When the Control Panel opens double click **Add or Remove Programs**



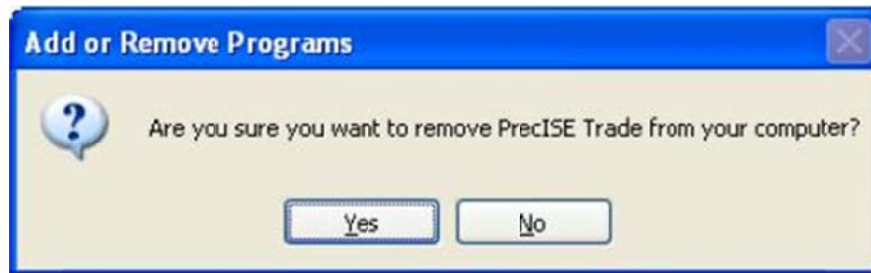
**Figure 8: Control Panel / Add or Remove Programs**

- The Add or Remove window will open. Scroll to PrecISE Trade and highlight by selecting. Then Click the Remove button.



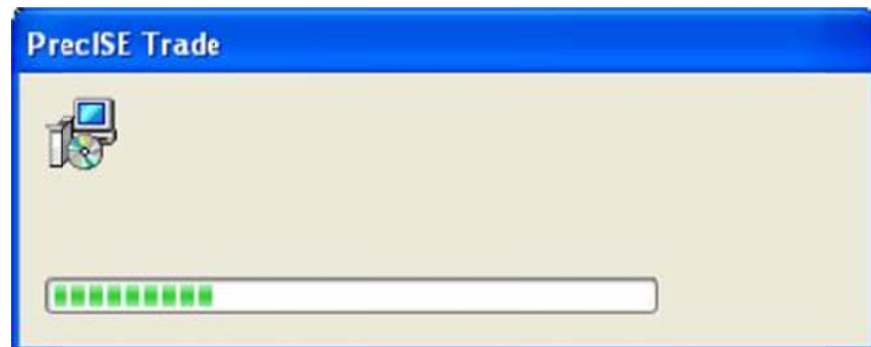
**Figure 9: Add or Remove Programs / Remove Button**

4. A prompt will follow confirming your selection to remove PrecISE Trade. Click **Yes** to confirm.



**Figure 10: Add or Remove Confirmation Prompt**

5. A prompt will pop up and indicate the removal status. Upon completion the PrecISE Trade program will be gone from the Add or Remove Window.



**Figure 11: Removal Status Prompt**

## 6. Downloading New PrecISE Software

New versions of PrecISE Trade are posted on the ISE member website as they become available. This section describes how to find then download the latest version of PrecISE.

To download new PrecISE software, follow these steps:

1. Navigate to the PrecISE Download area via the following link: <http://ise.com/login>

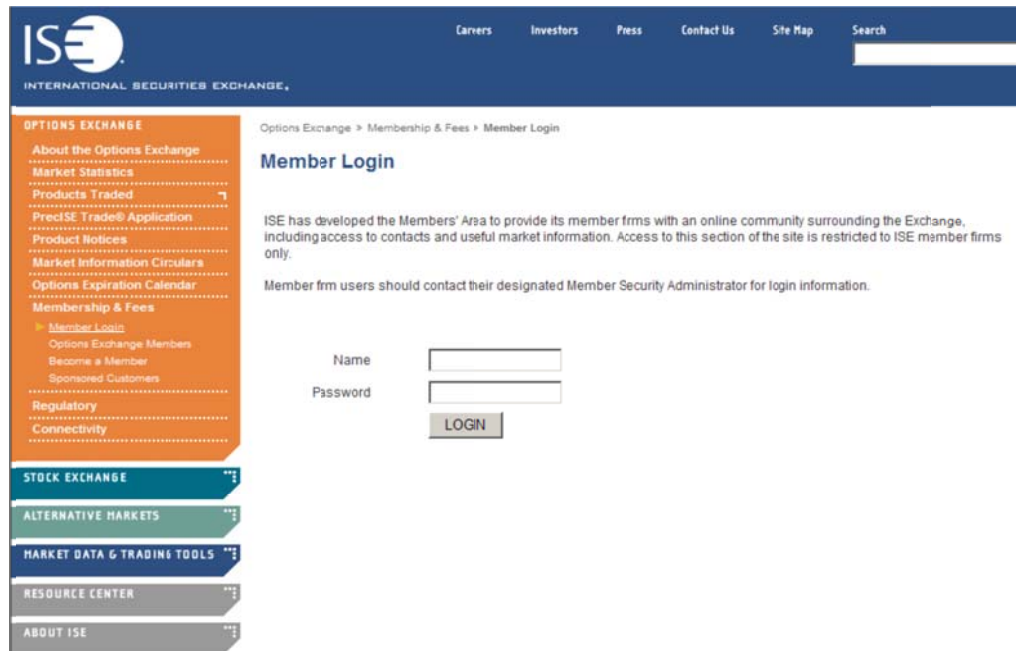


Figure 12: Member Login Website

2. login with the following credentials:

Name: precise

Password: precise

3. You may get a Security Information Alert, to accept click Yes

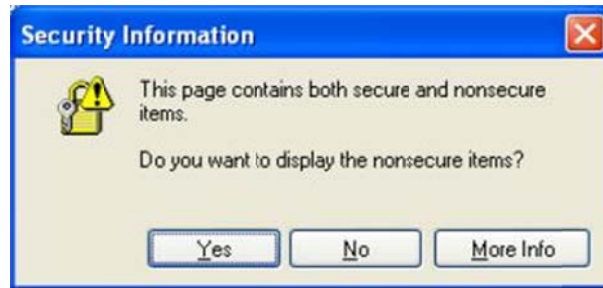


Figure 13: Security Information Alert Prompt

4. You will then be directed to the PrecISE download page.

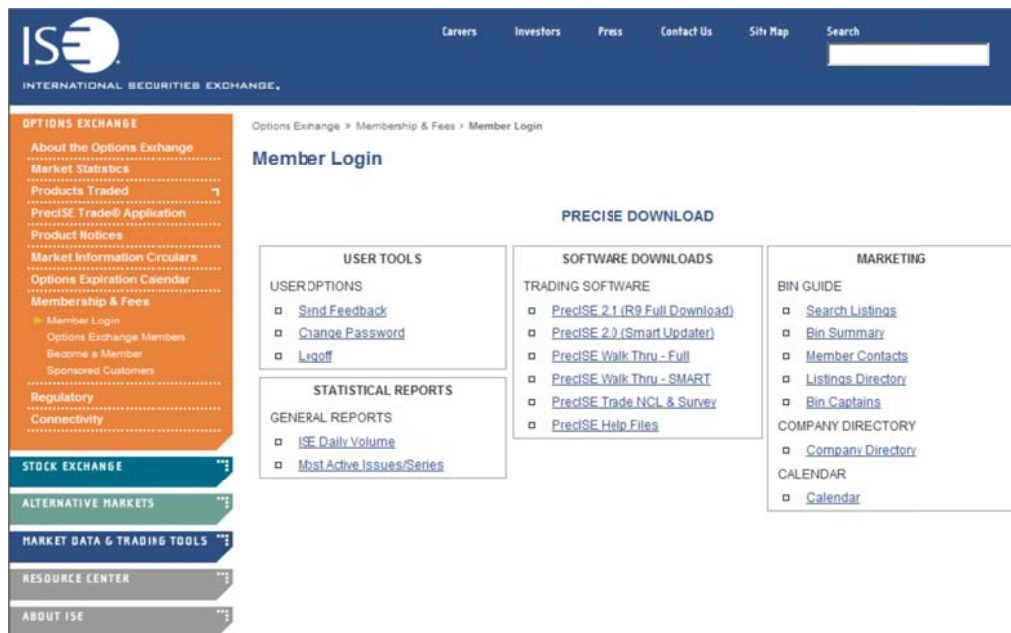


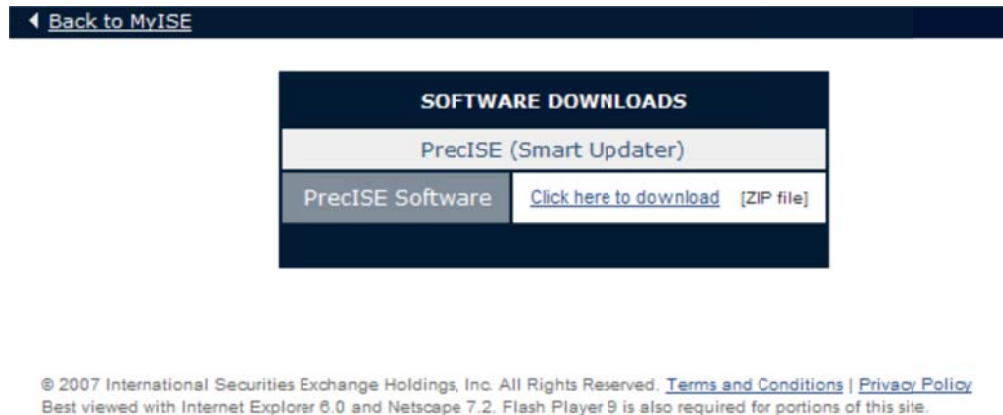
Figure 14: PrecISE Download Website

There are two download packages available.

- Smart Updater installation automatically receives updated software versions after installation is complete. Smart Updater also includes the option to uninstall the software automatically.  
**ISE strongly recommends members install the Smart Updater.**
- Full Download or Stand Alone version of the software does not automatically update.

Depending on your company policy, you should contact your systems administrator for the correct download package.

5. The software download page for the Smart Updater or the Full Download will open. Click the “Click here to download” link.



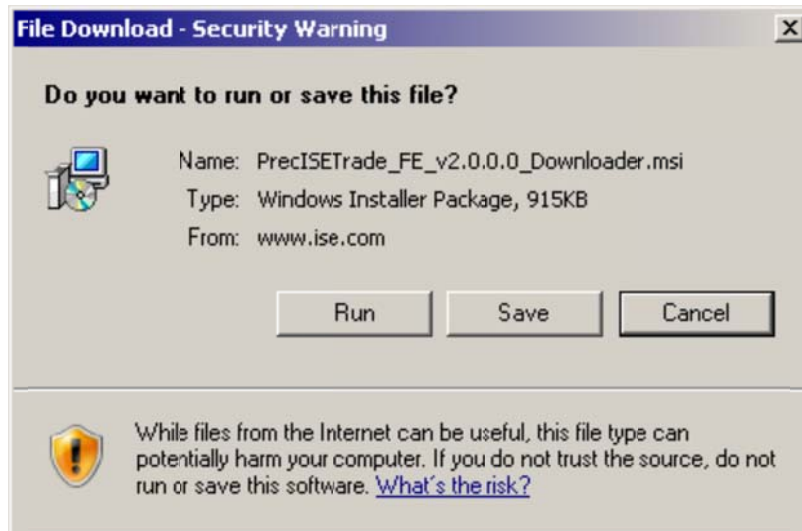
**Figure 15: PrecISE Download Link**

6. Depending on your browser security settings you may encounter a security prompt. To continue with the download click Close on the Information Bar pop up (1). Then click the Information Bar at the top of the page (2). Click Download File... (3).



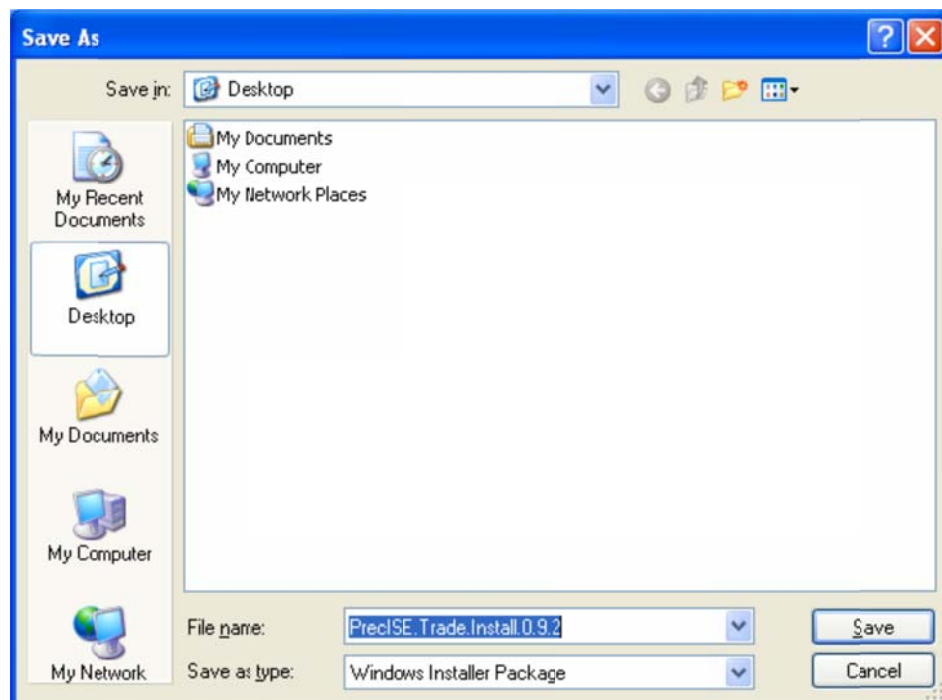
**Figure 16: Browser Security Settings**

7. The File Download window will open. Click Save button.



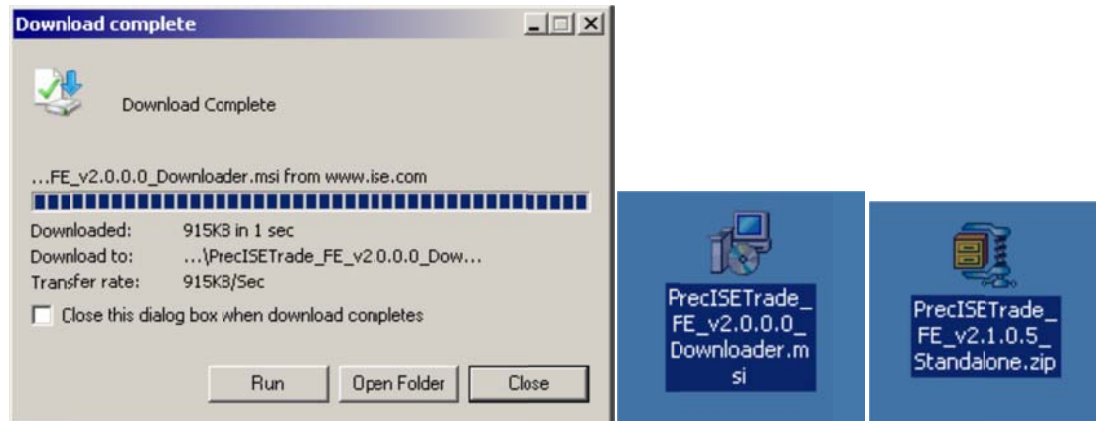
**Figure 17: Browser Security Settings**

8. The Save As window opens. Select the Desktop icon in the left panel. Then click the Save button.



**Figure 18: Save As window**

9. You will get a Download Complete prompt, click Close. The software install package will be saved to the Desktop and is now ready for installation.



**Figure 19: Download Complete**



## 7. Installing New PrecISE Software

Prerequisite is the download of the PrecISE Trade software. If this has not been completed please see **Chapter 6: Downloading New PrecISE Software** on **page 19**.

Locate the downloaded PrecISE software installation packages which will be in .zip file format. If you followed the download instructions in this guide, it will be located on your Desktop. If your systems administrator uses a different method for installation, you will need their assistance.

To install new PrecISE software, follow these steps:

1. Double click the downloaded install package to begin the installation. You will be prompted with the following Install window. Click Next to proceed.

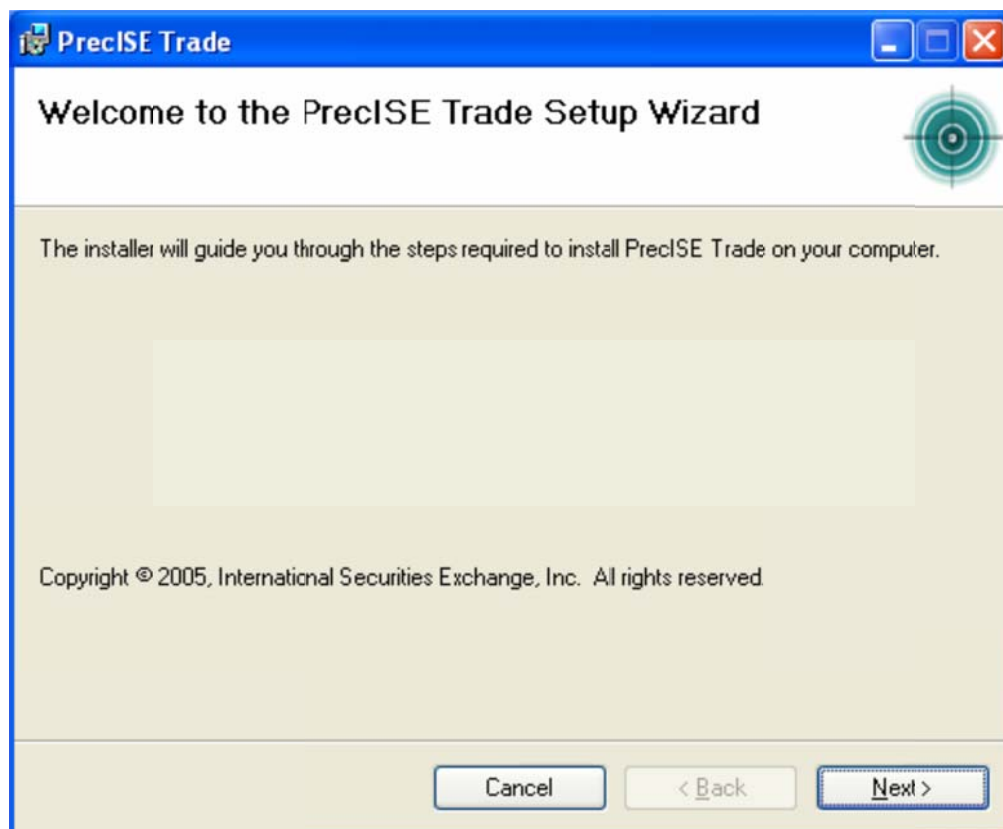
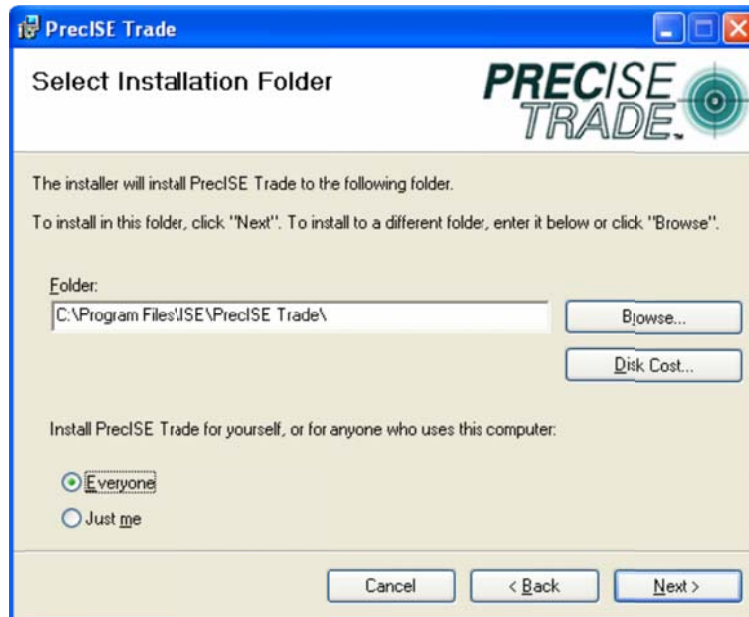


Figure 20: Installation Welcome Window

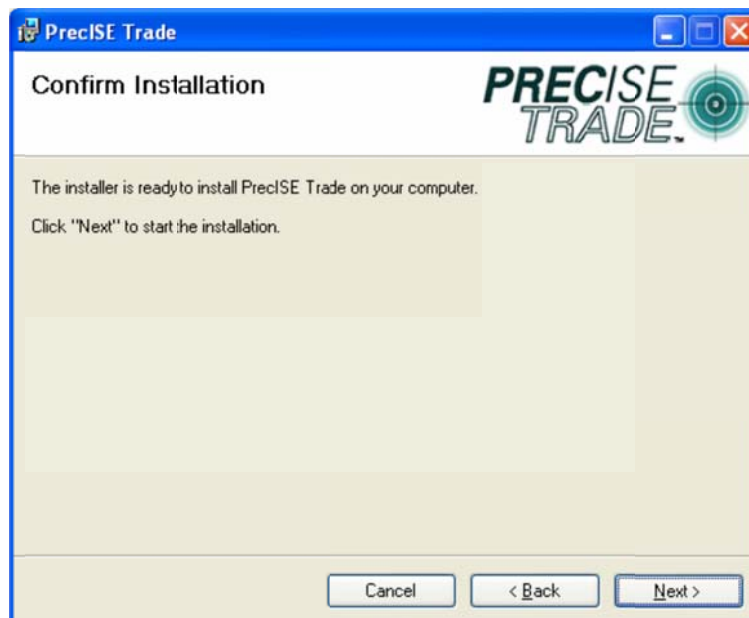


2. It is recommended you keep the default directory as suggested by the Installation Folder Window. Click Next to proceed.



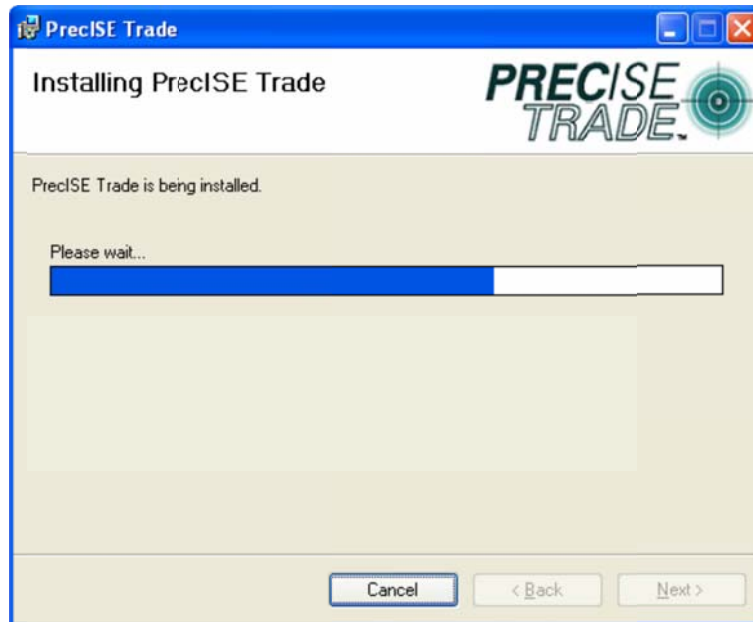
**Figure 21: Select Installation Folder**

3. A confirmation window will pop up, click Next button to continue.



**Figure 22: Confirm Installation Window**

4. You will get a progress window for the installation



**Figure 23: Installation Progress Window**

5. You will then receive a message that the installation is complete. Click Close, a shortcut to the application will be placed on the Desktop.

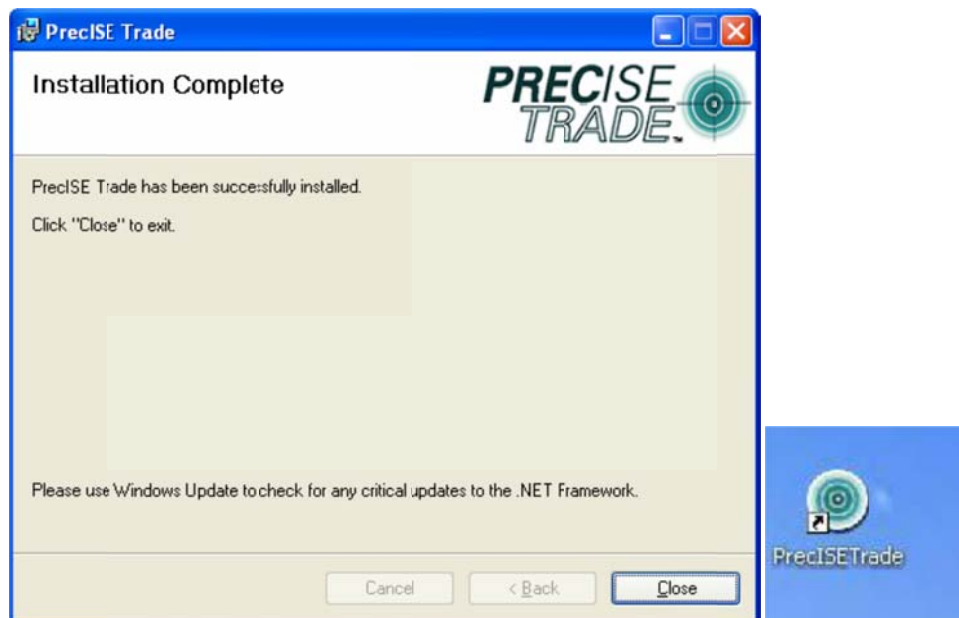


Figure 24: Installation Complete Prompt

## 7.1 Vista and Windows 7 Installation

### 7.1.1 Pre-requisite

Administrator access is Mandatory for installation on Windows Vista and Windows 7. The user must belong to the admin group or an actual administrator is standing-by to help.

### 7.1.2 Installation Instructions

1. Log onto Windows Vista or Windows 7 using administrator (or user in the admin group)
2. Download Precise from ISE website.
3. Unzip the downloaded zip file, and double-click on the resulting executable to initiate the installation process. Once installed, continue on to the following steps.
4. Installation folder's permission (default is C:\Program Files\ISE) must be set so the actual users of precise will have full rights to that folder.
5. If this is a smart-updater, admin user must start Precise for the first time to upgrade precise. ANY FUTURE UPDATES REQUIRE ADMIN USER TO RUN PRECISE TO UPGRADE IT FIRST.
6. Keep in mind, Precise logs are now under AppData folder, not application data folder as in windows XP. (Although vista still has the application data folder) Default folder path will be:

C:\Users\<user>\AppData\Roaming\ISE\PrecISETrade\logs\

### 7.1.3 Limitation

There is a known limitation regarding PrecISE Trade's logging reporting functionality. The automated Log Reporting is not currently supported under Windows Vista. In order to send log files to ISE, user will need to manually go into the directory mentioned in step 6 of the installation procedure, and email those logs to ISE.

## 8. Running The New PrecISE Software

After download and installation has been completed you are now ready to run PrecISE Trade.

To run PrecISE software, follow these steps:

1. Locate the PrecISE shortcut and double click it to execute. The following login window will open.  
Enter your assigned User name and Password.



**Figure 25: PrecISE Trade Logon Screen: User Name & Password Tab**

2. Click the Host Settings tab. If you are connecting via a direct line or service provider, enter the following IP address: 209.140.121.190 in the Primary Host field.

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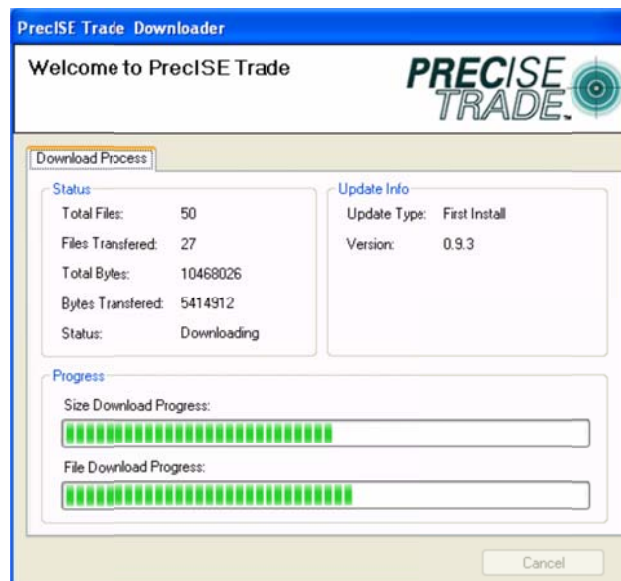
### NOTES:

- Do not enter a port number as it is not required. If you are connecting via the internet, you will use a different IP address: 64.95.40.50.
  - For T7 member testing and production, use the IP addresses listed in Section 4.2: Member Test Connections on page 9.
-



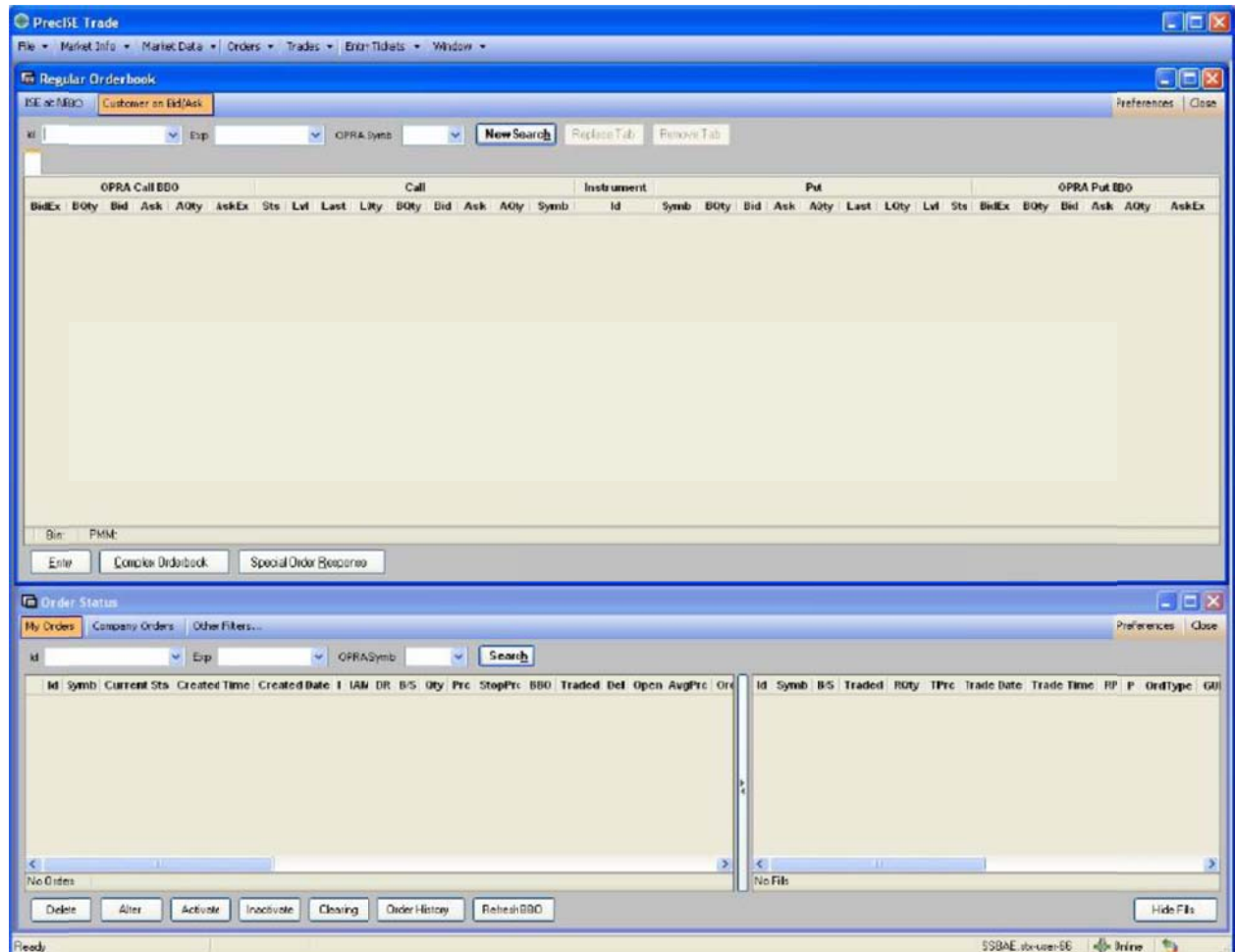
**Figure 26: PrecISE Trade Logon Screen: Host Settings Tab**

3. If you downloaded the Smart Updater package: the following downloader progress window pops up. Note: this only occurs on the first execution of a new installation. If you downloaded the Full Download package: PrecISE Trade Application will simply start.



**Figure 27: Smart Updater Download Progress Window**

4. PrecISE Trade application will load then start up.



**Figure 28: PrecISE Trade at Start Up**