InTouch™ Compact Edition

User's Guide

Invensys Systems, Inc.

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Welcome

The Wonderware Extensions for InTouch Compact Edition builds on existing InTouch™ functionality, allowing you to run versions of your InTouch applications on Wonderware Compact Panels.

This user's guide assumes that you are familiar with InTouch 10.0, including creating InTouch applications, using the ArchestrA Integrated Development Environment, and InTouch WindowMaker. For more information on using InTouch, see your InTouch documentation.

The *InTouch Compact Edition User's Guide* describes how to install the Wonderware Extensions for InTouch Compact Edition, create InTouch Compact Edition applications, validate, publish, and download applications to Wonderware Compact Panels, and run the applications on the panel. There is also information on how to install the InTouchCompactApp object. In addition, this guide describes the differences in features and operations between InTouch and InTouch Compact Edition applications as well as information on InTouch Compact Edition alarms and trends.

This guide is provided in PDF form and can be printed. Also, information included in this guide is provided in browser-based online help, which can be accessed from the InTouch HMI.

Documentation Conventions

This documentation uses the following conventions:

Convention	Used for
Initial Capitals	Paths and file names.
Bold	Menus, commands, dialog box names, and dialog box options.
`Monospace`	Code samples and display text.

Technical Support

Wonderware Technical Support offers a variety of support options to answer any questions on Wonderware products and their implementation.

Before you contact technical support, refer to the relevant section(s) in this guide for a possible solution to any problem you have with Wonderware Extensions for InTouch Compact Edition or InTouch Compact Edition. If you need to contact technical support for help, have the following information ready:

- The type and version of the operating system you are using.
- Details of how to recreate the problem.
- The exact wording of the error messages you saw.
- Any relevant output listing from the Log Viewer or any other diagnostic applications.
- Details of what you did to solve the problem(s) and your results.
- If known, the Wonderware Technical Support case number assigned to your problem, if this is an ongoing problem.

Chapter 1

Installing Wonderware Extensions for InTouch Compact Edition

This section shows you how to install Wonderware Extensions for InTouch Compact Edition on your InTouch computer. You also see how to add the InTouch Compact Edition application object to the ArchestrA Integrated Development Environment (IDE).

Before Installing Wonderware Extensions for InTouch Compact Edition

You install the Wonderware Extensions for InTouch Compact Edition on a computer that currently has InTouch version 10 and ArchestrA Integrated Development Environment version 3 installed.

You do not need to have a panel connected to this computer during the installation process, although you must have a panel connected when you download InTouch Compact Edition applications to a panel.

Before you start the installation, be sure that you can log on to the InTouch computer with a user ID that has administrative privileges.

Installing Wonderware Extensions for InTouch Compact Edition

The installation program copies the Wonderware Extensions for InTouch Compact Edition files to the computer and adds the features to InTouch. (You do not need to install InTouch Compact Edition on the panels as they are shipped with the software already installed.)

To install Wonderware Extensions for InTouch Compact Edition on your computer

1. Exit all unnecessary Windows programs; in particular, make sure that InTouch and other Wonderware software are not running.
2. Insert the InTouch Compact Edition CD into your CD-ROM drive.

   If you are installing the non-English version of Wonderware Extensions for InTouch Compact Edition, a **Welcome** dialog box appears with a language selection list. Select the language from the list and click **Next**.

Note If you install a different language version of Wonderware Extensions for InTouch Compact Edition than the language version of installed InTouch, you cannot install the Compact Edition Development component. You can only install the Compact Edition Download Utility and the PDF documentation in the selected language.

   The **Welcome** dialog box appears.

3. Click **Next**. The **License Agreement** dialog box appears.
4. Read and accept the license agreement, and then click **Next**. The **Select Features** dialog box appears.
5. Select one or more of the following features:
   - **Compact Edition Development** - installs all required software for InTouch and Application Server to develop an InTouch Compact Edition application.
   - **Compact Edition Download Utility** - a utility to download a published InTouch Compact Edition application to a device.
   - **PDF Documentation** - a set of PDF books describing InTouch Compact Edition.
6. Click **Next**. The **Ready to Install** dialog box appears.
7. Click **Next**. The installation program installs the software on the computer. This takes a few minutes. When the installation is finished, the **Successful Installation** dialog box appears.

8 Click **Finish**. (You do not have to reboot your computer after installing Wonderware Extensions for InTouch Compact Edition.)

If you install or reinstall InTouch or Application Server after installing Wonderware Extensions for InTouch Compact Edition, you must also reinstall the Wonderware Extensions for InTouch Compact Edition.

The InTouchCompactApp Object

The InTouchCompactApp object represents an InTouch Compact Edition application in the Wonderware Application Server environment. The InTouchCompactApp object manages the development and check-in of an InTouch Compact Edition application.

Overview

Use the InTouchCompactApp object to incorporate InTouch applications into an overall system defined by a Wonderware Galaxy. The Integrated Development Environment (IDE) manages:

- Development and check-in for multiple users.
- Application backup and restore.

You create an InTouch Compact Edition application by deriving a template object from the InTouchCompactApp base template. You can start a new application or create a copy of an existing application. Either way, opening an InTouchCompactApp object starts WindowMaker. There is no object editor for the InTouchCompactApp object.

For information on creating and downloading InTouch Compact Edition applications, see Developing an InTouch Compact Edition Application on page 15.

Importing the InTouchCompactApp Object

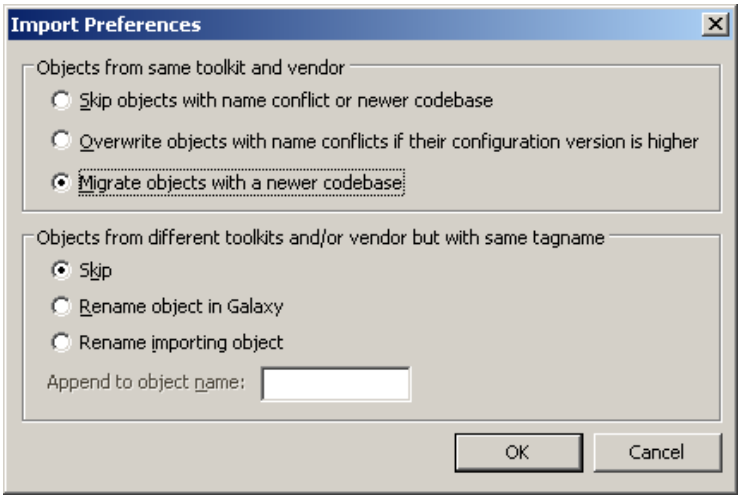
The InTouchCompactApp object is not installed in the ArchestrA IDE as part of the installation process for the Wonderware Extensions for InTouch Compact Edition. You must manually import the InTouchCompactApp object to the Galaxy that you are using.

To import the InTouchCompactApp object

1 Start the ArchestrA Integrated Development Environment.

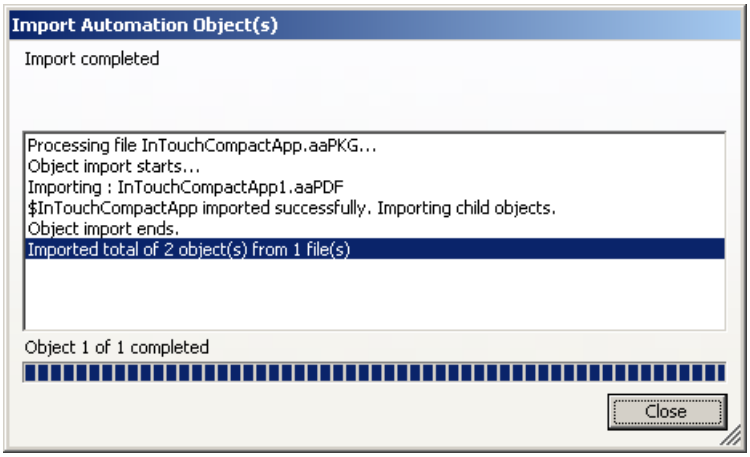
2 On the **Galaxy** menu, select **Import** and then **Object(s)**. The **Import Automation Object(s)** dialog box appears.

3 Select the **InTouchCompactApp.aaPKG** file in the Wonderware Application Server installation directory and click **Open**. The **Import Preferences** dialog box appears.



4 Click **OK**. The ArchestrA Integrated Development Environment imports the object. The **Import Automation Object(s)** dialog box shows the progress of the import process.

5 Click **Close** after the object is imported.



Using the InTouchCompactApp Object with Existing InTouch Applications

When you create an InTouchCompactApp object to manage an existing InTouch application, the InTouch application files are transferred to a file repository folder. The original InTouch application files are not modified or deleted.

You should not access files in the file repository directly or make assumptions about the file repository structure.

When you start WindowMaker from the IDE to make changes to the InTouch Compact Edition application, the original InTouch application is not changed.

After you create the InTouchCompactApp object, deleting the original InTouch application does not affect the InTouchCompactApp object's application.

If you delete an InTouchCompactApp object that represents an existing InTouch application, the application files are removed from the file repository folder, but the existing application is not affected.

For general information about objects, including relationships, see the *Wonderware Application Server User's Guide*.

Using the InTouchCompactApp Object with New InTouch Compact Edition Applications

When you create an InTouchCompactApp object for a new InTouch Compact Edition application, the IDE starts WindowMaker. You create an application the same way you would if WindowMaker had been started from the InTouch Application Manager.

InTouchCompactApp Object Rules

Some key aspects of an InTouchCompactApp object are:

- You cannot create InTouchCompactApp object instances from the InTouchCompactApp base template.
- You can derive only one level of an InTouchCompactApp object template from the base InTouchCompactApp template.
- You cannot derive an instance of the InTouchCompactApp object or derived template of InTouchCompactApp.
- InTouchCompactApp objects cannot host other objects.

Configuration

You edit the InTouchCompactApp object using WindowMaker.

For general information on objects, including relationships, see the *Wonderware Application Server User's Guide*.

Uninstalling Wonderware Extensions for InTouch Compact Edition

You can use the standard Add/Remove Programs feature from the Control Panel to remove Wonderware Extensions for InTouch Compact Edition. You can also use the InTouch Compact Edition CD to uninstall the software.

Uninstalling Wonderware Extensions for InTouch Compact Edition does not require you to reboot the computer after the uninstall is complete.

To uninstall Wonderware Extensions for InTouch Compact Edition

1. Insert the InTouch Compact Edition 10.0 CD into your CD-ROM drive.
2. The Application Maintenance dialog box appears. Select **Remove** and click **Next**.

   The uninstallation program uninstalls the Wonderware Extensions for InTouch Compact Edition software. This takes a few minutes. When the process is complete, the **Successful Uninstallation** dialog box appears.
3. Click **Finish**. You do not have to reboot your computer after uninstalling the software.

Chapter 2

Developing an InTouch Compact Edition Application

This section shows you how to develop an InTouch Compact Edition application using the ArchestrA **InTouchCompactApp** object template.

You can develop an InTouch Compact Edition application that resembles many of your InTouch applications and download it to the panel, or you can import an existing InTouch application and download it to the panel.

If you have the Wonderware InTouch HMI installed, you can create an application using the Application Manager. Starting with Wonderware InTouch version 10.0, you can also create an application using the ArchestrA IDE.

Working with an InTouch Compact Edition Application

The general process to create an InTouch Compact Edition application is:

1. Create a derived template from **InTouchCompactApp**.
2. Create a new application or import an existing InTouch application.
3. Validate the application to:
   - Check for compatibility of the application to run on panel.
   - Verify the validation report for errors and warnings.
4. Publish the application to generate an InTouch application that can be run on the Wonderware Compact Panel.
5. Download the generated application to the Wonderware Compact Panel.

Deriving a Template

The **InTouchCompactApp** template exists in the **Template Toolbox** within the ArchestrA Integrated Development Environment. You cannot create an instance from the base template, but you can derive a template from **InTouchCompactApp**.

To derive a template from the base template

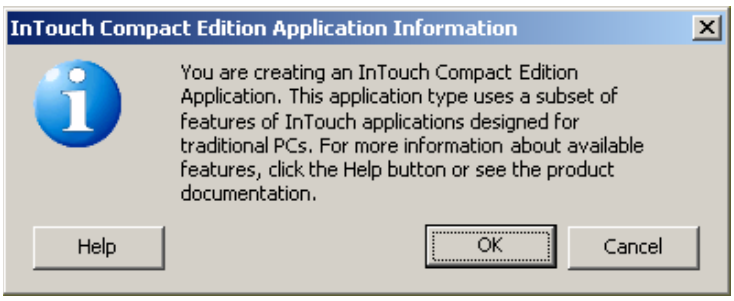
1. Select the base template to use as the parent template in the **Template Toolbox** or **Derivation** view.
2. On the **Galaxy** menu, click **New** and then click **Derived Template**. A derived template is created in the same toolset as its parent.

Creating an InTouch Compact Edition Application

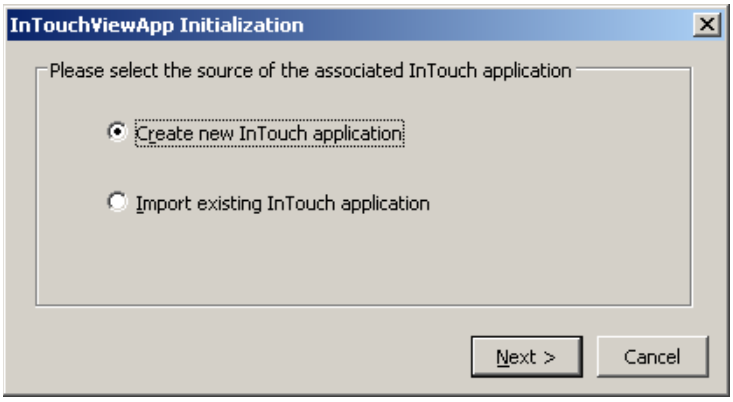
The first time you start WindowMaker for a derived **InTouchCompactApp** template, the software takes you through the creation/importation process.

To create an InTouch Compact Edition application

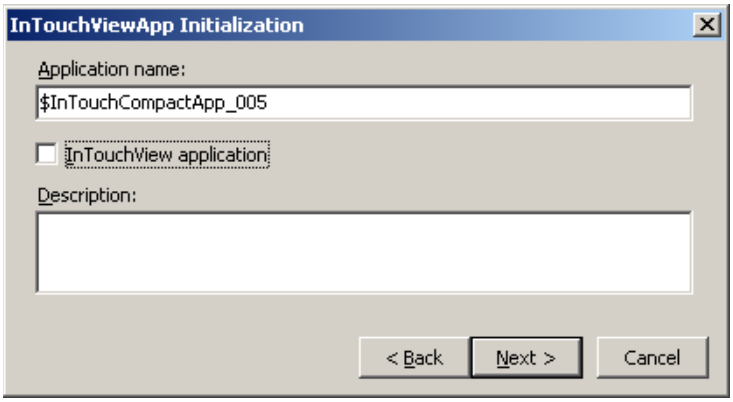
1. Double-click the derived template. The **InTouch Compact Edition Application Information** dialog box appears.



2. Click **OK**. The **InTouchViewApp Initialization** dialog box appears. The **Create new InTouch application** option is selected by default.



3. Click **Next**. The **InTouchViewApp Initialization** name dialog box appears.



4 In the **Application name** box, type a name for the application. In the **Description** box, type an optional description for the application. (Ignore the **InTouchView application** check box.)

5 Click **Next** to start WindowMaker.

6 Use WindowMaker to enter application information. When you are finished, exit WindowMaker.

If check-in comments are enabled in the ArchestrA Integrated Development Environment, a standard check-in dialog box appears.

7 Type an optional check-in comment and click **OK**. The **Check In** dialog box shows the progress of checking in the application.

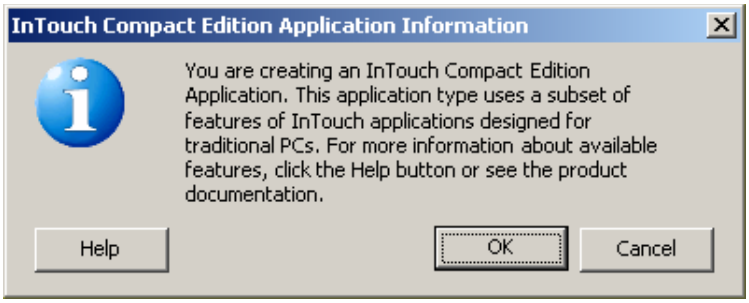
8 When the application has been checked in, click **Close**.

You can modify InTouch Compact Edition applications using WindowMaker the same was as any other InTouch application. For more information on creating InTouch applications, see the *InTouch HMI Application Management and Extension Guide* accompanying your InTouch software.

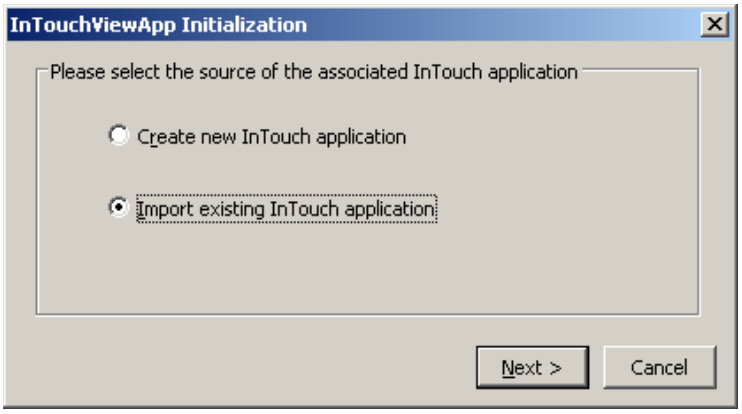
You can also create InTouch Compact Edition applications by importing existing InTouch applications.

To create an InTouch Compact Edition application by importing

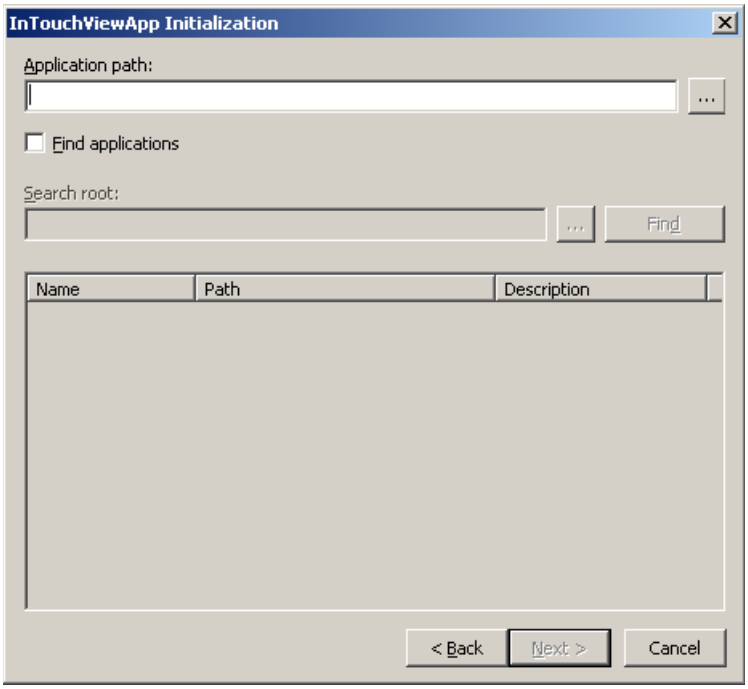
1 Double-click the template derived from the InTouch Compact Edition base template. The **InTouch Compact Edition Application Information** dialog box appears.



2 Click **OK**. The **InTouchViewApp Initialization** dialog box appears.

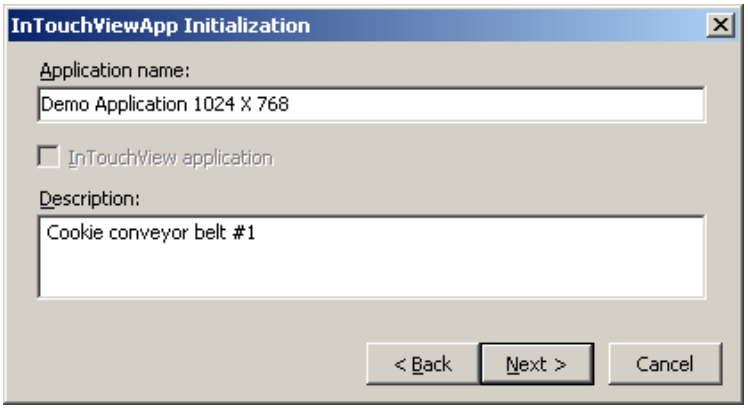


3 Select **Import existing InTouch application** and click **Next**. The **InTouchViewApp Initialization** path dialog box appears.



4 Type the path for the InTouch application you want to import. You can search for applications by checking the **Find applications** box, typing the search information in the **Search root** box, and clicking **Find**.

5 Select the application you want to import from the list and click **Next**. The **InTouchViewApp Initialization** name dialog box appears.



6 Change the application name and description as desired, and then click **Next**. The ArchestrA Integrated Development Environment imports the application.

7 Click **Next**. WindowMaker starts and opens the new InTouch Compact Edition application.

8 Configure the application and exit WindowMaker when you are finished. If check-in comments are enabled in the ArchestrA Integrated Development Environment, a standard check-in dialog box appears.

9 Type an optional check-in comment and click **OK**. The **Check In** dialog box shows the progress of checking in the application.

Note For a detailed list of the differences between InTouch and InTouch Compact Edition, see InTouch Compact Edition Supported Features on page 51.

Renaming an InTouch Compact Edition Application

You can rename an InTouch Compact Edition application without affecting the way it works.

To rename an InTouch Compact Edition application

1 In the ArchestrA IDE, select the InTouch Compact Edition application you want to rename.

2 On the **Edit** menu, click **Rename**.

3 Type the new application name and press **Enter**.

Deleting an InTouch Compact Edition Application

When you delete an InTouch Compact Edition application, you delete the derived application as well as the InTouchCompactApp object itself.

To delete an InTouch Compact Edition application

1. Select the InTouch Compact Edition application you want to delete.
2. On the **Edit** menu, click **Delete**.
3. Confirm the deletion.

Validating an InTouch Compact Edition Application

You validate the InTouch Compact Edition application to check for error conditions and verify that it runs properly on the panel. You can validate applications from InTouch WindowMaker or the ArchestrA IDE.

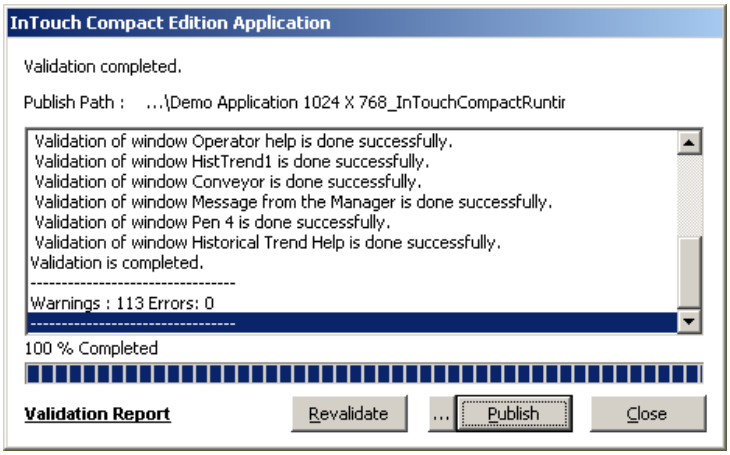
Note You must save any unsaved changes to the application before validating or revalidating it.

Validating Applications using InTouch WindowMaker

You can validate InTouch Compact Edition applications using InTouch WindowMaker.

To validate an application using InTouch WindowMaker

1. From the ArchestrA Integrated Development Environment, open the InTouch Compact Edition application.
2. On the **Special** menu in InTouch WindowMaker, point to **InTouch Compact Edition application**, then **Validate/Publish**. The **InTouch Compact Edition Application** screen appears.



3. When the validation process is complete, click **Validation Report** to show possible errors and warnings.

Note You can also find the validation report in the **InTouchcompactfiles** folder in the InTouch application folder.

VALIDATION REPORT

The following is a list of all messages that occurred during the validation process.
Warnings appear in orange and errors in red.

Validation Details:

Validation Time	1/4/2008 7:10:17 PM
Error / Warning(s)	0 Error(s), 113 Warning(s)
Supported Tag Count	28
Resolution	1024 X 768

Expand All | Hide All

VALIDATION Total:	0 Error(s)	113 Warning(s)
AccessLevel	0 Error(s)	2 Warning(s)
Tags	0 Error(s)	3 Warning(s)
Application Scripts	0 Error(s)	7 Warning(s)
Windows	0 Error(s)	101 Warning(s)

VALIDATION		
AccessLevel		
+ AccessLevel	0 Error(s)	2 Warning(s)
Tags		
+ Batch%Conc	0 Error(s)	1 Warning(s)
+ Pen04	0 Error(s)	1 Warning(s)

You can publish and download applications containing only warnings and run them on the panel. If an application contains errors, you must correct the errors before publishing and downloading the applications.

If the validation report contains warnings, the run-time behavior of the indicated object or animation may produce unexpected results. It is recommended to change the InTouch application in such a way that it uses only supported features, if possible.

For a detailed list of the differences between InTouch and InTouch Compact Edition, see InTouch Compact Edition Supported Features on page 51.

Validating an Application using the ArchestrA IDE

You can validate InTouch Compact Edition applications using the ArchestrA IDE.

To validate an InTouch Compact Edition application using the ArchestrA IDE

1. In the ArchestrA IDE, right-click the InTouch Compact Edition application you want to validate.
2. On the context menu, select **Validate / Publish Compact Edition Application**. The **InTouch Compact Edition Application** dialog box appears.
3. Continue with step 3 in Validating Applications using InTouch WindowMaker on page 22.

Revalidating InTouch Compact Edition Applications

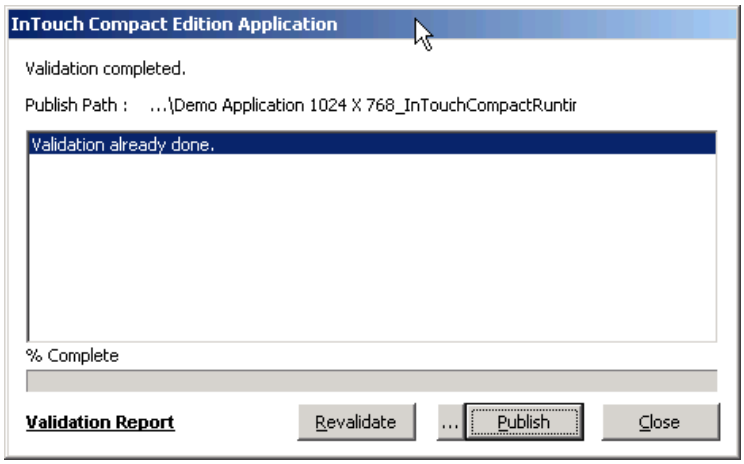
InTouch does not always recognize some of the changes you make to an InTouch Compact Edition application. In cases like this, you are not prompted to re-save the application after making changes. When you change an InTouch Compact Edition application, you need to revalidate the application before you can publish and download it.

In general, you need to revalidate the application whenever you modify the application, including the following:

- Changing information in the Tagname Dictionary
- Importing windows or tags from another application
- Adding, modifying, or deleting Access Names

To revalidate an InTouch Compact Edition application

1. Right-click the InTouch Compact Edition application you want to validate.
2. On the context menu, click **Validate / Publish Compact Edition Application**. The **InTouch Compact Edition Application** dialog box appears.



3. Click **Revalidate**. The ArchestrA Integrated Development Environment revalidates the application.

   When the revalidation process is complete, you can display the new validation report by clicking **Validation Report**.

Publishing an InTouch Compact Edition Application

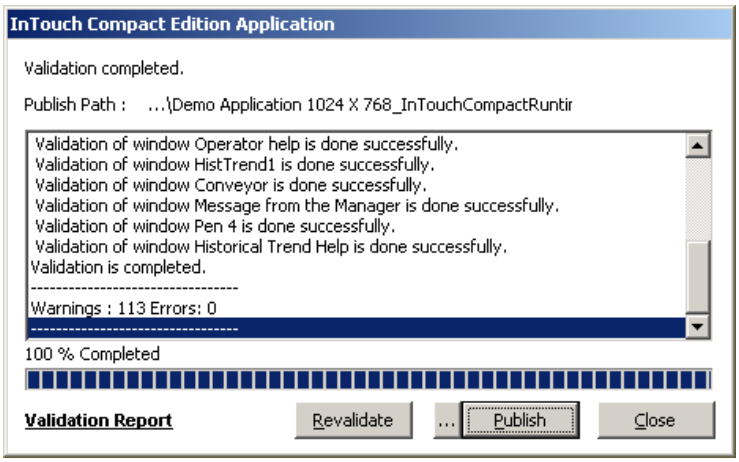
After you validate an InTouch Compact Edition application, you can publish the application, which converts an InTouch Compact Edition application to a format that can be downloaded to the Wonderware Compact Panel. You can publish applications from InTouch WindowMaker or the ArchestrA IDE.

Publishing Applications using InTouch WindowMaker

You can publish InTouch Compact Edition applications using InTouch WindowMaker.

To publish an application using InTouch WindowMaker

1. From the ArchestrA Integrated Development Environment, open the application you want to download in InTouch WindowMaker.
2. On the **Special** menu in InTouch WindowMaker, point to **InTouch Compact Edition application**, and then click **Validate/Publish**. The **InTouch Compact Edition Application** dialog box appears.



3. If you want to change the path of the published files, click the browse button and specify the path. The default path for publishing files to is the InTouch application folder with the name convention: *applicationname*_InTouchCompactRuntime
4. Click **Publish**.

Publishing an Application using the ArchestrA IDE

You can publish InTouch Compact Edition applications using the ArchestrA IDE.

To publish an InTouch Compact Edition application

1. In the Archestra IDE, right-click the validated InTouch Compact Edition application you want to publish.
2. Select **Validate/Publish Compact Edition Application** from the menu. The **InTouch Compact Edition Application** screen appears.
3. Continue with step 3 in Validating Applications using InTouch WindowMaker on page 22.

Downloading InTouch Compact Edition Applications to the Panel

After you create or import your applications on your desktop, you download InTouch Compact Edition applications from the desktop computer to your panel.

You can download InTouch Compact Edition applications with the InTouch Compact Edition download utility.

The InTouch Compact Edition download utility can be started from the following places:

- ArchestrA Integrated Development Environment
- **Start** menu
- InTouch WindowMaker

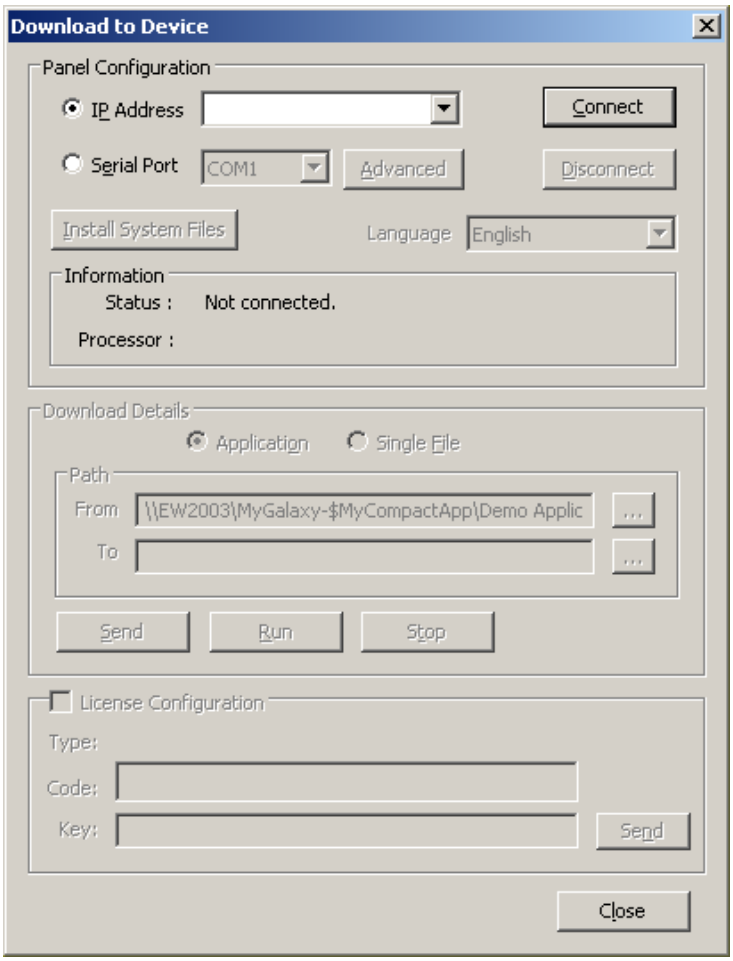
You can use your computer's serial port to connect to your Panel.

Downloading an Application Using the ArchestrA Integrated Development Environment

You can download InTouch Compact Edition applications using the ArchestrA Integrated Development Environment. You can use this method to download an application that has already been published in the ArchestrA Integrated Development Environment.

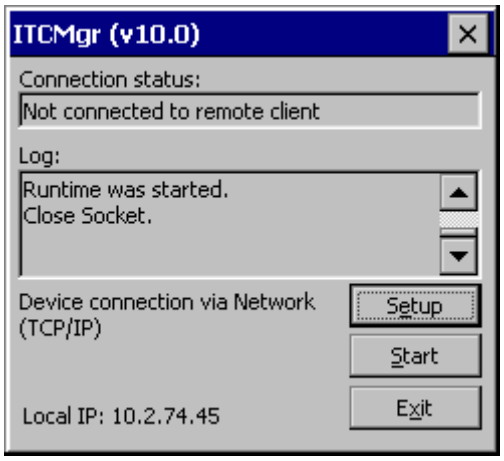
To download an application using the ArchestrA Integrated Development Environment

1. From the ArchestrA Integrated Development Environment, right-click the application you want to download.
2. Select **Download Compact Edition Application** from the context menu. The **Download to Device** dialog box appears.



3 Do one of the following:
   - Using Windows Explorer, go to the \InTouchCompact folder in the storage card and start **ITCMgr.exe**.
   - Double-click the ITCMgr.exe shortcut on the panel desktop.

   The **ITCMgr** dialog box appears on the panel.



4 Depending on how you have the panel connected to your desktop computer, do one of the following:
   - For an Ethernet connection, enter the IP address appearing on the **ITCMgr** dialog box in the **IP address** box on the **Download to Device** dialog box.
   - For a serial connection, select the COM port in the **Serial Port** list. Click **Advanced** if you also need to adjust the baud, RTS, or CTS for the serial connection.

5 On the **Download to Device** dialog box, click **Connect**. The download utility establishes a connection to the panel.

6 If required, in the **From** box, type the path for the published application or browse for the path. (You can browse the folder by clicking the browse button.)

7 In the **To** box, type the target folder on the panel. (You can browse the folder on the panel by clicking the browse button.)

8 Click **Send**. The InTouch Compact Download Utility transfers the application to the target folder on the panel.

Downloading an Application Using the InTouch Compact Edition Download Utility

You can download InTouch Compact Edition applications using the InTouch Compact Edition download utility. You are most likely to use this method of downloading when you have an application validated and published and are downloading it to several different panels.

To download an application using the InTouch Compact Edition download utility

- On the **Start** menu, point to **Programs**, **Wonderware**, **InTouch**, and then click **InTouch Compact Edition download utility**. The **Download to Device** dialog box appears.

For more information about connecting and downloading an application, see Downloading an Application Using the ArchestrA Integrated Development Environment on page 28.

Downloading an Application Using InTouch WindowMaker

You can download InTouch applications using InTouch WindowMaker.

To download an application using InTouch WindowMaker

1. From the ArchestrA Integrated Development Environment, open the application you want to download in InTouch WindowMaker. (The application must have already been validated and published.)
2. On the **Special** menu in InTouch WindowMaker, point to **InTouch Compact Edition application**, and then click **Download**. The **Download to Device** dialog box appears.

Continue with the steps for connecting and downloading an application in Downloading an Application Using the ArchestrA Integrated Development Environment on page 28.

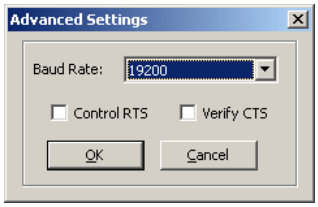
Downloading an Application using the Serial Port

If your device uses the serial port instead of TCP/IP to communicate with the development node, you can configure:

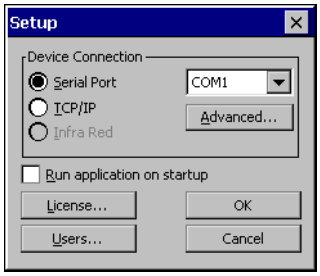
- Serial port number
- Baud rate
- Control RTS
- Verify CTS

To download an application using the serial port

1. Open the **Download to Device** dialog box from the ArchestrA IDE, the Start menu, or from InTouch.
2. In the **Panel Configuration** area, select **Serial Port**.
3. In the **Serial Port** list, select the serial port you want to use.
4. To configure a baud rate for the serial port, or to set Control RTS or Verify CTS, click **Advanced**. The **Advanced Settings** dialog box appears.

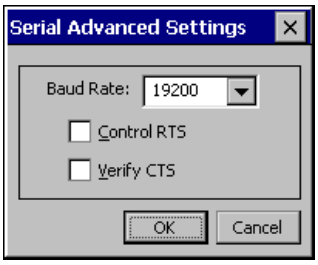


   a. In the **Baud Rate** list, select the baud rate your serial port connection uses.
   b. If required, select **Control RTS**.
   c. If required, select **Verify CTS**.
5. Click **OK**.
6. On the panel, click **Setup** in the **ITCMgr** dialog box. The **Setup** dialog box appears.



7. Select **Serial Port** and set the serial port number in the list.

8 To configure a baud rate for the serial port, or to set Control RTS or Verify CTS, click **Advanced**. The **Serial Advanced Settings** dialog box appears.



a In the **Baud Rate** list, select the baud rate your serial port connection uses.

b If required, select **Control RTS**.

c If required, select **Verify CTS**.

9 Click **OK** and **OK** again to dismiss the **Setup** dialog box.

10 On the development computer, continue with the steps for connecting and downloading an application in Downloading an Application Using the ArchestrA Integrated Development Environment on page 28.

Changing the Language of the InTouch Compact Edition Viewer

You can configure the InTouch Compact Edition Viewer to run in a different language than English. You may want to do this after changing the operating system language in the Regional Settings of the panel.

To change the language of the Viewer

1 Open the **Download to Device** dialog box from the ArchestrA IDE, the Start menu, or from InTouch.

2 Connect to the target device by clicking on **Connect**.

3 In the **Language** list, select the language you want the InTouch Compact Edition Viewer to appear in.

4 Click **Install System Files**. The files are copied to the panel.

5 When the copying is complete, click **Close**. A message appears prompting you to reboot the panel so that the language setting can take effect.

6 Click **OK** to dismiss the message.

7 Reboot the panel.

Configuring the License for the Panel

If your panel requires a license, you can configure the license code and license key in the **Download to Device** dialog box.

To configure the license for the panel

1. Open the **Download to Device** dialog box from the ArchestrA IDE, the Start menu, or from InTouch.
2. Connect to the target device by clicking on **Connect**.
3. Select **License Configuration**.
4. In the **Code** box, type the license code.
5. In the **Key** box, type the license key.
6. Click on **Send**. A confirmation message appears.
7. Click **Yes**. The license is sent to the panel.

Running Applications on the Panel

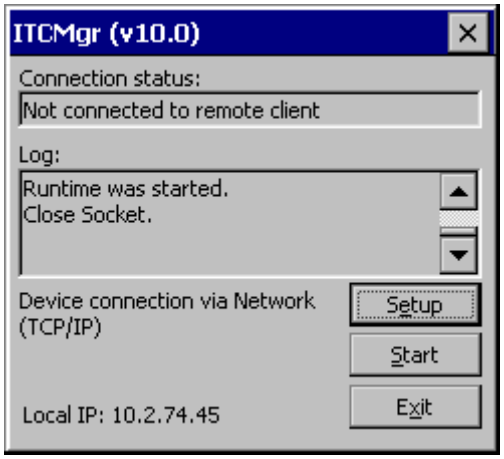
You can run applications that have been downloaded to a panel using InTouch Compact Edition.

Running an Application on the Panel

The panel runs an application using InTouch Compact Edition.

To run an application on the panel using InTouch Compact Edition

1. Using Windows Explorer, go to the \InTouchCompact folder in the storage card and start **ITCMgr.exe**. The **ITCMgr** dialog box appears.



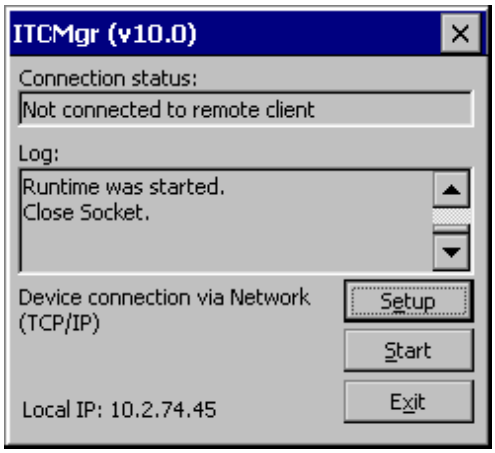
2 Click Start. InTouch Compact Edition runs the last application downloaded to the panel.

Running an Application on the Panel at Startup

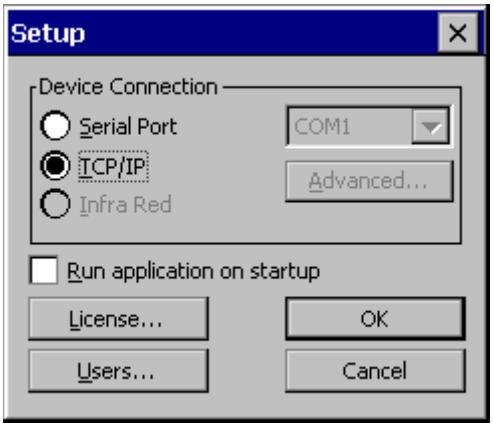
You can set the panel to run an application automatically when the panel starts.

To run an application on the panel at startup

1. Using Windows Explorer, go to the \InTouchCompact folder in the storage card and start **ITCMgr.exe**. The **ITCMgr** dialog box appears.



2. Click **Setup**. The **Setup** dialog box appears.



3. Check **Run application on startup**.
4. Click **OK**.
5. On the panel's desktop, double-click **regsave**. The regsave program saves the settings in the panel's registry. The **regsave** dialog box appears.
6. Click **OK**.

The next time you start the panel, InTouch Compact Edition starts automatically and loads the application.

Running an Application using the Download Utility

You can start an InTouch Compact Edition application from a desktop computer connected to the panel with the Download utility.

To run a new application using the Download utility

1. On the **Special** menu in InTouch WindowMaker, point to **InTouch Compact Edition application**, and then click **Download**. The **Download to Device** dialog box appears.
2. Connect to the panel.
3. If required, in the **To** field, type the name of the application. (You can browse the folder on the panel by clicking the browse button.)
4. Click **Send** to download the application to the panel.
5. Click **Run**. The application starts on the panel.

To run the last downloaded application using the Download utility

1. On the **Special** menu in InTouch WindowMaker, point to **InTouch Compact Edition application**, and then click **Download**. The **Download to Device** dialog box appears.
2. Connect to the panel.
3. Click **Run**. The last downloaded application starts on the panel.

Chapter 3

Trends and Alarms

This section explains how to use the InTouch Compact Edition trend and alarm controls.

Wonderware Compact Panels do not display trend or alarm objects. Instead, there is a trend window and an alarm window. Each window provides a trend or an alarm object that uses buttons to configure options.

When you publish an InTouch Compact Edition application, the application's windows are converted to .scr files. As part of the publishing process, InTouch Compact Edition creates WW__Trend and WW__Alarm windows, which are converted to buttons in the application window. These windows are downloaded to the panel with the application. You can then open the trend and alarm windows to show trend and alarm information from the InTouch Compact Edition application.

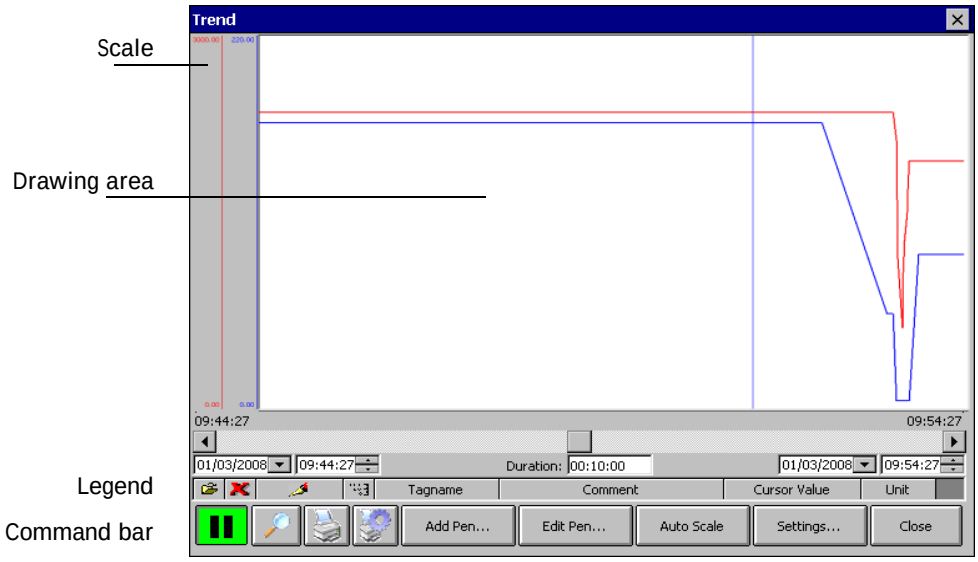
Showing Trend Information

You can use the WW__Trend.scr window to show a graphical representation of trend information.

To show trend information

- There are three ways to show the Trend window on the panel:
  - Select **Open** from the **File** menu on the panel and open **WW__Trend.scr**.
  - You can also use scripting to show the Trend window. For example, you can create a button with the action script **Show "WW__Trend";** in the application. When you run the application on the panel, click the button to show the Trend window.
  - If you have a trend object in the application in WindowMaker, then publish and download the application, the location where the object is placed in the application windows is replaced with a rectangle that shows **Click here to open the trend window**.

The **Trend** window appears.



The Trend window has four areas:

Area	Description
Drawing area	The area the trend curves appear in.
Scale	The Y-axis information. There can be one or several scales.
Legend	Shows the color of the pens assigned to trend values.
Command bar	The buttons for performing tasks in the Trend window.

Legend

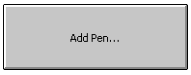
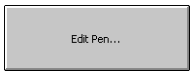
The legend shows information about the pens in the drawing area. You can assign up to eight pens in a trend, but a trend can only show a maximum of four lines simultaneously. If you have assigned more than four pens to a trend, you can scroll through the pen information.

The legend shows the following information about each pen:

Icon	Description
	Opens the **Tag Selection** dialog box so you can select a tag for this pen.
	Removes the pen.
	Opens the **Color selection** dialog box so you can select the pen color.
	Shows or hides the scales of pens. This only works in single section mode and increases the drawing area.
Tagname	Tag currently selected for this pen.
Comment	Comment for the tag as defined in the Tagname Dictionary.
Cursor Value	The current values of the pens at the cursor.
Unit	Engineering units configured for the tag in the Tagname Dictionary.

Command Bar

You use the command bar to perform the following tasks:

Button	Description
	Switches between run/pause modes.
	Zooms the trend in or out.
	Prints the current trend window.
	Opens a dialog box so that you can configure the printer settings. For more information, see Configuring the Printer Settings on page 45.
	Opens the **Tag Selection** dialog box so that you can select a tag to add to the trend.
	Edits the currently selected pen.
	Sets the Min/Max value of each pen according to its minimum and maximum value found in the trend drawing area.
	Sets trend settings, such as grid and value divisions.

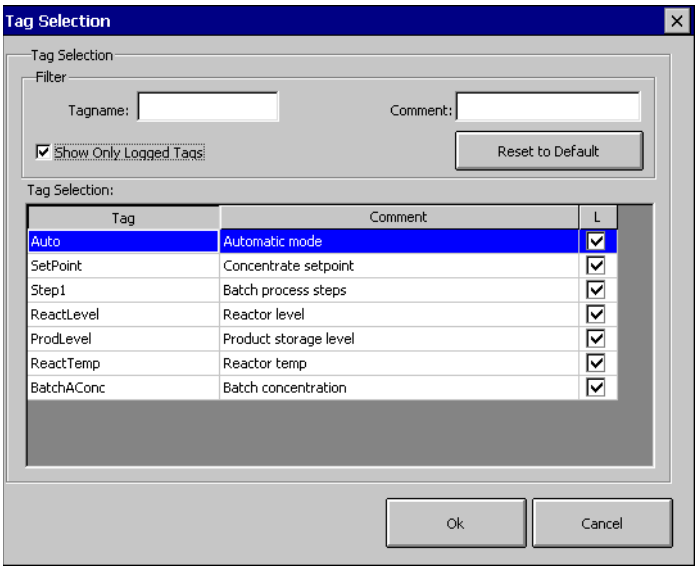
Adding a Pen

When you first open the trend window, there are no assigned pens. You must add pens to track trend information for tags.

Note You can add a maximum of 8 pens in the Trend window.

To add a pen

1. Click **Add Pen** on the Trend window command bar. The **Tag Selection** dialog box appears.



2. Select the tag you want to assign to the new pen.

   By default, you see only those tags that have the **Log Data** option selected in the Tagname Dictionary; however, you can clear the **Show Only Logged Tags** check box and select any application tag.

Editing Pen Properties

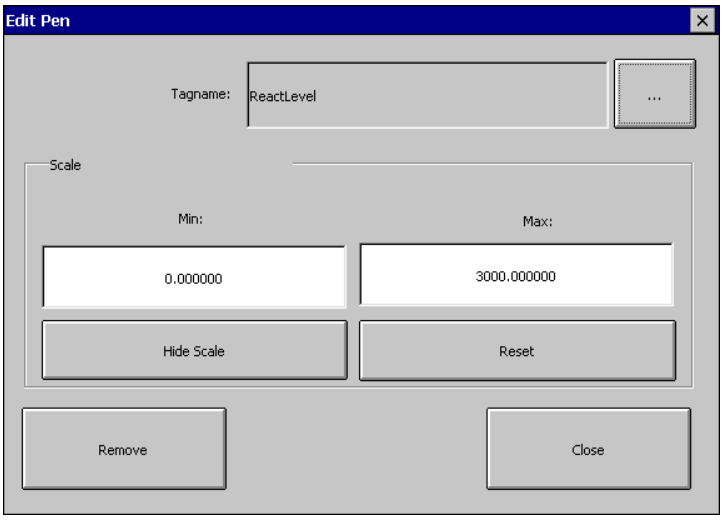
You can edit pen properties to:

- Show different min/max values.
- Hide the scale.
- Remove the pen from the trend.

To edit a pen property

1 Select a pen in the Trend window legend.

2 Click **Edit Pen** on the Trend window command bar. The **Edit Pen** dialog box appears.



3 You can do the following on the **Edit Pen** dialog box:

- You can change the tag associated with the pen by clicking the browse button, which shows the **Tag Selection** dialog box.
- You can adjust the minimum and maximum settings. (Click **Reset** to reset the minimum and maximum values to the tag's MinEU/MaxEU dotfield values.)
- Click **Hide Scale** to hide the scale and increase the drawing area when working in single section mode.
- Click **Remove** to remove the pen from the Trend.

Note You can click **Auto Scale** to set the Min/Max value of each pen according to its minimum and maximum value found in the Trend window drawing area.

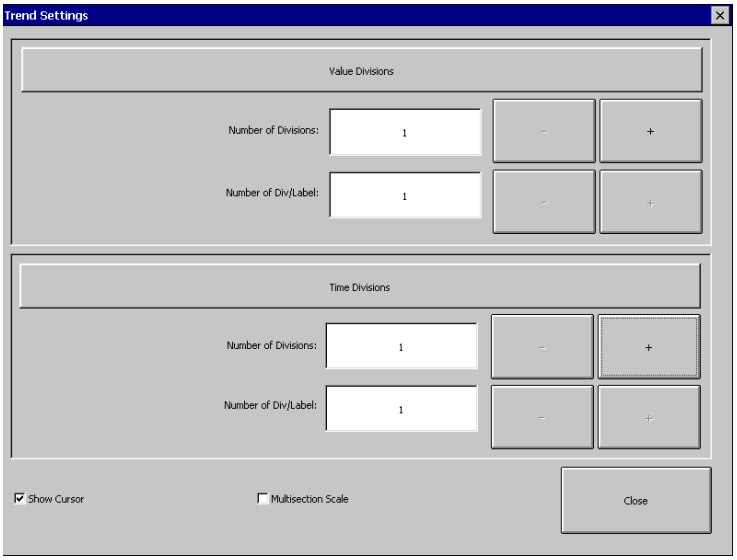
Changing Trend Settings

You can modify trend properties such as grid and value divisions.

Note The trend settings are reset to their default values when you download a new or the same application to the panel.

To change trend settings

1. Click **Settings** on the Trend window command bar. The **Trend Settings** dialog box appears.



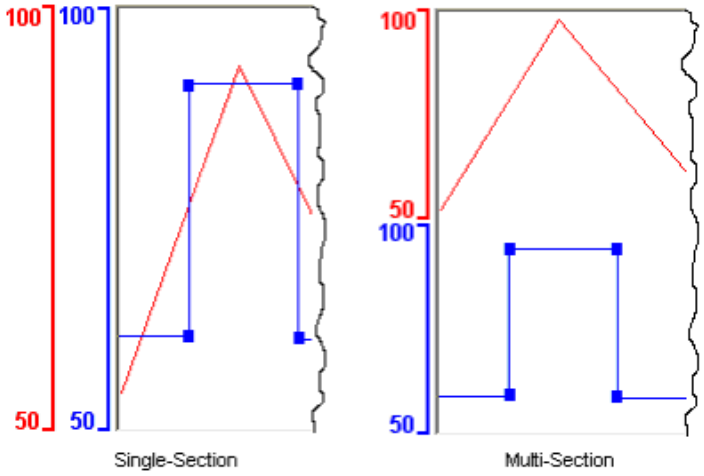
2. In the **Value Divisions** and **Time Divisions** boxes, type the number of divisions and the number of divisions/label. (These settings are equivalent to **Number of Major Div** and **Major Div/Label** options in InTouch.)

Note The Trend window does not support the **Minor Div/Major div** option.

3. Select the **Show Cursor** check box to show a vertical cursor line in the Trend window. (The legend has a **Cursor Value** column that shows the value when the pen intersects the vertical cursor. You can move the vertical cursor by clicking on the drawing area.)

4 Check **Multisection Scale** to select the multisection mode. In a single-section chart, the scales for the Y axis are shown together in a common chart area.

In the multisection mode, the axes and curves are stacked vertically with no overlap between charted information, as shown in the following figure.



Storing Historical Data for a Tag

You can store historical data for a specific tag by checking the **Log Data** option in the InTouch **Tagname Dictionary**. When you publish the InTouch Compact Edition, the tags are divided in groups of 20 tags and each group is assigned an ordinal number.

When you run the application on the panel, InTouch Compact Edition creates one data file for each group in the folder **\Storage Card\InTouchCompact\<Application Folder>\Hst**. The files are named:

GGYYMMDD.hst

where

GG – Hexadecimal group number

YY – Year

MM – Month

DD – Day

The historical files are in binary format with metadata information. Each register in the data file has the following fields:

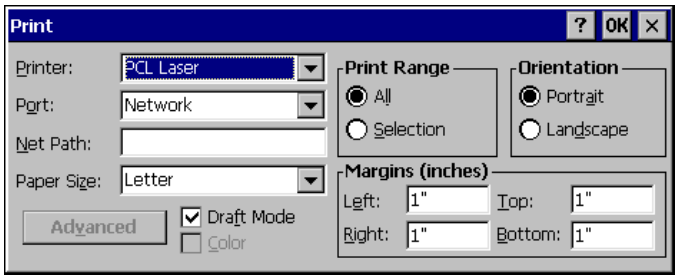
<TimeStamp><Value1><Value2> …. < Value N>

InTouch Compact Edition stores new registers in the file every minute or whenever one of the tags changes. To compute the size of your history files, estimate 8 bytes for each field stored in the data files.

At midnight, files older than three days are deleted.

Configuring the Printer Settings

You can configure the printer settings by clicking the Printer Setup icon. The **Print** dialog box appears.



You can configure the printer as you would with the standard Windows printer configuration dialog box.

Trend Limitations

There are several limitations to trend data in InTouch Compact Edition applications.

- You can set trend duration to a maximum of 72 hours and a minimum of 2 seconds.
- If you are in online mode, the trend time cannot show future time values. To view the trend with future time values, open the trend in historical mode and set a future time value as end time.
- If you are in online mode, the trend always links the last point saved in the historical files with the current value of the tag.
- You can have only one trend object in an InTouch Compact Edition application. Multiple references to the trend object all use the same trend window.

Trend Run-Time Behavior

This section lists any unusual run-time behavior of the trend.

Using the Mouse Scroll Wheel

You can use the scroll wheel of the mouse to change start time, end time and duration of the trend. Depending on the trend mode (running or paused), the trend shows different behavior:

- Trend is running (End time is the reference):
  - Scrolling the start time changes the duration and keeps the end time fixed.
  - Scrolling the end time keeps the duration fixed and changes the end time.
- Trend is paused (Start time is the reference):
  - Scrolling the start time keeps the duration fixed and changes the end time.
  - Scrolling the end time changes the duration and keeps the start time fixed.

Showing Alarm Information

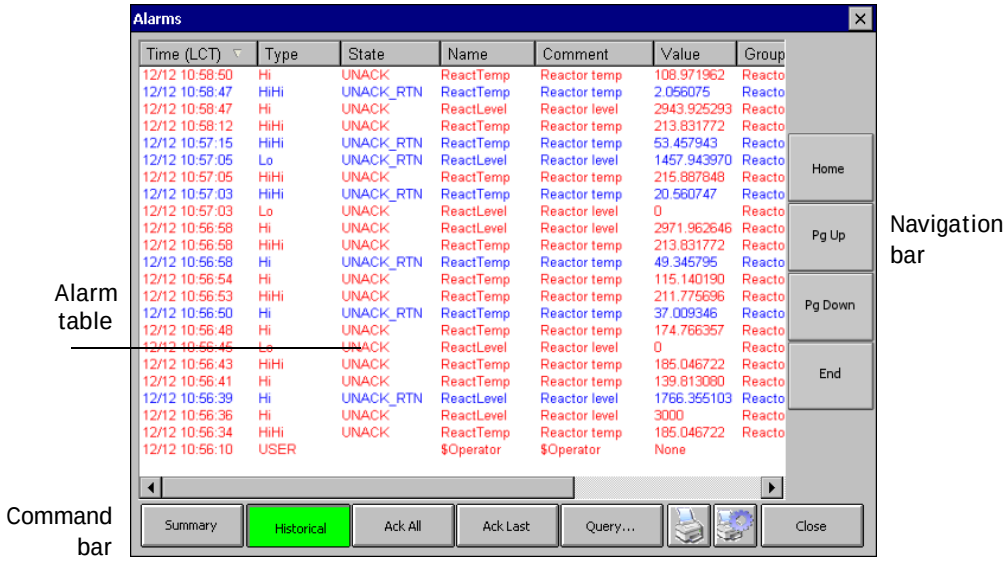
You can use the **Alarms** window to show alarm information in a table.

To show alarm information

◆ There are three ways to show the **Alarms** window on the panel:

- Select **Open** from the **File** menu on the panel and open **WW__Alarm.scr**.
- You can also use scripting to show the **Alarms** window. For example, you can create a button with the action script **Show "WW__Alarm";** in the application. When you run the application on the panel, click the button to display the **Alarms** window.
- If you have a distributed alarm object in the application in WindowMaker and you then publish and download the application, the location where the object is placed in the application windows is replaced with a rectangle that shows **Click here to open the alarm window**.

The **Alarms** window appears.



The **Alarms** window has three areas:

Area	Description
Navigation bar	Controls for the alarm information display.
Alarm control	The area the alarm information appears in.
Command bar	The buttons for performing tasks in the Alarms window.

Navigation Bar

You can use the navigation bar to navigate historical alarms. The navigation bar only appears if the **Alarms** window is in historical mode.

Alarm Table

The alarm table is similar to that of the distributed alarm object in InTouch. The following columns are available: Time (LCT), Type, State, Name, Comment, Value, Group, Operator, Time (OAT) Priority, Operator Node. For more information on these columns and the distributed alarm object, see the *InTouch HMI Alarms and Events Guide*.

Command Bar

You use the command bar to perform the following tasks:

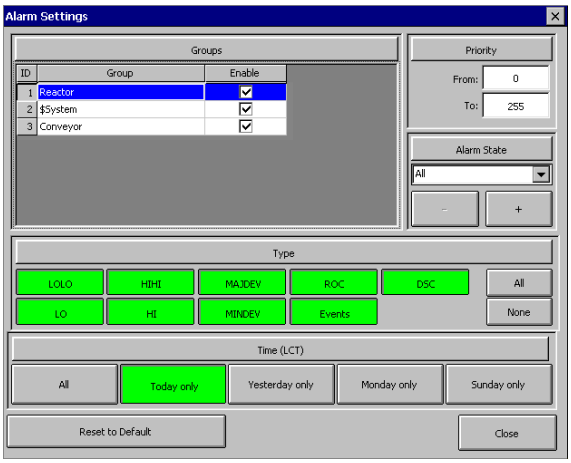
Button	Description
Summary / Historical	Switches between summary/historical modes.
Ack All	Acknowledges all the alarms.
Ack Last	Acknowledges the last alarm.
Query...	Opens the **Alarm Settings** window.
	Prints the current **Alarms** window.
	Opens a dialog box so that you can configure the printer settings. For more information, see Configuring the Printer Settings on page 45.

Setting Alarm Queries

You can set alarm queries from within an InTouch Compact Edition application.

To set an alarm query

1 Click **Query** on the **Alarms** window. The **Alarm Settings** dialog box appears.



2 Enter information the same as for setting an alarm in InTouch. For more information, see the *InTouch HMI Alarms and Events Guide*.

Data Storage

When you run the application on the panel, InTouch Compact Edition creates one data file for each alarm group in the folder **\Storage Card\InTouchCompact\<Application Folder>\Alarm**. The files are named:

alYYMMDD.alh

for alarms, and

evYYMMDD.evt

for alarm events, where

YY – Year

MM – Month

DD – Day.

The historical files are in Unicode Text format. At midnight, historical files older than three days are removed.

Alarm Limitations

There are a few limitations to alarms in InTouch Compact Edition applications.

- You can only have one alarm object in an InTouch Compact Edition application. Multiple references to an alarm object use the same **Alarms** window.
- You cannot customize an alarm object in WindowMaker, but you customize it when you run it on the panel.

Alarm Group Hierarchies

InTouch Compact Edition does not support more than two levels in the alarm group hierarchy.

When you publish an application that has more than two levels in the alarm group hierarchy, the groups in the third level and above are moved directly under the $System alarm group.

For example, when you publish an application that has alarm groups with the following hierarchy:

```
$System
   Group 1
      Group 2
   Group 3
      Group 4
         Group 5
```

The groups in the published application are changed to the following hierarchy:

```
$System
   Group 1
   Group 2
   Group 3
   Group 4
   Group 5
```

When applying alarm filters, the subordinate alarm groups are not associated with their parent. For example, if you filter for group 3 alarms, you see only the alarms specifically configured for group 3. You do not see the subordinate alarm groups 4 and 5 in an InTouch Compact Edition application as you would in the InTouch application.

Appendix A

InTouch Compact Edition Supported Features

This section describes the InTouch features that are supported, partially supported and unsupported in InTouch Compact Edition.

Supported Features

This section describes the InTouch features that are fully supported and have minor limitations in their usage on the panel.

InTouch Windows

InTouch windows are generally supported on the panel and are managed as individual .scr files that you can open.

There are however some limitations to the InTouch window properties.

InTouch	Comments
Window Name	InTouch Compact Edition supports no special characters other than underscores (_) in window names. If the window name has special characters, the special characters are replaced with their equivalent ASCII character values. For example, “Win\A” is converted as “Win!92!A”. The new window name appears in the validation report. Avoid using the following window names, as these conflict with pre-defined standard window names in InTouch Compact Edition: WW__Alarm, WW__DiscreteInput, WW__AlarmQuery, WW__DiscreteInput, WW__Trend, WW__TrendPenEdit, WW__TrendPenSel, WW__TrendSettings, and WW__TrendZoom.
Window Type	All three window types (Replace, Overlay, and Popup) are supported.
Frame Style	Not supported.
Dimensions	Same as regular InTouch application.
Windows Color	Same as regular InTouch application.
Size Controls	Not supported.

Tag Name Conventions

Special characters (!, @,-,?, #, $, %, \, and &) in tag names are converted to uppercase letters (A, B, ...) and the new tag names appear in the validation report.

If a tag name starts with a number, the number is converted to the first available uppercase letter and the new tag name appears in the validation report. For example, the tag name “1tag” is converted as “Atag”.

Tag Types

InTouch Compact Edition supports only the following types of tags:

- Memory discrete

- Memory integer
- Memory real
- Memory message
- I/O discrete
- I/O analog
- I/O message
- Supertags, but only one level of nesting
- Indirect tags, if they do not point at tags containing special characters.

Note Tags with any other data types, such as TagID and indirect, generate a warning in the Validation report. GroupVar tags that are created directly in the Tagname Dictionary do not generate a warning in the Validation report.

Tag Properties

InTouch Compact Edition supports most InTouch data types, but there are some limitations. The following sections describe the main, detail, and alarm properties of tags.

Main

The InTouch main tag properties supported in InTouch Compact Edition are:

- Read-only
- Read/write
- Log data
- Log events (log events priority is not supported)
- Retentive value
- Retentive parameters
- Comments

In addition, InTouch Compact Edition only supports the $System Alarm Group and Groups under $System. You can have at most 999 groups. Warnings are generated when there is more than one level under $System or more than 998 groups.

Details

InTouch Compact Edition supports the following InTouch tag properties:

- Initial value
- Log deadband
- Min EU / Max EU
- Min raw / Max raw

There are limitations to several InTouch detail tag properties:

- Engineering Units longer than seven characters are truncated and a warning is generated.
- InTouch Compact Edition only supports linear conversion to scale raw values when calculating engineering units. Square root data conversions generate a warning in the Validation Report.
- InTouch Compact Edition supports most item names conventions for different I/O drivers. For more information on item names and limitations, please refer to the appropriate I/O driver configuration guide.

Alarm

The InTouch alarm tag properties supported in InTouch Compact Edition are:

- Alarm Comment
- Deviation alarm and Priority
- LoLo, Lo, Hi, HiHi alarm and Priority
- Rate of change alarm and Priority
- Value deadband
- Deviation deadband

There are limitations to several InTouch main tag properties.

InTouch	Comments
ACK Model	InTouch Compact Edition displays two alarms for a tag when there are Lo and LoLo alarms, while InTouch only displays the most recent one. Expanded Summary and Event-Oriented acknowledgement models are not supported.

InTouch	Comments
Raw Value Data Conversion	InTouch Compact Edition only supports linear conversions. Square root data conversions generate a warning in the Validation Report.
Alarm priorities	InTouch Compact Edition only supports priority values from 1 to 255.
Inhibitor Tags	Not supported.

Tag Dotfields

The InTouch tag dotfields supported by InTouch Compact Edition are:

- Alarm
- Ack
- AlarmDisabled
- AlarmDsc
- AlarmROC
- LoLoLimit
- LoLimit
- HiLimit
- HiHiLimit
- HiStatus
- HiHiStatus
- LoStatus
- LoLoStatus
- Major/MinorDevPct
- Major/MinorDevStatus
- ROCPct
- ROCStatus
- MinEU/MaxEU
- Name
- UnAck

- Value

There are limitations to one InTouch dotfield property.

InTouch	Comments
Quality	InTouch Compact Edition only supports the quality values 0 (Bad) and 192 (Good).

Note If unsupported dotfields are used in an animation or a script, it is ignored. If it is used in an action script, the object that calls the script is deactivated.

System Tags

The InTouch System tags supported in InTouch Compact Edition are:

- $AccessLevel
- $ChangePassword
- $Date
- $DateString
- $DateTime
- $Day
- $HistoricalLogging
- $Hour
- $Minute
- $Month
- $NewAlarm
- $Operator
- $OperatorEntered
- $PasswordEntered
- $Second
- $System
- $Time
- $Year

The $TimeString system tag shows the time in the same format set in the Windows Control Panel (Regional Settings, Time Format), such as 12:01:59 PM.

InTouch Compact Edition ignores the Date/Time format set by the operating system. The format is always HH:MM:SS in 24 hour format.

$AccessLevel has a range of 1 to 255 in an InTouch Compact Edition application. If $AccessLevel is set to a value higher than 255, it is reset to 255.

Note If you use unsupported system tags in scripts or expressions, the scripts or expression will not work.

Graphic Objects

The InTouch graphic objects supported in InTouch Compact Edition are:

- Rectangle
- Rounded Rectangle
- Ellipse
- Line
- H/V Line
- Polyline
- Polygon
- Text
- SmartSymbol
- Symbol
- Cell

There are limitations to several InTouch graphic object properties:

InTouch Feature	Comments
Bitmap	Bitmap objects can be linked to jpg, bmp, pcx, and tga graphics in InTouch. InTouch Compact Edition only supports the bmp, jpg and jpeg formats. A warning appears if there is a link to any other graphic format.
DAO	A distributed alarm object is converted to a Button object with an animation link you can click to show the Alarm window. You can write the script to open the alarm window manually as Show “WW__Alarm”; .
Trend	Real time and historical trends are converted to Button objects with an animation link you can click to show the Trend window. You can write the script to open the trend window manually as Show “WW__Trend”.

InTouch Feature	Comments
Wizards	SPC wizards, Trends, Analog Square Clock, Analog Round Clock, Vert Mouse Rel Slider, Alarm Point Monitor, 3 Position Dime Switch, 3 Position Knob Switch, I/O Message Display, I/O Analog Display, and ActiveX controls are not supported. A warning appears if any of these are in the application.

Animation Links

All InTouch graphic animations or links are supported in InTouch Compact Edition except Tooltip and Blink.

There are limitations to several InTouch graphic animations or links.

Note If any of the following InTouch features are used in an animation link, the animation link will not work.

InTouch Feature	Comments
Touch Push Buttons - Action	InTouch Compact Edition supports only the following condition types for the Pushbutton action animation links: • On Left Click/Key Down • While Left/Key Down • On Left/Key Up A warning is displayed in the validation report if any other condition types are used.
Line Color	InTouch Compact Edition supports only line color for line objects.
Miscellaneous Orientation	InTouch Compact Edition supports only dynamic rotation for lines, polylines, and closed polygons.
Percent Fill (Horizontal, Vertical)	InTouch Compact Edition supports horizontal and vertical percent fills, but only one type of percent fills can be enabled at a time in an application.

Scripts

The following script types are supported: application script, window script, data change script, and condition script.

Only the On Left Click/Key Down, While Left/Key Down, and On Left/Key Up condition types are supported for Touch Pushbutton action script.

For a list of unsupported script types, see Unsupported Features on page 68.

Note If unsupported script types are used, then the script will not run.

Script Functions

The InTouch mathematical functions supported in InTouch Compact Edition are:

- abs
- arccos
- arcsin
- arctan
- cos
- exp
- int
- log
- logn
- pi
- round
- sgn
- sin
- sqrt
- tan
- trunc

The InTouch string functions supported in InTouch Compact Edition are:

- Dtext
- StringCompareNoCase
- StringCompare
- StringASCII
- StringChar
- StringFromIntg
- StringFromReal
- StrringFromTIme
- StringLeft
- StringLen
- StringLower

- StringMid
- StringRight
- StringToIntg
- StringToReal
- StringUpper
- Text

The InTouch miscellaneous functions supported in InTouch Compact Edition are:

- ChangePassword
- DialogStringEntry
- DialogValueEntry
- GetNodeName
- Hide
- HideSelf
- LogMessage
- LogOff
- PostLogonDialog
- SetWindowPrinter
- Show
- ShowAt
- ShowHome
- ShowTopLeftAt

There are limitations to several InTouch script functions.

InTouch Feature	Comments
Ack	InTouch Compact Edition supports only the tag name option, but does not support groups.
PrintWindow	InTouch Compact Edition supports only printing the currently open window. It does not support parameters.

Note If any functions other than those above are used in any scripts, the function will not work correctly.

Alarms and Events

InTouch Compact Edition has the following limitations and differences for alarms and events:

- Only the Ack, Unack, and AlarmDisabled dotfields are converted and supported. A warning appears during the validation process if the InTouch application uses a dotfield other than Ack, Unack, AlarmRoc, AlarmDsc, or AlarmDisabled.
- InTouch Compact Edition shows two messages for a tag when there are Lo and LoLo alarms, while InTouch only shows the most recent message. A warning is generated if the tag is configured for a condition alarm to remind you that two messages appear for a tag with Lo and LoLo alarms.
- InTouch Compact Edition only supports ack mode.
- InTouch Compact Edition ROC alarm has second's precision. If a tag value changes in less than one second, the alarm is generated, regardless of the specified rate of change period. This may also cause some differences in the rates; for instance, in Windows CE a rate of 10 cannot be guaranteed to be precise.
- Events do not have priority in InTouch Compact Edition.
- InTouch Compact Edition does not support Group Var inhibitors.
- The InTouch alarm states supported by InTouch Compact Edition are:
  - UNACK
  - ACK
  - UNACK_RTN

Alarm Queries

Alarm queries can be configured only at run time on the Alarm window.

InTouch Compact Edition supports the following InTouch alarm event query options:

- Alarm Group
- From/To Priority
- Alarm State
- Alarm Type
- Time (LCT)

The following table describes the limitations of alarm and event query options:

InTouch Feature	Comments
Group	The InTouch Compact Edition alarm window opens a pop-up to select a group. InTouch Compact Edition does not support third level and higher in alarm group hierarchies. For more information, see Alarm Group Hierarchies on page 49. Also the number of alarm groups is restricted to 999 and a warning is generated in the Validation Report if the InTouch application has more than 998 alarm groups.

Historical Logging and Trends

InTouch Compact Edition has the following limitations and differences for trend functions:

- Hist Trend tags are not supported.
- InTouch Compact Edition supports only 72 hours of data.
- InTouch Compact Edition trend saves the last selected options, such as Time Span.
- InTouch Compact Edition trend has entries to specify the Time Span at run time.
- InTouch Compact Edition run time trend has an option to stop a real-time trend and evaluate the data.
- At run time, the labels and the divisions in the X axis don't move in InTouch Compact Edition.
- InTouch Compact Edition real-time trend has no limit on the number of samples.
- InTouch Compact Edition trend has a legend, so there is no need for the legend wizard.

The InTouch chart time trend options supported in InTouch Compact Edition are:

- Initial Time Span
- Secs
- Mins
- Hrs
- Days

The InTouch sample trend options supported in InTouch Compact Edition are:

- Msec
- Sec
- Min
- Hr

InTouch Compact Edition allows different sampling intervals based on a tag trigger. Use the $Second system tag as the interval so the trend updates every second.

The InTouch color trend options supported in InTouch Compact Edition are:

- Chart Color

The InTouch time divisions trend options supported in InTouch Compact Edition are:

- Number of Major Div
- Minor Div/Major Div
- Major Div/Time Labels
- HH:MM:SS

Note InTouch Compact Edition supports top or bottom trend labels, but not both on the same trend.

The InTouch value divisions trend options supported in InTouch Compact Edition are:

- Number of Major Div
- Minor Div/Major Div
- Min Value
- Max Value

Security

InTouch Compact Edition supports only traditional InTouch-based security.

Data Entry and Keyboards

The options **InTouch Keyboard** and **Resizeable Keyboard** are supported.

DAServer Connectivity

The Compact Panel DAServer allows you to connect to the System Platform or other nodes in the Galaxy.

InTouch Compact Edition Run-Time Limitations

This section lists limitations for InTouch Compact Edition versus InTouch.

InTouch Windows Limitations

This section lists restrictions for InTouch windows.

- InTouch Compact Edition can only close the window that has focus. (InTouch lets you select the windows you want to close.)
- The maximize and minimize options are not supported in the historical mode viewer. (This is the same as if you select the **Always Maximize** option in the **WindowViewer Properties** configuration dialog).

Tag Name Limitations

This section lists restrictions for tag names.

- Any indirect tags assigned to a tag containing special characters do not work, but do not generate a warning in the Validation Report, either. Although tags with special characters are converted, the tag name in double quotes in the indirect tag is not recognized as a tag name in any script. For example, for an indirect tag **Tag1** and a normal tag **Tag%1**, in the statement **Tag1.Name = "Tag%1"**, indirect tag Tag1 cannot reference the Tag%1 correctly.
- More than one level of nesting is not supported in SuperTags. SuperTags with one level of nesting are converted to unnested tags on the panel. The backslash (\) is replaced by a letter.

Graphic Objects and Display Limitations

This section lists limitations in the display of graphic objects.

- The options **Halo follows object shape** and **Inactivity** are not supported.
- Due to a limitation in the Windows CE drawing APIs, InTouch Compact Edition paints blank enclosed intersections in a polygon.
- InTouch Compact Edition only supports Arial, Arial Black, Garamond, Courier New, Symbol, Tahoma, Times New Roman and fonts for display of Japanese and Simplified Chinese. If any other font is used, it appears as Tahoma on the panel.

Animation Limitations

This section lists restrictions for animations.

- The Slider Vertical/Horizontal animations configured with any reference location work slightly differently in InTouch Compact Edition. When you click an object, the cursor stays where you clicked, whereas in InTouch, the cursor moves to the edge.
- Keyboard input is always enabled in the InTouch Compact Edition viewer through the Windows CE virtual keyboard even if it is not enabled in the application.
- InTouch Compact Edition uses the numeric keypad as numeric keys, just like the normal number keys. If you configured a numeric value such as 7, the numeric keypad (NumKeypad7) performs the command. However, InTouch Compact Edition does not support Select, Clear, Execute, Tab, or Ctrl+Break. These generate a warning in the Validation Report.

Security Limitations

This section lists limitations for security features.

- The **Configure Users** option does not appear in the Security menu of the InTouch Compact Edition Viewer, even when you have selected this option in the **WindowViewer Properties** dialog box.
- The only supported value for **Password Char** is asterisk (*).
- When the user logs on or logs off, the event is logged twice.

- InTouch Compact Edition does not support $AccessLevel values greater than 255. Any value greater than 255 generates a warning in the Validation Report. Because InTouch Compact Edition limits $AccessLevel, a condition such as **$AccessLevel >= 400** is always evaluated as false.

Alarms and Events Limitations

This section lists limitations in alarms and events.

- Event types in InTouch Compact Edition are different than the event types in InTouch. The following tables lists the differences:

InTouch event	InTouch Compact Edition event
USER	System Security
LGC	Tags Change
DDE	Tags Change
OPR	Tags Change
SYSTEM	n/a

- Tag and alarm history are limited to a range of 24 hours to 3 days. Only local alarms are supported.

Unsupported Features

The following features are not supported in InTouch Compact Edition:

- Alarm displays: Any screens with a distributed alarm object are converted to use the special alarm display. For more information, see Trends and Alarms on page 37.
- Historical Trend control: Trend objects are converted to use the special trend display. For more information, see Trends and Alarms on page 37.
- HistTrend and TagID data types
- ArchestrA Symbols: These appear as X
- Custom Properties of ArchestrA Symbols
- Remote Tags
- Remote Tags in expressions and scripts
- Terminal services

- Resizable Keyboard (even though it can be selected)
- Run-time language switching
- SPC wizards, Trends, Analog Square Clock, Analog Round Clock, Vert Mouse Rel Slider, Alarm Point Monitor, 3 Position Dime Switch, 3 Position Knob Switch, I/O Message Display, I/O Analog Display, and Mouse Release wizard
- ActiveX controls
- Database access
- Database Alarm Logging
- Tagname value encryption
- Topic switching
- Using Access Names directly for communications other than with I/O drivers
- For-Next loop execution time limit (5 seconds)
- LoopTimeout parameters in InTouch.ini
- SymbolFactory symbols with unsupported animations
- Windows common controls
- Expanded Summary and Event-Oriented ACK models
- QuickFunctions
- Key scripts
- SQL Access
- SPC and SPC Pro
- Recipe Manager

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