User's Guide

InSite™ CSL

Configuration Tool

METTLER TOLEDO

Note

This documentation is provided solely as a guide for individuals who have received Technical Training in servicing the METTLER TOLEDO terminal & software products.

For information, locate the closest authorized METTLER TOLEDO representative at the METTLER TOLEDO website, www.mt.com.

This documentation correctly describes the operation and functionality of the InSite® software versions as follows:

Revision	Date
1.4.00	February 2014
1.3.04	September 2013
1.2.26	January 2013
1.2.09	June 2012
1.0.06	August 2011

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1 Installation

This chapter covers
- System requirements
- Installation procedure

This chapter contains general information on InSite CSL system requirements and the installation procedure and its options.

1.1. System Requirements

This section contains details on the system requirements and recommendations, including details on the required hardware and other software needed to run InSite CSL. InSite CSL requires the installation and usage of the technician dashboard so all of its hardware and software requirements must first be met.

1.1.1. O/S requirements

InSite CSL runs on any of the following Windows operating systems:

- Windows XP Professional, Windows 7 32-bit

1.1.2. Hardware requirements

Hardware requirements match those of the chosen O/S and the technician dashboard. In addition, InSite CSL requires:

- ~ 57 MB free disk space required (not including .NET)
- Appropriate space for configuration file storage
- Network / Internet access

1.1.3. Software requirements

- Microsoft® .Net Framework Version 2.0 (or 3.5 which contains 2.0)
- Technician Dashboard

1.2. Release Notes

For a list of devices supported by the current release of InSite CSL, and a revision history, please refer to the **Release Notes** document.

1.3. Installation Procedure

Installation of the InSite software application is handled through the Technician Dashboard. Once this is installed and the technician is authorized through the DSM user administration, the dashboard will show the InSite CSL icon, indicated at lower right in Figure 1-1. If the software has not been installed yet, clicking this icon will cause the installation process to start. The dashboard manages all installation and update processes.

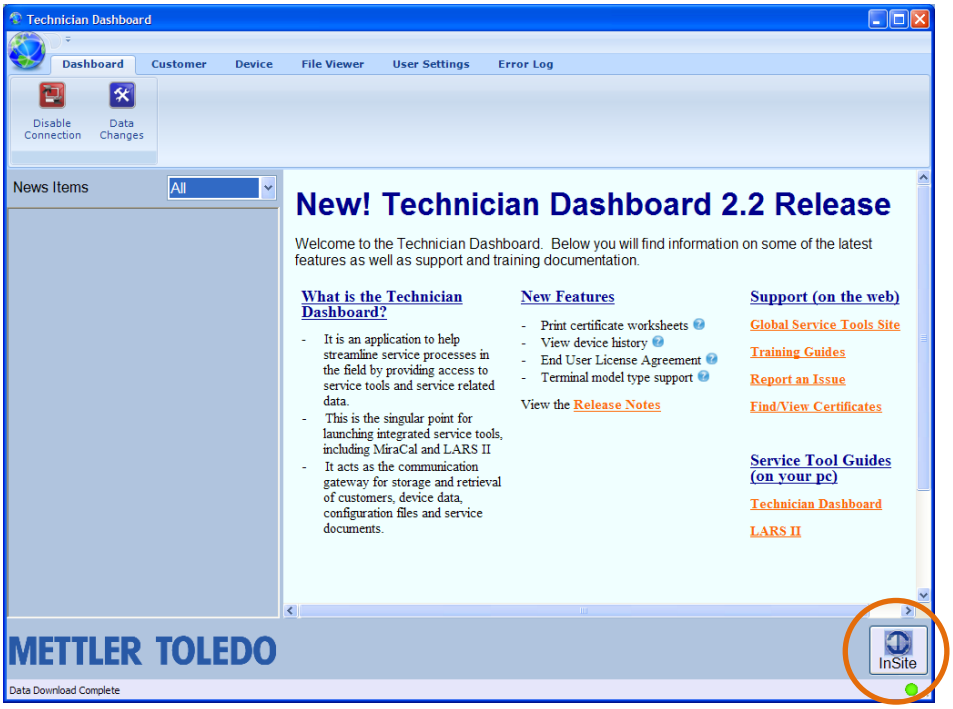


Figure 1-1: InSite Setup from dashboard

1.4. InSite Install Script Procedure

With either installation method, an installation script is launched. The script leads through a series of dialog windows for the installation process, giving several opportunities to cancel the process before it begins.

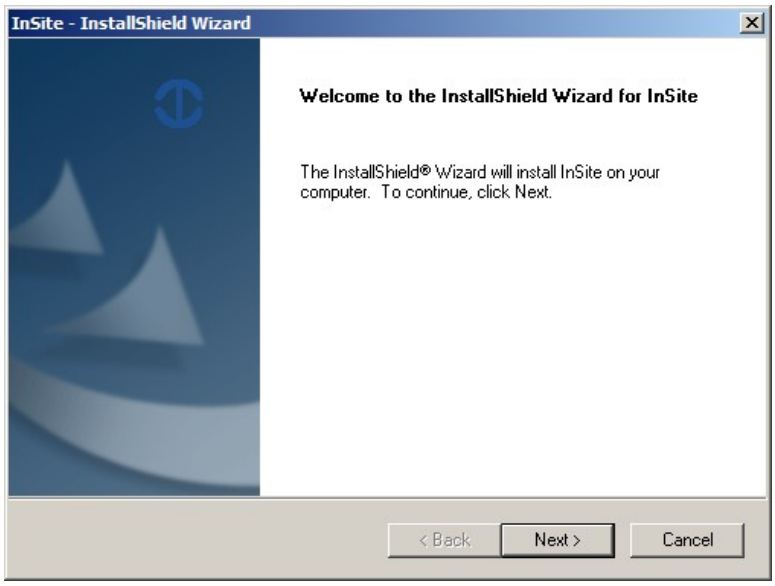


Figure 1-2: Welcome screen

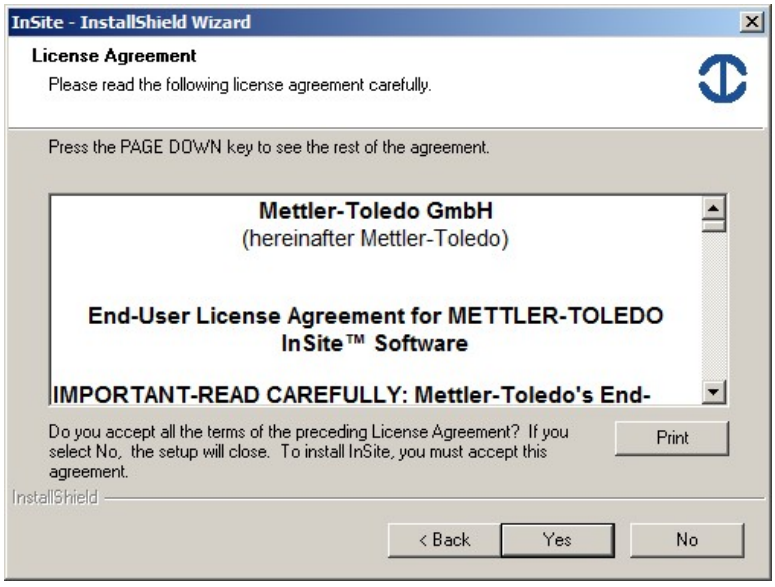


Figure 1-3: EULA Acceptance Screen

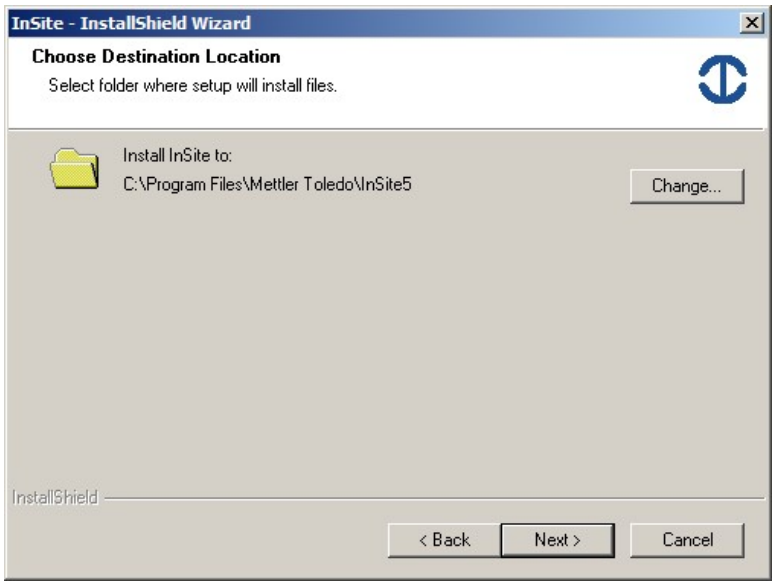


Figure 1-4: Installation Location Path Option

The screen shown in Figure 1-5 allows the selection of products to include. At least one product must be selected.

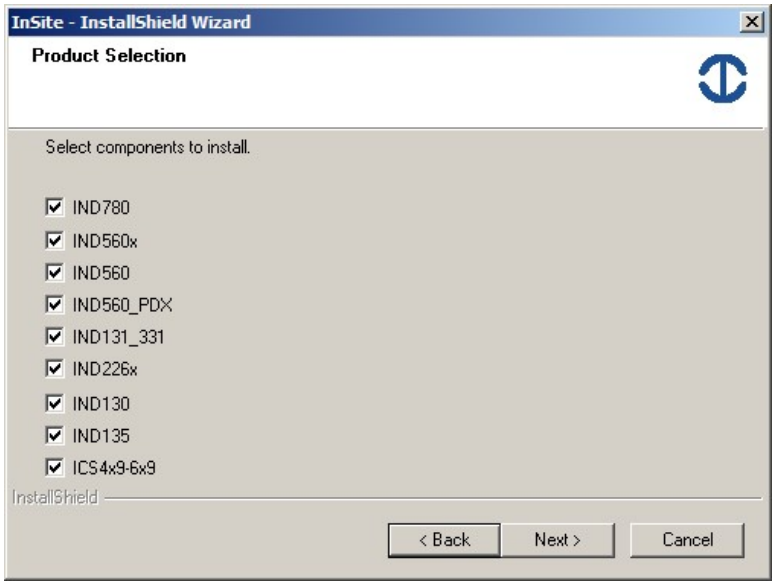


Figure 1-5: Product Module Selection Option

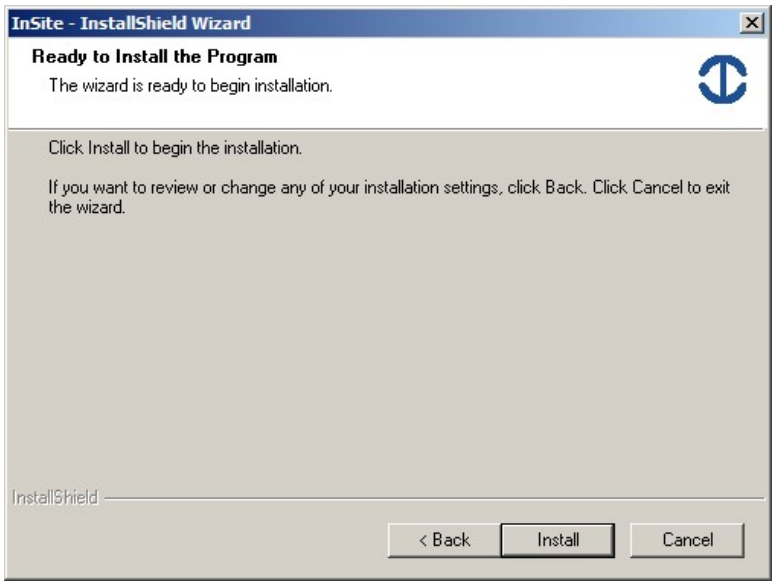


Figure 1-6: Final Installation Confirmation Screen

Once installation begins, a progress screen is shown (Figure 1-7). This screen will also indicate which component or file is currently being installed.

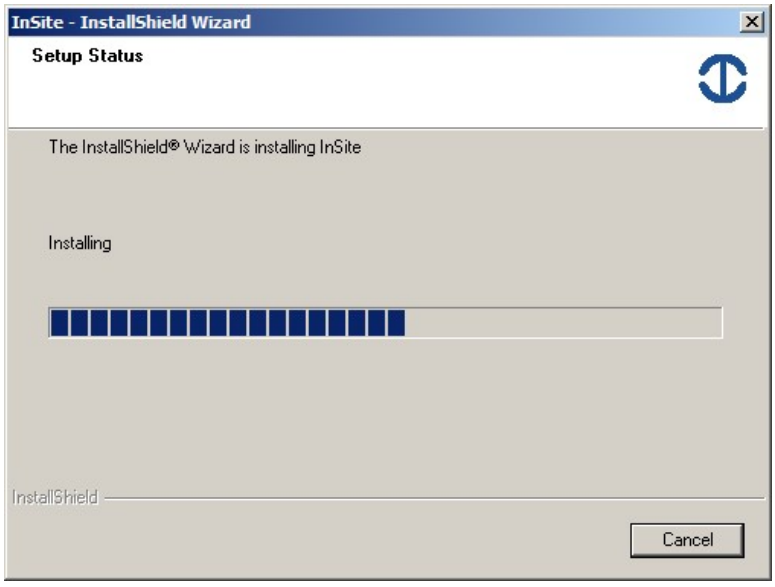


Figure 1-7: Installation Progress Screen

Once installation is complete, click Finish to close the install script dialog.

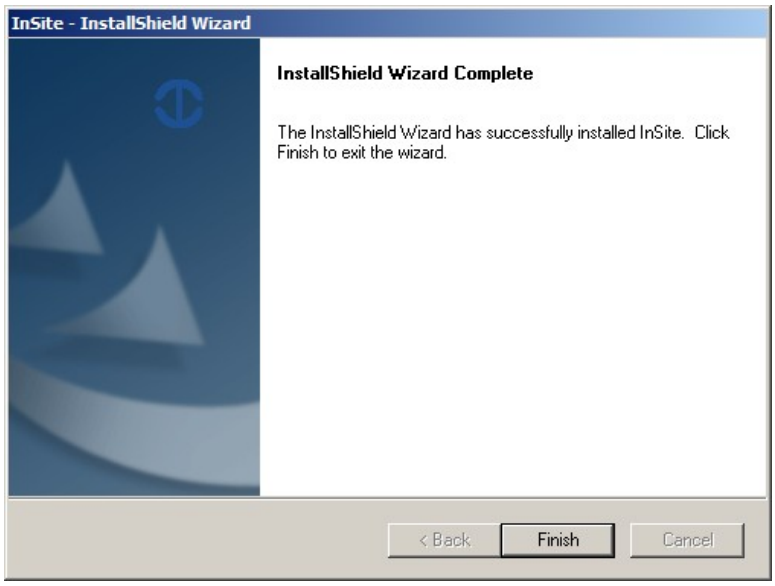


Figure 1-8: Installation Complete Screen

1.4.1. After Installation is Complete

After the installation is complete, InSite CSL and the selected product modules should be installed on the system. It can be accessed ONLY through the dashboard icon. No shortcut icon is placed on the desktop.

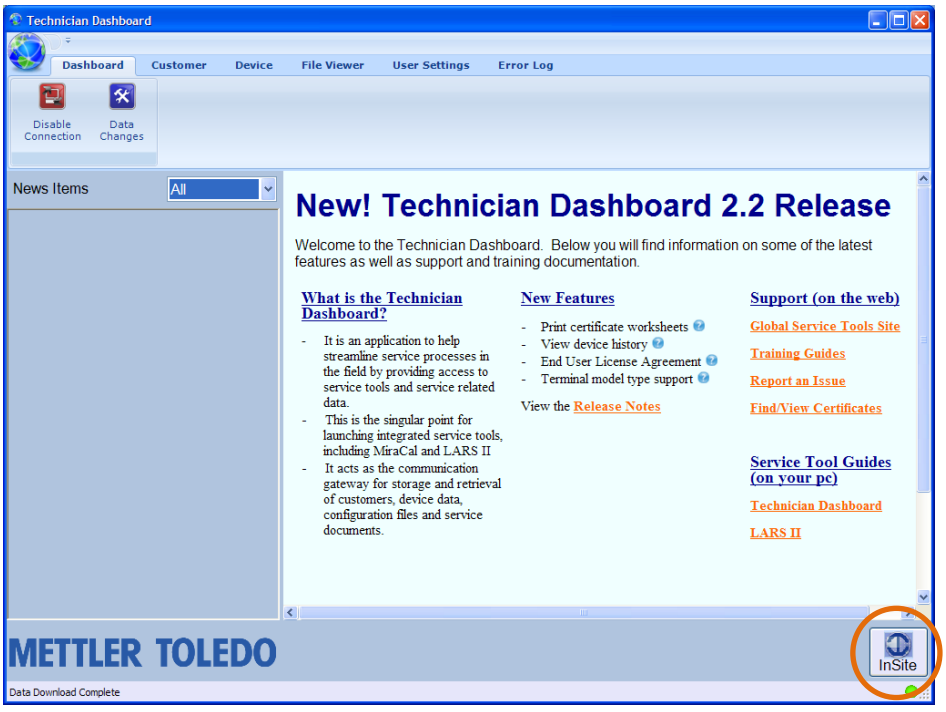


Figure 1-9: InSite CSL Icon on the dashboard

1.5. Support Information

Please contact your local Mettler-Toledo, LLC service office for support.

2 Configuration Tool

This chapter covers
- InSite CSL - purpose and features
- List of supported devices

The InSite CSL application is used to manage industrial terminal product configuration information. This service tool is used to provide configuration of the setup parameters for various IND and ICS terminals from a PC. Only one instance of this application may be running at a time.

2.1. InSite CSL Overview

The InSite CSL Configuration Tool is an application for the PC that can be used to save the values of various setup parameters in the terminal and restore them at a later date or copy configuration into other terminals. A typical screen from the InSite CSL Configuration Tool is shown in Figure 2-1.

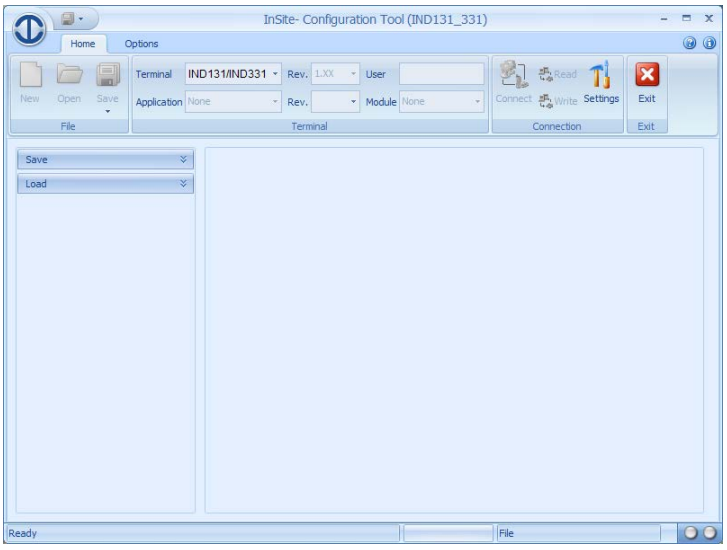


Figure 2-1: Configuration Tool

In order to be able to use InSite CSL, the technician must first be authenticated by the dashboard. If the use of InSite CSL is permitted, the dashboard will present the icon to launch the application. In addition, special product permissions are controlled through the DSM Technician Dashboard user administration. In some cases, a user may not be permitted to have full configuration access to certain products.

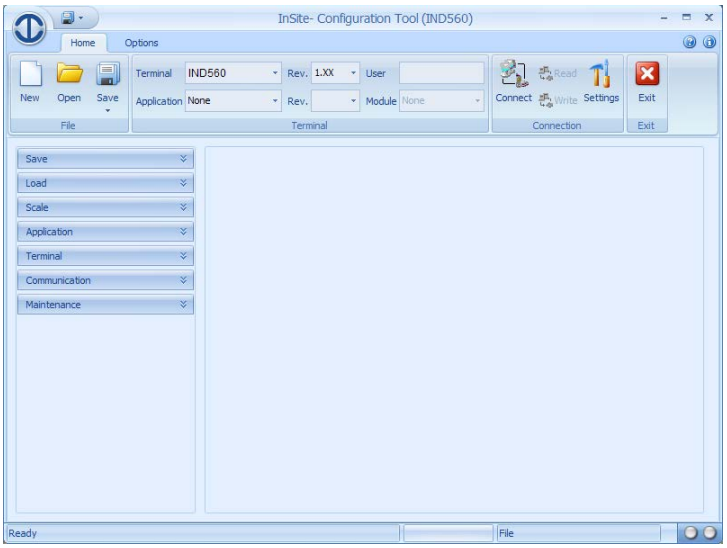


Figure 2-2: Authenticated version

When fully authenticated, InSite CSL may be used to perform the following:

- Extract the current configuration from a connected terminal and save it as a file locally
- Load a saved configuration into a connected terminal
- Load new firmware
- Create a configuration offline
- Connect to a terminal and change configuration
- Modify templates with special editor
- Access protected diagnostic service

2.2. Supported Devices

For a list of devices supported by the current release of InSite CSL, please refer to the **Release Notes** document.

2.3. Starting the software

Starting InSite CSL application is strictly controlled through the technician dashboard – unlike any other Windows application. Upon starting, InSite CSL will confirm that the dashboard was used to launch it and request information regarding the identification and rights of the technician.

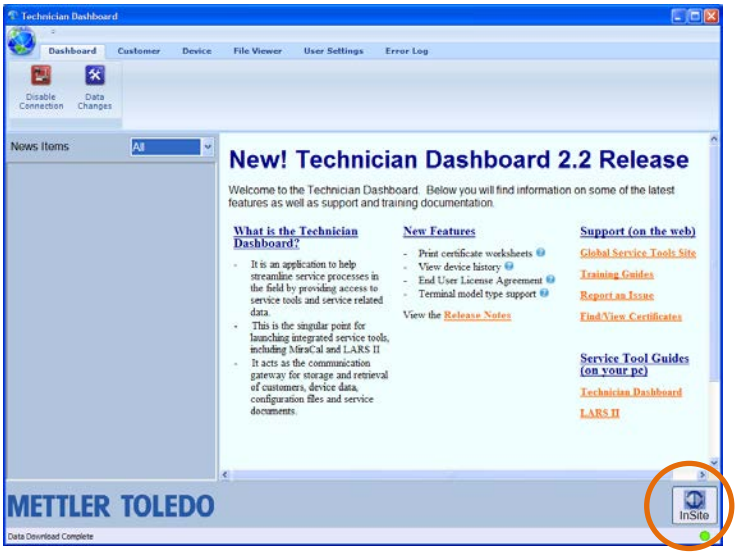


Figure 2-3: InSite CSL Icon

2.4. Screen layout overview

Figure 2-4 gives an overview of layout of InSite CSL. The various areas used in the tool are indicated.

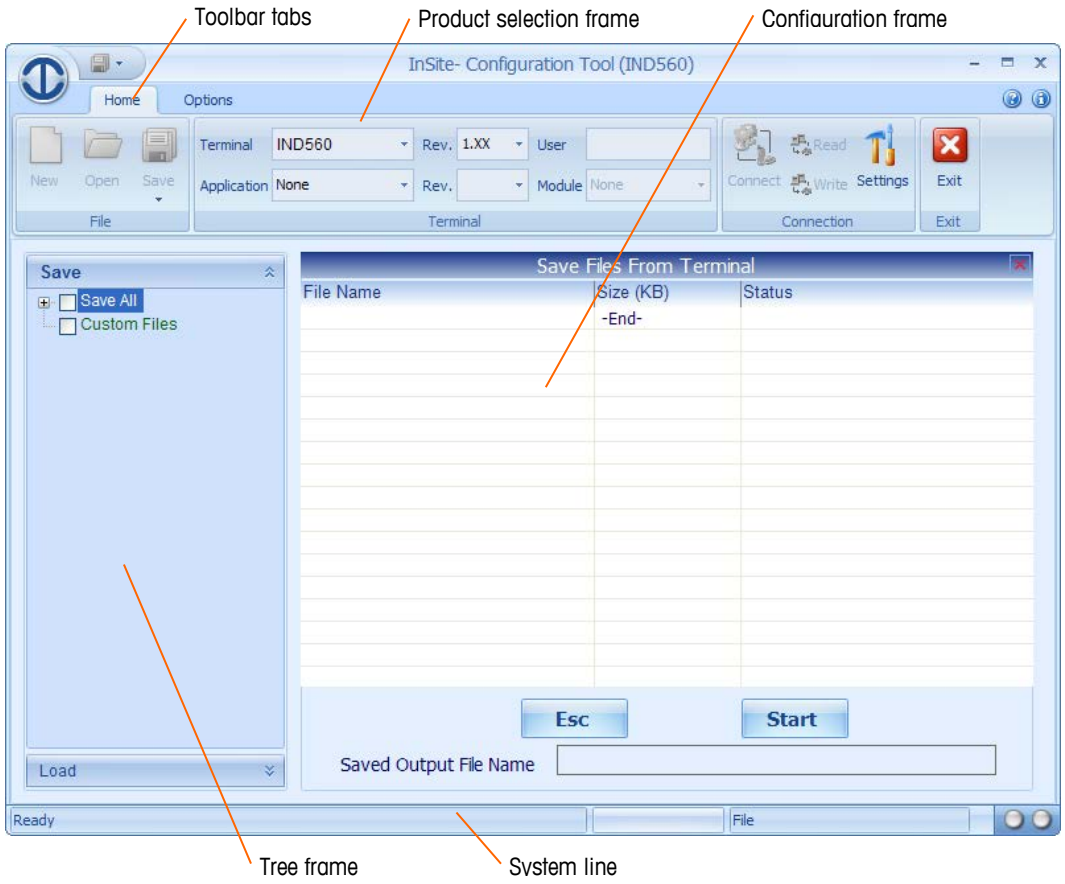


Figure 2-4: InSite CSL Overview

The following sections describe the use of each of these areas.

2.4.1. Toolbar tabs

The toolbar tabs (Figure 2-5) allow selection of different tool button frames. The home tab contains **File**, **Terminal**, and **Connection** tool button frames.

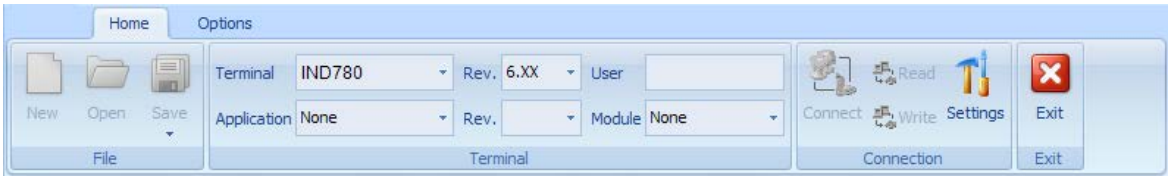


Figure 2-5: Toolbar tabs - Home

The options tab (Figure 2-6) contains the **Others** tool button frame. This frame contains tool buttons for firmware upgrade and other special features. The Print frame is used to configure and print the configuration report.

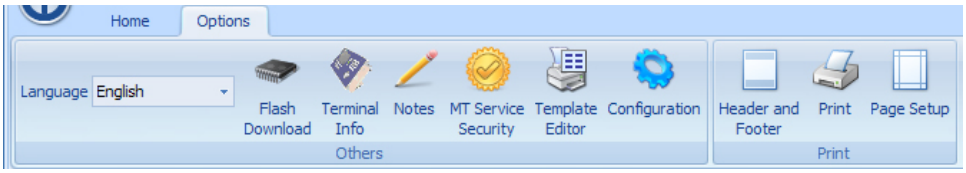


Figure 2-6: Toolbar tabs - Options

2.4.2. Product selection frame

The **Terminal** frame (Figure 2-7) includes a drop-down menu for selecting the terminal type. The Application drop-down menu allows selection of any currently available optional application programs installed on the terminal. The user security access level is displayed based on the login performed during the connection procedure. Selection of the connected product is required before a Save procedure in order for InSite CSL to determine what communication method must be used.

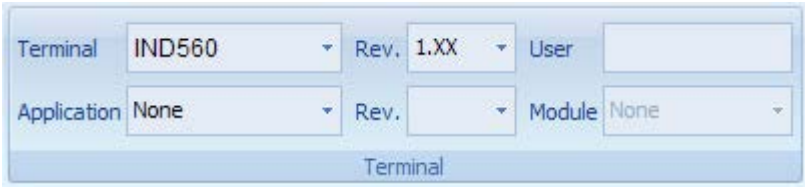


Figure 2-7: Product selection frame

2.4.3. Tree frame

The Tree frame (Figure 2-8) changes content based on the product selected and the features available. At a minimum it will show 2 tree items:

- Save
- Load

Once the tool is authenticated, additional items will be shown based on the product selection. Typically this includes:

- Scale
- Application
- Terminal
- Communication
- Maintenance

Selecting each of these items displays the relevant information in the tree and configuration frame. These are used to navigate to associated screens in the Configuration frame.

Figure 2-8: Tree Frame

2.4.4. Configuration frame

The **Configuration** frame (Figure 2-9) displays information related to the selection in the tree frame and / or the toolbar tool button function.

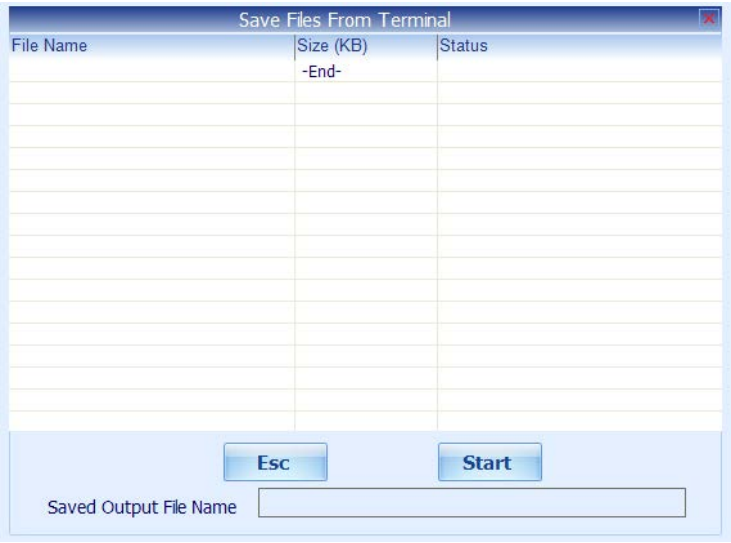


Figure 2-9: Configuration Frame

The content of the Configuration frame varies for different InSite CSL operations.

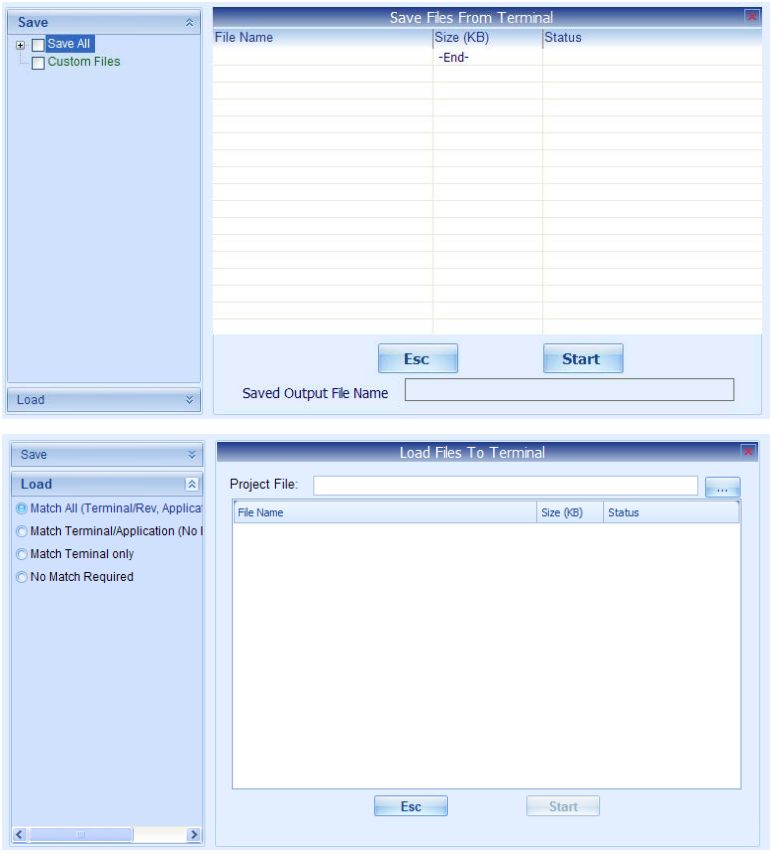


Figure 2-10: Save and Load Configuration Frames

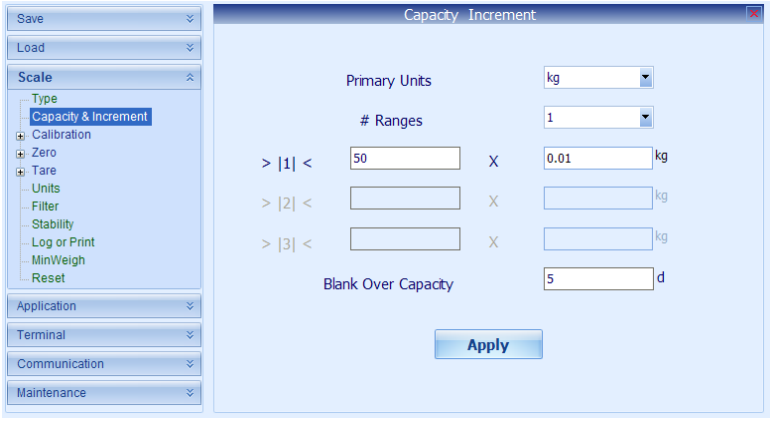


Figure 2-11: Scale Capacity Configuration Frame

2.4.5. System line

The first section in the system line (Figure 2-12) shows the operation status. The second section shows the progress bar of operations performed. The third section shows the connection parameters while connected (example: IP address of the terminal or the offline filename). The TX and RX lights blink when data is written to or read from the terminal, respectively.

Figure 2-12: System Line

3 Authentication

This chapter covers
- DSM Overview
- DSM access
- InSite CSL file options

The DSM (Device Service Management) platform provides rights management, authentication and file management services for METTLER TOLEDO service tools, including this version of the InSite tool. In order to use the advanced features of InSite and the file management functions of DSM, the user must connect and successfully login to the DSM server periodically through the Technician Dashboard.

3.1. DSM Overview

The DSM platform manages METTLER TOLEDO PC based service tools and technician information. It uses the service tools to exchange information with devices that are isolated from direct, external communications for various reasons.

3.1.1. DSM Features

In this version of the InSite tool, the 3.x version of the DSM api.dll has been implemented. This version has the following features:

- Device must be created using dashboard before service events and files can be stored
- Verification of user rights
- Storage of device configuration files
- Addition of device configuration service events
- Added further InSite service events
- Search and retrieval of device configuration files (based on service provider territory)

3.2. InSite CSL DSM Access

The user interface for DSM version 3.x is supplied through the Technician Dashboard. This application must be used to start InSite and validate the user. The InSite tool itself no longer provides a mechanism to login and gain access to the DSM server. The user rights are passed to InSite through the dashboard and there are options to restrict access as follows:

- No restrictions (full access to all terminals and features)
- No access to MT Service Security (access to all terminals and other features)
- Customized access (access to selected terminals / features)

Customized access allows user rights to be defined for specific products and/or features. Selections for these rights include:

- Individual terminals and terminal applications access
  - Selection of terminals allows the user to perform disconnected / connected configuration of the terminal. (Save / Load of all terminals is always permitted.)
- MT Service Security access
- Firmware Upgrade access (Flash Download)

Periodically the user will be required to re-authenticate through the dashboard.

3.3. InSite CSL File Storage

Connectivity between InSite and the DSM server provides file management benefits. InSite uses the dashboard's file service to upload saved configuration files and retrieve stored files.

Files sent to the DSM server use a specific naming convention:

Product_serialnumber_datetimestamp.ipz

So, for example, a configuration file saved at 12:00:00 on October12, 2009 for an IND780 terminal with a serial number 1234566KK would be named:

IND780_1234566KK_20091012120000.ipz

This naming convention is used ONLY for the copy of the file that is stored on the DSM server – it has been designed so that multiple configuration files for the same terminal can be archived safely. However, the user can rename the copy of the configuration file stored locally.

The configuration file itself is a zipped file of all configuration data selected during the save terminal file process. Any zip utility can be used to unzip it and extract files (change the file extension from .ipz to .zip) if InSite is unavailable for some reason.

Files are saved to the server automatically when the Save Terminal File operation is performed as long as a network connection to the server can be made. Otherwise, it gets placed in a queue until the next time a connection is made.

3.4. InSite CSL File Retrieval

Once files have been stored on the DSM server by a user, they can be searched and retrieved at any point through the Technician Dashboard. InSite CSL no longer has direct access and requires the file to be copied on local media. For the dashboard to retrieve a file, connection to the DSM server must be made first. Files can be found by selecting the Device tab.

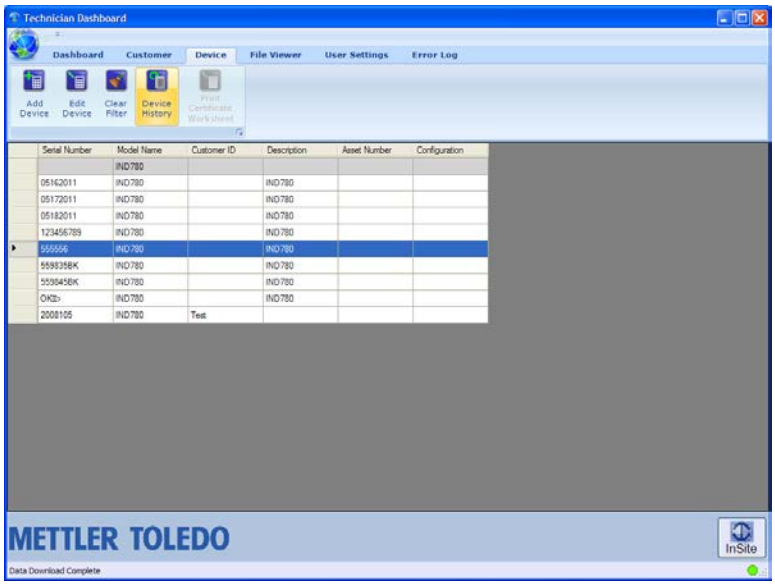


Figure 3-1: Device Tab

Devices listed here may have associated service events recorded in the Device History data. Devices are listed by Serial number and model type. Selecting a specific device and clicking the Device History tool button will open a dialog window with all the service events for that particular device.

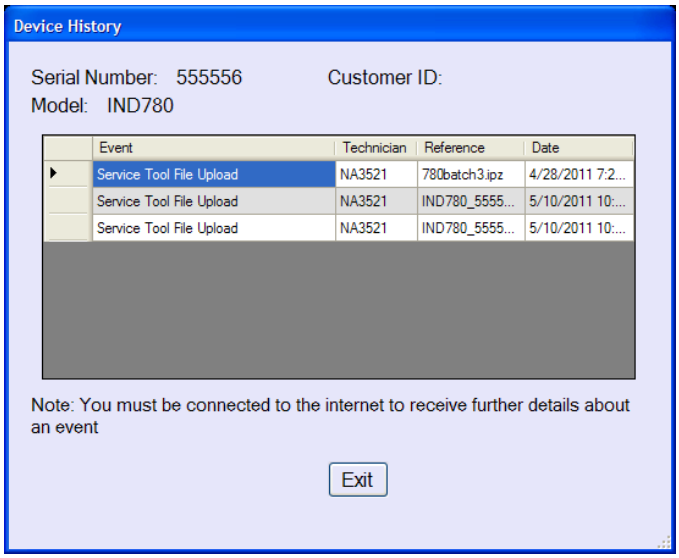


Figure 3-2: Device History

If the event is a service tool file upload, the reference field contains a link to the saved file. By clicking on this field (the filename in the Reference column), the dashboard starts its process to retrieve the selected file. It will automatically place the file in its own subdirectory structure when connection to the server is made and the file is received. This process can take a few minutes and happens in the background. Files for InSite are stored in the path for the dashboard under the tool, technician ID, and model.

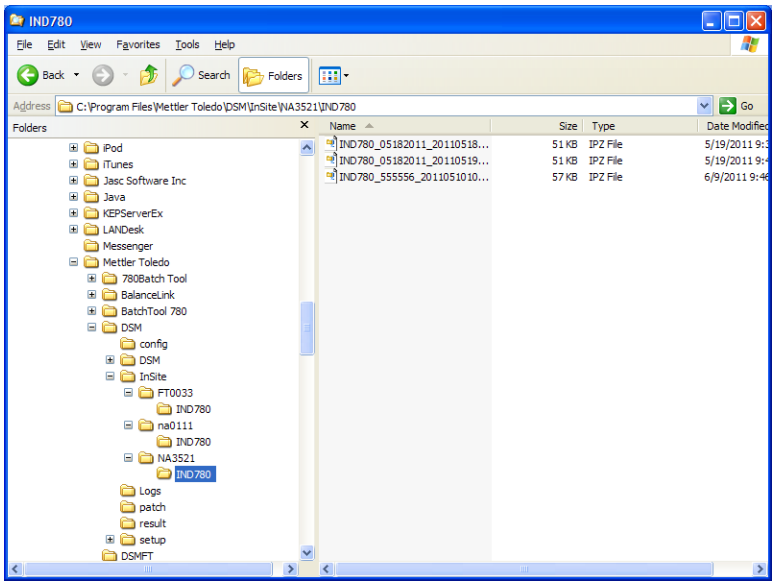


Figure 3-3: File Location

For example, if a file is retrieved for an IND780 that was stored by technician NA3521, it will be placed in:

C:\Program Files\Mettler Toledo\DSM\InSite\NA3521\IND780

At that point, the normal InSite CSL Load Terminal File operation can be performed by browsing to the retrieved file's location.

4 Save/Load

This chapter covers
- Save operation
- Load operation

The InSite Save and Load operations allow the user to transfer the configuration contents from the terminal to a file on the PC. Once saved, the information stored in this file may be restored into the same terminal or loaded into other terminals.

4.1. Save Terminal File

InSite's Save operation establishes a connection with a terminal, retrieves the configuration data, and stores this data as an .ipz file on the PC. The contents of the saved file are dependent on the terminal's typical configuration data. For example, the IND780 uses .dmt files to store configuration shared data. It also has .csv files for tables & logs.

4.1.1. Save Procedure

To begin the save, follow these steps:

1. Select the terminal type for this save.

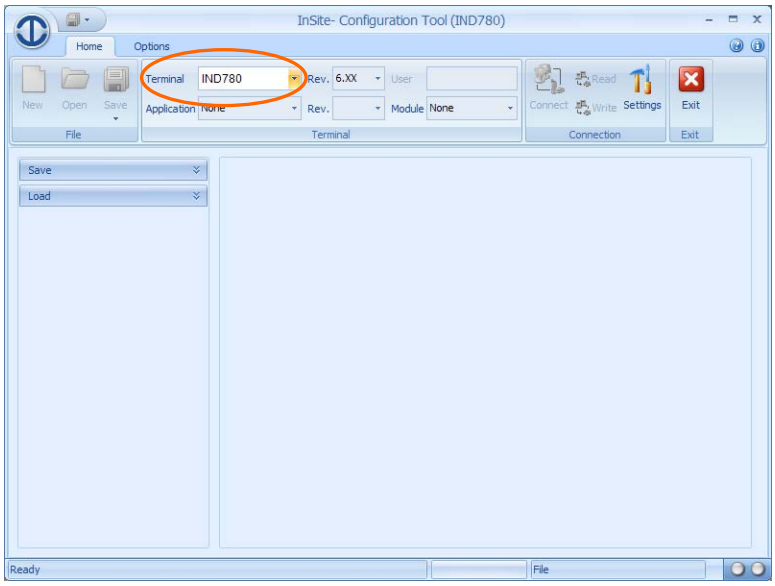


Figure 4-1: Terminal Selection

2. Configure the connection settings that should be used to communicate to the terminal. This is product-dependent, and can involve either COM port settings and/or IP address information. The COM port selects which port is used by InSite on the PC and should be used for serial communications. The IP address should be entered to match the connected terminal's IP

address and should be used for Ethernet communications. Not all terminals support both communication methods. Make sure valid FTP username and password entries have been placed in the connection settings for these. InSite will be unable to retrieve the data from the terminal if an invalid, an unauthorized, or no username is entered and the process requires them.

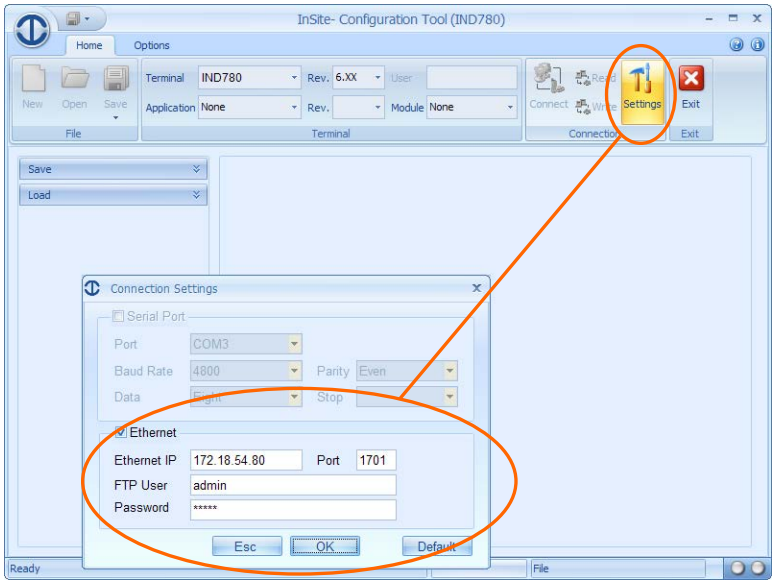


Figure 4-2: Port Configuration

3. Open the Save tool in the tree frame.

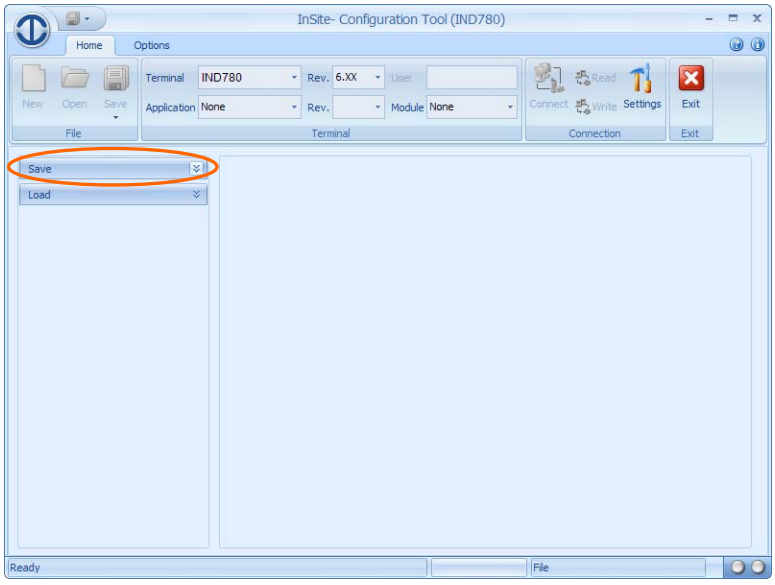


Figure 4-3: Save Tool in Tree Frame

Don't forget to unlock the terminal with the MT Service Security **before** saving if you wish to include special diagnostic data – like the PDX_Performance log – in the saved information!

4. Select the information desired for the save. As items are selected they will appear in the configuration frame to the right. Selections in the tree are product dependent so this view will vary based on the product selection.

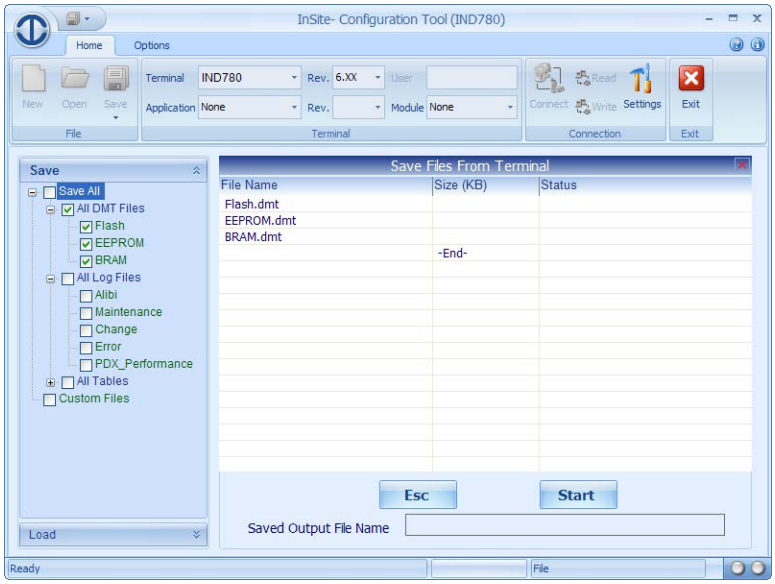


Figure 4-4: Selecting Items to Save

5. Once the save items are selected as desired, start the save process by clicking Start.

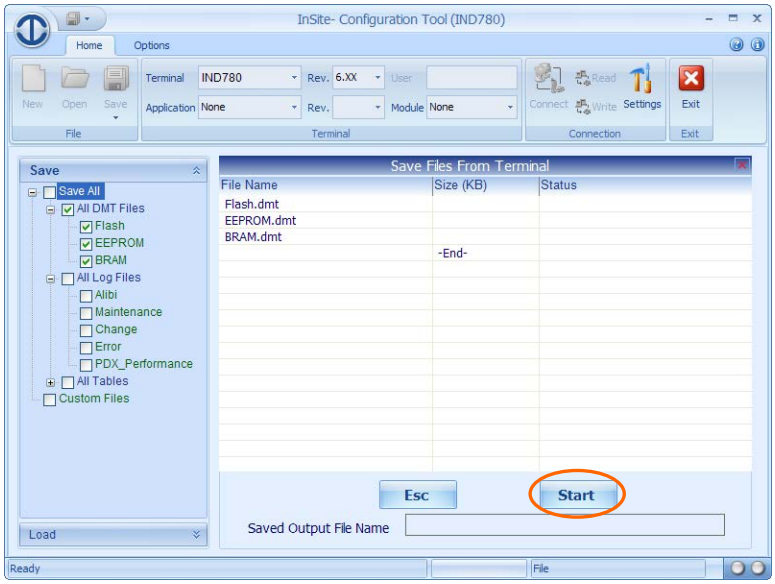


Figure 4-5: Starting the Save Process

6. A dialog window will appear, prompting for a name to give the file generated by the Save process, and to save it. Enter the name and select a location, then click Save to begin.

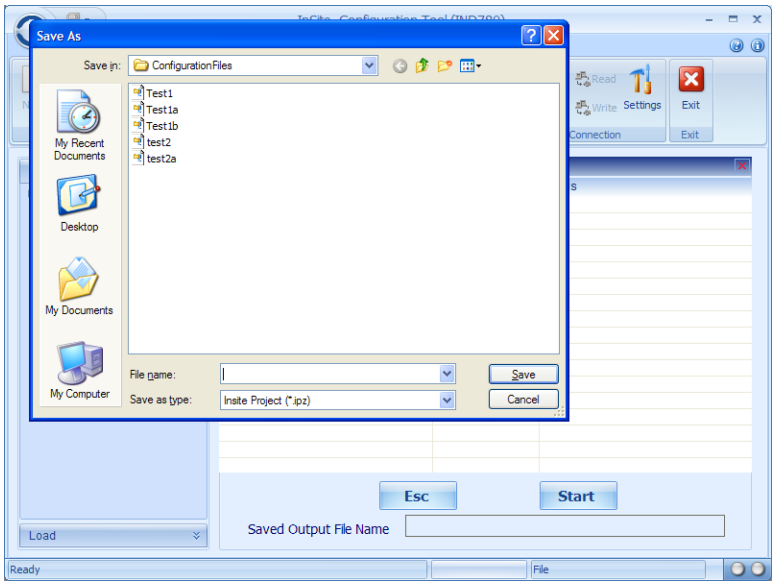


Figure 4-6: Filename Entry

7. InSite will begin the process to collect the required data for the Save. A login screen may be presented if the terminal requires user / password information to access setup. In certain cases, both a shared data username and password and an FTP username and password will be required to get access to the data needed. Make sure the correct username and password is given when prompted!
8. As information is transferred from the terminal to InSite, the status will be updated in the view in the configuration frame. Once all information is received, the save file will be created.
9. Once the Save is completed, close the Save window in the configuration frame to use other InSite features.

4.1.2. Using Saved files

Files created by the Save process are named with the extension .ipz. This unique extension is used so that InSite can identify them and use them for its Load process. However, they are in fact .zip files, and can be opened with software that manages files of that type.

4.2. Load Terminal File

InSite's Load operation takes a saved file and sends its contents to a connected terminal. The Load process has a variety of selectable levels of terminal checking. These selections establish what set of rules InSite uses when it compares the saved file to the connected terminal.

Table 4-1: Load Selection Options

Load Selection	InSite Check
Match All	Terminal firmware revision, application, & module settings must match
Match Terminal / Application	Terminal & application settings must match, but revision & module may be different
Match Terminal only	Only the terminal type must match
No match required	No match is required

4.2.1. Load Procedure

To begin the load operation, take the following steps:

1. Select the terminal type for this load (this is only to establish the connection settings that will be used).

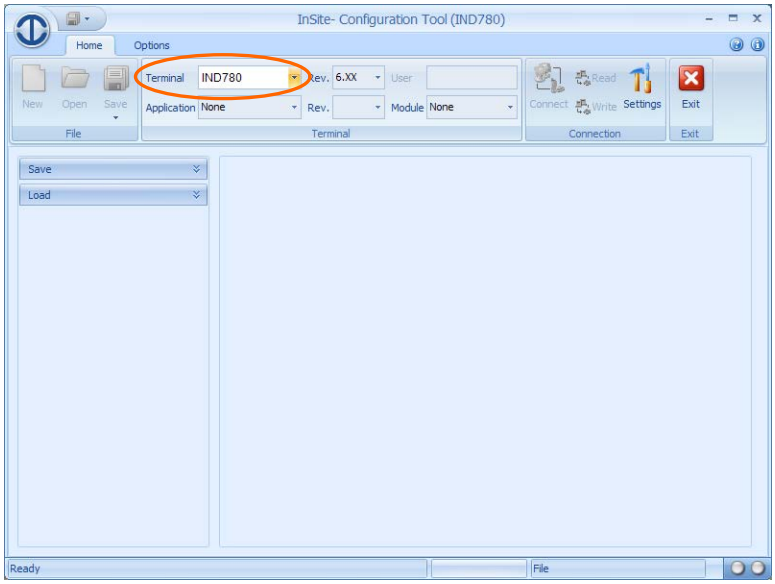


Figure 4-7: Terminal Selection

2. Configure the connection settings that should be used to communicate to the terminal (this is product dependent and can involve either COM port settings and/or IP address information). The COM port selects which port is used by InSite on the PC and should be used for serial communications. The IP address should be entered to match the connected terminal's IP address and should be used for Ethernet communications. Not all terminals support both communication methods. Make sure valid FTP username and password entries have been placed in the connection settings for these. InSite will be unable to retrieve the data from the

terminal if an invalid, an unauthorized, or no username is entered and the process requires them.

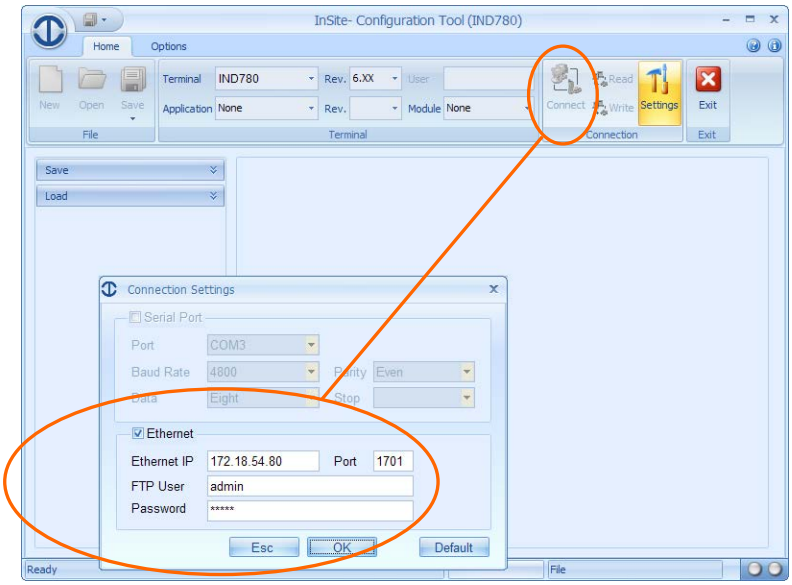


Figure 4-8: Port Configuration

3. Open the Load tool in the tree frame.

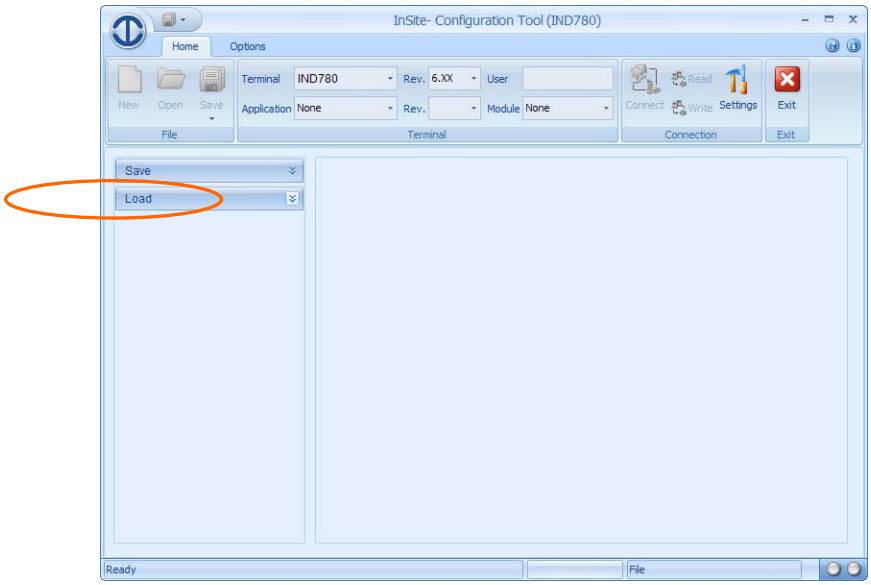


Figure 4-9: Load Tool in Tree Frame

4. Select which type of load selection is required, and select the Project file (stored .ipz file) to use.

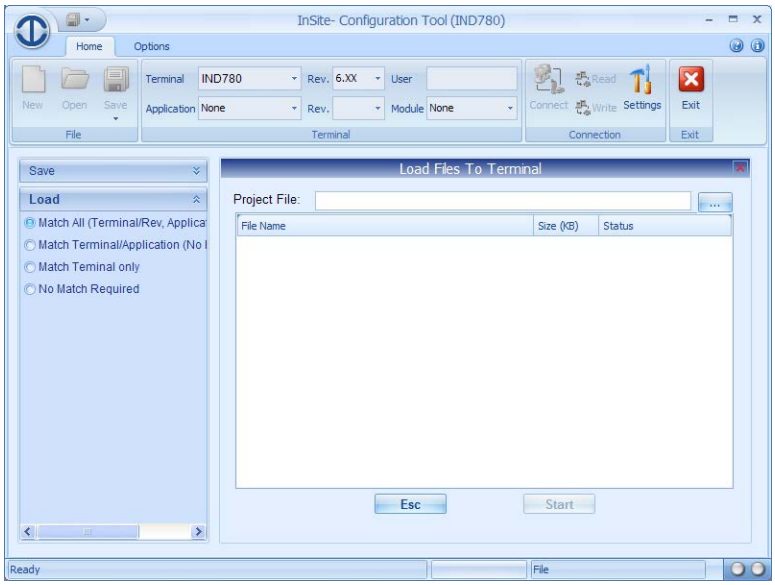


Figure 4-10: Selecting Load Selection Option

5. InSite will then open the saved file and list its contents in the Load view in the configuration frame. Click on Start to begin the Load process.

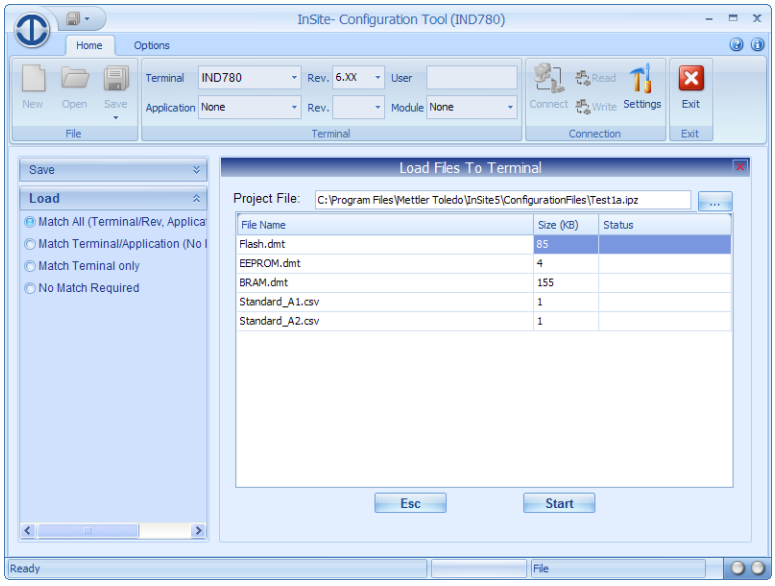


Figure 4-11: Starting the Load Process

6. A login screen may be presented if the terminal requires user / password information to access setup. In certain cases, both a shared data username and password and an FTP username and password will be required to get access to the data needed. Make sure the correct username and password is given when prompted!

7. As the configuration data is sent to the terminal, the status information will be updated in the Load view. If all information is sent successfully, the view will be cleared. Once the Load is completed, close the Load window in the configuration frame to use other InSite features.

IT IS STRONGLY RECOMMENDED THAT POWER TO THE TERMINAL BE CYCLED AFTER LOADING NEW CONFIGURATION DATA TO INSURE THAT ALL CHANGES ARE APPLIED AND TAKE EFFECT IN THE TERMINAL'S OPERATION.

5 Disconnected Mode

This chapter covers
- Disconnected mode features
- Recommended usage

Once authenticated, the InSite tool can be used to create configuration files without a terminal. In order to unlock access to these special features, the user must connect and successfully log in to the DSM server periodically through the Technician Dashboard, and the user credentials must include rights to this functionality (based on product selections).

5.1. Disconnected Functionality

If authenticated for access to this functionality, the InSite tool will include the configuration tree selections in addition to the Save Terminal File / Load Terminal File choices for a particular product. This access can be provided on a product-by-product basis.

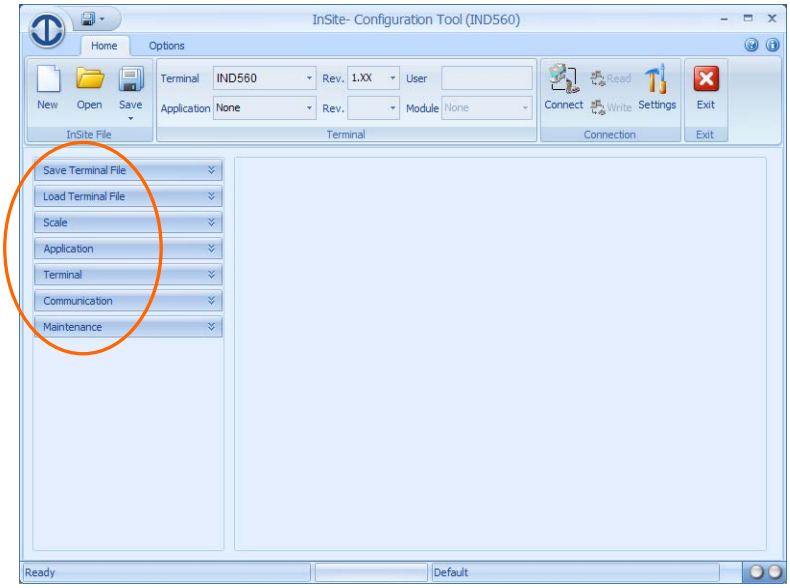


Figure 5-1: Configuration Tree Selections

To use InSite in the disconnected mode, use the navigation frame to select the desired configuration section. Once the section is expanded, a view of the tree is shown (Figure 5-2). From the tree, individual configuration branches may be selected. These pages are then shown in the configuration frame.

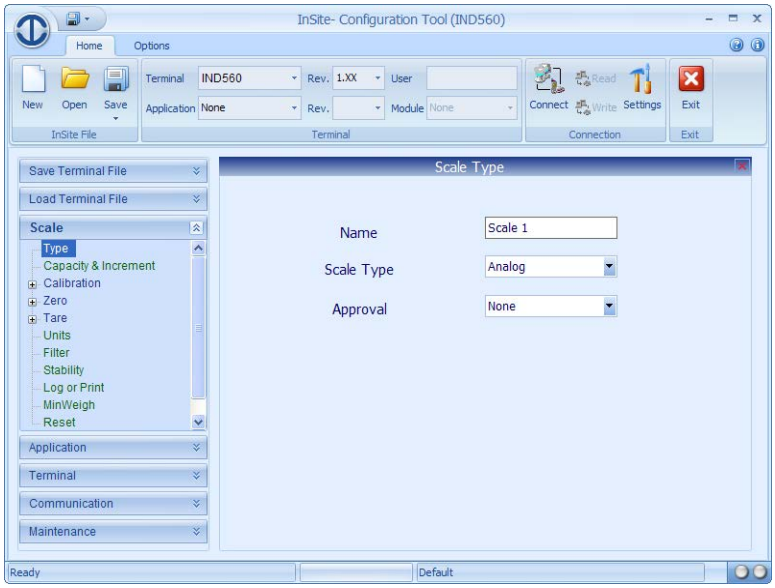


Figure 5-2: Tree View

All configuration tree and frame contents are based on specific product definitions. Configuration information, configuration selections and operation are detailed in the specific product's technical documentation.

Any configuration parameter with a white background can be changed; those with a light or slightly darker blue background are read only – either because of access rights or restricted use as defined by another parameter selection. Many configuration fields have qualified entry checks. InSite may reject unacceptable data entries or selections in those cases.

5.1.1. Unique Disconnected Mode Features

Because the InSite tool cannot verify the terminal's hardware in the disconnected mode, the configuration information includes extra parameters to define what optional hardware is available for some terminals. For example, in products that support multiple scale types, there will be a selection (as opposed to a read only field when connected) to choose the type of scale on which the configuration should be based. This selection can affect several other configuration parameters. It is up to the user to ensure that the appropriate hardware selections are made for disconnected configurations.

IT IS IMPORTANT TO NOTE THAT INSITE DOES NOT SAVE AN ENTIRE CONFIGURATION IMAGE IN THE DISCONNECTED MODE – ONLY CHANGES ARE SAVED.

As changes are made to the disconnected configuration, InSite keeps track of **all** changes, and **only** the changed information. Once the changes are complete and the user saves the InSite file, only the changes to the configuration are saved.

5.2. Disconnected Mode Usage

The disconnected mode is useful for creating configuration files when the terminal is not available. The user may pre-configure any known setup information without access to hardware. Then, when the terminal is available, the saved information can be written to it using connected mode. This allows users to create configuration data at their own convenience.

ONLY BCF (InSite files) may be used or opened in the disconnected mode.

In addition, saved InSite files can be used to clone common application data for terminals with different hardware. Because portions of the configuration data will be different, a complete save/load would not be appropriate. Since the disconnected mode saves only the changed information, a file containing only the appropriate changes could be made and written into all terminals.

6 Connection Settings

This chapter covers
- Connection settings

In order to communicate to a connected terminal, InSite must be configured to use either a COM port for serial communications or an Ethernet IP address and port for an Ethernet socket connection. The section provides details on the steps needed to make these selections.

6.1. Settings

The Settings tool button provides access to the communication parameters used by InSite for the product selected in the Terminal frame. Some terminals can only support one method of communication based on hardware and software capabilities.

6.1.1. Changing Settings

To define the connection parameters to use, take the following steps:

1. Select the terminal type for this connection.

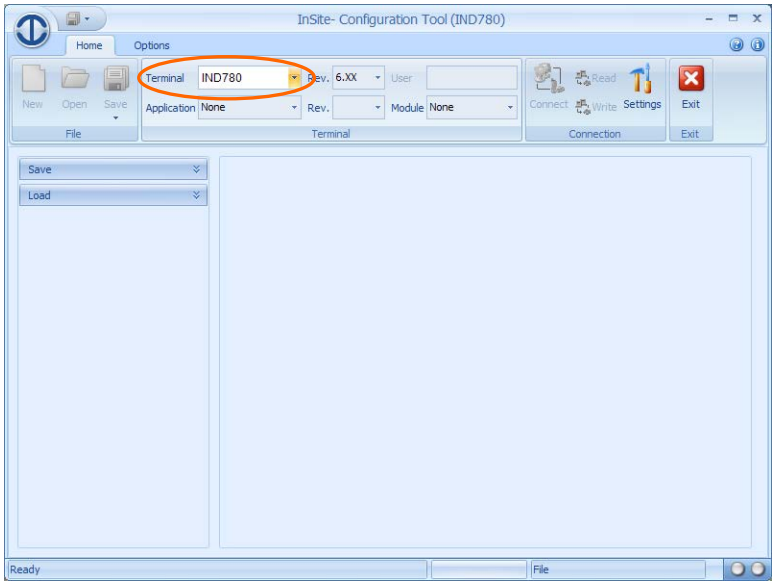


Figure 6-1: Terminal Type Selection

2. View the current settings by clicking on the Settings tool button.

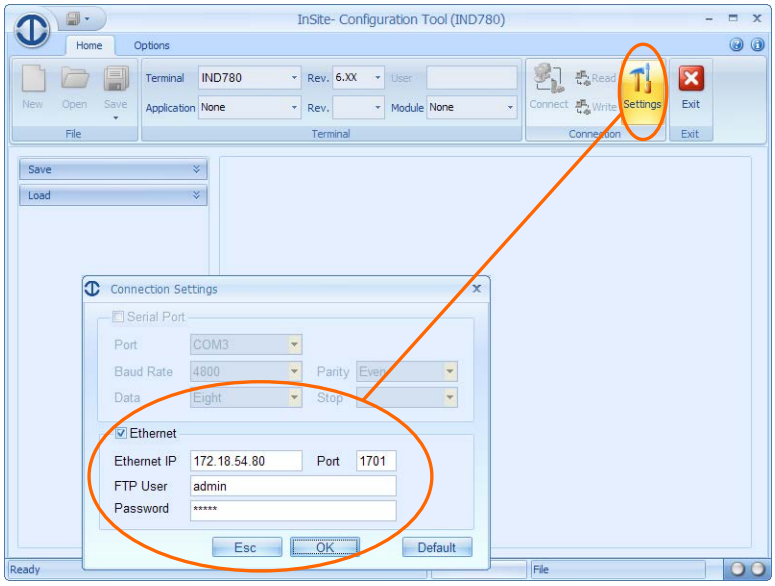


Figure 6-2: Port Settings

3. If Serial / Ethernet selections are both available, chose which type of communication should be used.

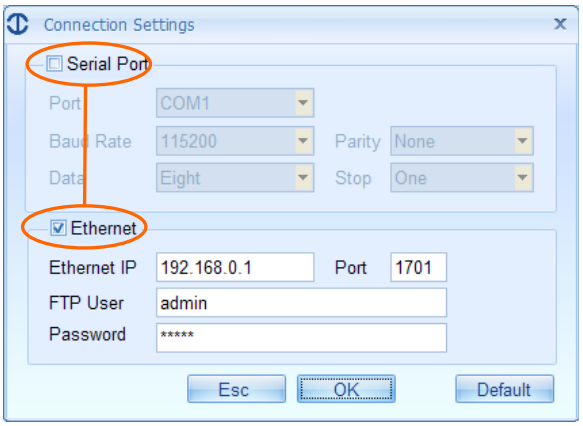


Figure 6-3: Connection Type Selection

4. For an Ethernet connection, enter the IP address and port of the **terminal**. InSite will use this to establish the socket connection to it. The FTP user/password information is used when FTP access is required for file transfers. The default user/password is admin/admin.

5. For a serial connection, select the **PC** com port and port configuration data. InSite will use this information to control the PC COM port during serial communications with the terminal. InSite can use USB to serial port adapters that have been configured on the PC. It will display any serial port it can use in its selection list. Typically, the USB driver must be installed (rather than using the generic one) in order for the connection to work.

6.1.2. Terminal Connection types

For a list of devices supported by the current version of InSite, please refer to the **Release Notes** document.

7 Connected Mode

This chapter covers
- Connected mode features
- Recommended usage

Once authenticated via the dashboard, the InSite tool may be used to connect to the terminal directly and change its current configuration, read its current configuration and save it as an InSite configuration file, or write saved InSite configuration files into the connected terminal. In order to unlock access to these special features, the user must connect and successfully log in to the DSM server periodically through the Technician Dashboard. The user's credentials must include rights to this functionality (based on product selections).

7.1. Connected Functionality

Like the disconnected mode, if authenticated for access to this functionality, the InSite tool will include the configuration tree selections in addition to the Save Terminal File / Load Terminal File choices for a particular product. This access can be provided on a product-by-product basis. Any product that can be used in the disconnected mode can also be used in the connected mode. To use InSite in the connected mode, use the terminal toolbox frame to select the desired terminal selection. Make sure the settings are correct for the connection (see chapter 6 for details), then click on the Connect button in the Connection toolbox frame to establish communication with the terminal.

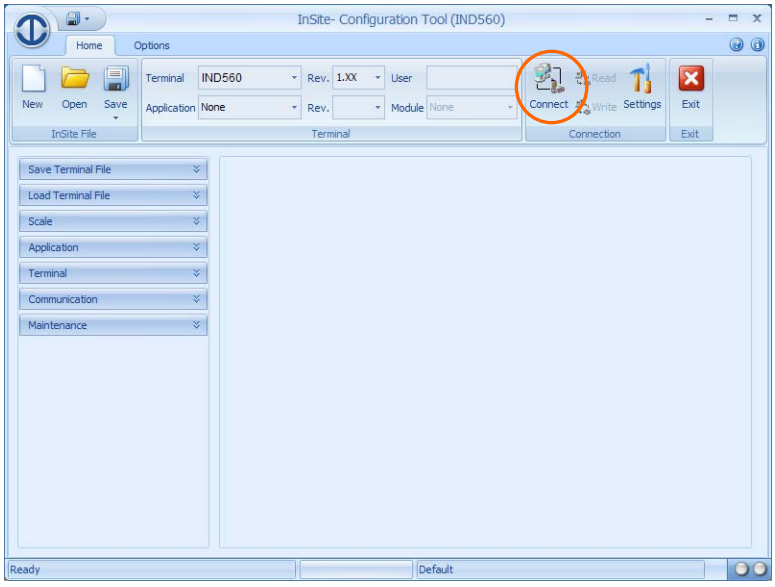


Figure 7-1: Connect Button

Some products may request login information before the connection is completed.

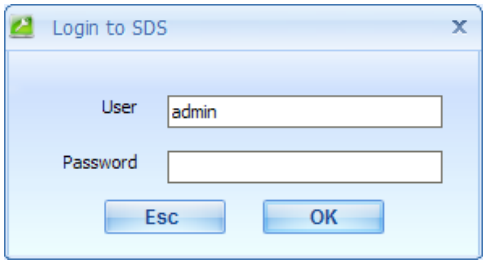


Figure 7-2: Login Dialog

Either valid username/password information (as previously configured in the terminal) or the default username must be entered to advance to the next step in the connection process. The default username for a factory-configured IND560/IND560x or IND780 is admin (all lower case) with no password.

Once connected, use the tree view in the navigation frame to view or make changes to the current configuration of the connected terminal.

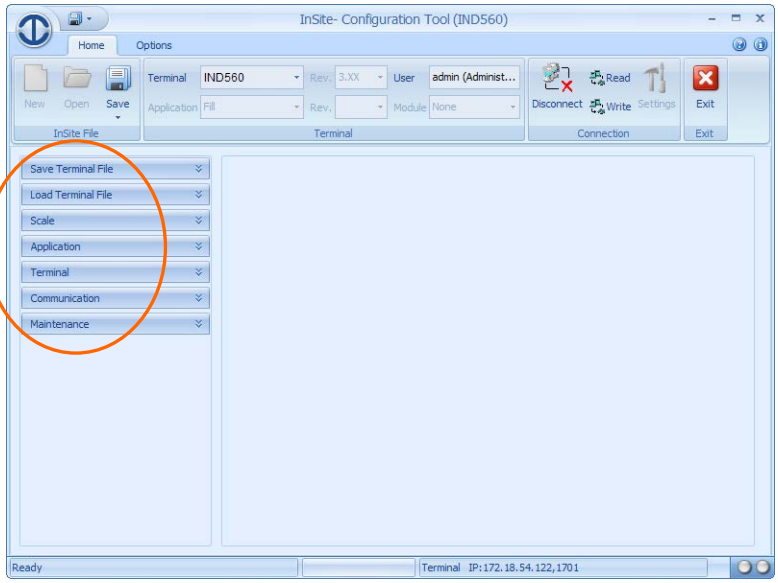


Figure 7-3: Navigation Frame

Contents of the tree and configuration frame window are product-specific but typically follow the same general organization with five main sections: Scale, Application, Terminal, Communication, and Maintenance.

7.1.1. Reading Configuration from a Terminal

Not all parameters are read when a terminal is connected to the tool: only relevant parameters are read as the user navigates through the nodes in the tree frame. This was done as a concession to those who wish to connect and change only a few parameters, since reading all configuration data can be quite time-consuming. However, after connecting the user can choose to read all the values from the terminal.

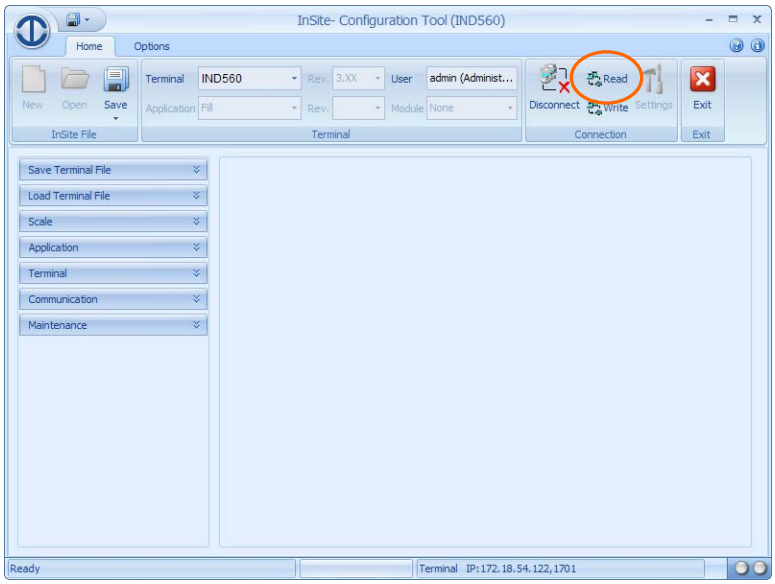


Figure 7-4: Read Button

The Read tool button in the Connection section can be used to initiate the read all data operation. It is important to remember to do this when it is desirable to save the entire terminal configuration to a file.

For the IND560/IND560x and IND780, for security reasons the user and FTP tables are not read. The default values for these tables are kept as part of the saved file. If the terminal has special configuration in these tables, the saved file must be modified to include this special configuration as part of the saved file otherwise the configuration file may have the typical terminal defaults saved here in its place.

7.1.2. Review / Change Configuration

Often, the InSite tool must send the terminal both the changed information and a trigger to make the new configuration take effect. The new terminal values are written after the changed parameter loses focus. In order to "write" to the terminal, navigate away from the changed data by clicking on another parameter or another page.

There are a few exceptions to this: Read/write tables are updated every time the user leaves the table view. In some special, the use of an "apply" button is required. InSite also writes when the page is switched if the page contains a single setup parameter.

7.1.3. Saving Terminal Configuration (InSite File)

To save the connected configuration of a terminal, follow these steps:

1. Connect to the terminal
2. Read all data
3. Save the configuration (as the required filename)

This saved file does **not** contain the user and FTP data unless modified via the tool. These files are saved as InSite files with the '.bcf" file extension and cannot be restored via the USB backup/restore process. The write method must be used when InSite is in its connected mode.

7.1.4. Writing Terminal Configuration

When a terminal is connected, parameter values in a saved configuration (.bcf) file can be uploaded to the terminal using the **Terminal | Write all data to terminal** menu command.

The operator will be given the option for the IND560 and the IND780 to write the configuration file with or without the user and FTP tables.

IT IS STRONGLY RECOMMENDED THAT POWER TO THE TERMINAL BE CYCLED AFTER LOADING NEW CONFIGURATION DATA TO INSURE THAT ALL CHANGES ARE APPLIED AND TAKE EFFECT IN THE TERMINAL'S OPERATION.

7.2. Special Operations

User & FTP Tables:

- When the Write All command is used, InSite confirms whether the user & FTP tables should be included

The connected mode allows the user to perform some special operations like using the template editor, editing softkeys in a special window, performing firmware upgrades, accessing special service information, and printing the configuration information.

The username and passwords for the Users and FTP tables are handled differently from other configuration data in IND560 and IND780. These tables cannot be read from the terminal. However, they can be reset or modified – the write operation is allowed. When the "read all" operation is performed, the password information is not included. When the "write to terminal" operation is performed, the user is asked whether these tables should be included. "Yes" will overwrite the terminal's existing tables with those stored in the offline file (either the default tables or the modified tables if they have been changed in the offline file). "No" will restore everything except these tables.

7.2.1. Template Editor

The Template Editor can be accessed from inside the InSite tool in two ways: through the Template Editor tool button on the Options tab or through the tree "view" selection of the output templates.

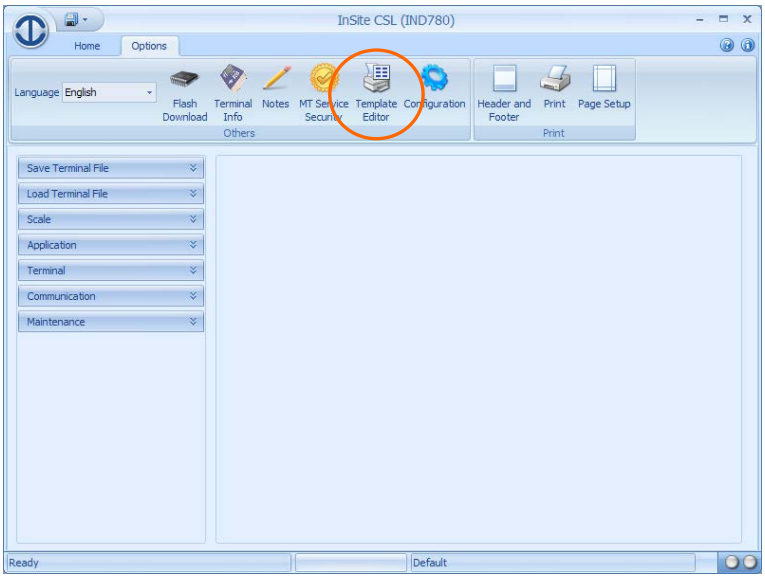


Figure 7-5: Template Editor Button

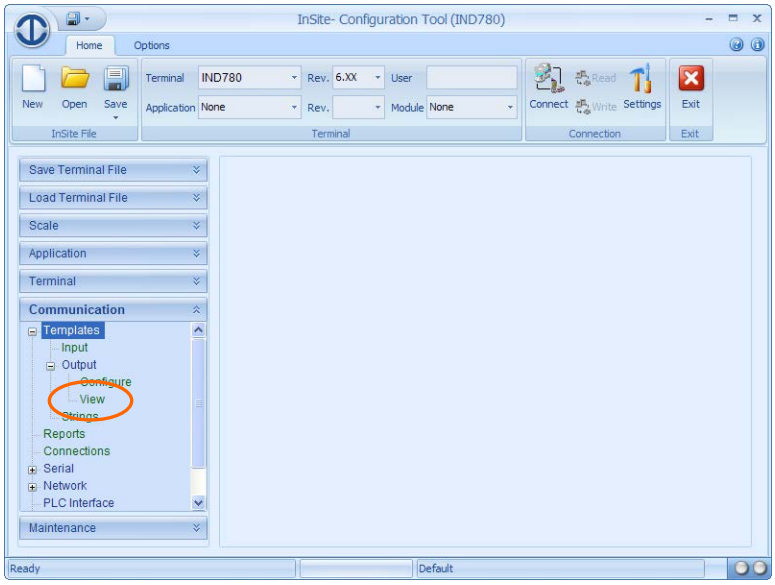


Figure 7-6: Template View in Tree

Once selected, the Template Editor replaces the navigation frame and toolbar frame with its own contents.

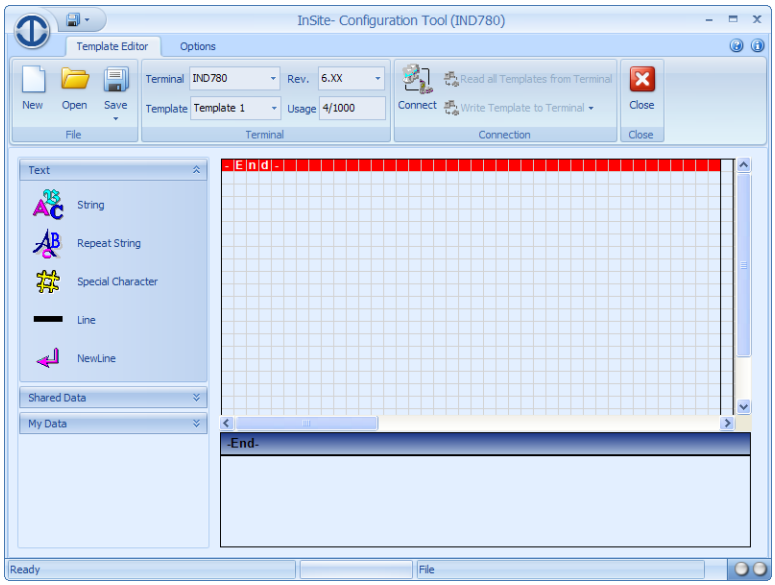


Figure 7-7: Template Contents Viewed

Please refer to Chapter 8 for details on using the Template Editor.

7.2.2. Softkeys

Softkeys can be dragged and dropped into the empty softkey locations in the special softkey layout window found in the Softkeys node in the Terminal tab of the tree frame.

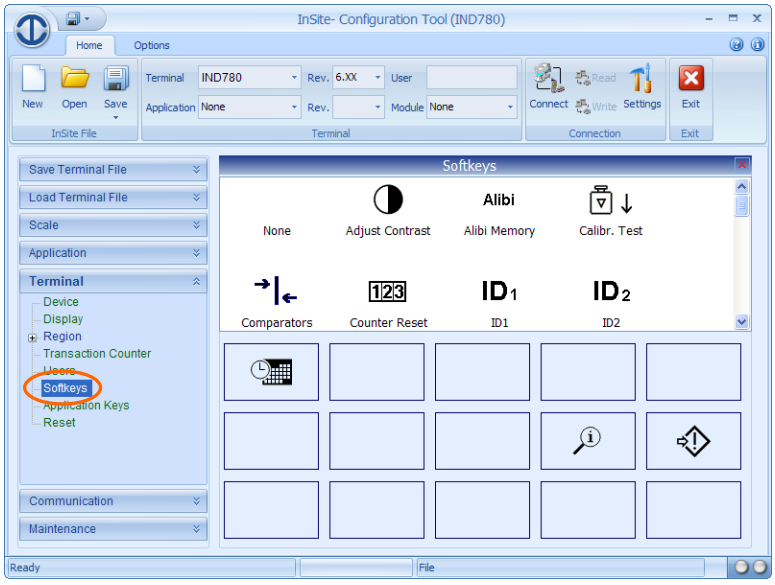


Figure 7-8: Softkeys View

7.2.3. Firmware Upgrades

The various terminals' Firmware can be upgraded using the Flash Download function found on the Options tab.

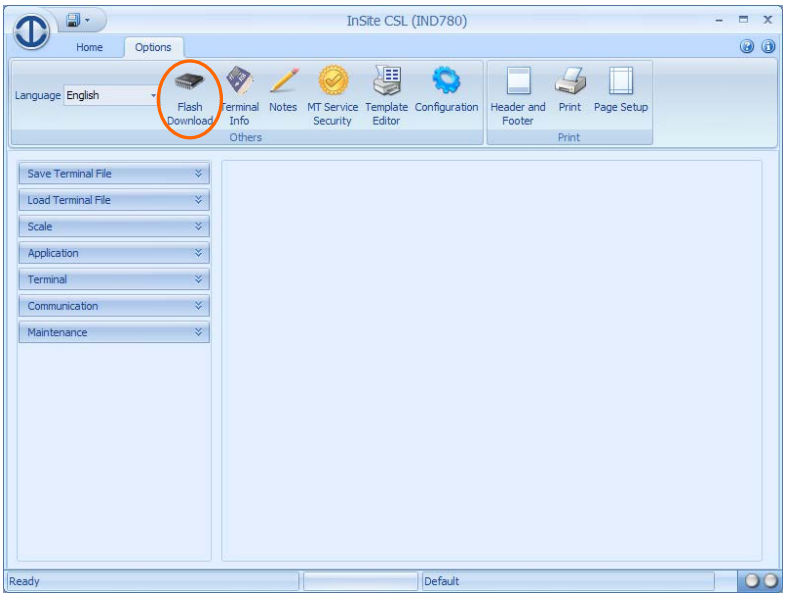


Figure 7-9: Flash Download Button

Depending on the type of terminal, this procedure may launch a separate application, Flash Magic (Figure 7-10), that handles the upgrade process, or it may start a dialog in the configuration frame to control the firmware file selection and communication to the terminal.

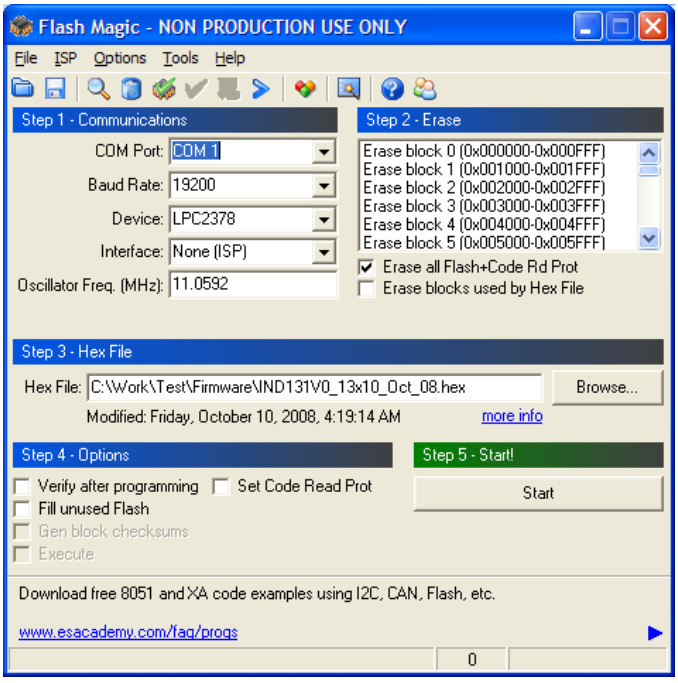


Figure 7-10: Flash Magic Window

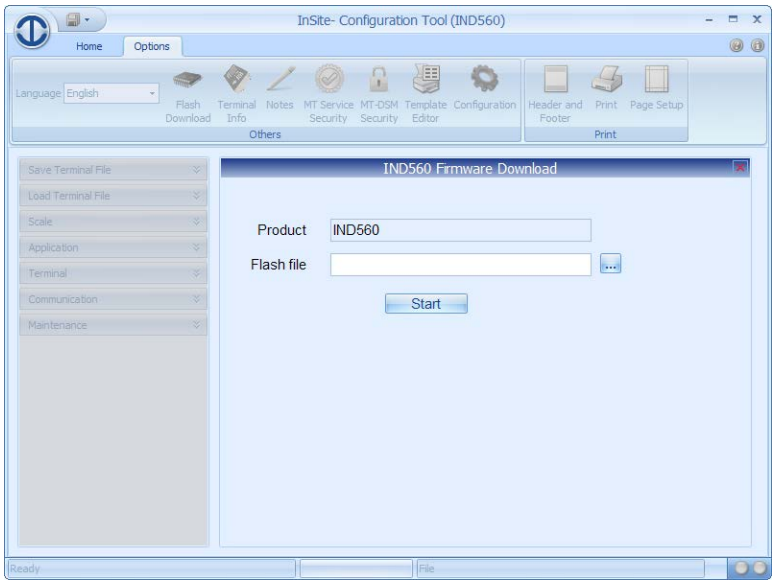


Figure 7-11: Firmware Upgrade Dialog

For products that use FTP to load their firmware – IND780, for example – make certain that the appropriate FTP user name and password are entered in the connection section before beginning the FTP process.

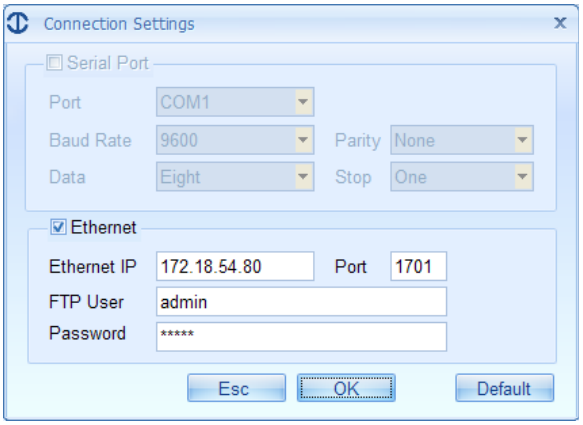


Figure 7-12: Ethernet Connection Information for FTP Login

It is also important to remember that many terminals require a special switch setting and power cycle operation in order to make the terminal ready to accept firmware upgrades. Consult the technical documentation of the specific terminal for details on the required process. Once the operation is complete, close the firmware upgrade window to exit it and access other configuration functions.

	**DON'T FORGET TO BACK UP THE TERMINAL'S CONFIGURATION BEFORE PERFORMING THE FIRMWARE UPGRADE. USE THE SAVE/LOAD PROCESSES TO SAVE AND THEN RESTORE THE SETUP INFORMATION.**

7.2.4. MT Service Security

For products that support it, the new MT Service Security section of the InSite tool is used to unlock access to special diagnostic service information. This is information that is NOT available via open

communications and requires an encrypted exchange of information between the InSite tool and the terminal before the terminal will permit access to its protected data.

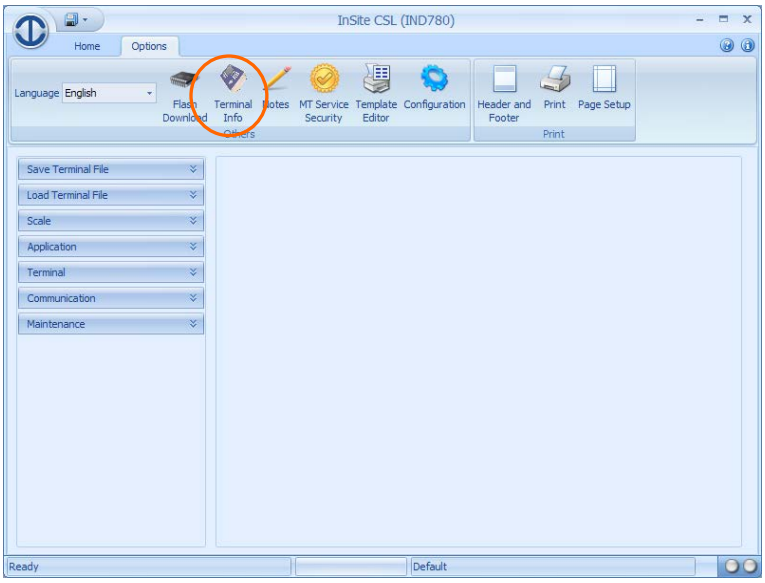


Figure 7-13: MT Service Security Button

Please refer to Chapter 9 for details on the MT Service Security operation.

7.2.5. Configuration Reports

Once the terminal has been configured, the configuration data can be printed from the InSite tool. The configuration report is generated from the Options tab, Print section in the toolbar frame.

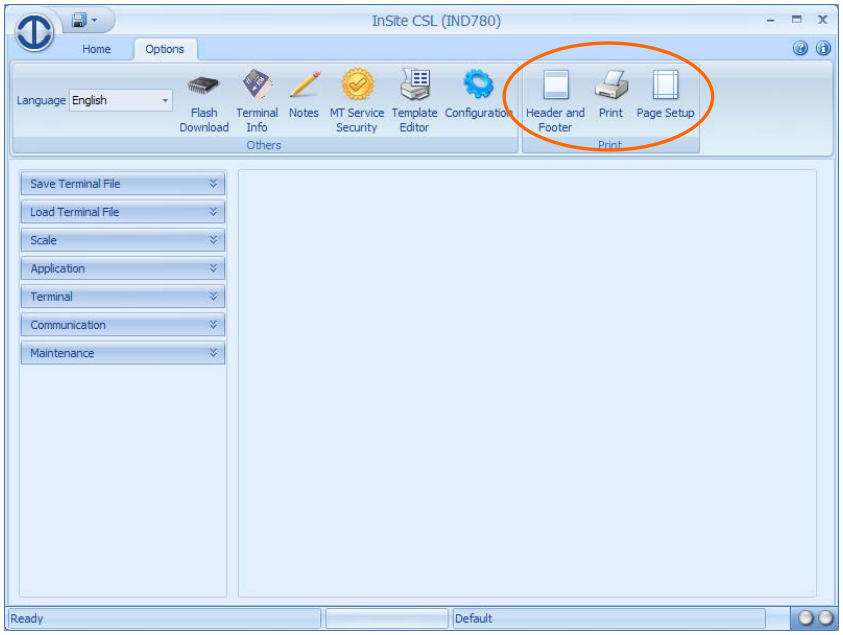
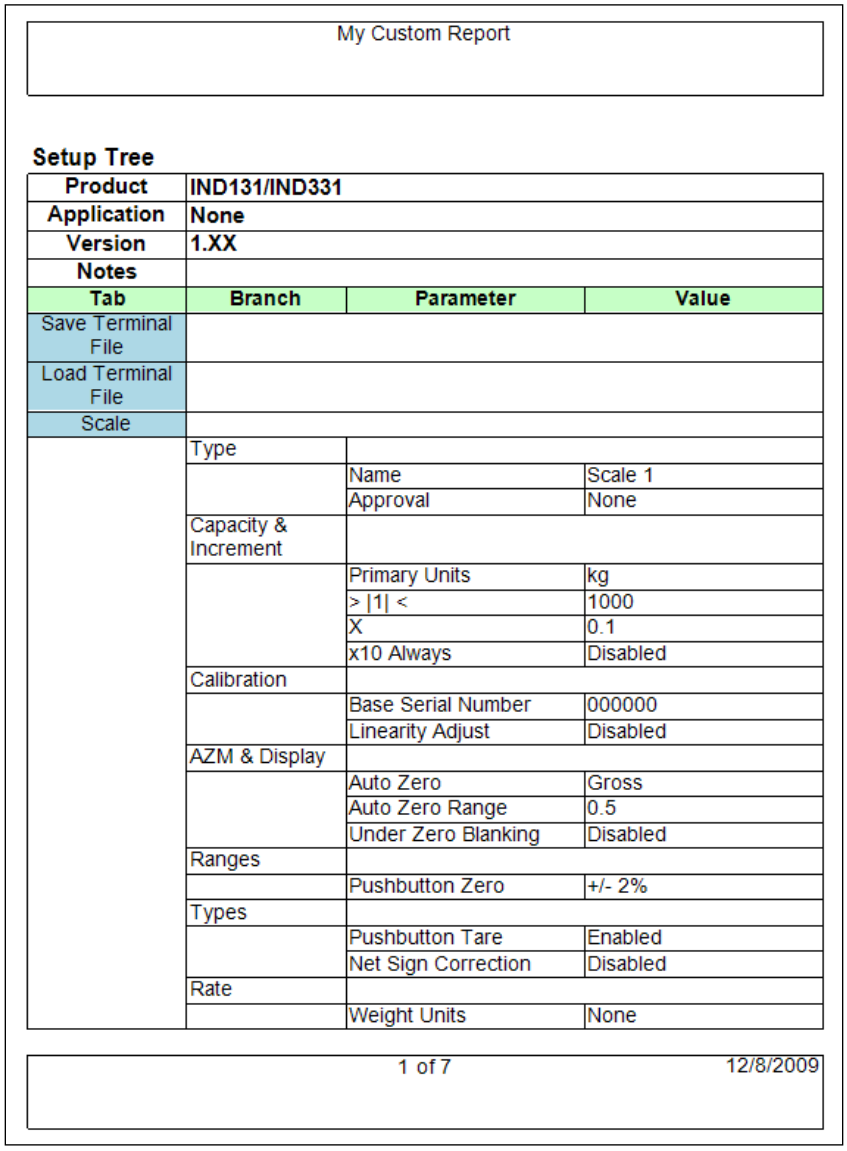


Figure 7-14: Print Options

There are options to customize the header and footer information and configure page settings. Once these are set up, the print function is used to generate to print view, which can be saved as a file or sent to a printer connected to the PC.

The header and footer can include system information like time, date, and number of pages. Custom text can also be inserted. Be careful when choosing the header and footer size – this can make the print report very large for the more advanced terminals.

Figure 7-15 shows an example of a configuration report printout from an IND131/IND331 terminal.



My Custom Report

Setup Tree

Product	**IND131/IND331**		
Application	**None**		
Version	**1.XX**		
Notes			
Tab	**Branch**	**Parameter**	**Value**
Save Terminal File			
Load Terminal File			
Scale			
	Type		
		Name	Scale 1
		Approval	None
	Capacity & Increment		
		Primary Units	kg
		> |1| <	1000
		X	0.1
		x10 Always	Disabled
	Calibration		
		Base Serial Number	000000
		Linearity Adjust	Disabled
	AZM & Display		
		Auto Zero	Gross
		Auto Zero Range	0.5
		Under Zero Blanking	Disabled
	Ranges		
		Pushbutton Zero	+/- 2%
	Types		
		Pushbutton Tare	Enabled
		Net Sign Correction	Disabled
	Rate		
		Weight Units	None

1 of 7 12/8/2009

Figure 7-15: Sample Printout Page from IND131/IND331

7.3. Connected Mode Usage

The connected mode is required when loading a saved InSite file created in the disconnected mode (Write) to complete cloning from another terminal or loading the pre-configuration data.

This mode allows instant access to read or change individual setup parameters quickly. It also has several special operations for terminal configuration:

- Template Editor with visual layout
- Softkey layout
- Firmware upgrades
- MT Service Security
- Configuration reports

While connected sessions can be used to save the entire configuration if the Read All function is used, InSite will not include the secure FTP and User tables with its data. Use of the Save function is strongly recommended to archive the complete configuration. This process should work for **any** version – even those not yet supported in the connected / disconnected modes

Templates and configuration files created in the prior version of the InSite tool (version 4) can be used and saved into the new version of the tool.

8 Template Editor

This chapter covers
- Layout and detailed operation of InSite Template Editor

The InSite Template Editor allows the user to build a Print Template. Print Templates are custom-tailored reports defined using Shared Data elements, text, and formatting commands.

The Template Editor is used to perform the following:

- Lay out the template data in a grid-based WYSWYG view
- Select one of the three possible grid widths (40 columns, 80 columns, 132 columns) based on number of characters supported by the printer
- Drag-and-Drop location / selection of items inside the template
- Insert text (fixed strings)
- Insert special characters for control codes (CR, LF, SO, SI, STX, ETX, etc.)
- Provide usage information to reflect the amount of space used in the current template
- Configure a terminal's template while connected to it
- Configure a terminal's template offline and then download it to a terminal when connected
- Extract the current templates from a connected terminal and save it as a file locally

8.1. Starting the Template Editor

The Template Editor may be accessed from inside the InSite tool in two ways: Through the Template Editor tool button on the Options tab or through the tree "view" selection of the output templates.

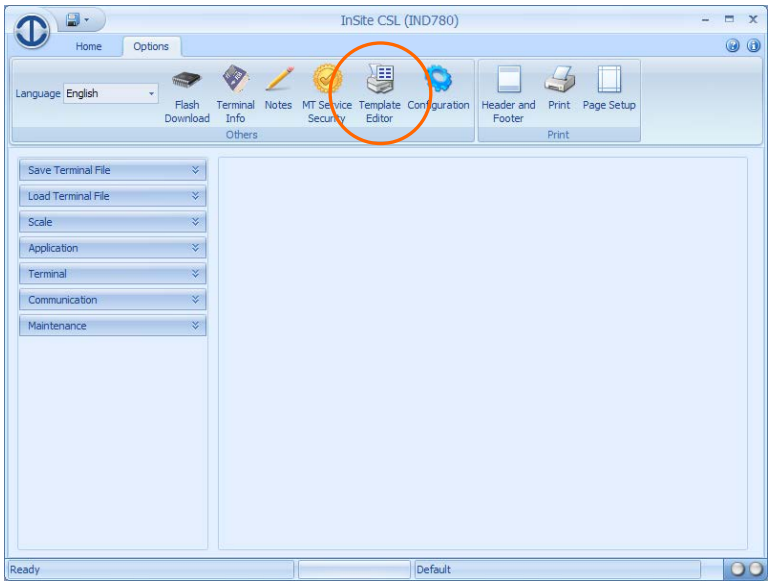


Figure 8-1: Template Editor Button

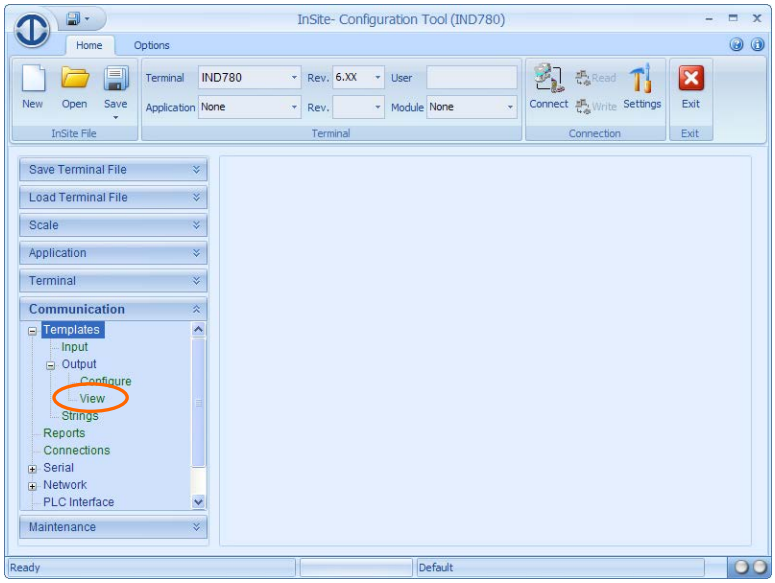


Figure 8-2: Template View in Tree

Once selected, the Template Editor replaces the navigation frame and toolbar frame with its own contents.

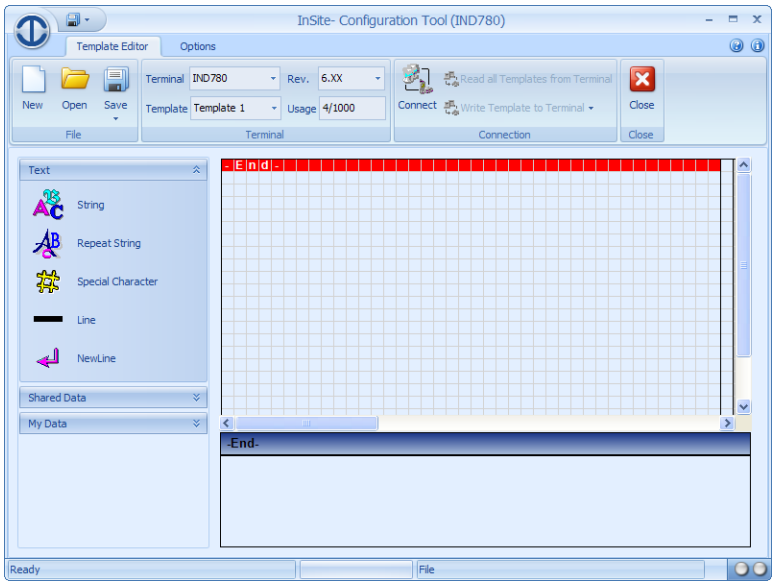


Figure 8-3: Template Contents View

The Template Editor tab contains toolbar frames to handle file operations, terminal information, connection functions, and a Close button to return to the normal InSite configuration functions.

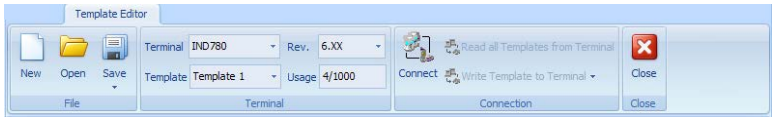


Figure 8-4: Template Editor Tab

The File section in the Template Editor allows templates to be created and opened, or their structure **only** to be saved as a ".tpr" file. The Terminal section contains selections for the terminal type and template. It also indicates how much of the template space has been used for the current template. The Connections section provides methods to connect / disconnect from the terminal (based on the InSite tool settings) and Read or Write templates to the terminal once connected.

The Options tab contains toolbar frames to handle view options, edit operations, and miscellaneous template information.

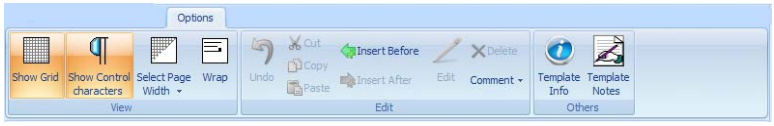


Figure 8-5: Template Editor Options Tab

The View section controls the visual layout window view options. The user can choose to display the grid, display control characters, and control data wrapping. In addition, the window's number of characters (page width size) can be configured for 40, 80 or 132 "columns". This determines how many character positions are available inside the printable (blue) vs. non-printable (grey) areas. Keep in mind that this constraint is for design purposes – the terminal and its template do

not have such restrictions. This is always controlled by the connected printer (and its characters-per-line capabilities).

The Edit section controls the editing options in the design window. The Others section contains the miscellaneous information about the template and a place to record user notes.

Once the design window options are configured as required, the toolbox selections that replaced the tree in the navigation frame are used to populate the template with text and shared data reference variables.

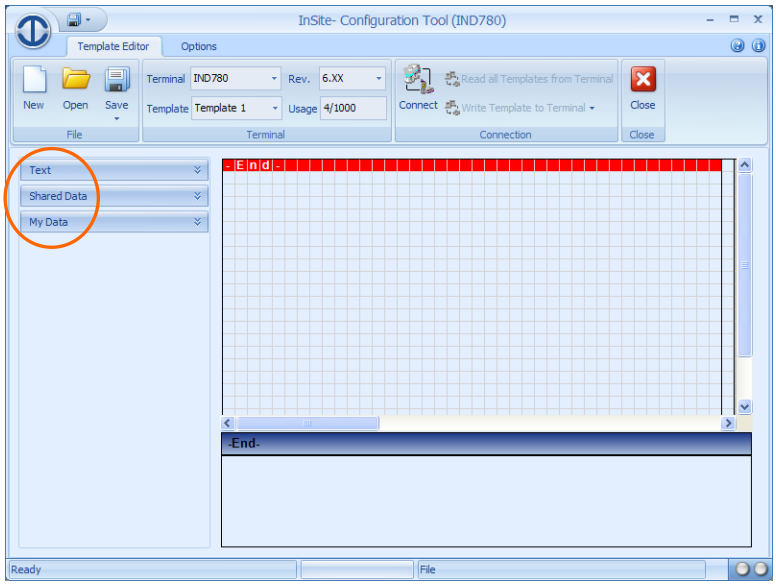


Figure 8-6: Template Editor Toolbox Selections

8.2. Adding Text to a Template

There are two ways of placing text or shared data into the template:

- Click on the object in the toolbox; the InSite Template Editor will place that object in the current focus location of the template.
- Drag and drop an object into any "valid" position in the template.

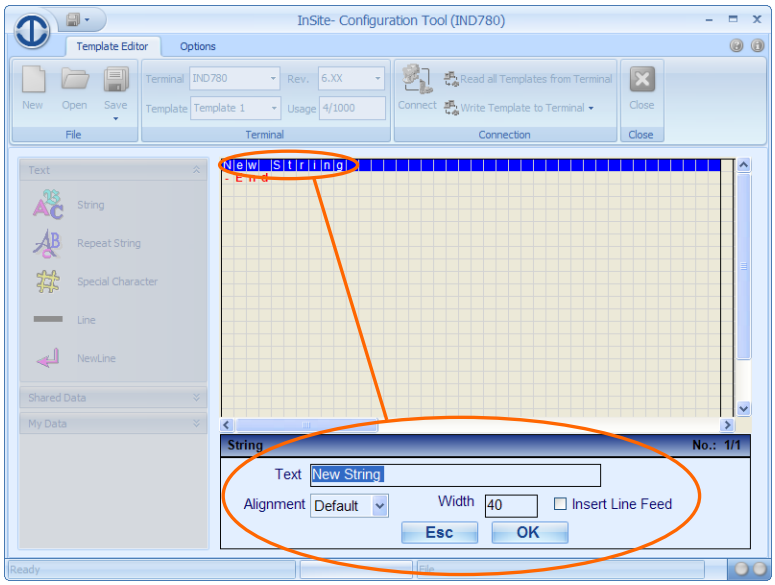


Figure 8-7: Template Text Entry, Object Parameters Displayed

Once the object has been placed in the layout grid, its parameters will appear below the grid. This information is object-dependent, but includes formatting information like alignment and width. It is also possible to include line feed characters after the object. Once the parameters are configured as desired, the OK button is used to confirm and complete the object entry. ESC is used if the object's entry should be ignored and the template returned to its prior state.

8.2.1. Text Object Types

The InSite Template Editor has five different types of text objects:

- String
- Repeat String
- Special Character
- Line
- New Line.

The String object allows a user-specified string of text to be defined. The Repeat String is identical to the String object except it includes a field to indicate how many times the string should be repeated. The Special Character object is used for non-printable control characters like SOH, SI, SO, and FF. The Line object is used when a divider line of characters (such as dash or star) is needed. The New Line object is used when extra line feeds (CR/LF) are desired.

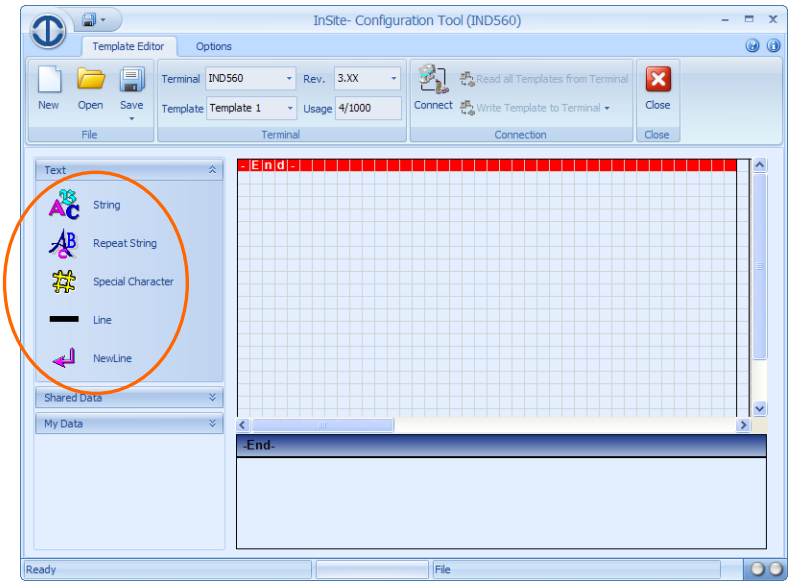


Figure 8-8: Text Objects

8.2.2. String

The String object for InSite Template Editor has three parameters:

- Text
- Alignment
- Width.

A line feed can also be included at the end of the string.

Figure 8-9: String Parameters

Text is used to enter the desired string. Alignment options are left, center and right. The width is used to pad or trim the desired data. The InSite Template Editor will default the width value to the size of the entered text and will display the entered text in the layout window once the object has been added. An inserted line feed object is indicated by the paragraph symbol (¶).

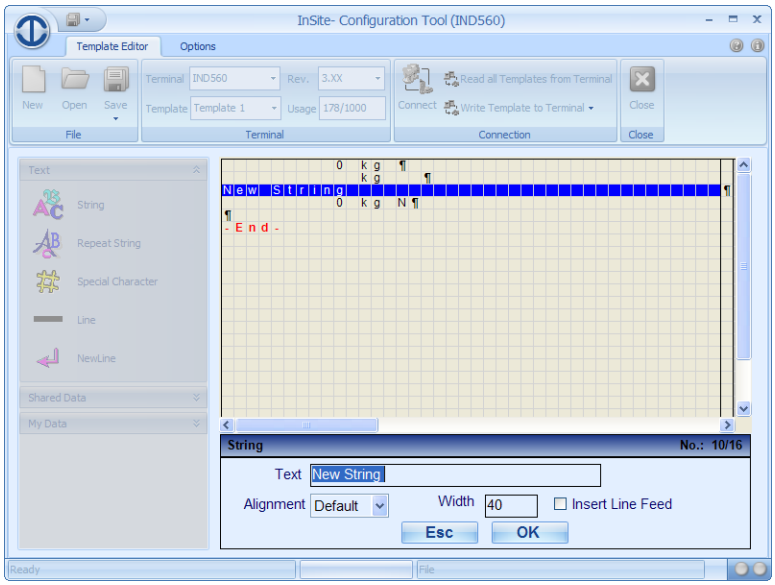


Figure 8-10: String Objects with Line Feed Objects Displayed

8.2.3. Repeat String

The Repeat String object for InSite Template Editor has three parameters:

- String
- Alignment
- Width

A line feed can also be included at the end of the string.

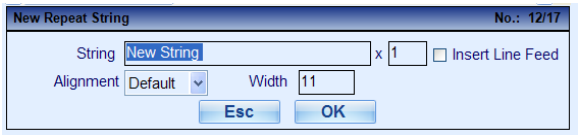


Figure 8-11: Repeat String Parameters

String is used to enter the desired text and number of times it should be repeated. Alignment options are left, center or right. The width is used to pad or trim the desired data. The InSite Template Editor will default the width value to the size of the entered text and will display the entered text in the layout window once the object has been added. An inserted line feed object is indicated by the paragraph symbol (¶).

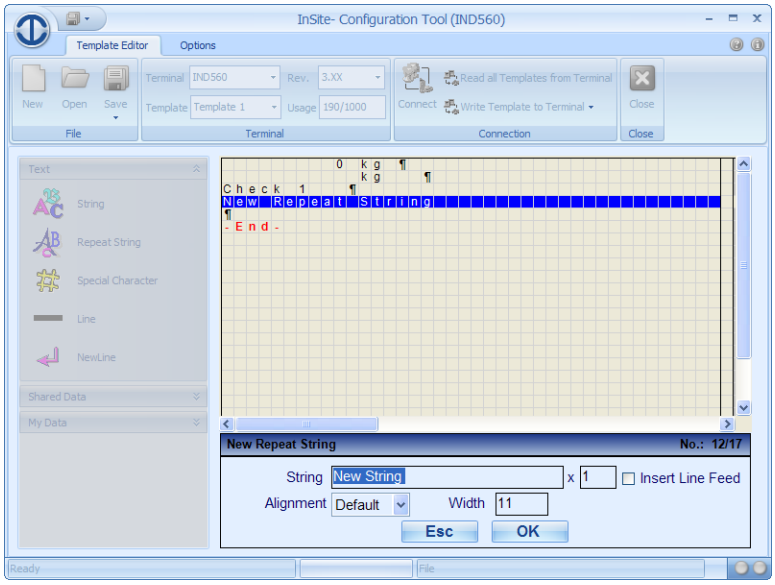


Figure 8-12: Repeat String Object

8.2.4. Special Character

The Special Character object for InSite Template Editor has one parameter:

- Character.

A line feed can also be included at the end of the string.

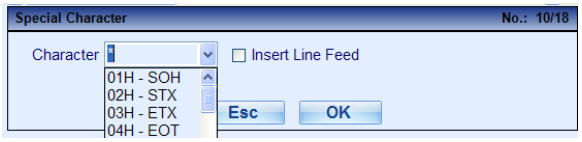


Figure 8-13: Special Characters Parameter

The Character selection box is used to pick from the available special characters. This list includes hex values and an abbreviated character name. An inserted line feed object is indicated by the paragraph symbol (¶). The special character is indicated by a box symbol (□) in the design window once it has been added.

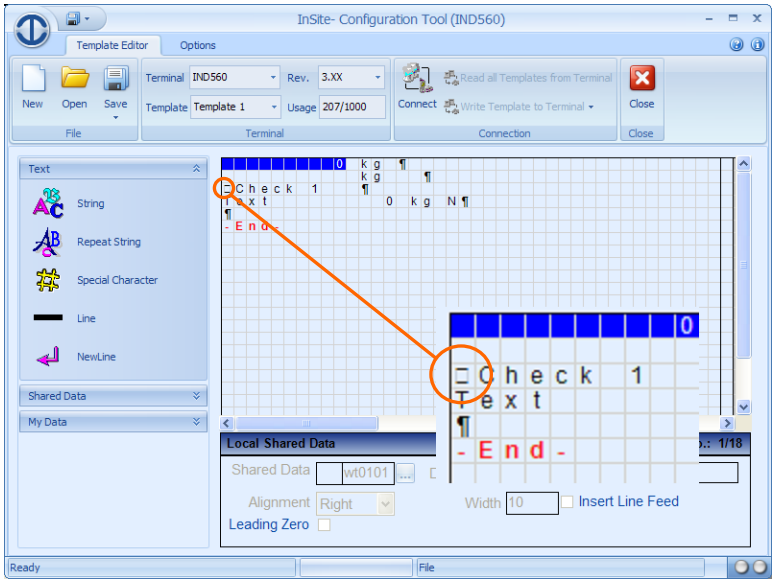


Figure 8-14: Special Character Indicated by Box Symbol

8.3. Adding Shared Data to a Template

The Shared Data toolbox contains objects to place a new shared data variable reference in the template. In addition, as shared data fields are used, the toolbox will keep a few of the most recent ones.

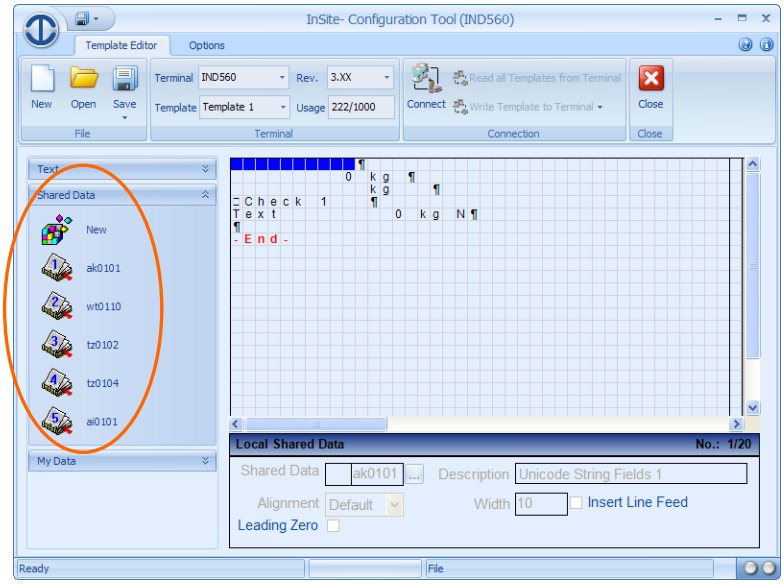


Figure 8-15: Shared Data Objects

The Shared Data object has several parameters:

- Shared Data
- Alignment
- Width

A description of the shared data is included for the template designer. Alignment options are left, center or right. The width is used to pad or trim the desired data. The InSite Template Editor will default the width value to the maximum character size of the shared data variable. **Warning**: In some cases, this can be quite long! A line feed can also be included at the end of the string. An inserted line feed object is indicated by the paragraph symbol (¶).

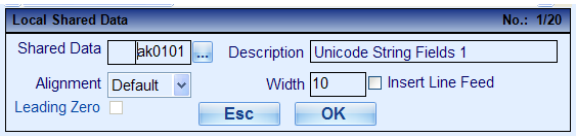


Figure 8-16: Shared Data Parameters

A shared data name selection window can be opened by clicking on the ellipsis button (…) beside the shared data entry box. This provides a list of available shared data variable names and their descriptions for users who are uncertain which variable to use.

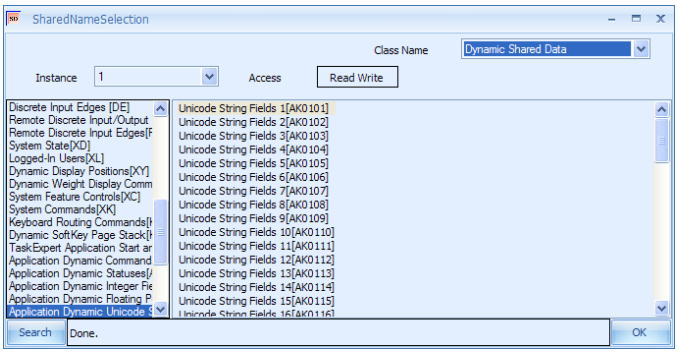


Figure 8-17: Shared Data Selection Window

8.4. Using My Data

The My Data toolbox contains copied or cut sections of template data that can be saved and pasted into other templates in the InSite Template Editor.

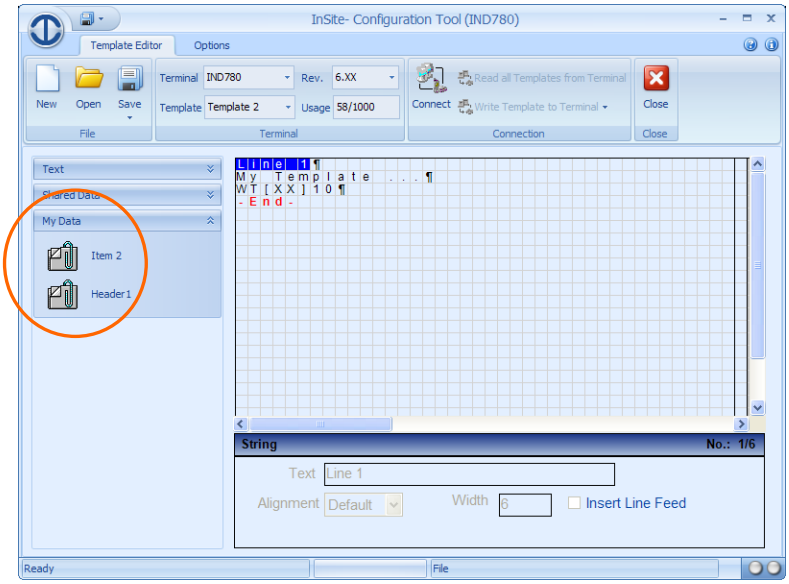


Figure 8-18: My Data Objects

These items can be renamed by right clicking them and selecting rename from the menu options.

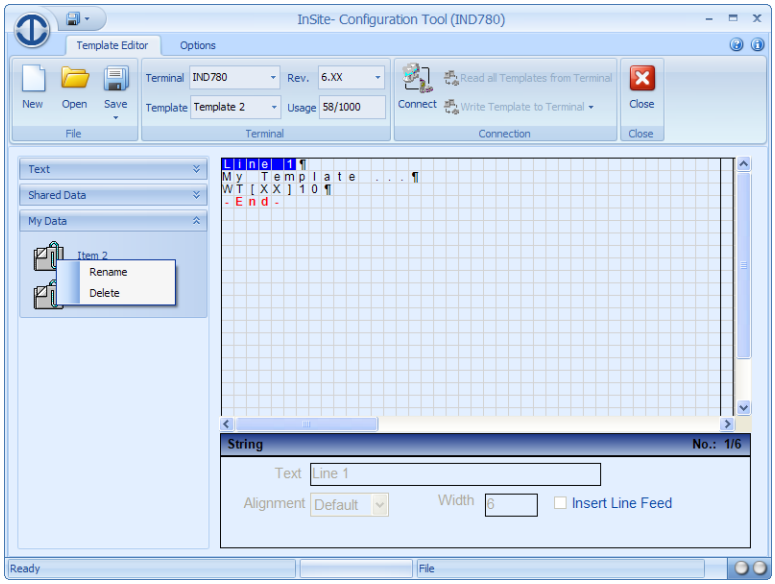


Figure 8-19: Renaming a My Data Object

- Note that only the last 10 items are stored in the My Data toolbox, so if more than 10 cut or copy operations are performed, the earliest clipped data will be overwritten.

9 MT Service Security

This chapter covers
- MT Service Security Features

Once authenticated, the InSite tool may be used to unlock access to terminals' special diagnostic features. Not all terminals support this feature – only those like the IND780 with protected diagnostic data.

For products that support it, the new MT Service Security section of the InSite tool is used to unlock access to special diagnostic service information. This is information that is NOT available via open communications and requires an encrypted exchange of information between the InSite tool and the terminal before the terminal will permit access to its protected data.

9.1. Using MT Service Security

MT Service Security can be used in both connected and disconnected mode. Operation differs slightly between the two modes. In both cases, click on the MT Service Security button in the Others section of the Option tab to access these features.

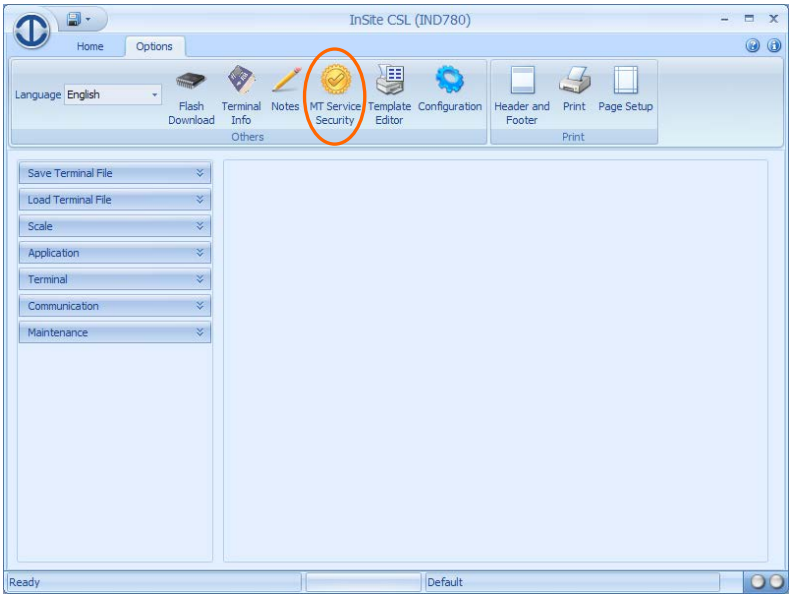


Figure 9-1: MT Service Security Button

If a terminal is connected while working with MT Service Security, the InSite tool will read the required security information from the terminal. At this point, it will also show the status of the terminal's security (locked or unlocked) and provide a command button to allow the opposite operation (unlock if locked, lock if unlocked). Once the command button is clicked, the InSite tool will exchange the security information needed and update the status and command button.

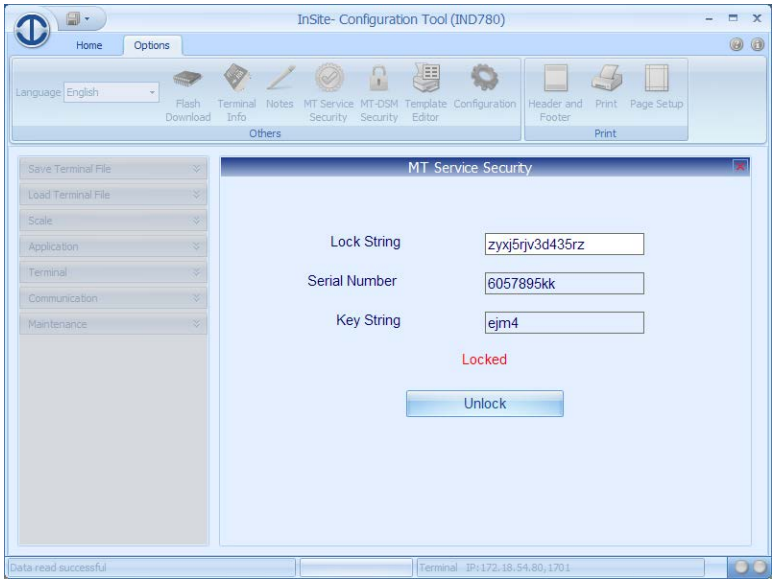


Figure 9-2: MT Service Security Unlock Button

If it is not possible to connect to the terminal, the MT Service Security function can still be used to unlock the terminal. In the disconnected mode, the InSite tool will provide an entry box for the lock string. This information must be acquired from the terminal's maintenance section. Enter in the string that the terminal displays and click on the Create Key button.

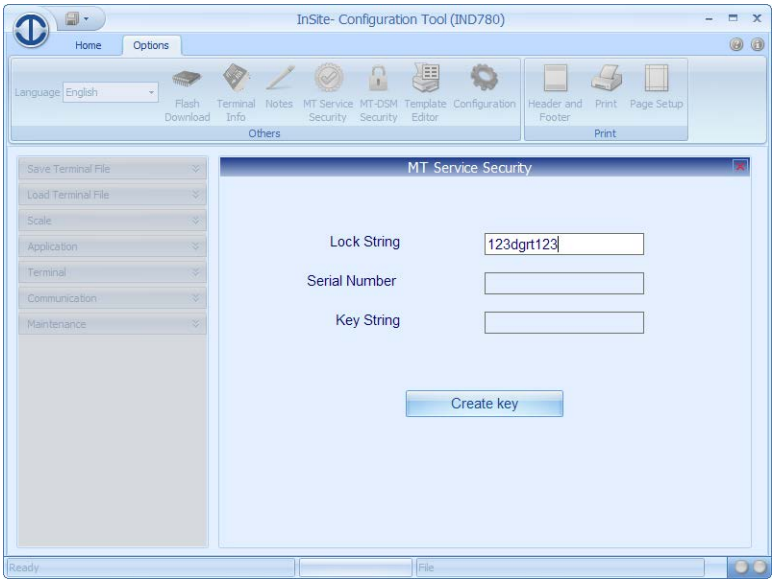


Figure 9-3: Create Key String

The InSite tool will generate a key string as long as the data is valid AND the serial number of the terminal is not blank (this value is embedded in the lock string data). The key string must then be entered at the terminal in order to unlock it.

To return to other configuration functions, close the MT Service Security window. Once the terminal is unlocked (from either method), the protected service information can then be viewed and edited.

Don't forget to lock the terminal once at the end of the session. If the diagnostic information is to be saved, first unlock the terminal using this process, then perform the save.

A Terminal Connection

This appendix covers
- Terminal wiring and connection information
- Firmware updates

This Appendix provides specific information on terminal connection setup and wiring for operation with the InSite Configuration Tool.

A.1. IND131 / IND331

A.1.1. Configuration & Save/Load

Connection to InSite is only possible using COM1 of the terminal.

1. Enter setup of the terminal and select Variable Access as the assignment for COM1.
2. Confirm the connection settings in InSite.
3. Connect an RS-232 cable between the terminal and PC wired as shown below.

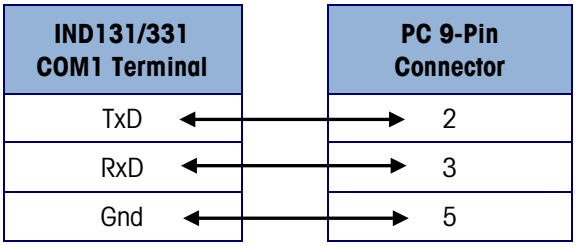


Figure A-1: RS-232 Connection to IND131/IND331 Terminal

After connection between InSite and the IND131/331 has been terminated, enter the terminal's setup tree and change the assignment for COM1 to the appropriate settings. Remember to change the serial port settings as well, if necessary. Power cycle the terminal.

A.1.2. Flashing new Firmware

Refer to "Upgrading Firmware" section in Chapter 4 of the IND131/IND331 Technical Manual for a complete explanation of the required steps.

A.1.3. Using the SD memory card

InSite now allows you to read the configuration of an IND131/IND331 terminal from the file saved on an SD memory card. Once imported, the configuration may be modified, saved back to the SD memory, and loaded into the terminal.

In disconnected mode, both TXT files and normal BCF files can be selected. Figure A-2 shows the file selection dialog.

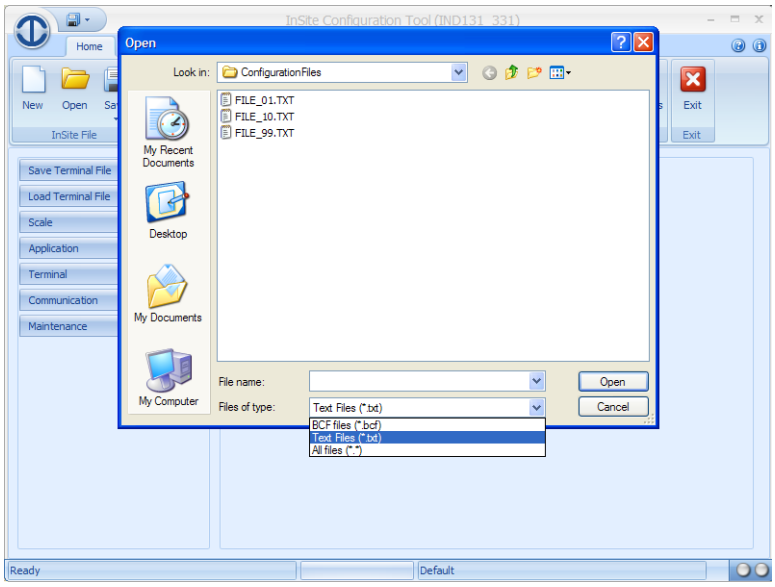


Figure A-2: File Selection Dialog

Once the file is opened, the configuration can be modified in the same way as any normal BCF file. Changes can then be saved as either a BCF or TXT file, for future loading into the SD memory card. Figure A-3 shows the Save As… dialog.

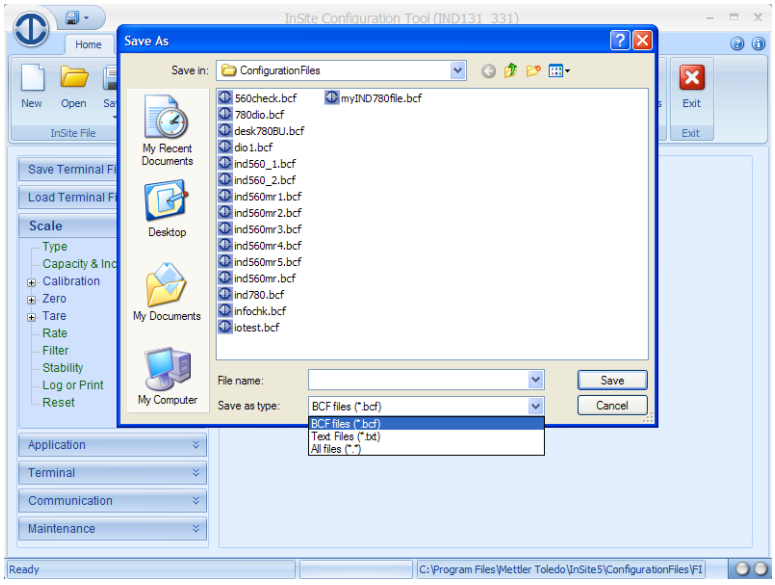


Figure A-3: Saving the Configuration File

Please note the following:

- InSite defaults to the BCF file selection for all offline file operations.
- The IND131/IND331 terminal can only use TXT files from its SD memory card. BCF files must be 'Saved As' TXT for the terminal to use them.

- InSite does not include any special read or write functions for memory cards – if the memory card can be seen by the normal file browse function (such as Windows Explorer), InSite can read or write directly to it. However, it is recommended that files are copied from the memory card to a folder on the PC before opened using InSite.
- Refer to the IND131/331 **User's Guide** for instructions on using the SD memory card to save and load configuration information in the terminal.

A.2. IND246

A.2.1. Configuration & Save/Load

A.2.1.1. Connection

In the IND246 terminal, the connection to InSite is supported by COM1, USB and Ethernet.

When connecting via USB, the serial connection parameters should be used. Any baud rate, data bits or parity combination can be used for COM1 and USB, provided that the InSite settings match the terminal port settings.

In order to be able to use one of these connections with InSite, the terminal must first have at least one configured connection for the selected hardware. The type of connection does not matter – InSite CSL will take control of the port automatically, providing the port is not configured as "None."

A.2.1.2. Weighing Mode

When connecting to InSite, the IND246 terminal should be in basic weighing mode, **not** in one of its application modes. There is no need to change the port connection to connect InSite – InSite will take over the port function automatically and then switch it back when disconnecting.

- Note: It is important to use InSite's disconnect function; otherwise, normal port function is not restored and it will be necessary to power cycle the IND246 to recover.

A.2.2. Flashing New Firmware

A.2.2.1. File Type

To flash firmware from InSite, the file must be an **.mot** file. InSite does not support the 246A0xx.**hex** file type used to flash from the SD card inside the terminal.

A.3. IND560

A.3.1. Configuration & Save/Load

A.3.1.1. Ethernet

1. The optional COM2/COM3/Ethernet board must be installed in the IND560 terminal.
2. The IP address of the PC may need to be changed. Refer to the "Ethernet Connection to a PC" section of the IND560 Technical Manual, Appendix D
3. The IP address programmed in the terminal must be known so it can be entered in InSite.

4. Connect a cross-over Ethernet cable between the terminal and PC.
5. Confirm the connection settings in InSite are set for Ethernet – not serial interface and enter the IP address of the terminal.

A.3.1.2. Serial

1. Serial connection to InSite is only possible using COM1 of the terminal.
2. Two methods can be used to program the IND560 terminal for connection to InSite configuration:
   a. Select Variable Access as the assignment for COM1
   b. Turn SW2-1 ON then power on the terminal. This overrides the currently selected assignment for COM1 and sets the port for access to InSite.
3. Choose one of the two methods above and program the IND560 accordingly.
4. Confirm the connection settings in InSite are set for serial interface – not Ethernet.
5. Connect an RS-232 cable between the terminal and PC. The cable should be configured as shown below.

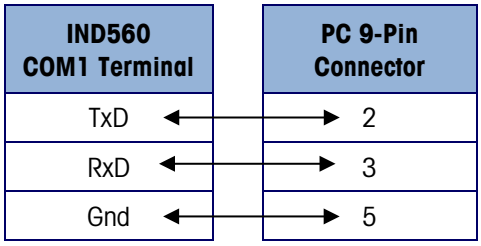


Figure A-4: RS-232 Connection to IND560 Terminal

After connection between InSite and the IND560 has been terminated, turn SW2-1 back off or enter the terminal's setup tree and change the assignment for COM1 to whatever is required. Remember to also change the serial port settings if required. Power cycle the terminal.

A.3.2. Flashing new Firmware

A.3.2.1. Ethernet

Refer to "Upgrading Firmware" section in Chapter 4 of the IND560 Technical Manual for a complete explanation of the required steps.

A.3.2.2. Serial

Refer to "Upgrading Firmware" section in Chapter 4 of the IND560 Technical Manual for a complete explanation of the required steps.

A.4. IND560x

A.4.1. Configuration & Save/Load

A.4.1.1. Ethernet

1. The optional ACM500 module must be connected to the IND560x terminal and the optional COM2/COM3/Ethernet board must be installed in the ACM500 module.
2. The IP address of the PC may need to be changed. Refer to the "Ethernet Connection to a PC" section of the IND560x Technical Manual, Appendix D
3. The IP address programmed in the terminal must be known so it can be entered in InSite.
4. Connect a cross-over Ethernet cable between the terminal and PC.
5. Confirm the connection settings in InSite are set for Ethernet – not serial interface and enter the IP address of the terminal.

A.4.1.2. Serial

1. Serial connection to InSite is only possible using COM1 of the terminal.
2. Two methods can be used to program the IND560x terminal for connection to InSite configuration:
   a. Select Variable Access as the assignment for COM1
   b. Turn SW2-1 ON then power on the terminal. This overrides the currently selected assignment for COM1 and sets the port for access to InSite.
3. Choose one of the two methods above and program the IND560x accordingly.
4. Confirm the connection settings in InSite are set for serial interface.
5. The COM1 port of the IND560x is intrinsically safe and requires use of an intrinsically safe barrier. **A PC and the IND560x's COM1 port cannot be connected directly!**
6. Refer to the "COM1 Serial Port Connection" section in Appendix A of the **IND560x Technical Manual** for details of the required barrier and wiring details.

After connection between InSite and the IND560x has been terminated, turn SW2-1 back off or enter setup of the terminal and change the assignment for COM1 to whatever is required. Remember to also change the serial port settings if required. Power cycle the terminal.

A.4.2. Flashing new Firmware

A.4.2.1. Ethernet

Refer to "Upgrading Firmware" section in Chapter 4 of the **IND560x Technical Manual** for a complete explanation of the required steps.

A.4.2.2. Serial

Refer to "Upgrading Firmware" section in Chapter 4 of the **IND560x Technical Manual** for a complete explanation of the required steps.

A.5. IND780

A.5.1. Configuration, Save/Load & Flashing Firmware

IND780 uses Ethernet connections to do ALL configuration & firmware updates.

1. The IP address of the PC may need to be changed.
2. The IP address programmed in the terminal must be known so it can be entered in InSite.
3. Appropriate Ethernet cable(s) / hardware should be used between the terminal and PC.

A.6. ICS Terminals

A.6.1. Configuration and Save/Load

Please follow terminal-specific instructions for setting up and selecting the serial COM port used to connect to InSite CSL. Note that, in order to override normal serial COM port operation, ICS terminals typically must be switched to a special communication mode found within the maintenance section of the terminal's configuration menu.

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