

SIEMENS



Siemens FINlite
User Guide

Copyright Notice

Notice

Document information is subject to change without notice by Siemens Industry, Inc. Companies, names, and various data used in examples are fictitious unless otherwise noted. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of Siemens Industry, Inc.

All software described in this document is furnished under a license agreement and may be used or copied only in accordance with license terms.

For further information, contact your nearest Siemens Solution Partner, Authorized TALON Dealer.

Copyright 2017 Siemens Industry, Inc.

To the Reader

Your feedback is important to us. If you have comments about this manual, please submit them to: SBT_technical.editor.us.sbt@siemens.com

Other product or company names mentioned herein may be the trademarks of their respective owners.

Printed in the USA.

Cyber security disclaimer

Products, solutions and services from Siemens include security functions to ensure the secure operation of building automation and control, fire safety, security management, and physical security systems. The security functions on these products, solutions and services are important components of a comprehensive security concept.

Drafting, implementing and managing a comprehensive and up-to-date security concept, customized to individual needs, is nevertheless necessary, and may result in additional plant- or site-specific preventive measures to ensure secure operation of your site regarding building automation and control, fire safety, security management, and physical security. These measures may include, for example, separating networks, physically protecting system components, user training, multi-level defensive measures, etc.

For additional information on security as part of building technology and our product, solution and service offerings, please contact your Siemens sales representative or project department. We strongly recommend to always comply with our security advisories on the latest security threats, patches and other related measures.

<http://www.siemens.com/cert/en/cert-security-advisories.htm>



Adobe AIR copyright

Adobe® AIR® Copyright © 2007 - 2017. Adobe Systems Incorporated. All Rights Reserved. Adobe, Adobe AIR and AIR are either trademarks or registered trademarks in the United States and/or other countries.

Table of Contents

Cyber security disclaimer	2
FINlite Graphics Tool.....	5
FINlite Graphics Tool Overview	6
User Interface Description for the FINlite Graphics Tool.....	7
File Menu.....	8
Edit Menu	9
View Menu.....	9
Language Dropdown.....	10
Question Mark Icon	10
Panels Bar	10
Components Bar	12
Layers Bar	12
Properties Bar	13
Animation Editor	14
File-System & User Library Bar.....	14
The Canvas	15
Tips for Using the FINlite Graphics Tool	16
Using the FINlite Graphics Tool	17
Launching the FINlite Graphics Tool	17
Logging in to the Controller	17
Creating Graphics.....	18
Editing the Graphics Animation	22
Saving and Publishing the Graphics File.....	23
Creating Device Templates	24
Backing Up Graphics.....	26
Deleting Graphics Files	26
Deleting Graphics Using FINlite	27
Example: Deleting a Graphic from the BACnet Field Panel Web Server	30

FINlite Graphics Tool

Overview

This document discusses the following topics:

- FINlite Graphics Tool Overview
 - User Interface Description for the FINlite Graphics Tool
 - Tips for Using the FINlite Graphics Tool
- Using the FINlite Graphics Tool
 - Launching the FINlite Graphics Tool
 - Logging in to the Controller
 - Creating Graphics
 - Editing the Graphics Animation
 - Saving and Publishing the Graphics File
 - Creating Device Templates
 - Backing up Graphics

FINlite Graphics Tool Overview

The Field Panel Web Server Graphics Application is a graphic utility program called Siemens FINlite. FINlite can be used to create, modify, animate, and save graphics files to be used with the Web Server user interface.



NOTE:

FINlite does not use vector graphics, so the graphics are not scalable. Graphics must be created for the resolution of the monitor on which they will be displayed.

Siemens FINlite can connect to a panel and bind graphical elements to data points. While connected to the panel, the user will be able to see current values, and command points to see the affects on graphics.

Graphic files can be deleted from FINlite or the HMI.

Graphics files can be backed up to the Internal Flash Drive (IFD) through the HMI, using the **Graphics backup** feature, and deleted using the **Delete_file** feature in the HMI..



NOTE:

Siemens FINlite supports Windows 7 and Windows 10.



NOTE:

Siemens FINlite is an Adobe AIR application.

Siemens FINlite provides the following operations:

- Graphics creation and deletion
- Graphics manipulation
- Graphics animation
- Test animation with live data before publication
- Saving the graphics components to the user library for reuse
- Publishing graphics to the panel(s)
- Opening a pre-constructed graphics file from the local file system



NOTE:

In the Web Server user interface, it is recommended to limit the total number of graphic tabs and dynamic trend tabs that are open to six (6) for performance reasons.

Graphics Application Workflow



NOTE:

Siemens FINlite supports .png and .jpg graphics file formats only.

1. Create a graphics background file using Designer, Auto CAD, or another designing tool. Save the file (as a .png or .jpg) to the local file system or hard drive. Use the designing tool's Export feature to convert the native file type to a .png or .jpg format for use with Siemens FINlite.

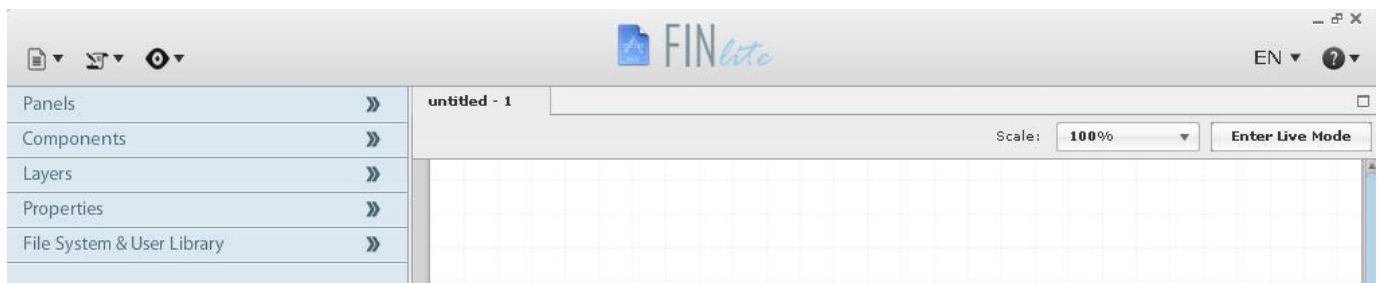
**NOTE:**

After a new animation image has been added to the set of frames in FINlite's Animation Editor window, existing images are sometimes automatically resized to match the frame added by the user.

Before bringing them into FINlite, be sure the images to be added for editing animation are sized similarly to the existing images, to avoid automatic resizing issues.

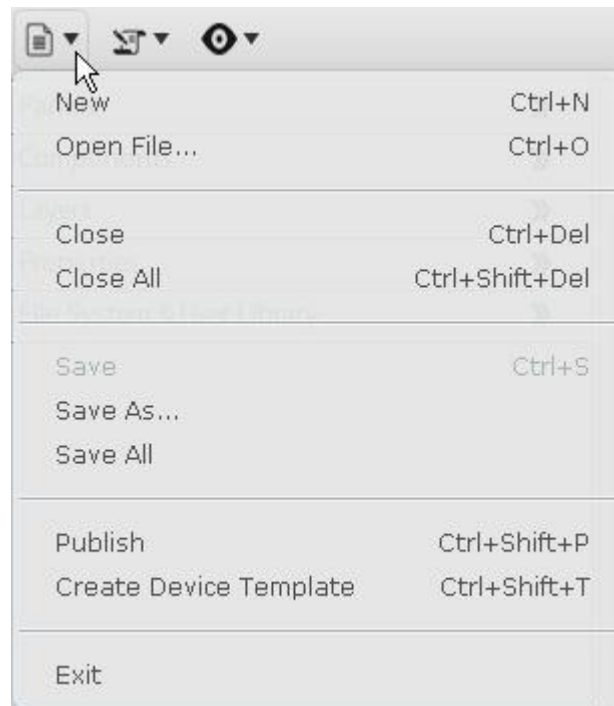
2. Open the pre-constructed graphics background file from Siemens FINlite to add animated graphics. The background file can be sized in the canvas before graphics are added.
3. Once the graphics are published from FINlite to the panel(s), they can be viewed via the Field Panel Web Server user interface. See the *Viewing Graphics in the Web Server User Interface* section.

User Interface Description for the FINlite Graphics Tool



The drop-down menus at the top of the Siemens FINlite Application and the navigation pane bars on the left side of the Siemens FINlite Application allow you to work with the graphics files in many ways.

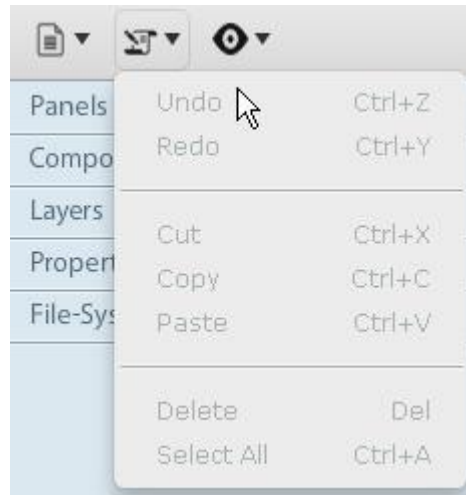
File Menu



The **File** menu allows you to access the File commands:

- **New** opens a new graphics file.
- **Open File** opens an existing graphics file.
- **Close** closes the current file.
- **Close All** closes all open files.
- **Save** allows you to save the current file.
- **Save As** allows you to save the current file in a new location with a new name.
- **Save All** saves all open files.
- **Publish** allows you to download the graphics file to the panel so it is visible via the BACnet Field Panel Web Server user interface.
- **Create Device Template** turns a graphics file into a device template. This allows you to *relativize* points for later reuse. Relativizing allows you to re-associate points to graphical components. This is important when creating a graphic associated with a specific FLN application number and using points from a selected FLN device.
- **Exit** closes the application.

Edit Menu



The **Edit** menu allows you to access the Edit commands:

- **Undo** allows you to reverse the last action.
- **Redo** allows you to reverse the last Undo action.
- **Cut** removes the image from the file and puts it into the clipboard.
- **Copy** puts a copy of the image into the clipboard.
- **Paste** places the image from the clipboard into the file where the cursor is located.
- **Delete** allows you to delete the highlighted object or file.
- **Select All** allows you to select all files or objects simultaneously.

View Menu



The **View** menu allows you to access the View commands:

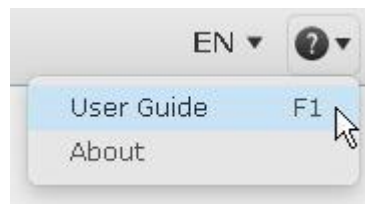
- **Show Side Panel** allows you to open or close the navigation pane on the left side of the application.
- **Enable Choice Pop-up** launches the three-button pop-up window accessible upon starting the FINlite application. The three buttons are: Open, Create, and User Guide. See the *Launching the FINlite Graphics Tool* section.

Language Dropdown



The **Language** menu allows you to change the language used in the FINlite application.

Question Mark Icon



The **Question Mark** icon opens the User Guide and product information.

- **User Guide** opens the product documentation as a PDF.
- **About** displays product information.

Panels Bar



The **Panels** bar allows you to connect to and access information from the available panels.

- The **Connect To Panel** button opens the **Panel Login** window, which allows you to log in to the available, licensed panels.



Static Icons

Static icons in the Panels bar indicate the various characteristics of the panel node. A static icon associated with a panel node is fixed for the Web session.

Icon	Description	Indication
	Red shield icon with a horizontal white bar.	FPWeb license is not installed for the panel. You must obtain and install an FPWeb license (LSM-FPWEB.T, LSM-FPWEBPL.T, LSM-FPWEBPLHST.T) in order to use FINlite features.
	Purple shield icon with a vertical white bar.	Panel is not upgraded to the latest firmware. You must upgrade the panel to the appropriate firmware in order to use features associated with the version of the FINlite, such as the Delete Graphics feature.
	Both red and purple shield icons displayed together.	FPWeb license is not installed for the panel AND the latest firmware has not been installed in the panel. Moving your cursor over the icon also indicates if the node has license restrictions and does not have the latest firmware installed. No FPWeb license and Not latest firmware.

Dynamic Icons

Dynamic icons in the Panels bar indicate the various states of the panel node. A dynamic icon associated with a panel node is updated when a change to the state of the panel is detected.

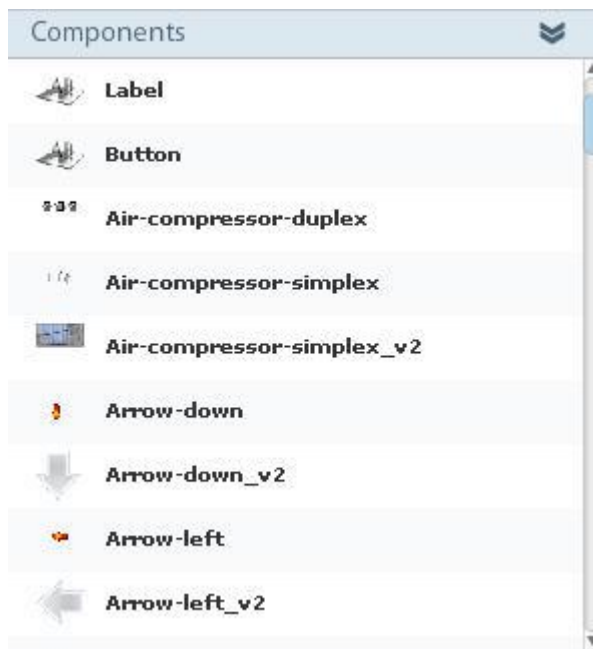


NOTE:

You must perform a panel refresh before the dynamic icons will indicate a change of state.

Icon	Description	Indication
	Yellow triangle icon with a red exclamation point.	Database File Synchronization. Field panel database file synchronization is in progress.
	Orange triangle icon with a white exclamation point.	Panel Not Ready. You must load the panel with a database from a software tool or front end computer, or use the Panel Configuration Editor in the Field Panel Web Server to make the panel ready.
	Red triangle icon with a black exclamation point.	Panel Communication Lost. Communication to the device has been lost (device failure).

Components Bar



The **Components** bar displays the available components which can be dragged and dropped to the canvas and customized. Supplied component images are intended for use with binary points.

Layers Bar



The **Layers** bar allows you to create layers within the graphics file. Layers can be moved or locked. Components can be copied or moved to an existing layer or to a new layer.

- The **New Layer** button creates a new graphics layer.
- The **Delete Layer** button deletes the highlighted layer.

Properties Bar

Clicking a component in the canvas on the right side of the application, and opening the **Properties** bar in the left navigation pane opens the Properties area for the specific component. Each type of component has different customizable properties.

Opening the **Properties** bar with nothing on the canvas allows you to customize the size and background color of the canvas itself.

Customizable properties include, but are not limited to:

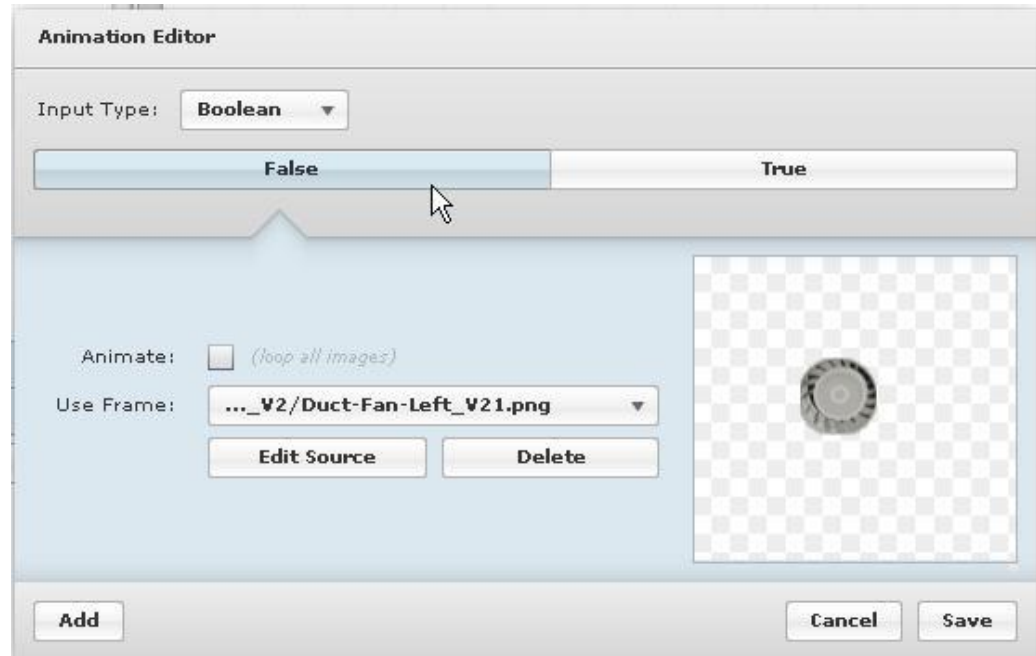
- Name of the component.
- Type of component.
- Object the component is bound to.
- Font size and color of labels.
- Width and height of the component.
- Background color and alpha (transparency) level.
NOTE: The background color defaults to white, and the alpha level defaults to 100 (no transparency). You may need to adjust these levels to achieve the desired appearance.
- Alignment of the component within the background.
- Invisible or visible on the completed graphics file.

Other features of the Properties area include:

- The **Locked** check box, which ensures that no other changes are made to the properties.
- The **Edit Animation** button, which opens the **Animation Editor** window.

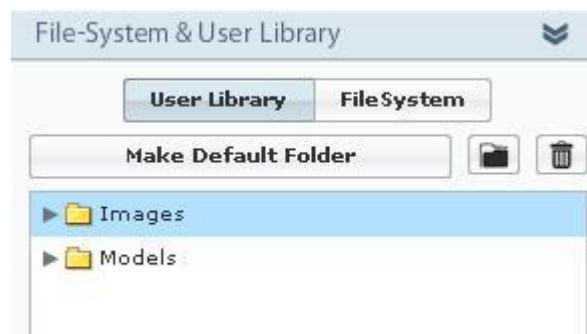
Animation Editor

The Animation Editor allows you to customize the animation of a graphics component.



See the Editing the Graphics Animation section for more information.

File-System & User Library Bar



The **File-System & User Library** bar displays your available local file system and the saved images and models.

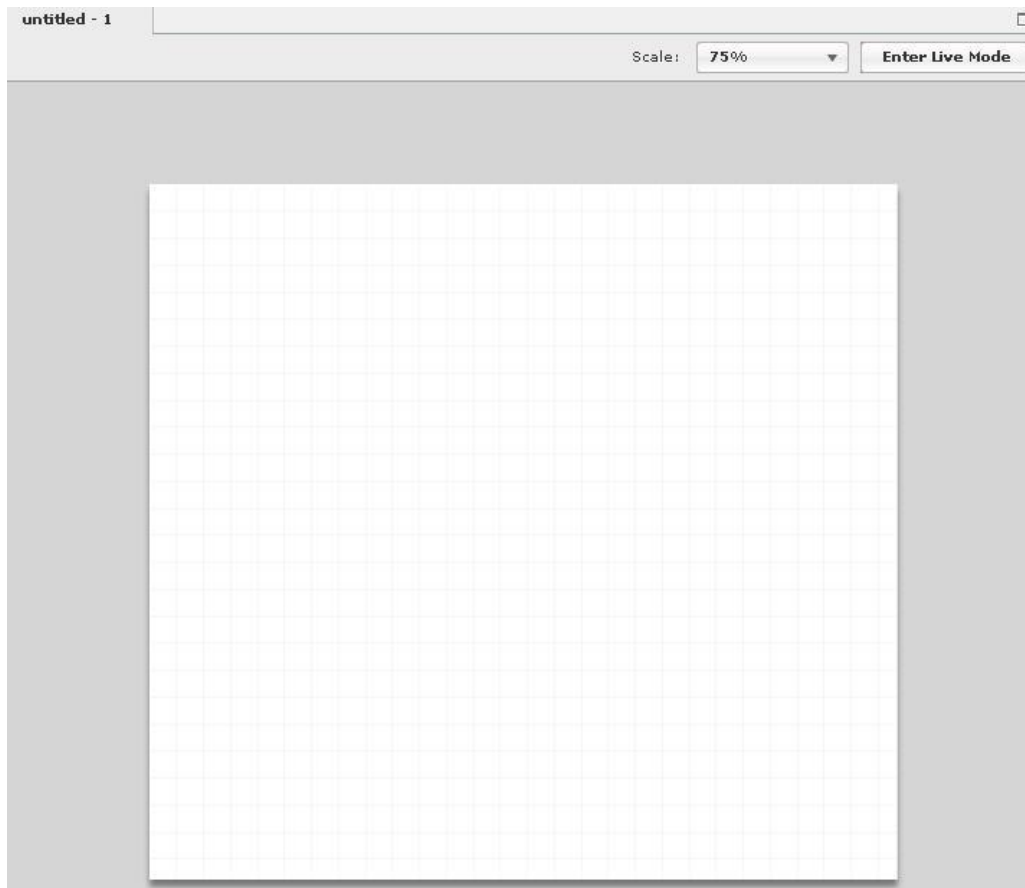
The **User Library** and **File System** buttons allow you to toggle between the folders.

The **Make Default Folder** button sets the chosen folder as the default when you choose the **Add to Favorites** button in the Properties bar.

The **Folder** button creates a new folder within the displayed file system.

The **Trash** button deletes the highlighted folder or file.

The Canvas



The canvas is the graphics workspace on the right side of the FINlite application window.

The top left tab displays the name of the graphics file.

The **Maximize** button allows you to maximize the workspace canvas and no longer display the left navigation bar (side panel).

The **Scale** drop-down menu allows you to change the size of the workspace canvas.

The **Enter Live Mode** button allows you to begin polling points and view the graphics animation through the FINlite application.

Tips for Using the FINlite Graphics Tool

**NOTE:**

Graphics can only be published to the Modular series and Compact series 36-point controllers.

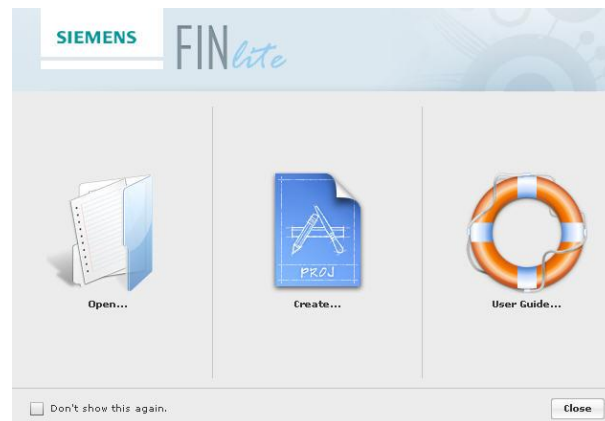
- Graphics files can be created and viewed via the Siemens FINlite Graphics Tool.
- Graphics files can be viewed but not modified using the Graphics View in the BACnet Field Panel Web Server User Interface. See the *Graphics View* section.
- Once published to a panel, graphics files can be modified using the same computer used to create them, or they must be copied manually from the field panel to a computer running the Siemens FINlite application.
- If your system requires large graphics, it is recommended that you use a USB memory device (such as a thumb drive) to save memory.
- Library components should be saved before bindings are made; otherwise, additional work may be required.

Using the FINlite Graphics Tool

Launching the FINlite Graphics Tool

To launch the Siemens FINlite Graphics Application:

1. Follow the instructions for the Tools Installer.
2. Launch the FINlite application from the desktop icon created by the Installer, or from the **Start** menu icon created by the Installer.
 - ⇒ After the application starts, the **Choice** window displays three button choices: Open, Create, and User Guide.



3. To keep the Choice window from displaying upon start-up, check the **Don't show this again** check box.
4. Click the **Open** button to open an existing Graphics file from the local file system.
NOTE: A Graphics file can also be opened by selecting **New** from the **File** menu.
5. Click the **Create** button to begin creating a new Graphics file.
6. Click the **User Guide** button for assistance with the Graphics Application.

Logging in to the Controller

To log in to the controller:

1. Click the **Panels** bar in the left navigation pane to access a specific controller.
 - ⇒ The object list of the chosen controller displays.
2. Click the **Connect** button.
 - ⇒ The **Panel Login** dialog box displays.



3. In the **Panel Login** dialog box, enter the panel IP address, user name, and password.
 - ⇒ The tool authenticates with the panel, retrieves the panel list, and then authenticates with all of the panels on the network.
 - ⇒ Once the login is complete, the object list of the chosen panel displays in a tree format in the left navigation pane.



NOTE:

Check the **Save Login Info** check box to allow recently used IP addresses and user account information to be saved.

User Account Passwords Using Double Byte Character Sets

Double-byte characters cannot be directly entered in the password field in FINlite. In FINlite there are password fields whenever a connection is being made to a panel.

You have the following options for passwords:

- Use only single byte characters for user account passwords. This option does not require special procedures to enter the user account password in FINlite.
- Use double byte characters for user account passwords. This option requires copying the characters from another field (such as the user name field) or another application (such as Notepad) and pasting the characters into the password field in FINlite. The location from which the characters are copied must support viewing of the double byte characters appropriately.

Creating Graphics

Click the **Components** bar in the left navigation pane to open the Components area of the FINlite application.

Once a component is edited and customized, it is called a *Model*. Once a Model is saved, it can be reused in multiple graphics files.

The **Layers** bar in the left navigation pane allows you to layer the components in a specific order. For instance, in a Graphics file, the Air Handler Unit (AHU) template may be on the bottom-most layer while all of the AHU elements represented by the components may be on the middle layer, with the labels on the top layer. Be sure to layer the background image first, and then layer buttons and labels on top. If the background is layered on top of a button, for example, the button won't function properly.

To create a Model:

1. Drag a component to the canvas on the right side of the FINlite window.
2. Click the **Properties** bar in the left navigation pane to customize the features of the component. See the *User Interface Description for the FINlite Graphics Tool* section for more information.
3. Click the **Add to Favorites** button in the Properties area.
 - ⇒ The new Model is saved to the **Models** folder in the File System and User Library area of the navigation pane.



NOTE:

Library components should be saved before bindings are made; otherwise, additional work may be required.

Label Component:

Labels can also be modified to display updates of point name, status, value, description, priority, device name, and/or units.

1. Drag a **Label** component to the canvas on the right side of the FINlite window.
2. Click the **Properties** bar in the left navigation pane to customize the features of the label.
3. To activate the label for point value updates or other point information:
 - a. Once the label is bound to a point, the **Text** field will display a + sign, allowing you to choose point characteristics to add to the label's **Text** field. Click the + sign and choose each characteristic, one at a time, until all desired characteristics have been chosen.
 - b. Click on **Enter Live Mode** to see the live, updated status.

The features of a **Label** component can be modified using the **Properties** bar: name, label text, bound point, size, position, background color, background color transparency, visibility, locked status, corner shape, font color/size, and font style and alignment.

Button Component:

The button component can be used for several different purposes.

- If the button is bound to a **Point**, selecting the button opens the Point Commander for that point.
- If the button is bound to a **Graphic**, selecting the button opens the bound graphic.
- If the button is bound to a **Schedule Object**, selecting the button opens the schedule object for viewing.
- If the button is bound to a **Trend Log**, selecting the button opens the Trend View and display the bound trend data.
- If the button is bound to a **Web page**, selecting the button opens the bound Web page in a new window in the user's browser.

To bind a button to a point:

1. Expand the **Panels** bar and connect to a panel on the desired ALN, if not already connected.
2. Expand the **Components** bar and drag a button onto the workspace.

3. From the **Panels** bar, expand the panel with the desired point. Expand the **Local** section of that panel, and then expand the applicable point type (analog input, analog output, etc.).
4. Select the point you want to associate with the button and drag it onto the button in the workspace (this binds the point to the button).
5. Select the button on the workspace and expand the **Properties** bar.
6. Verify that in the Properties area, the **On Click** field displays **Open Resource** and below this is the name of the desired point.
7. Publish the graphic. A button bound to a point will not work unless the graphic is published to the panel and used through the user interface. If you try to use the button in FINlite, even in Live Mode, it will not work.
8. Open the Graphics View in the BACnet Field Panel Web Server user interface, navigate to the published graphic, and open the graphic containing the button.
9. Click on the button to bring up the Point Commander Application for the associated (bound) point.

To bind a button to a graphic:

1. Expand the **Panels** bar and connect to a panel on the desired ALN, if not already connected.
2. Expand the **Components** bar and drag a button onto the workspace.
3. From the **Panels** bar, expand the panel with the desired graphic, and then expand the **Graphics** section of that panel.
4. Select the graphic you want to associate with the button and drag it onto the button in the workspace (this binds the graphic to the button).
5. Select the button on the workspace and expand the **Properties** bar.
6. Verify that in the Properties area, the **On Click** field displays **Open Resource** and below this is the name of the desired graphic.
7. Publish the graphic. A button bound to another graphic will not work unless the graphic is published to the panel and used through the user interface. If you try to use the button in FINlite, even in Live Mode, it will not work.
8. Open the Graphics View in the BACnet Field Panel Web Server user interface, navigate to the published graphic, and open the graphic containing the button.
9. Click on the button to bring up the associated (bound) graphic.
NOTE: Both the graphic with the button and the graphic that is bound to the button need to be published to their appropriate panels.

To bind a button to a Schedule Object:

1. Expand the **Panels** bar and connect to a panel on the desired ALN, if not already connected.
2. Expand the **Components** bar and drag a button onto the workspace.
3. From the **Panels** bar, expand the panel with the desired Schedule Object, and then expand the **Schedules** section of that panel.
4. Select the Schedule Object you want to associate with the button and drag it onto the button in the workspace (this binds the Schedule Object to the button).

5. Select the button on the workspace and expand the **Properties** bar.
6. Verify that in the Properties area, the **On Click** field displays **Open Resource** and below this is the name of the desired Schedule Object.
7. Publish the graphic. A button bound to a Schedule Object will not work unless the graphic is published to the panel and used through the user interface. If you try to use the button in FINlite, even in Live Mode, it will not work.
8. Open the Graphics View in the BACnet Field Panel Web Server user interface, navigate to the published graphic, and open the graphic containing the button.
9. Click on the button to bring up the associated (bound) Schedule Object.

To bind a button to a Trend Log Object:

1. Expand the **Panels** bar and connect to a panel on the desired ALN, if not already connected.
2. Expand the **Components** bar and drag a button onto the workspace.
3. From the **Panels** bar, expand the panel with the desired Trend Log Object, and then expand the **Trends** section of that panel.
4. Select the Trend Log Object you want to associate with the button and drag it onto the button in the workspace (this binds the Trend Log Object to the button).
5. Select the button on the workspace and expand the **Properties** bar.
6. Verify that in the Properties area, the **On Click** field displays **Open Resource** and below this is the name of the desired Trend Log Object.
7. Publish the graphic. A button bound to a Trend Log Object will not work unless the graphic is published to the panel and used through the user interface. If you try to use the button in FINlite, even in Live Mode, it will not work.
8. Open the Graphics View in the BACnet Field Panel Web Server user interface, navigate to the published graphic, and open the graphic containing the button.
9. Click on the button to bring up the associated (bound) Trend Log Object.

To bind a button to a Web page:

1. Expand the **Components** bar and drag a button onto the workspace.
2. Select the button on the workspace and expand the **Properties** bar.
3. From the **On Click** menu, select **Go to Webpage**.
4. Enter the desired URL address in the field below the **On Click** menu.
5. Publish the graphic.
6. Open the Graphics View in the BACnet Field Panel Web Server user interface, navigate to the published graphic, and open the graphic containing the button.
7. Click on the button to bring up the associated (bound) Web page.

The features of a **Button** component can be modified using the **Properties** bar: name, label text, on-click action, size, position, visibility, locked status, corner shape, font style/color/size, and button color/shading.

To create a Graphics file:

1. Click the **Components** menu in the left navigation pane of the Graphics Application window.
2. To assign an object to the component, click the arrows next to the panel and objects names in the navigation pane to navigate to the desired object from the object list in the left pane and drag it on top of the component that has just been dropped onto the canvas.
3. Once all the desired components have been added to the canvas, click the **Enter Live Mode** button in the upper right corner of the window, above the canvas. This allows the panel to begin polling points and displaying current information on the graphic.

NOTE: While in live mode you can open the Commander application and command the objects to see the graphic being manipulated. However, if a PPCL program or any other application is influencing the object, the change will be seen without any user interaction such as using the Commander application.

To Publish a Graphics File:

1. From the **File** menu, select **Publish**.
2. Open the BACnet Field Panel Web Server user interface.
3. In the left navigation pane, click either the **Devices/Points** bar or the **Graphics** bar.
4. Navigate to the panel to which the graphic was published.
 - ⇒ The published graphic will display under the panel name.

Editing the Graphics Animation

Components can be further manipulated by editing the animation. Several images of a component can be saved individually to the user library for reuse with animation. Once an object is assigned to the component, the object can be commanded to different values. Each value commanded will access a different component graphic, which creates the graphic animation.

To Edit the Animation:

1. On the canvas, highlight the component you want to animate by clicking it.
2. Click the **Properties** bar in the left navigation pane.
3. Click the **Edit Animation** button.
 - ⇒ The **Animation Editor** window displays.
4. Use the **Input Type**, **Values From**, and **To** fields to customize the animation options for the component graphic.
5. Choose a section in the values line (Boolean component types will have only “True” and “False”) by clicking in between the triangles.
6. Use the **Use Frame** drop-down to choose an image to connect to the chosen value.

The **Animate** check box will loop all chosen images when the object value is set to “True” (or any chosen value). This will give the graphic the appearance of moving.

Saving and Publishing the Graphics File



NOTE:

Graphics can only be published to the Modular series and Compact series 36-point controllers.



NOTE:

Before transferring a file to a field panel, you must verify that enough RAM is available in the field panel to hold the entire file or it cannot be transferred to its final location.

To save the Graphics file:

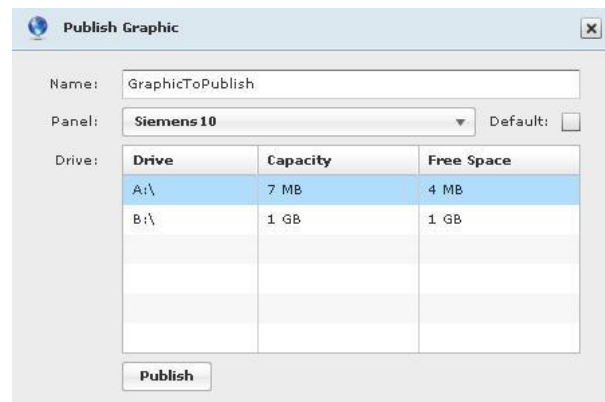
- After the components are edited and the Graphics file is complete, save the Graphics file to the local file system by clicking **Save** from the **File** menu. Graphics file names must not:
 - Exceed 20 characters in length
 - Contain special characters: . \ / : * ? " < > | (includes period)
 - Contain characters with accent marks (such as é or ô)

To publish the Graphics file:

1. From the **File** menu, select **Publish**.

⇒ The **Publish Graphic** window displays, allowing you to name the graphics file, and select the panel and drive (**A:** or **B:** if available) to publish to.

NOTE: Do not use a period or any of the special characters listed above in the file name.



2. To set the graphic as the default graphic for the panel, check the **Default** check box. For more information on default graphics, see the *Default Graphics* section.
3. Click **Publish**.
4. The graphics files on Drive A can be backed up to the Internal Flash Drive (IFD) using the HMI.

Default Graphics

To set a default graphic for the panel:

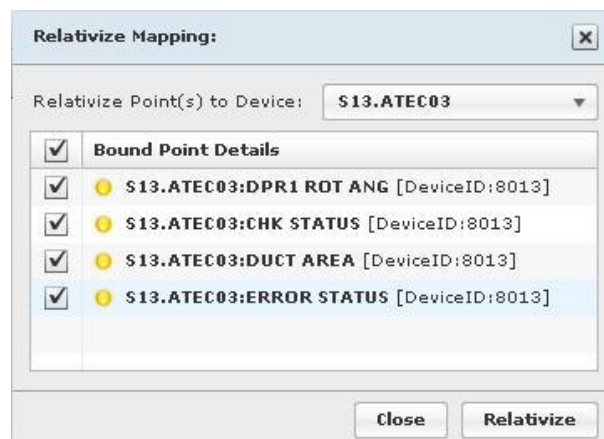
1. When publishing the file, select the **Default** check box.
2. Select Drive **A**.
NOTE: Default graphics can only be saved to Drive A. If you select Drive B, FINlite will automatically change the selection to Drive A, graying out the Drive B row in the **Drive** table.
3. Click **Publish**.
 - ⇒ FINlite automatically renames the file to **default.fnl**.
 - ⇒ When you connect to that panel from the BACnet Field Panel Web Server user interface, the graphic will display as the default graphic.
NOTE: Because Device Template graphics are published to the **Graphics\Application\AppID** folder on the panel, rather than in the Graphics folder, they cannot be used as default graphics. See the *Creating Device Template* section for more information on Device Templates.

Creating Device Templates

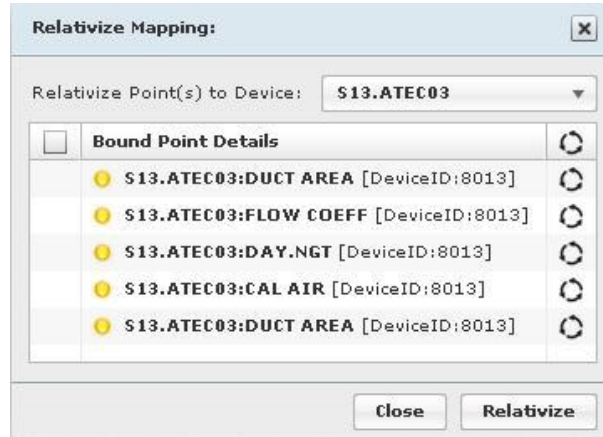
You can create a graphics template from a single file for reuse with multiple FLN devices that have the same application ID. This is accomplished by using the *Create Device Template* feature (also called *relativizing a file*).

To Relativize a Graphics File:

1. Create a graphics file using a background graphic and components.
2. Connect to a panel.
3. Bind points from one of the desired FLN devices to each of the components in the graphic.
4. From the **File** menu, select **Create Device Template**.
 - ⇒ The **Relativize Mapping** window displays.



5. In the **Relativize Points to Device** drop-down list, select the panel to relativize to.
6. Choose any or all of the device points to relativize by clicking the check boxes next to the point name(s). Checking the topmost check box will select all points.
7. Click **Relativize**.
 - ⇒ Once points are relativized, a circular arrow icon displays in the **Relativize Mapping** window, to the right of the point name.



8. To un-relativize any or all points, click the **Un-relativize Points** icon (the circular arrows to the right of the point names). Clicking the topmost icon will un-relativize all points.
9. Save and publish the graphics file.



NOTE:

In order to relativize an existing graphics file, you must be connected to a panel.

In the BACnet Field Panel Web Server User Interface

To apply the relativized graphics file to an FLN device:

1. Open the relativized graphics file.



NOTE:

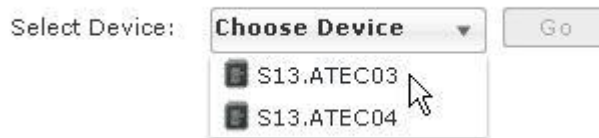
Device Template graphics (relativized graphics files) are stored within the selected panel in the Graphics area, by application ID (Graphics\Application\ApplicationID).



NOTE:

Because Device Template graphics are published to the Graphics\Application\AppID folder on the panel, rather than in the Graphics folder, they cannot be used as default graphics.

- A **Select Device** drop-down list will display in the Graphics Viewer on the right side of the Web Server.



2. Select the device whose live data should display in the relativized graphic.
 3. Click **Go**.
- ⇒ The relativized graphic will display the live data from the selected device.

Backing Up Graphics

Use this procedure to back up graphics files using the HMI.

HMI	S, H, E, W, G (System, Hardware, Ethernet, Webserver, Graphicsbackup)
-----	---

Example

```
10:13:04 07/30/2010 FRI Logged on successfully Field panel <40091>  
User: <high> <High default user account>
```

```
>Point, Application, Time, Message, Cancel, System, passWord, Bye? s  
>Diagnostics, Users, dSt, Bacnet, Error_msgs, Hardware, Text, Quit? h  
>Fieldpanels, Ethernet, nodeNameetable, Disks, Reportprinter,  
Licensemanager, Quit? e  
>ipSettings, Bbmd, Telnet, Webserver, Quit? w  
>Display, Modify, Uiupgrade, Graphicsbackup, Quit? g  
>Are you sure : y
```

DONE

Deleting Graphics Files



Graphics files consist of .fnl files and *media files*. Media files (backgrounds, component images, etc.) are shared among all graphics. The .fnl files are stored separately from the media files, and Device Template > FLN files are stored in a different location than non-Device Template graphics.



- The .fnl files for standard graphics are stored in **A:\wsroot\graphics**.
- The .fnl files for Device Template graphics are stored based on the Application ID of the FLN Device in question (for example: *A:\wsroot\graphics\applications\2486*).
- Media files for standard and Device Template graphics are stored in **A:\wsroot\graphics\media**.
- Graphics can be published to the **B:** drive, and may need to be deleted from that location.
- Once graphics are backed up, they also reside in the Internal Flash Drive (IFD), and may need to be deleted from that location.

In order to delete a graphic entirely so it will not appear in the User Interface, the file must be deleted from the Graphics folder in A:\wsroot. This can be done through the HMI (see the *Field Panel Features for BACnet Field Panel Web Server* section as well as the example at the end of this section) or through FINlite (see the *Deleting Graphics Using FINlite* section).

In order to delete graphics files to create more memory space, you must first determine which graphic files to delete. You must then determine which media files are being used by that graphic. If no other graphics are using the media files, then they can be

deleted. However, if you delete a file that is needed by another graphic, then that graphic will no longer work.

	 CAUTION
	Deleting Graphic Files Before deleting graphic files, you must be certain that no component of that file is being used in another graphics file.

	 WARNING
	Deleting Graphics Files from All Locations You must also be sure to delete .fnl files and associated media files from all locations (such as the B: drive and/or IFD).

Deleting Graphics Using FINlite




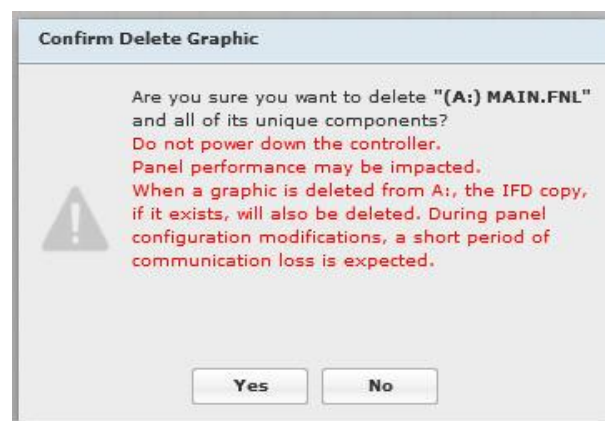
NOTE:

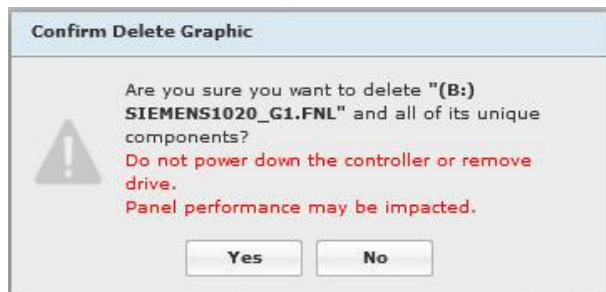
Deleting a graphic from Drive **A** also deletes it from the IFD.

Deleting a graphic from Drive **B** does NOT delete it from the IFD.

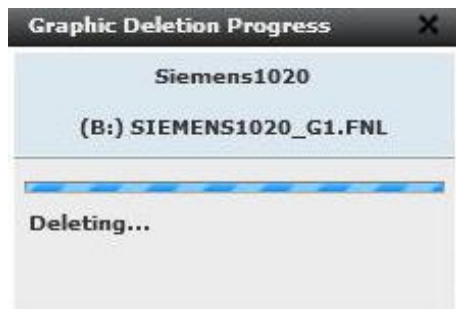
To delete a graphic file from the field panel using FINlite:

1. Click the **Delete**  icon to the right of the graphic name in the navigation pane:
 - ⇒ A confirmation window displays the drive from which the graphics file is being deleted.

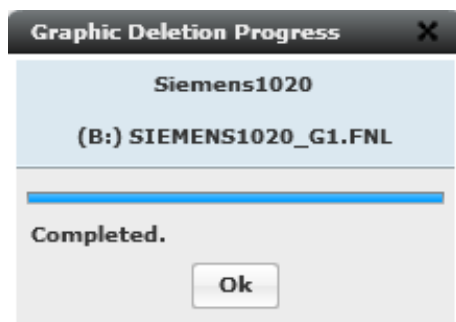




2. Select **Yes**. FINlite will appear frozen, and a confirmation window will display:

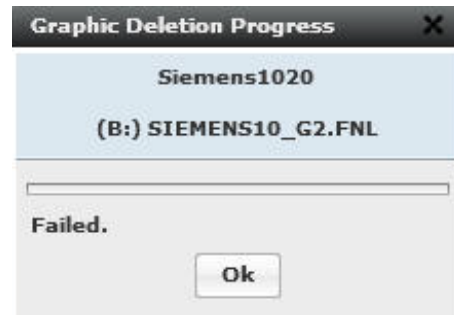


3. You can cancel the progress window by selecting the X button at the top right. This will allow you to continue working in FINlite while the deletion process continues.
- ⇒ When the deletion process is completed successfully, the progress window updates to indicate success. The graphics list is updated in the navigation pane.
4. Click **OK**:

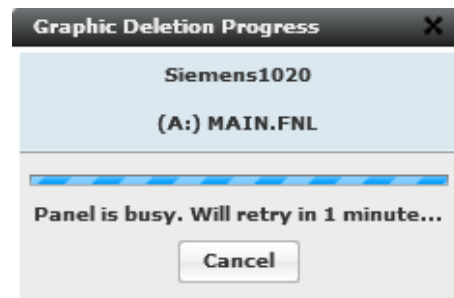


FINlite Graphics Deletion Errors

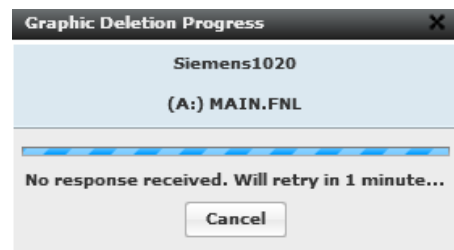
- When the deletion process is not successful, for example, because the drive was removed, the progress window will update to indicate failure. Click **OK** to remove the progress window:



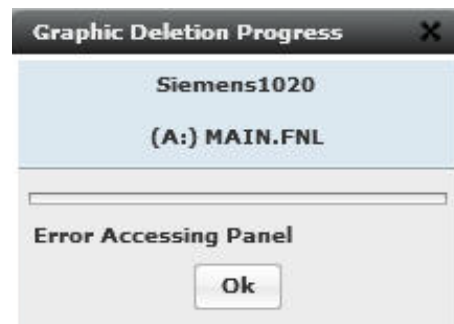
- The panel supports the deletion of only one graphic at a time. When more than one graphic deletion request has been made to the panel, the progress window will update to indicate that the panel is busy. FINlite will retry in one minute. To cancel the subsequent attempt, click **Cancel**:



- If a request is successfully initiated, but no response is returned within five minutes, the progress window will update. FINlite will attempt several retries. To cancel the subsequent attempt(s), click **Cancel**:



- If an original request or subsequent retry request is not successfully initiated, and the application detects panel communication failure, the progress window will update to indicate that no response from the panel will be received:



Example: Deleting a Graphic from the BACnet Field Panel Web Server

Viewing Directory Structure

```
Point, Application, Time, Message, Cancel, System, passWord, Bye? s
Diagnostics, Users, dSt, Bacnet, Error_msgs, Hardware, Text, Quit? h
Fieldpanels, Ethernet, nodeNameetable, Disks, Reportprinter,
Licensemanager, Quit? f
Log, Display, Add, dElete, Modify, Config, Filesys, Quit? f
List_drives, Set_drive, listDirectory, Change_dir, File_ops,
Remove_dir, Quit? l
```

```
08/05/2011 FRI Drives List 11:49
```

```
-----
Disk Size Free Space
```

```
IFD 10 MB 7445 KB
A:\ 8174 KB 5380 KB
End of report
```

Verifying Graphic before Deleting from IFD Directory

```
Point, Application, Time, Message, Cancel, System, passWord, Bye? s
Diagnostics, Users, dSt, Bacnet, Error_msgs, Hardware, Text, Quit? h
Fieldpanels, Ethernet, nodeNameetable, Disks, Reportprinter,
Licensemanager, Quit? f
Log, Display, Add, dElete, Modify, Config, Filesys, Quit? f
List_drives, Set_drive, listDirectory, Change_dir, File_ops,
Remove_dir, Quit? s
Drive name : -----ifd
List_drives, Set_drive, listDirectory, Change_dir, File_ops,
Remove_dir, Quit? d
```

```
08/05/2011 FRI File Directory 10:09
```

```
-----
-
Path: IFD:\
08/04/2011 17:47:37 4056 wsroot\Graphics\PURPLE.FNL
***
```

Deleting Graphics

```
List_drives, Set_drive, listDirectory, Change_dir, File_ops,  
Remove_dir, Quit? s  
Drive name : ifd  
List_drives, Set_drive, listDirectory, Change_dir, File_ops,  
Remove_dir, Quit? f  
Copy_file, Rename_file, Move_file, Delete_file, Quit? d  
File name : wsroot\graphics\purple.fn1  
Are you sure : y  
Deleting wsroot\graphics\purple.fn1...  
wsroot\graphics\purple.fn1 deleted successfully.
```

Deleting the Same Graphic from Drive A

```
List_drives, Set_drive, listDirectory, Change_dir, File_ops,  
Remove_dir, Quit? s  
Drive name : a:-----  
A:\  
List_drives, Set_drive, listDirectory, Change_dir, File_ops,  
Remove_dir, Quit? c  
File Directory : wsroot-----  
Path: A:\WSROOT\  
List_drives, Set_drive, listDirectory, Change_dir, File_ops,  
Remove_dir, Quit? c  
File Directory : graphics-----  
Path: A:\WSROOT\GRAPHICS\  
List_drives, Set_drive, listDirectory, Change_dir, File_ops,  
Remove_dir, Quit? d  
  
10/11/2011 TUE File Directory 13:42  
-----  
Path: A:\WSROOT\GRAPHICS\  
10/11/2011 13:38:56 1393 PURPLE.FNL  
End of report
```

```
List_drives, Set_drive, listDirectory, Change_dir, File_ops,  
Remove_dir, Quit? f  
Copy_file, Rename_file, Move_file, Delete_file, Quit? d  
File name : -----  
purple.fn1  
>Ok to continue (Y/N) : y  
Deleting purple.fn1...  
purple.fn1 deleted successfully.
```

Issued by
Siemens Industry, Inc.
Building Technologies Division
1000 Deerfield Pkwy
Buffalo Grove IL 60089
+1 847-215-1000

© Siemens Industry, Inc., 2017
Technical specifications and availability subject to change without notice.