

SIEMENS



**Facility Prime™
User Guide**

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To the Reader

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How To Use This Guide

This guide is for users of the Siemens Facility Prime application. This document describes how to use the application to view and command building automation system (BAS) information.



NOTE:

This document has information on using general functions and the **View Only** and **Command** modes. For information about using the **Editor** mode, available in the Facility Prime Editor version only, visit the Facility Prime website at www.usa.siemens.com/facilityprime.



Document Conventions

The following table lists conventions to help you use this document in a quick and efficient manner.

Convention	Examples
Numbered Lists (1, 2, 3...) indicate a procedure with sequential steps.	<ol style="list-style-type: none"> 1. Tap an object. 2. On the Command menu, enter the new value. 3. Tap OK.
<p>Conditions that must be completed or met before beginning a task are designated with a ▷.</p> <p>Intermediate results (what will happen following the execution of a step), are designated with a ⇒.</p> <p>Results, which inform the user that a task was completed successfully, are designated with a ⇨.</p>	<p>▷Composer software is properly installed.</p> <p>▷A Valid license is available.</p> <ol style="list-style-type: none"> 1. Select Start > Programs > Siemens > GMS > Composer. <ul style="list-style-type: none"> ⇒The Project Management window displays. 2. Open an existing project or create a new one. <ul style="list-style-type: none"> ⇨The project window displays.
References to keyboard keys and interactive elements, such as buttons, are shown in boldface font.	<p>Type F for Field panels.</p> <p>Tap OK to save changes and close the dialog box.</p>
	This symbol signifies Notes. Notes provide additional information or helpful tips.
Cross references to other information are indicated with an arrow and the page number, enclosed in brackets: [→92]	For more information on creating flowcharts, see Flowcharts [→92].
Error and system messages are displayed in Courier New font.	The message <code>Report Definition successfully renamed</code> displays in the status bar.

Safety Symbols


The following table lists the safety symbols that may be used in this manual to draw attention to important information.

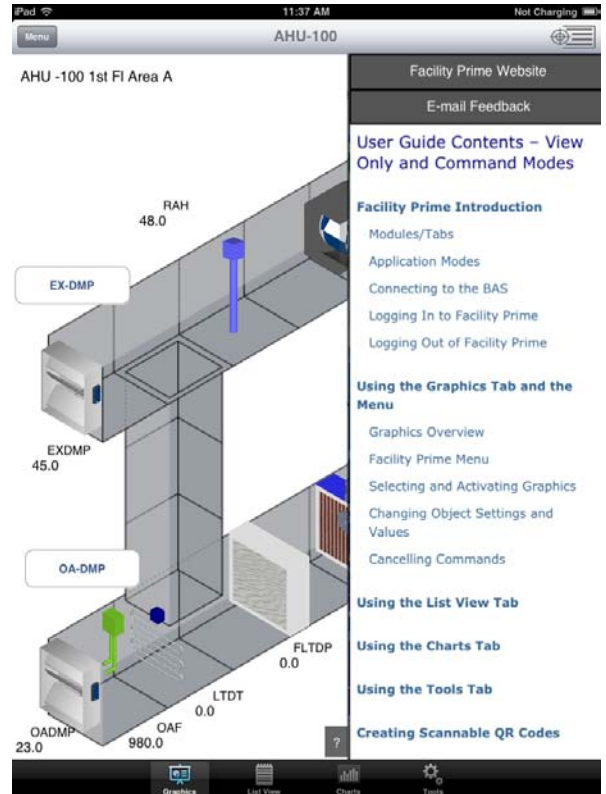
Symbol	Meaning	Description
NOTICE	CAUTION	Equipment damage may occur if a procedure or instruction is not followed as specified. (For online documentation, the NOTICE displays in white with a blue background.)
	CAUTION	Minor or moderate injury may occur if a procedure or instruction is not followed as specified.
	WARNING	Personal injury or property damage may occur if a procedure or instruction is not followed as specified.

Getting Help

For more information, visit the Facility Prime website at www.usa.siemens.com/facilityprime and contact your local Siemens Industry, Inc. Building Technologies representative.

The information in this guide is also available from within the Facility Prime application.

Tap  to open the Help panel to view descriptive and procedural information. From the Help panel, you can also connect to the website and send an e-mail to facilityprime.industry@siemens.com.



Chapter 1 – Facility Prime Introduction

With the Siemens Facility Prime™ application, you can use an Apple iPad® tablet to wirelessly connect to APOGEE® field panel controllers for monitoring and controlling the building automation system (BAS).

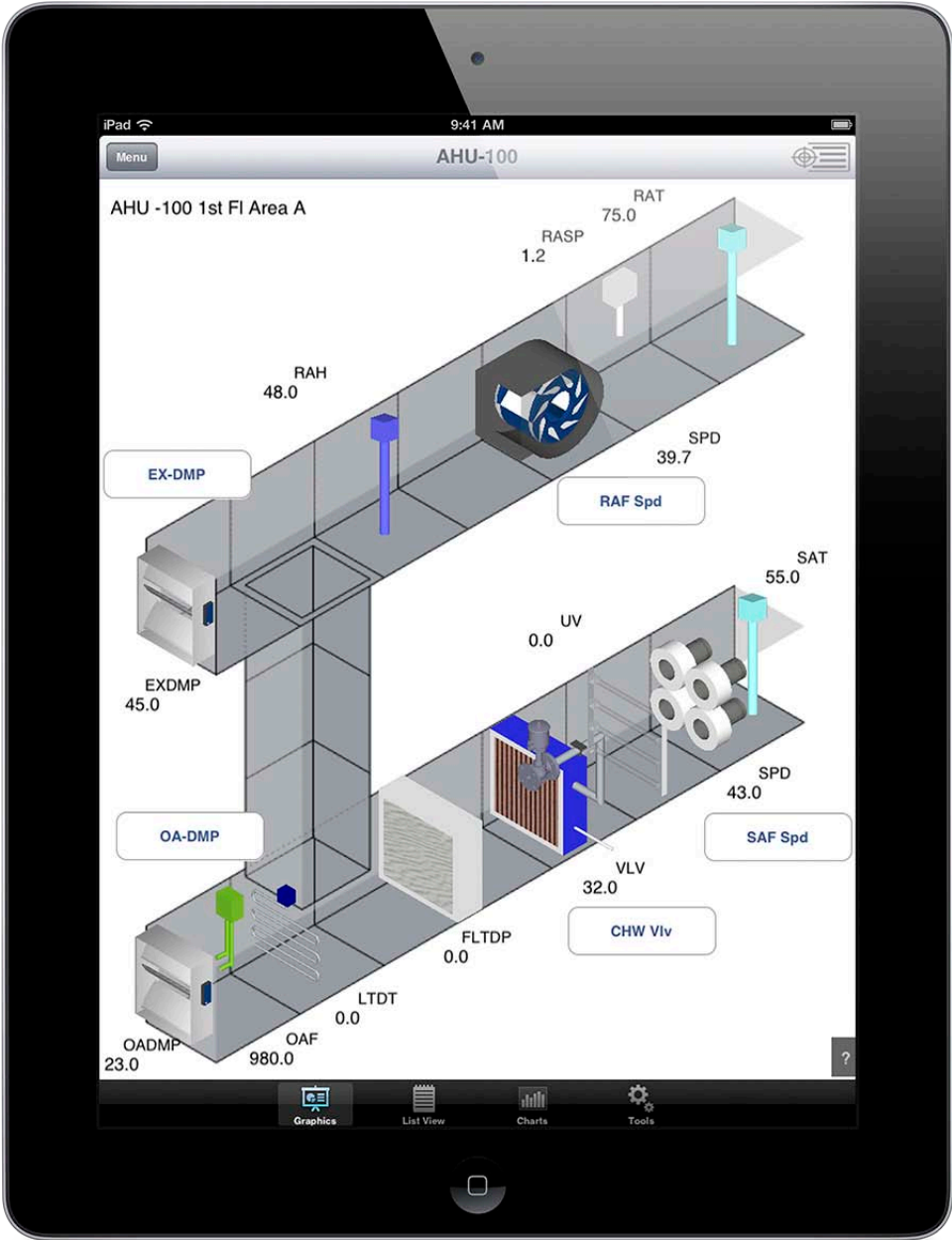


Figure 1: Facility Prime on an iPad 2.

Modules/Tabs

Four modules, or tabs, organize the Facility Prime functions and information: Graphics, List View, Charts, and Tools.



Graphics

Use the Graphics tab to view object status and settings through interactive images and links. The application can store as many different graphics as the iPad storage allows, but only one graphic is active at a time. The active graphic determines the information displayed on the List View and Charts tabs.



Figure 2: Graphics Tab.



List View

Use the List View tab to view object information as a summarized, text only list. The colored bars can indicate whether the object values are within normal or alarm ranges.

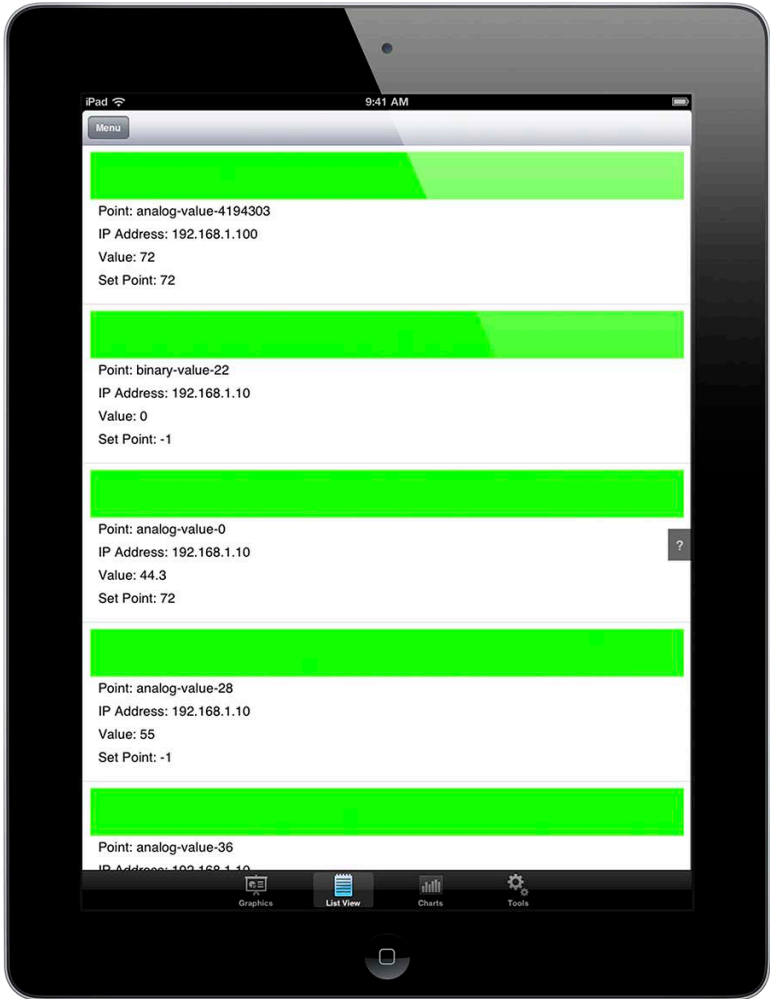


Figure 3: List View Tab.



Charts

Use the Charts tab to see object data plotted on scatter, bar, or pie charts. You can customize the chart appearance, such as the colors and line types.

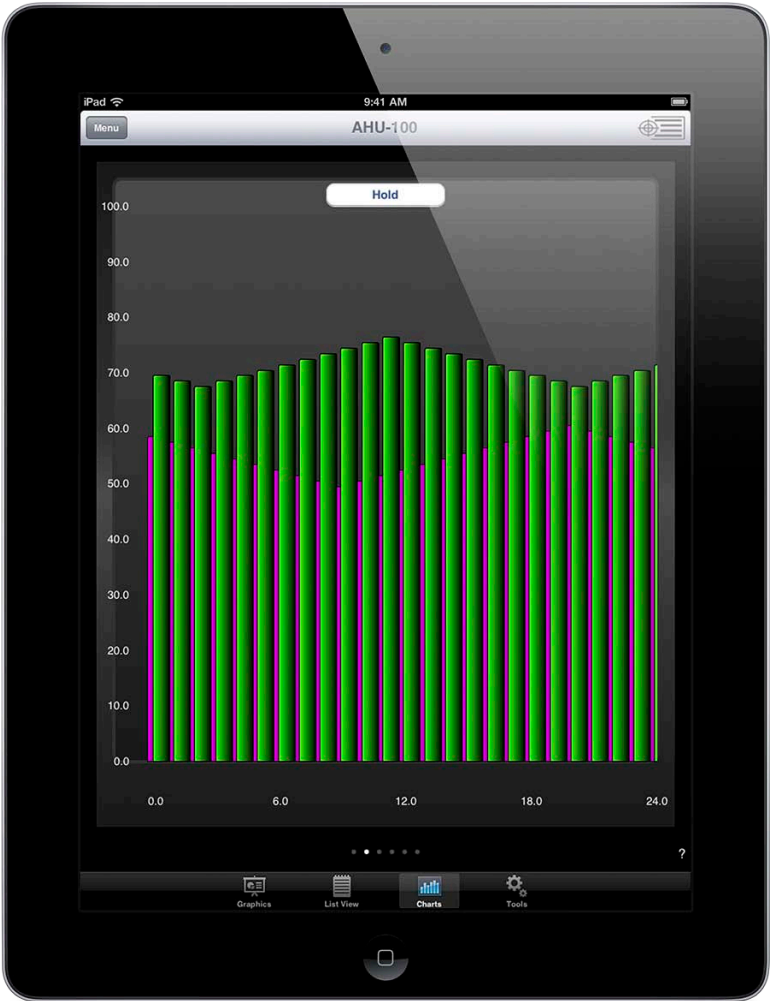


Figure 4: Charts Tab.



Tools

Use the Tools tab to create scannable QR codes and view BAS configuration.

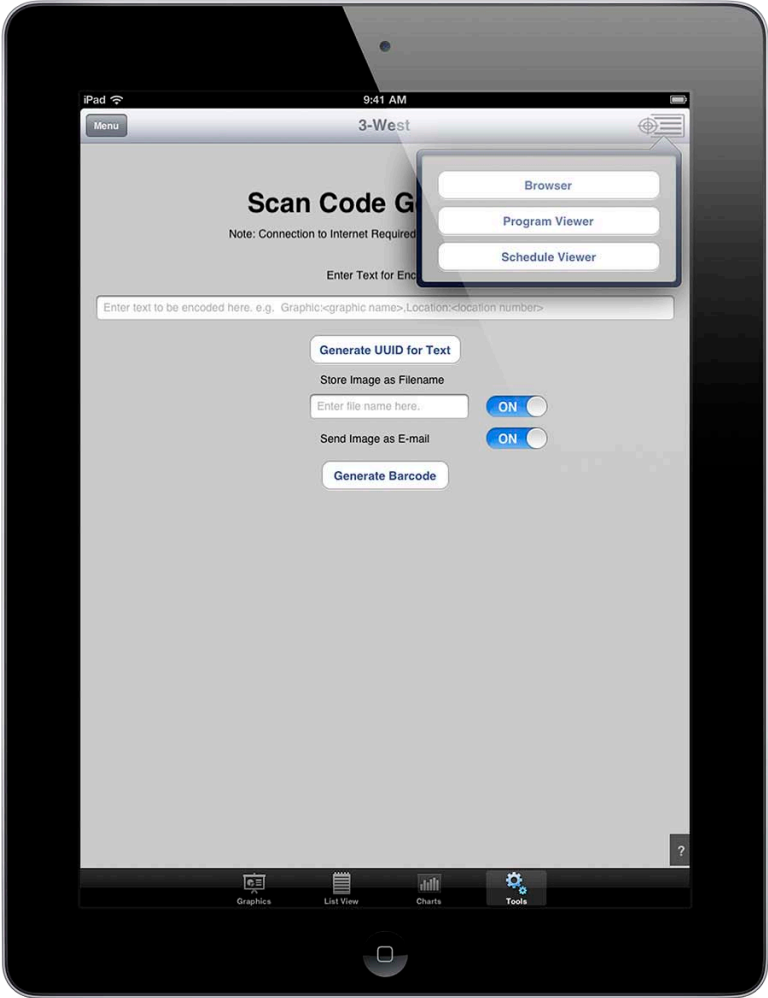


Figure 5: Tools Tab.

Application Modes

The Facility Prime application has three possible operation modes. The mode that is used depends on user logon criteria and the Facility Prime version that is installed.

- **View Only Mode**—This is the initial mode that is used when Facility Prime is started. It does not require a user to enter any log on information. In this mode, you:
 - Can view graphics, object lists, charts, and schedules.
 - Can create and e-mail reports.
 - Can create and scan QR and other barcodes.
 - Cannot make any changes to Facility Prime or building automation system (BAS) information and objects.

- **Command Mode**—If you log on to Facility Prime with a valid BLN Account that has at least **COMMAND** functional-access rights, you can also do the following for all objects that you have been granted access:
 - Command and release object settings.
 - Change object configuration, such as for alarms and state values.

- **Editor Mode**—The Editor mode is available only with the Facility Prime Editor version. To enable this mode, you must log on to Facility Prime with a BLN Account that has **EDIT** functional-access rights to field panel functions. In addition to all of the features available in the other two modes, you can:
 - Add, create, and configure Facility Prime graphics and charts.
 - Use the BACnet Browser to view and link to BACnet controller information.

For more information about the Editor mode, visit the Facility Prime website at www.usa.siemens.com/facilityprime or contact your local Siemens Industry representative.

Connecting to the BAS

The Facility Prime application uses Wi-Fi communications to access BAS controller information.

Requirements



To enable communications between Facility Prime and the BAS:

- The iPad settings must be set for wireless communications with the BAS network.
- The BAS must have at least one APOGEE Ethernet® field panel that will be used to manage communications between Facility Prime and the BAS.
- To enable Command and Editor mode functions, link the Facility Prime application to an APOGEE field panel.

Linking Facility Prime to a Field Panel

The Facility Prime application initially operates in **View Only** mode, without requiring a specific user logon. To enable the **Command** or **Editor** modes, a user must log in using a BLN account with COMMAND or EDIT level access.

Do the following to link Facility Prime and a field panel for authorizing user actions and commands:

1. Tap , and then tap **Users** on the popover menu.
⇒ The User Account Verification menu opens.
2. Tap .
3. Enter information for the APOGEE field panel to be used to authorize BLN account credentials for command and edit functions.
4. Tap **Set Panel Info**.

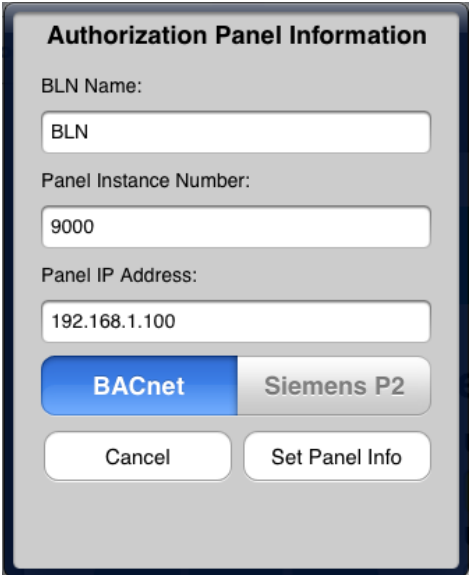




Figure 6: Field Panel Identification for Authorizing User Logons.

Logging In to Facility Prime

For **View Only** mode, you do not need to log in to Facility Prime. To access Facility Prime's **Command** or **Editor** mode functions, you must use an APOGEE BLN account to log in.

Contact your building automation system (BAS) administrator if you need a BLN account or a greater access level.

To log in:

1. Do one of the following to open the User Account Verification menu:
 - Tap , and then tap **Users** on the popover menu.
 - Tap a graphics element.
2. Enter the BLN user account's initials and password.
3. Tap .





NOTE:

Turning off the iPad screen or switching to a different application does not log you out of the Facility Prime application. To log out and restore the View Only mode, use the User Account Verification menu to log out of Facility Prime. Shutting down the application will also log out the user.

Logging Out of Facility Prime

To log out, do one of the following:

- Tap , and then tap **Users** on the popover menu. On the User Account Verification menu, tap .
- Shut down the Facility Prime application on the iPad.

Chapter 2 – Using the Graphics Tab and the Menu

Graphics Overview

The Facility Prime graphics create links to information in the building automation system (BAS) controllers. Using the Graphics tab, you can view object and facility information and, with granted access, change settings such as for room temperature and airflow.

The Facility Prime application can store as many different graphics as the iPad storage allows, but only one graphic can be active at a time. The active graphic determines the associated object information displayed on the List View and Charts tabs.


Facility Prime Menu

The Facility Prime Menu lists all of the available graphics installed on a specific iPad. You can open the Menu and change the active graphic from any of the Facility Prime tabs.

To open the Menu, tap .

Selecting and Activating Graphics


To select a graphic and activate its information:

1. On the toolbar, tap .
2. To quickly find a graphic, type the name or its initial letters in the **Search** box to filter the list.
3. Tap the graphic's name.
 - ⇒ The graphic is displayed on the Graphics tab, and the List View and Charts tabs show information for the associated objects.


Changing Object Settings and Values

Using a graphic, you can change—command—object settings and values. To enable the Command mode and make changes, you must be first logged in to the Facility Prime and building automation system (BAS) network, see [Logging In to Facility Prime](#) [→14]. For a user login account, contact your BAS administrator.

To command an object:

1. Select a graphic that has the object you want to command.
2. Tap the object or a related button.
 - ⇒ If the User Account Verification menu opens, enter a BLN user account's initials and password, and tap . Tap the object or button again to open the command menu or screen.
3. On the command menu or screen, enter the new value(s) according to the options.

For option definitions, see the [Glossary](#) [→29].

For the Light Commander, tap **Command Mode** to  to enable the individual light controls.
4. Tap **Command** or **Save**.
5. Tap **Transmit**.

Cancelling Commands



For a popover command menu, tap the screen outside the menu to cancel any unsaved actions and close the menu.

On a command screen, tap **Command**, and then tap **Cancel** on the popover menu that asks to transmit the values.

Deleting Graphics

Do the following procedure to remove a graphic from the Menu list and iPad storage. This is especially useful for removing older versions of graphics prior to importing the updated versions.


To delete a graphic:

1. On the toolbar, tap .
2. On the Menu, swipe the name of the graphic you want to delete.
3. Tap .

Chapter 3 – Using the List View, Charts, and Tools Tabs

Using the List View Tab

The List View tab shows a summary of object information associated with the active graphic. The colored bar above each section can be either green (normal condition) or red (alarm condition).

To see a different list, tap  to select the graphic with the objects you want to view.

Using the Charts Tab

The Charts tab can show up to six charts that are linked to a particular graphic. Charts can show current values or historical data plotted as scatter, bar, or pie charts.

From this tab, you can:




- View Charts**—Tap  to select the name of the graphic linked to the chart you want to view.
If the graphic is linked to multiple charts, drag the screen view to the side to see other charts.
- Change the Chart Appearance**—Tap  and then tap **Edit Chart** in the popover menu.
- Create Reports**—Tap  and then tap **Report** in the popover menu to create a PDF report file of the displayed chart.



Figure 7: Edit Chart Options.



NOTE:

The chart types and data values are selected through graphics elements configured with the Facility Prime Editor. For information on creating charts, visit the Facility Prime website at www.usa.siemens.com/facilityprime.

Using the Tools Tab

The Tools tab provides access to the Scan Code Generator and tools for reviewing field panel configuration.

Scan Code Generator

With the Scan Code Generator, you can create scannable QR codes that contain descriptive information or links to Facility Prime graphics. The iPad must have Internet access to create the codes. For more information, see [Creating Scannable QR Codes](#) [→19].

BAS Configuration Tools

To access the system tools, tap  (see [Figure 5](#)), and then tap:

- **Browser**—Opens the BACnet Browser, which displays BACnet controller configuration and data. For more information about the BACnet Browser, visit the Facility Prime website at www.usa.siemens.com/facilityprime.
- **Program Viewer**—Opens the PPCL Program Viewer for reviewing PPCL control programs.
- **Schedule Viewer**—Opens the BACnet Schedule Viewer for reviewing BACnet controller schedules.



NOTE:

The iPad must be communicating with the BAS to access and use these tools.

Chapter 4 – Creating and Scanning Codes

Creating Scannable QR Codes


With the Scan Code Generator, you can create scannable quick response (QR) codes that provide simple, fast access to information or link to and open Facility Prime graphics.

To create a QR code:

1. Verify that the iPad has Internet access.
2. On the Tools tab, enter text for encoding. The options are:
 - **Descriptive Text**—Enter the text that should be displayed after the code is scanned.
 - **Graphics Link**—Enter an identifier in the following format to open a specific graphic. NOTE: This format is case-sensitive.


Graphic:graphic's name

(example) Graphic:3-West

- **Location Element Link**—Enter an identifier in the following format to open a graphic and show a specific Location element  on that graphic. NOTE: This format is case-sensitive.

Graphic:graphic's name,Location:Location Value

(example) Graphic:3-West,Location:2

- **Unique Identification Code**—Tap **Generate UUID for Text** to create and encode a unique alphanumeric code.
3. Select how you want to get the code image file (*.png) by tapping the option switch(es) to :
 - **Store Image as Filename**—Saves the file on the iPad. After the file is created, use the iTunes application to access and copy the file for any further formatting and printing. For more information, see [Chapter 6 – Copying and Adding Facility Prime Files](#) [→23].
 - **Send Image as E-mail**—Attaches the file to an e-mail.

4. Tap **Generate Barcode**.


The code image file is saved on the iPad and/or attached to an e-mail.

For information about Location elements, visit the Facility Prime website at www.usa.siemens.com/facilityprime.

Scanning QR Codes

Using the iPad camera and the Facility Prime scanning function, you can scan QR codes that can have encoded information or links to Facility Prime graphics.

To scan a code:

1. On the Graphics tab, tap  to open the popover menu.
2. Tap **Code Scanner**.
3. Center the QR code in the iPad camera viewer.

The Code Scanner automatically scans the code and decrypts the information.


If the QR code contained a graphics link, the linked graphic is opened and, if applicable, a Location element  is shown at the set position.




Figure 8: Scanning a QR Code.

Chapter 5 – Creating and Sending Reports

On the Graphics or Charts tab, you can save a copy of what is displayed on the screen as a PDF file, which can then be saved on the iPad and/or e-mailed.

To create and/or send a report:

1. On the Graphics or Charts tab, tap  to open the popover menu.
2. Tap **Report**.
3. On the Generate Report menu, tap a report option:
 - **File**—Creates a PDF that is saved on the iPad. To view the PDF, you can:
 - Use the iTunes® File Sharing function to copy the report file (*.pdf) to another location. For more information, see [Chapter 6 – Copying and Adding Facility Prime Files](#) [-23].
 - Add a Document graphics element to a Facility Prime graphic and link the element to the PDF. For more information, visit the Facility Prime website at www.usa.siemens.com/facilityprime.
 - **E-mail**—Creates a PDF and attaches it to an e-mail for you to send.
 - **File & E-mail**—Saves a PDF on the iPad and attaches a copy to an e-mail.



NOTE:

If you don't receive the e-mailed report, verify that the iPad is communicating with your e-mail network. Facility Prime stores the e-mail until it can be sent.

Chapter 6 – Copying and Adding Facility Prime Files

Using the iTunes File Sharing functions, you can copy Facility Prime files such as for graphics, reports, and QR codes. This is useful for making backup copies or for transferring them to another computer and iTunes account.

You can also use iTunes to add custom graphics, images, and document files to the Facility Prime application.

TIP: The PNG file format is the preferred image file format.

To copy files between Facility Prime and a computer:

1. Start the iTunes application on the computer.
2. Use the USB cable to connect the iPad and computer.
3. In the iTunes menu - **DEVICES** section, select the iPad name.
4. Click **Apps** on the top navigation bar.
5. In the **File Sharing - Apps** section, select **Facility Prime**.

Files that can be copied from the iPad are listed in the Facility Prime Documents list.

6. To copy files from the iPad, select the file(s) that you want to copy and click **Save to**, select where you want to store the files, and click **OK**.
7. To add files to the Facility Prime application, click **Add**, select the file(s) that you want to add, and click **Open**.



NOTE:


When adding a custom graphic, be sure to add the *.grpbk file along with any files for custom images (*.png, *.jpg, etc.) that are used in that graphic. After adding the files, import the graphic to add it to the Facility Prime Menu. For more information, see [Importing Graphics](#) [→25].

Chapter 7 – Exporting and Importing Graphics

Using the iTunes File Sharing function and the Facility Prime export and import functions, you can back up and transfer Facility Prime graphics files between an iPad and computer.

Exporting Graphics

To export custom graphic files:

1. On the Facility Prime Graphics tab, tap  to open the popover menu.
2. Tap either **Export All Graphics** or **Export Current Graphic**.
3. Tap **OK**.
Copies of exported graphics are saved on the iPad.
4. Use the iTunes File Sharing function to view and copy the custom Facility Prime files to another location. For more information, see [Chapter 6 – Copying and Adding Facility Prime Files](#) [→23].

The custom graphic files (*.grpbk) are named based on the graphic's title and the date and time when the file was exported. When transferring graphic files to another computer or iPad, be sure to also copy the related images (*.png, *.jpg, etc.)


Importing Graphics



NOTE:

The filename (*.grpbk) of a custom graphic includes the date and time of when it was exported, making it unique from other versions of that graphic. To avoid having multiple versions of the same graphic on an iPad, delete the previous versions before importing the new ones. You can also reinstall the Facility Prime application on the iPad to remove and replace all the graphics.

To import custom graphic files:

1. Use the iTunes File Sharing function to add custom Facility Prime files to the iPad.
2. If the iPad has previous versions of the graphics to be imported, delete the old versions.
3. On the Graphics tab, tap  to open the popover menu.
4. Tap an import option:
 - **Import All Graphics**—This option imports all graphics files listed in the iTunes Facility Prime Documents list and adds them to the Menu.
 - **Import New Graphic**—Select the graphic file that you want to add and tap **Import**. After the import, the graphic is listed in the Menu and displayed on the Graphics tab.

Appendix A – APOGEE BAS and iPad Settings

This appendix describes the APOGEE network and iPad configuration settings needed to enable communications for the Facility Prime application. In addition to this appendix, also see the information in [Connecting to the BAS](#) [→13].

APOGEE Network


To enable the iPad to communicate with the BAS network:

- **Wi-Fi Communications**—Access to BAS communications must be available through a Wi-Fi connection.
- **APOGEE Device/Node:**
 - For BACnet communications, assign a device instance number for the iPad through its Facility Prime application settings (see iPad Apps Settings – Communications).
 - For P2 communications, assign a panel name to the iPad and add it as a node on the P2 network (also see iPad Apps Settings – Communications).

It is recommended that each iPad uses a unique instance number and/or panel name to identify it on the network.
- **BLN Account**—To enable the Command and Edit functions, at least one BLN account must be available to grant the appropriate functional and object access levels needed by the Facility Prime user.

iPad Apps Settings

For each iPad, open its **Settings** and in the **Apps** section, select **Facility Prime** (see *Figure 9*). Configure the following options:

- **Alarms**—Set the **Visual Alarm Indications** option to determine whether or not all of the following should occur:
 - The navigation bar on the Graphics tab turns red if an object, linked to the active graphic, is in alarm.
 - The Graphics tab icon displays an alarm count. 
 - The colored bar above an object's section on the List View tab turns red if the object is in alarm.
- **Communications**—Enter a **BACnet Device Instance #** and/or **Siemens P2 Panel Name**. For P2 communications, also see APOGEE Network – APOGEE Device/Node.

It is recommended that each iPad uses a unique instance number and/or panel name to identify it on the network.
- **Sleep Mode**—Set the **Keep Device Awake** option to suit the user preference.



Figure 9: Settings for an iPad's Facility Prime Application.

Glossary

ach

Air changes per hour. Number of times a volume of air, equal to the volume of the space, is moved through the space each hour.

analog point

Has a continuous range for a numerical value, such as for a temperature sensor reading.

BACnet

Standard protocol developed by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) for building automation and control network communications.

BAS

Building automation system.

base offset

Minimum range on a gauge.

binary point

Has two states: Off and On.

BLN account

Building Level Network account. APOGEE Automation System user account that determines a person's ability to access field panel/controller information and configuration.

Element

Graphical object or text added to a Facility Prime graphics page.

gesture

Hand motions, such as a tap or pinch, used on the iPad screen that enable interaction with the displayed objects.

high limit

High alarm value. At this value and higher, an alarm will be triggered.

IP address

Internet Protocol address. Identifies a field panel/controller that is providing information on a wireless communications network.

low limit

Low alarm value. At this value and lower, an alarm will be triggered.

point

Represents a piece of equipment or a value that the system monitors, controls, and/or uses for equipment control.

priority edit

Enables the user to set the priority level of a command.

release

Returns control of an object or value to the system.

set point (Stpt)

Target value that equipment or controllers work to maintain, such as the ideal temperature.

trend

Data samples collected by a specified time interval or change of value. Trend data can be useful for monitoring equipment performance over a certain period of time and troubleshooting any problems.