SIEMENS

Siemens SiPass Driver

Start-up Procedures

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Introduction

This document contains start-up information for the Siemens SiPass Driver. The following topics are discussed:

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Prerequisites

You should have a working knowledge of the APOGEE Automation System.

Make sure all the items in the following checklist are completed before proceeding.

- □ You are familiar with the SiPass system and the specific devices to be integrated.
- □ You have all wiring and installation complete, as specified in the *Siemens SiPass Driver Installation Instructions* (565-884).
- □ You have obtained the following information from the SiPass representative:
  - Addresses for each of the devices
  - Passwords
  - Communication parameters
- □ You have confirmed that the SiPass representative has performed the checkout on its system, all devices are communicating with the ACCs, and ACCs are communicating with the SiPass server.

- ☐ You are familiar with the application concepts for this driver, as described in the *Siemens SiPass Driver Technical Reference* on InfoLink.

Configuring the SiPass System

Enabling Siemens SiPass Driver Communications in the SiPass Software

In order to communicate with the Siemens SiPass Driver, the SiPass server must be configured with the appropriate settings.

1. On the SiPass graphical user interface (GUI), click the **Components** button on the **System** toolbar. The **Components** window with the **Component Definition** pane displays.

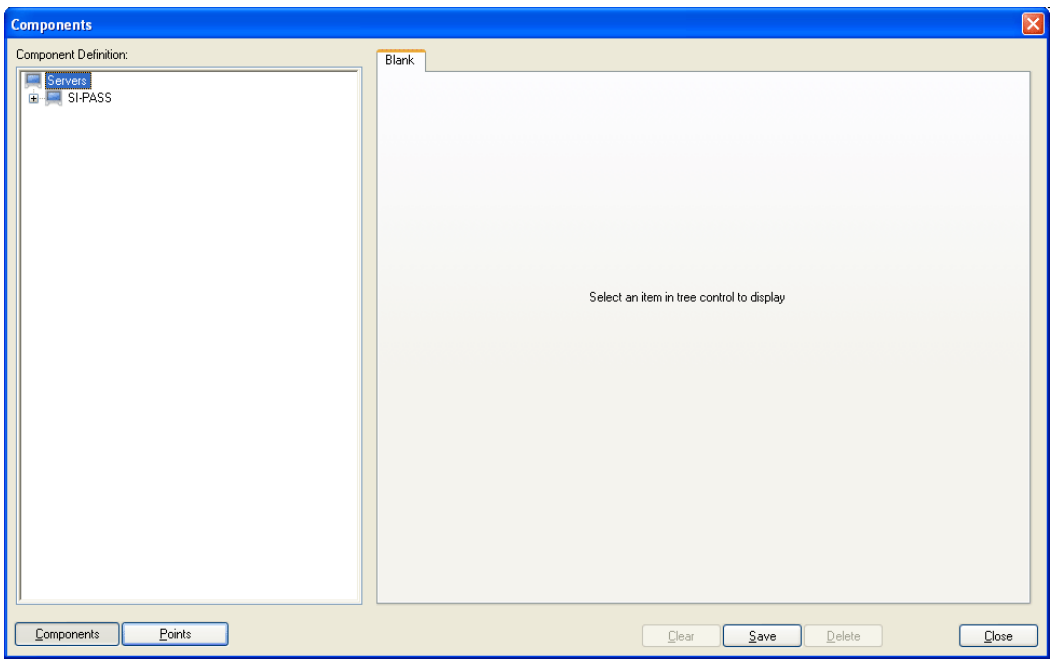


Figure 1. Components Window.

2. Under **Servers**, select the server to which the Siemens SiPass Driver is connected. The **Operational** pane for the selected server displays.

3. Click the **New Bus** button and select **Open Processor** from the displayed menu. The **Open Processor Gateway** pane displays.

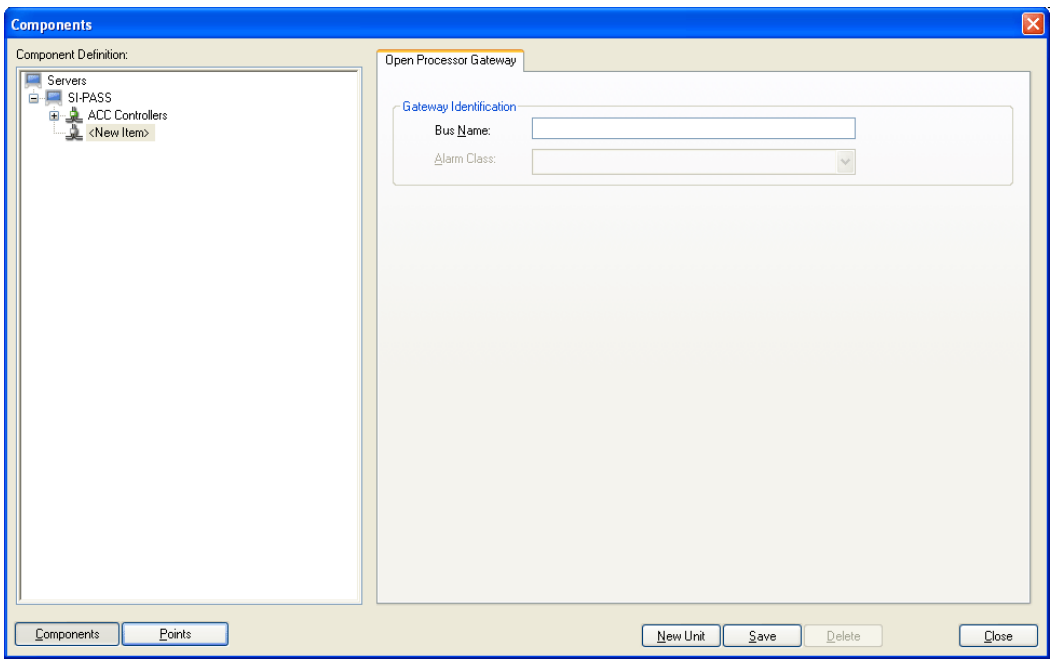


Figure 2. Open Processor Gateway Pane.

4. In the **Bus Name** field, enter a logical name for the bus.

The **Bus Name** is not used in other areas during configuration of the SiPass system.

5. Click the **Save** button. The bus added to the Component Definition pane displays.

6. Click the **New Unit** button. The **Open Processor** pane displays.

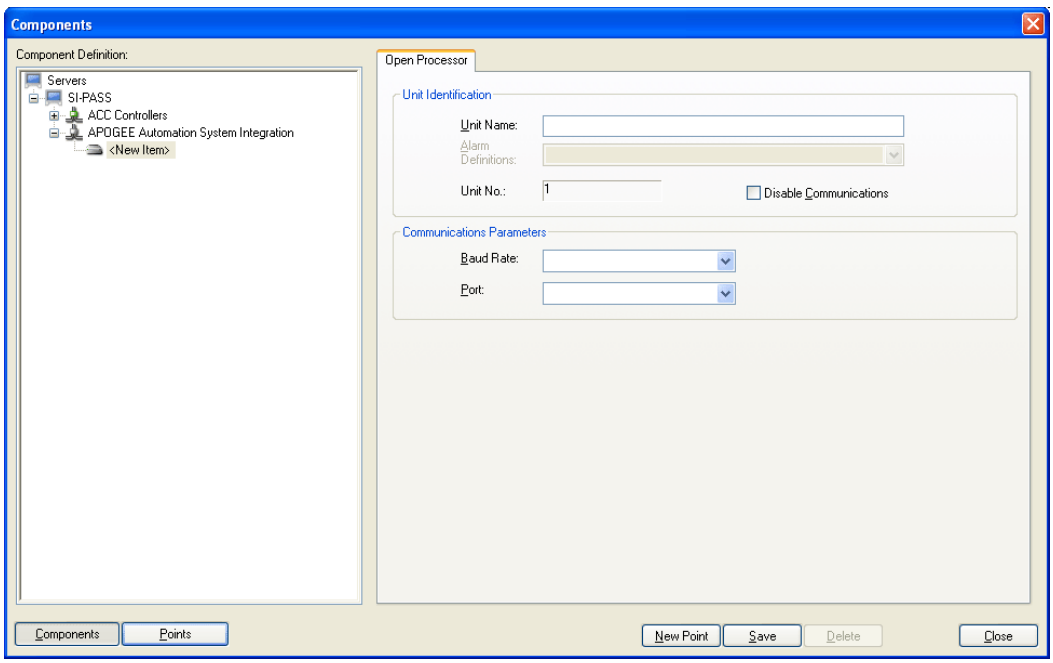


Figure 3. Open Processor Pane (New Unit).

7. In the **Unit Name** field, enter a logical name for the SiPass Driver unit.

The **Unit Name** is not used in other areas during configuration of the SiPass system.

8. In the **Baud Rate** list, select the baud rate (typically 19200) for the server COM port assigned to the Siemens SiPass Driver.

9. In the **Port** list, select the server COM port assigned to the Siemens SiPass Driver.

10. Click the **Save** button. The Siemens SiPass driver unit is added to the Component Definition pane displays.

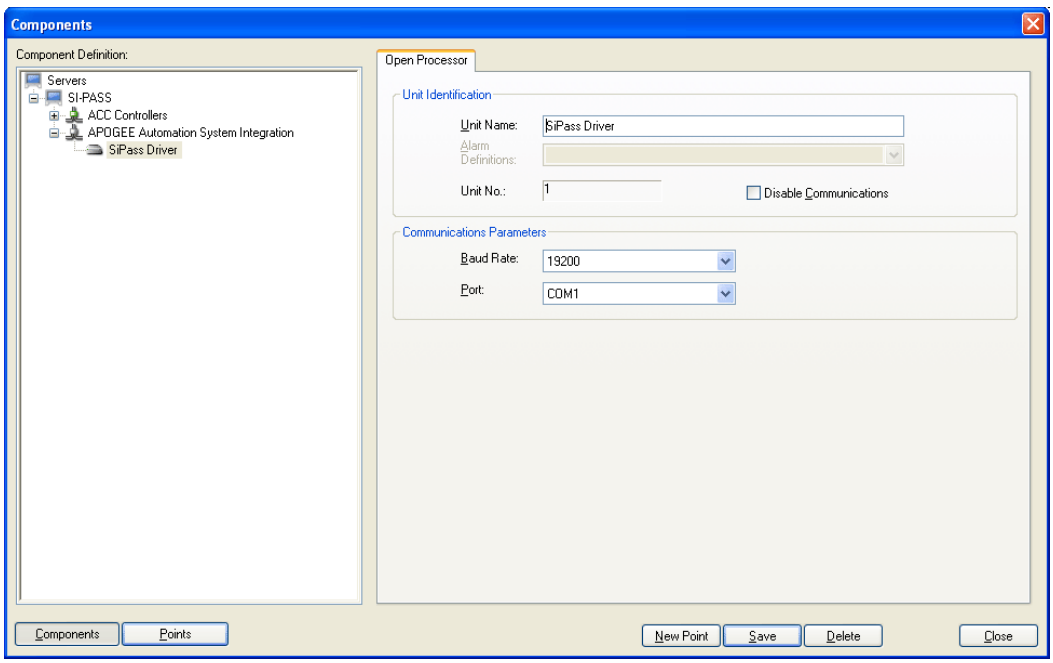


Figure 4. Open Processor Pane (Saved Unit).

Configuring SiPass Notification Zones (if used)

In order for the APOGEE Automation System to receive Notification Zone updates (see *SiPass Driver Technical Reference* for information on Notification Zones), the SiPass system must be configured to enable this function.

Notification Zones may only be assigned to cardholders in the SiPass system.

Perform the following procedures to enable the APOGEE Automation System to receive Notification Zone updates from the SiPass system:

1. Defining the Notification Zone Points
2. Assigning Notification Zone Points to Cardholders

Defining the Notification Zone Points

Follow this procedure to define Notification Zone points.

1. On the SiPass graphical user interface (GUI), click the **Components** button on the **System** toolbar. The **Components** window with the **Component Definition** pane displays.

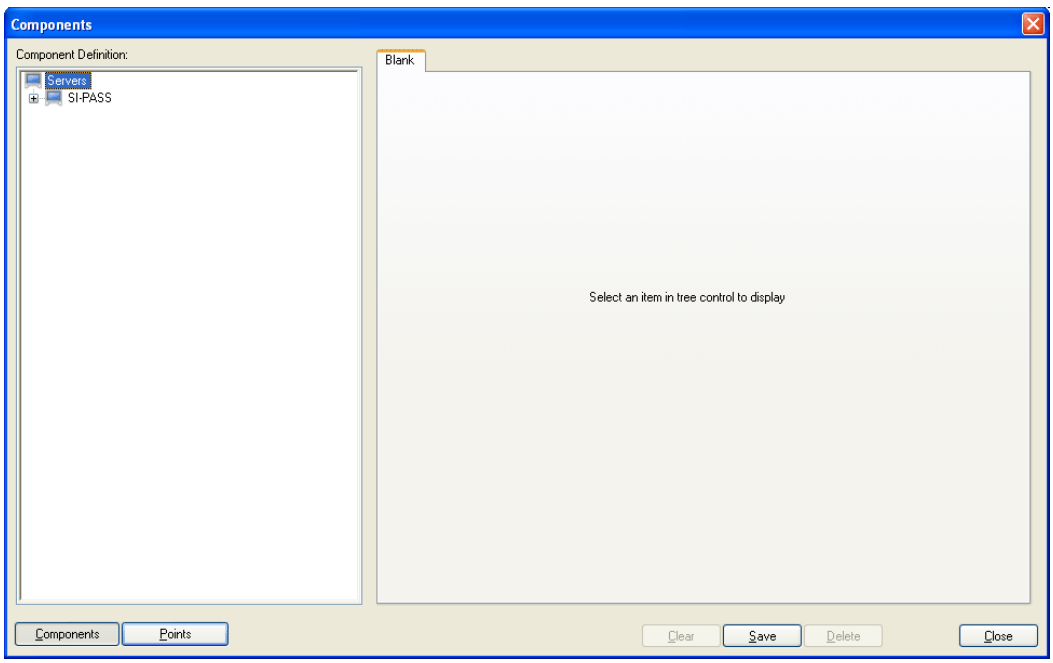


Figure 5. Components Window.

2. Under **Servers**, expand items until the Open Processor driver is displayed, then click the Siemens SiPass Driver's unit name (as defined in the *Enabling Siemens SiPass Driver Communications in the SiPass Software* procedure) to select it. The **Open Processor** pane displays.

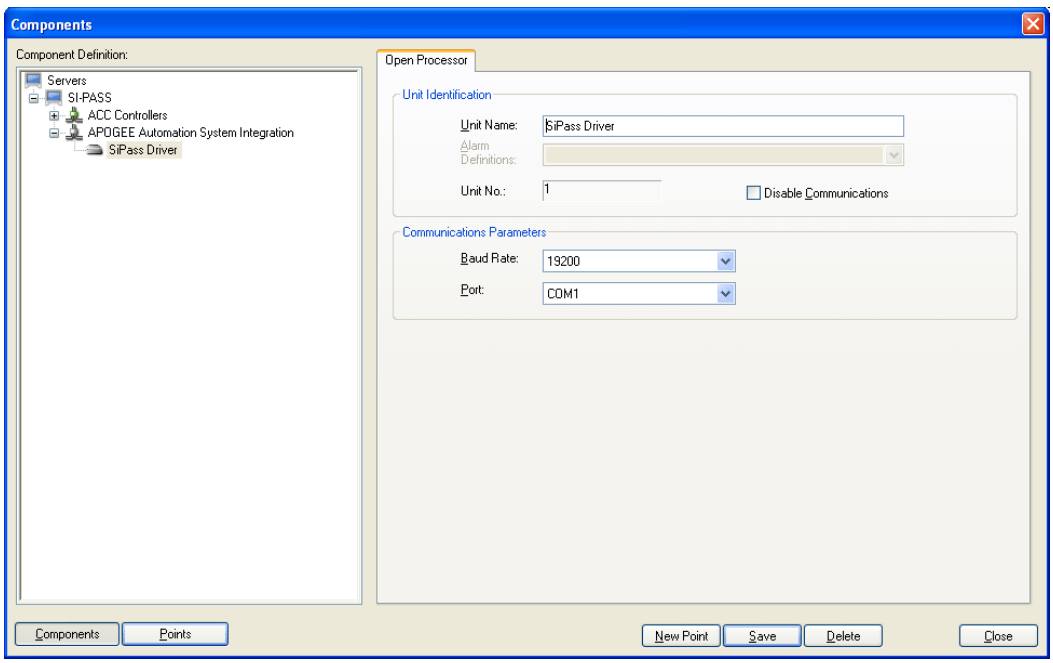


Figure 6. Open Processor Pane.

3. Click the **New Point** button. The **Notification Zone** pane displays.

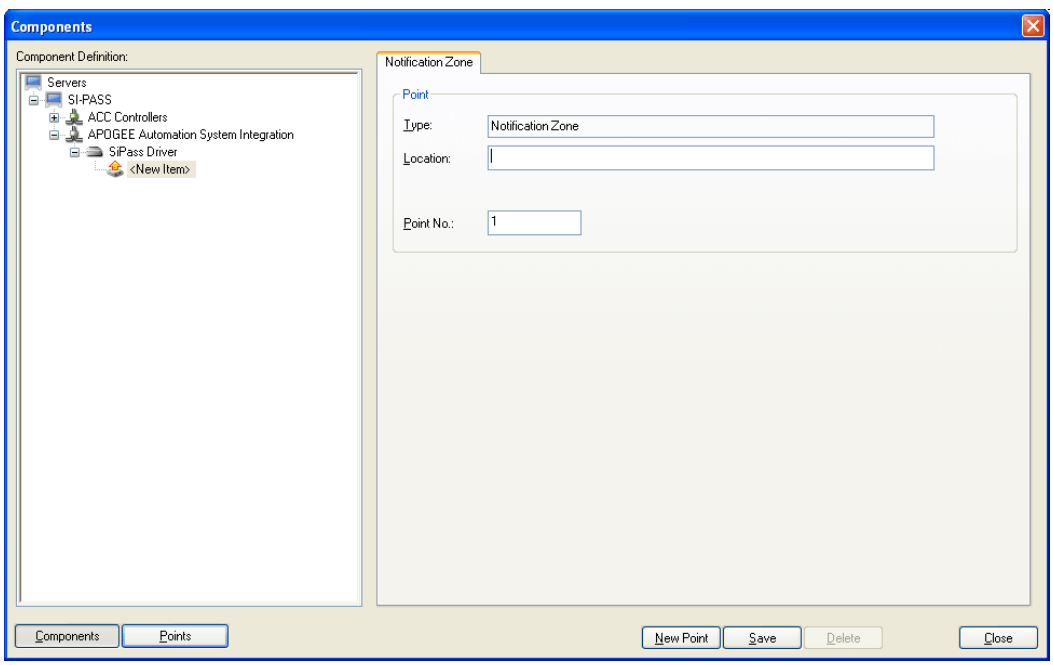


Figure 7. Notification Zone Pane.

4. In the **Location** field, enter a logical name for the Notification Zone location.

The **Location** is not used in other areas during configuration of the SiPass system.

5. In the **Point No** box, enter the Notification Zone number to be used by the APOGEE Automation System for this Notification Zone point.

6. Click **Save**. The Notification Zone point is added to the Component Definition pane.

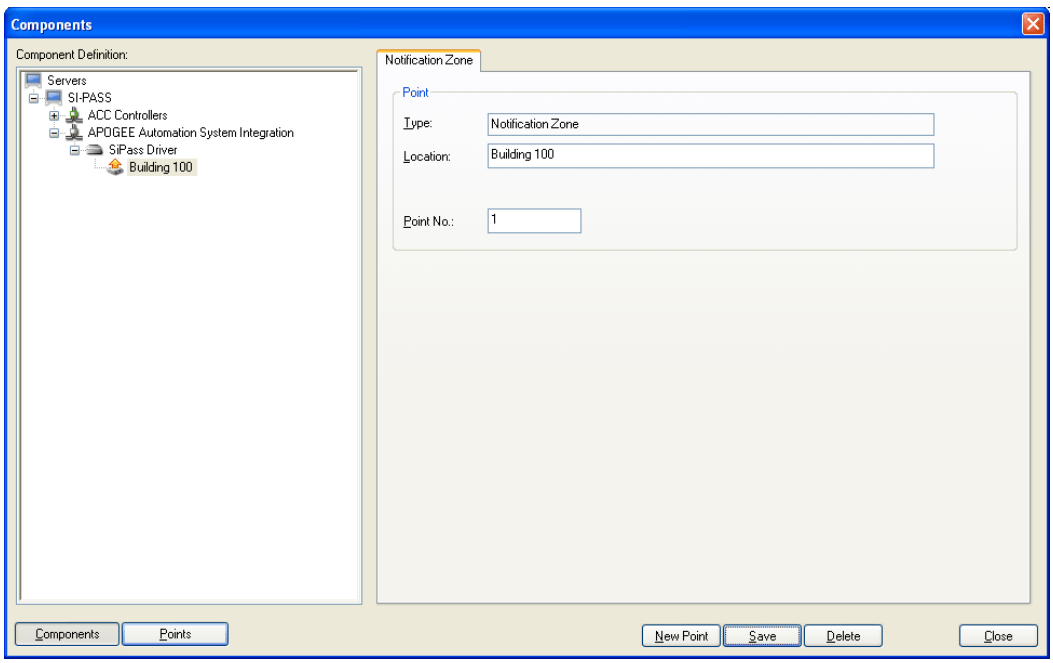


Figure 8. Notification Zone Pane.

7. Repeat this procedure to define all remaining Notification Zone points.

Assigning Notification Zone Points to Cardholders

Follow this procedure to assign Notification Zone points to a cardholder in the Siemens SiPass system.

1. On the SiPass graphical user interface (GUI), click the **Cardholder** button on the **Program** toolbar. The **Cardholder** window with the **Definition** pane displays.

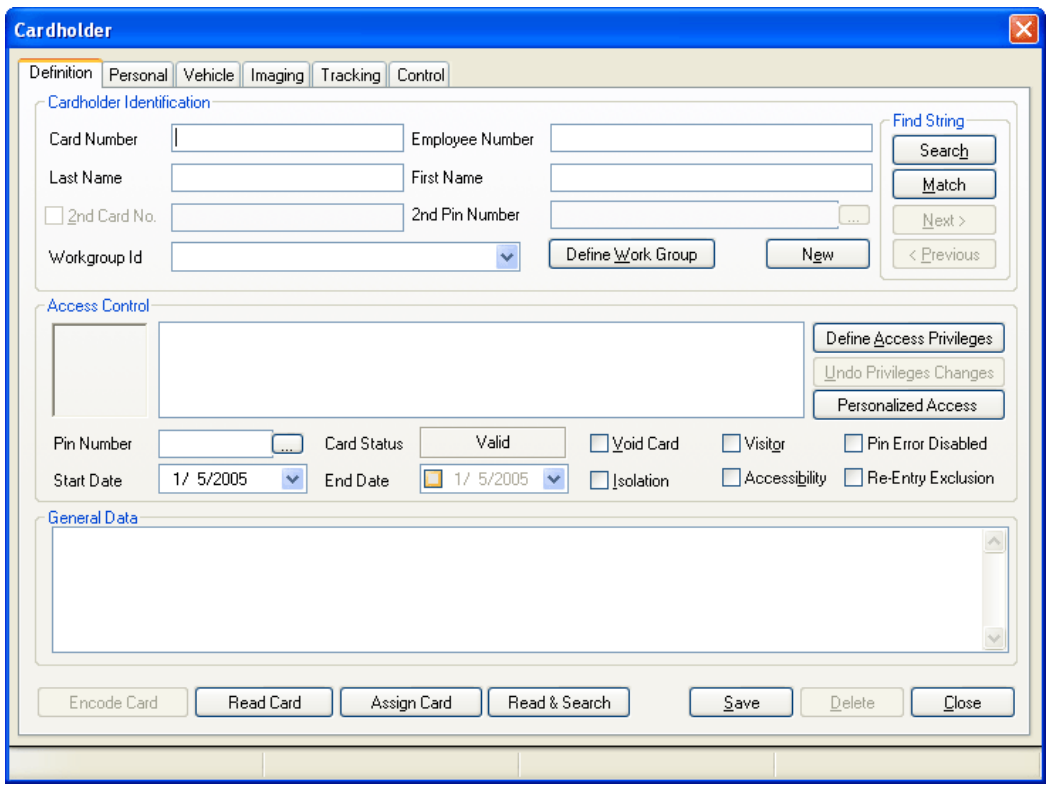


Figure 9. Cardholder Window (New).

2. Perform the following steps to search for the cardholder record to assign Notification Zone points:

   a. To limit the number of cardholders displayed during the search, enter information in the **Card Number**, **Employee Number**, **Last Name**, or **First Name** fields. Otherwise, leave these fields blank to display all cardholders.

   b. Click the **Search** button. The **Cardholder Records** window with a listing of cardholders displays.

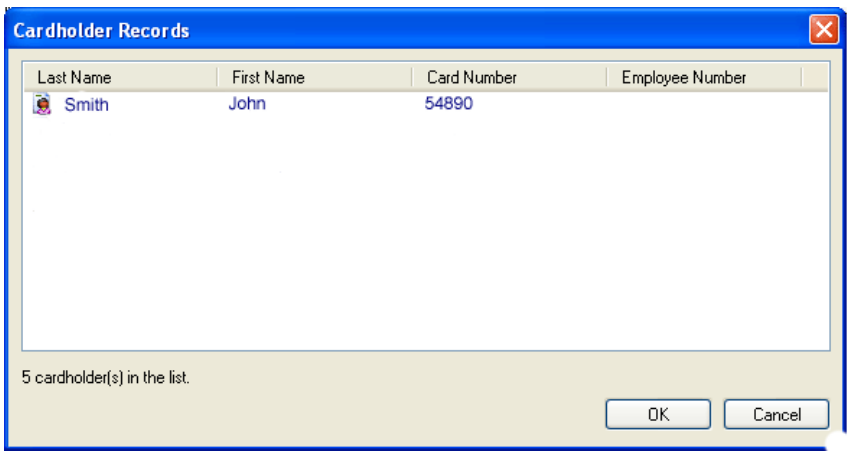


Figure 10. Cardholder Records Window.

3. Select the cardholder to assign to the Notification Zone and click **OK**. The cardholder's record displays in the Cardholder window.

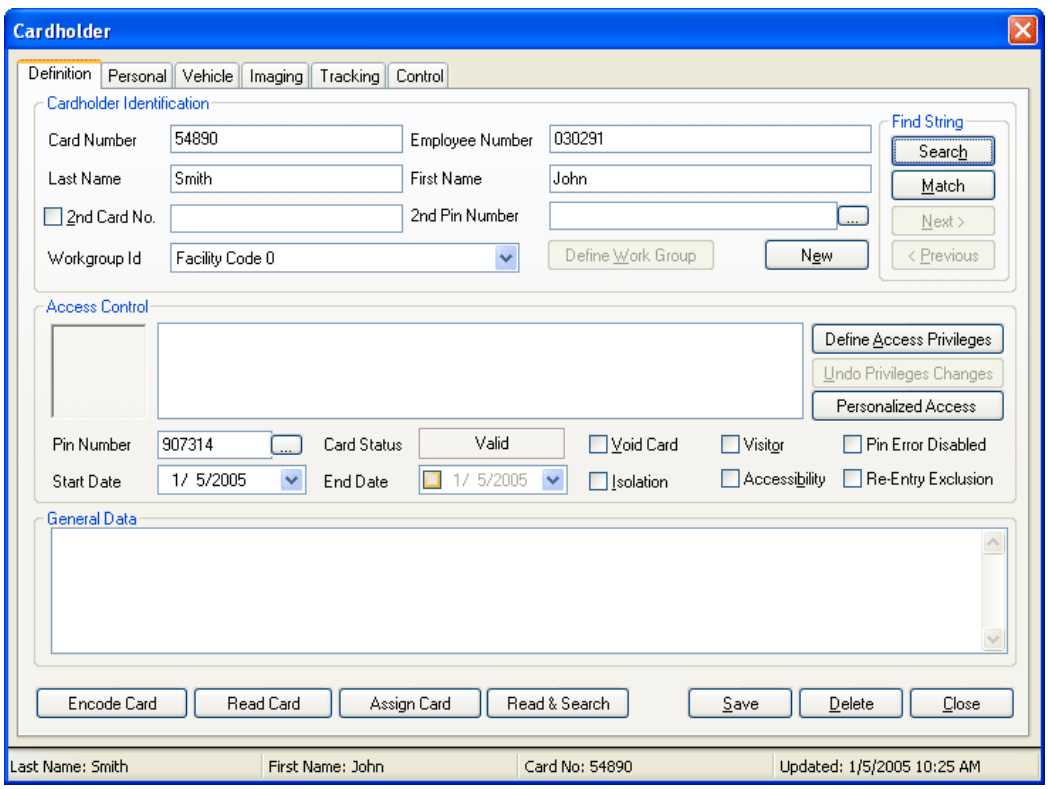


Figure 11. Cardholder Window (Existing).

4. Click the **Control** tab. The **Control** pane displays.

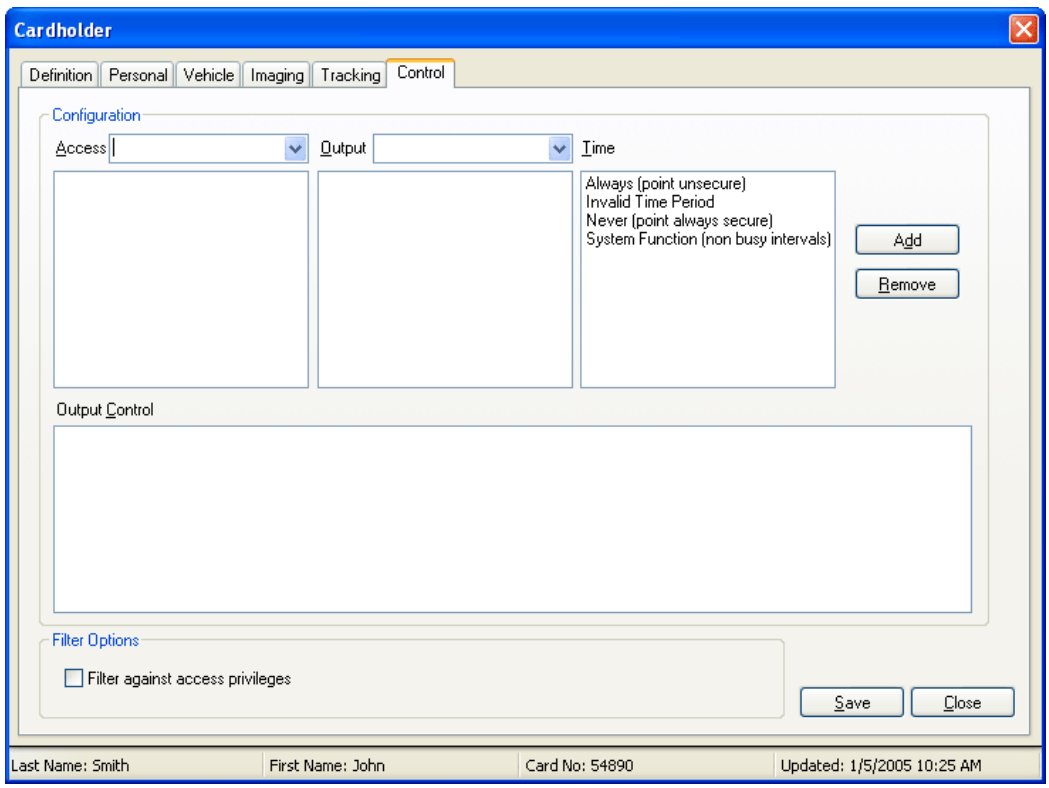


Figure 12. Control Pane.

5. Perform the following steps to assign Notification Zone points to the cardholder:

   a. In the **Access** list, select **Access Point** (or **Access Point Group)**. A listing of access devices (or groups) displays in the corresponding list box.

   b. In the access list box, select the device (or group) being assigned to the Notification Zone point.

   c. In the **Output** list, select **Notification Zone** (or **Notification Zone Group**). A listing of Notification Zone points (or groups) displays in the corresponding list box.

   d. In the output list box, select the appropriate Notification Zone point (or group) (as defined in the *Defining the Notification Zone Points* procedure).

   e. In the **Time** list box, select the specified time period to assign for Notification Zone access.

   In order to limit unnecessary data traffic, the time setting used for Notification Zones is typically an off-hours period. It may be necessary to configure a custom time period in the SiPass system for use with Notification Zones.

   f. Click the **Add** button. The assigned Notification Zone point is added to the **Output Control** list.

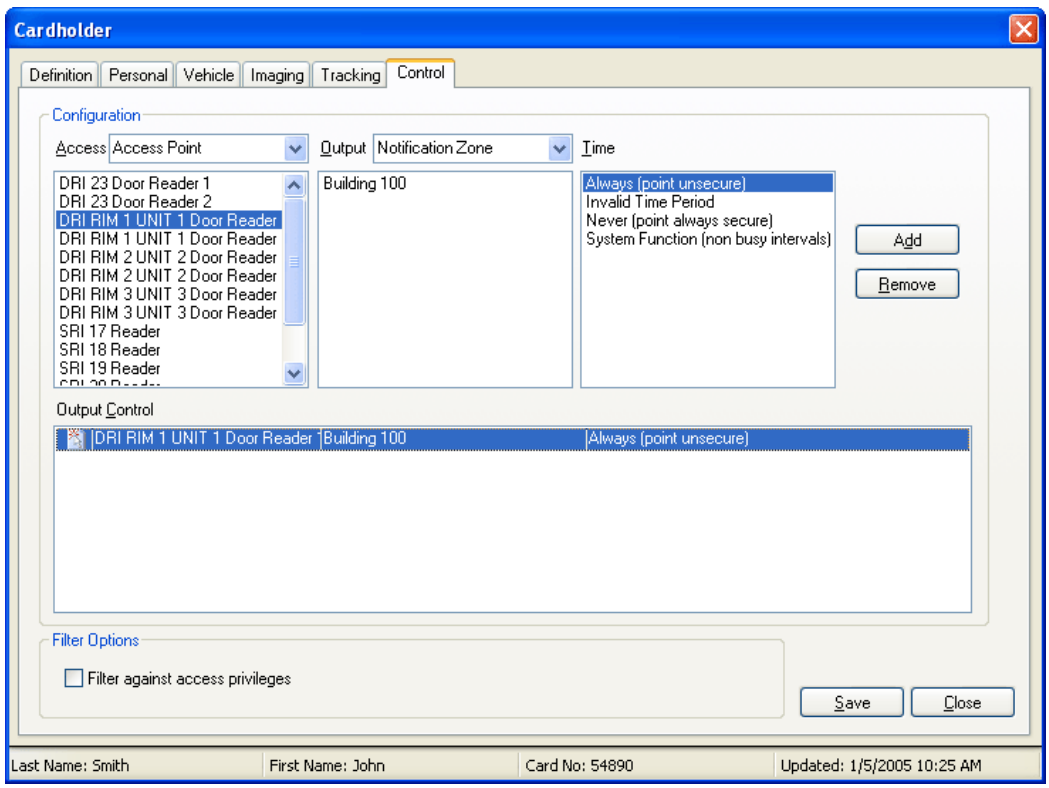


Figure 13. Control Pane.

g. Repeat these steps to assign remaining Notification Zone points.

6. Click the **Save** button. The cardholder record is saved with the added Notification Zone assignments.

Configuring Host Event Tasks

In order for the APOGEE Automation System to control host event tasks (see *Siemens SiPass Driver Technical Reference* for more information on host event tasks), the SiPass system must be configured to enable this function.

1. On the SiPass graphical user interface (GUI), click the **Host Event Task** button on the **System** toolbar. The **Host Event Task** window displays.

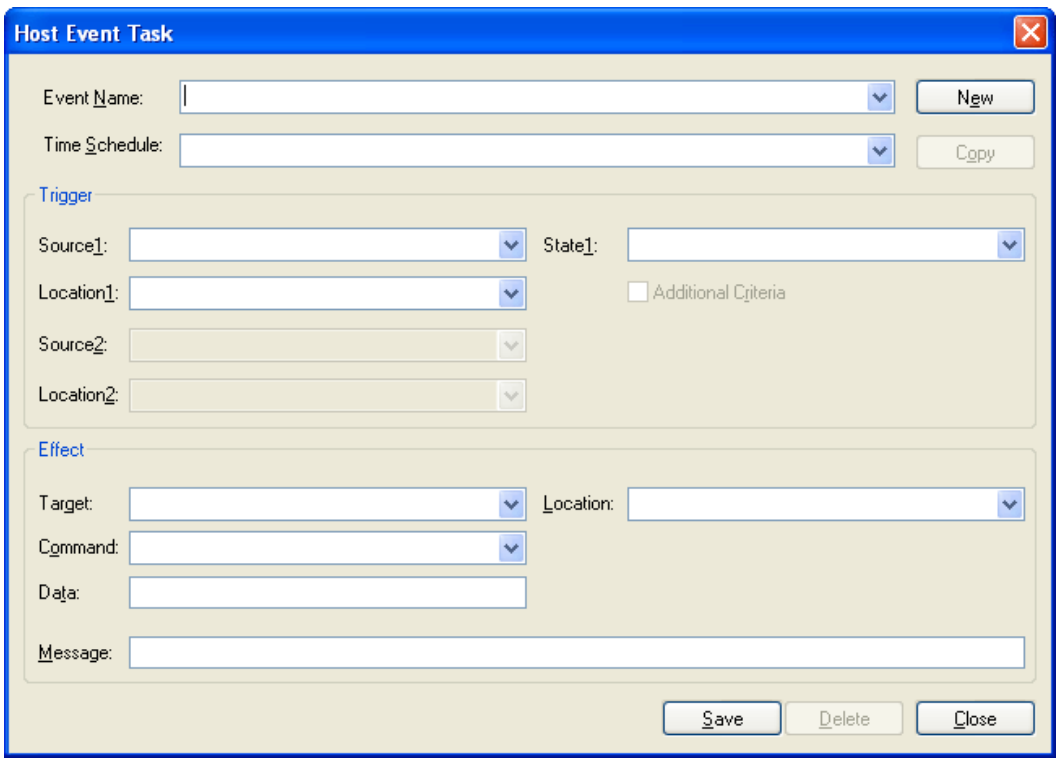


Figure 14. Host Event Task Window.

2. In the **Event Name** list, enter a host event name that describes what the event does.
3. In the **Time Schedule** list, select the time period during which the host event may be triggered.
4. In the **Source1** list, select **APOGEE Control**.
5. In the **Trig ID** box, enter the host event number to be used by the APOGEE Automation System for this event. (For example, if you are defining Event 1, enter “1” in this box.)
6. In the **Target** list, select the target that the host event will affect.
7. In the **Location** list, select the name of the object that the host event will affect.
8. In the **Command** list, select the command that will be performed on the target item when the host event occurs.
9. In the **Data** box, specify the data string for the command (if required).
10. In the **Message** box, enter the message you wish to see in the SiPass Audit Trail when the host event occurs.
11. Click the **Save** button. The host event task is saved.

The APOGEE Automation System can initiate Host Events, but cannot reverse the action of the Host Event. In order to use the APOGEE Automation System to reverse the action of a Host Event, it is necessary to create another Host Event containing the commands for the reverse action.

Setting Up the Siemens SiPass Driver

Perform the *General Start-up Tasks*. Then perform *Setting the FLN Communication Speed* and *Verifying the Setup Information*.

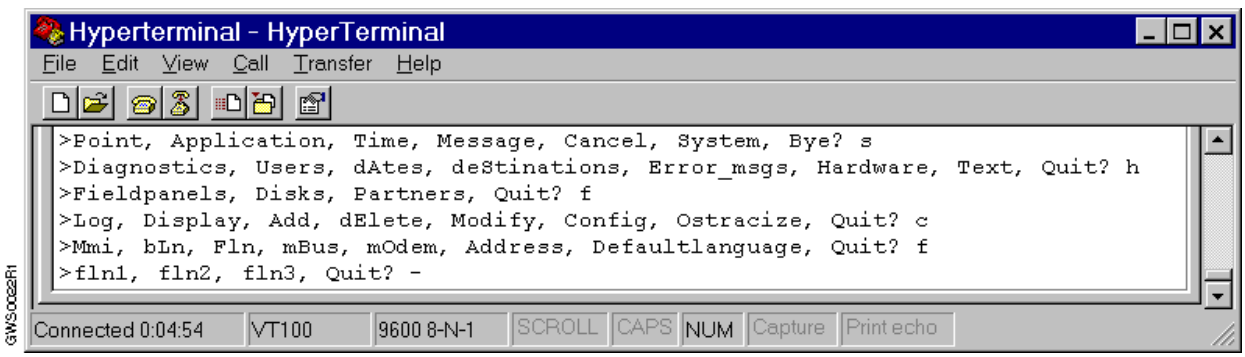
General Start-up Tasks

The general start-up tasks are described in the field panel documentation and training classes. If you need more information about the general start-up tasks, see the *Field Panel Start-up Procedures*.

Setting the FLN Communication Speed

(**S**ystem / **H**ardware / **F**ieldpanels / **C**onfig / **F**ln).

A sample MMI session follows.

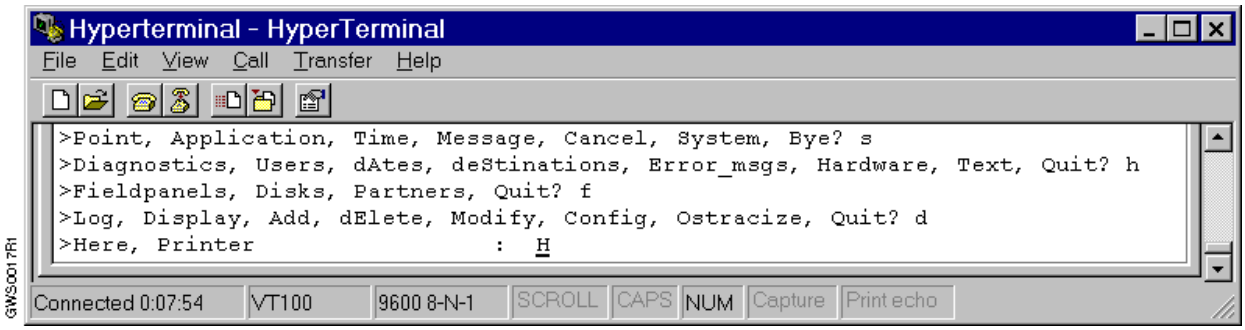


1. Press **1** for FLN 1, and then press **ENTER**.
2. Enter the FLN communication speed (typically 19200), and then press **ENTER**.

Verifying the Setup Information

(**S**ystem / **H**ardware / **F**ieldpanels / **D**isplay).

A sample MMI session follows.



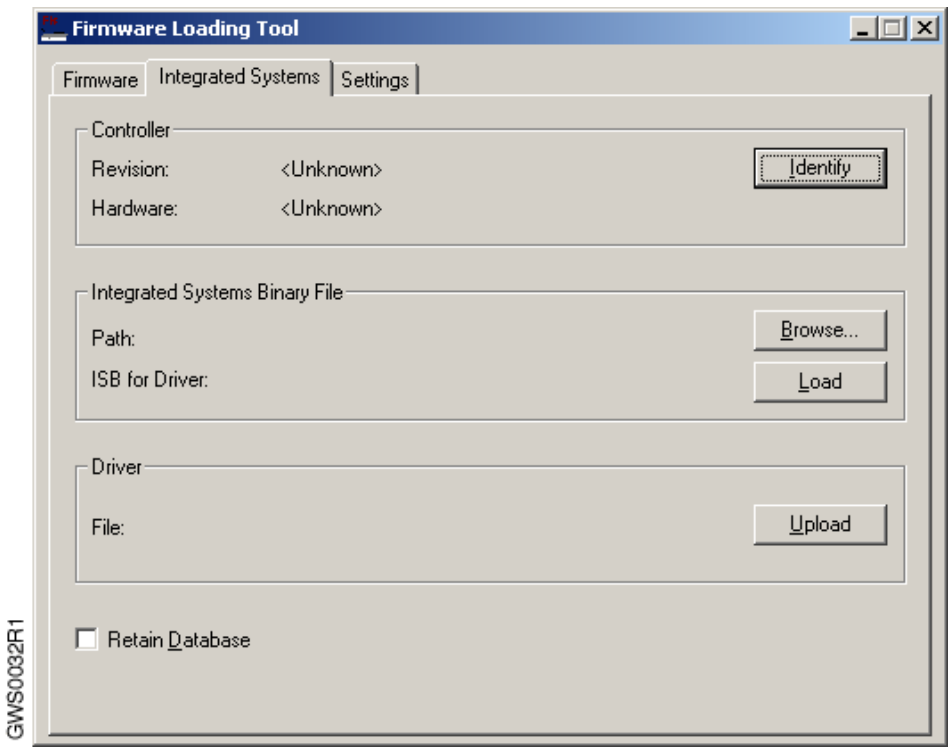
1. Select where to display the report:
    - To display the report at the operator terminal, type **H** to select Here.
    - To display the report at the report printer, type **P** to select Printer.
2. When prompted for the field panel (cabinet) number, press **ENTER**. The system displays the configuration.

Adding Custom Applications

If points will be manually added to the database, it is not necessary to add any applications.

The driver contains a standard application file, but supports the addition of custom applications. If a custom application file (.ISB) has been provided, it must be loaded into the driver hardware. To load this file, perform the following steps:

1. In CommTool, Version 4.7 or later, open **FLT**.
2. Connect to the MMI/MODEM port of the driver hardware.
3. Click the **Settings** tab. Adjust the communication speed, etc. as needed to establish communications.
4. Click the **Integrated Systems** tab. The Firmware Loading Tool dialog box displays.



5. Click **Identify**. The name of the driver and its revision is listed in the **Revision** field.
6. Click **Browse** and locate the application (.ISB) file to be loaded.

The .ISB file must be compatible with the revision listed in the **Revision** field.

7. Click **Load**. The application file is loaded into Flash memory. This is an automatic load. Several messages appear to indicate what processing step is taking place. Wait for the **Database Load Complete** message to display.
8. Click **OK** to accept the database load.

Establishing Communications with the SiPass System

Adding Applications

To add an application, use one of the following four methods. The methods are listed in order of preference with the preferred method listed first; however, you can use any of the available methods. The method you choose may depend on the tools you have available.

At this time, it is recommended that you DO NOT enter duplicate copies of the applications for the additional devices. After an application type is defined, it appears in System Profile. In the *Adding Remaining Devices* section, you use System Profile to add duplicate application instances.

Method 1 - Auto-detecting the Applications

The SiPass Driver can automatically detect the SiPass equipment defined in the SiPass server database, and add the standard applications corresponding to this equipment. Operation of this feature is controlled by the AUTOTEC point in the driver (see *Diagnostic Points* in the *SiPass Driver Technical Reference*). After communication is established with the SiPass server, command the AUTOTEC point to the appropriate value(s), then upload the applications to the Insight workstation or CommTool.

Method 2 - Using the TEC Applications Drive

Import the applications from the Buffalo Grove **TEC Applications Drive** into CommTool, and then download the applications to the driver. See *Appendix A - Importing Applications Using the Buffalo Grove TEC Applications Drive and CommTool* for the steps.

Method 3 - Using the MMI or MMI/MODEM Port and the Insight® Workstation

Add the applications using the MMI or MMI/MODEM port, and then upload the applications to the Insight workstation. See *Appendix B - Adding Applications Using the MMI or MMI/MODEM Port and the Insight Workstation* for the steps.

Method 4 - Using the MMI or MMI/MODEM Port and CommTool

Add the applications using the MMI or MMI/MODEM port, and then upload the applications to CommTool. See *Appendix C - Adding Applications Using the MMI or MMI/MODEM Port and CommTool* for the steps.

Adding the Required Points and Devices

It is recommended to start up the driver with a minimum database (required points only) to establish communications. This will assist in pinpointing the source of start-up problems. Once communication has been established, the remainder of the database can be added.

Table 1. Required Points and Devices.

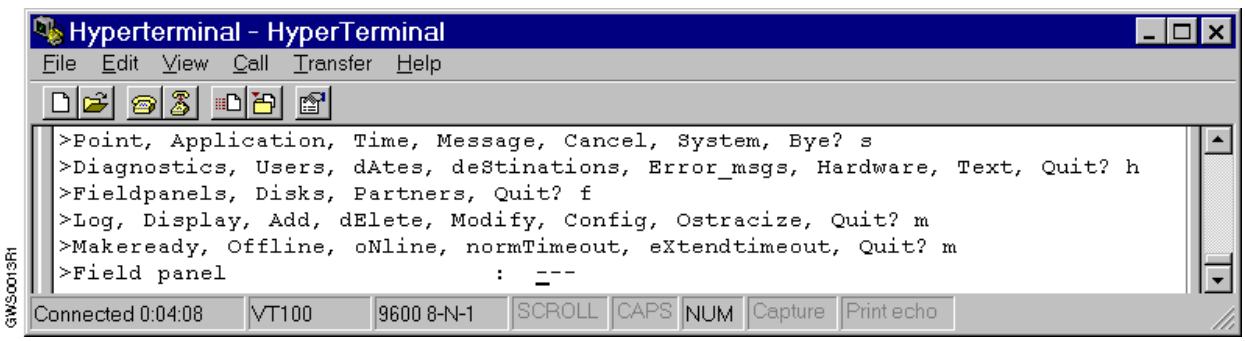
Rev. No.	Required Points and Devices	
All	To see the TX and RX LEDs flashing	There are no points *required* to establish communication between the driver and the SiPass system. The Siemens SiPass Driver must be made ready. **NOTE:** If adding points and applications online at the MMI port, the Siemens SiPass Driver must manually be made ready. See *Making the Siemens SiPass Driver Ready* section. If downloading from the Insight workstation or CommTool, this occurs automatically.
	To monitor and command points	The APOGEE point for the specific SiPass I/O point to be monitored or commanded. The point can be manually or auto-unbundled.
	Although not required, it is *recommended* that these points be added	Per driver, add the following points: • Ready Point - FLN 253, Drop 31, Point 1 • Communications Failure (COMFAL) - FLN 253, Drop 31, Point 2

For more information about these points, see the *Siemens SiPass Driver Technical Reference* on InfoLink.

Making the Siemens SiPass Driver Ready

(**S**ystem / **H**ardware / **F**ieldpanels / **M**odify / **M**akeready).

A sample MMI session follows.



➤ Enter the field panel (cabinet) number, and then press **ENTER**.

Checking Communications

To check communications, perform the following steps:

1. Verify that the STATUS LED on the front of the driver hardware is blinking approximately once a second. If not, the driver is malfunctioning.

2. Verify that the Power LEDs on the Trunk Interface II are lit.

3. Verify that the FLN 1 TX and RX LEDs on the driver hardware and the RX on the Trunk Interface II all flash together while the driver transmits data. Also, verify that the RX LED on the driver hardware and the TX LED on the Trunk Interface II flash together while the driver receives data from the SiPass system. This sequence repeats in approximately 10 seconds.

4. Perform a Point Log and verify that points contain the expected values.

   If individual SiPass devices are communicating with the driver, the COMMUNICATION STATUS (Point 99) for each device should appear as OFF and NORMAL (-N-) status.

Adding Remaining Devices

Once communications have been verified, add the remainder of the points required for additional devices. If using applications to map points, add the remainder of the devices by allowing the driver to auto-discover them and uploading the applications to Insight, or by adding TECs in System Profile and choosing the correct application number from the list in the **Add TEC** dialog box.

Commissioning the System

Consult as needed with the SiPass representative and the building engineer to make sure that the driver is providing accurate information and is performing the intended functions. In particular, verify that:

- The driver database is loaded.
- All lines of PPCL execute as intended.
- All LAO and LDO points commanded at the driver are confirmed at the SiPass system.
- Values read for LAI and LDI points commanded at the SiPass system are confirmed at the driver.
- Alarmable points correctly transmit alarm information.
- Any other functions that the driver is to perform are carried out as intended.

If any of the tests do not check out, see the *Troubleshooting Procedures* in the *Field Panels* section of the *APOGEE Automation Service Procedures* on InfoLink.

Appendix A - Importing Applications Using the Buffalo Grove TEC Applications Drive and CommTool

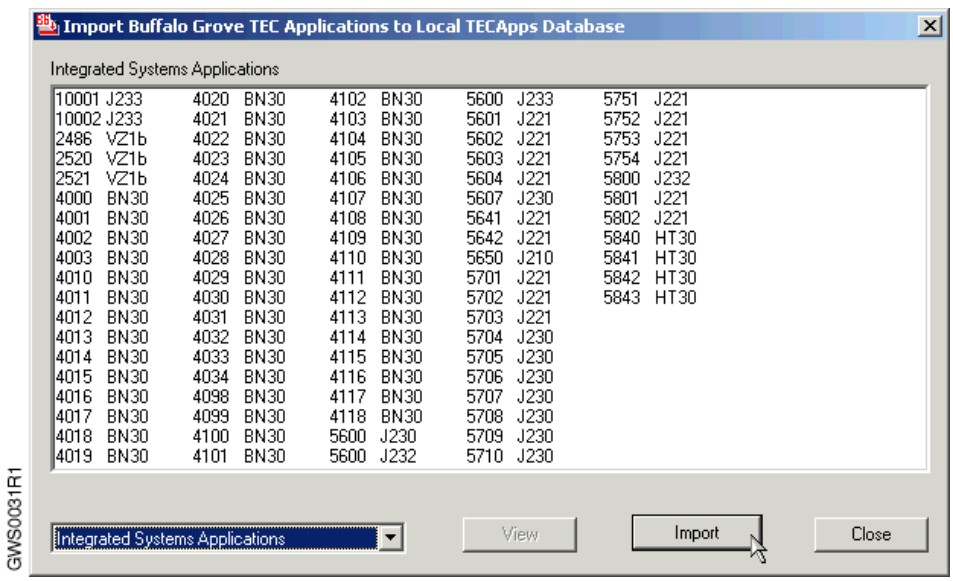
Requirements needed to perform the steps in Appendix A

- Access to the corporate network.
- CommTool Version 4.6 or later.

Using the Buffalo Grove TEC applications feature in CommTool, you can import the Integrated Systems applications from the Home Office TECAPPS Drive.

Importing Applications

1. Click **Start**, and then click **Programs**, **Commissioning Tool**, **Buffalo Grove TEC Applications**. The **Import Buffalo Grove TEC Applications to Local TECApps Database** dialog box displays.



2. From the drop-down menu, select **Integrated System Applications**. The **Integrated Systems Applications** list displays.
3. Select the application or applications, and then click **Import**.
4. If the **TEC Application Overwrite** dialog box displays, click **Yes** to accept and overwrite the files.

Appendix B - Adding Applications Using the MMI or MMI/MODEM Port and the Insight Workstation

Requirement needed to perform the steps in Appendix B

- Insight software Revision 3.5 or later.

When defining the system profile at the job site or without access to the corporate network, use the MMI port and the Insight workstation to add the applications. Uploading to the Insight workstation requires fewer steps than uploading to CommTool because the Insight workstation automatically “learns” the application when it is uploaded.

The first time you attempt to assign an application for the driver using the Insight workstation, the application numbers used by the driver most likely will NOT appear in the list of TEC applications. The following steps describe how to import the application into the Insight workstation.

If the needed application numbers already appear in the Insight workstation’s list of TEC applications, you do not need to do the following procedure. The Insight workstation has already imported these applications.

If any applications for the driver are displayed on System Profile as Application 65535 or as Application 5000, you must delete these TECs from the Insight workstation. Then, coldstart the driver before proceeding.

CAUTION:

Attempts to add the applications using the Insight workstation via any method other than what is described in the following steps is likely to cause unexpected results.

Uploading Applications to the Insight Workstation

1. Connect a terminal (or computer running FLT, HyperTerminal, etc.) to the MMI or MMI/MODEM port on the driver hardware. Adjust the communication speed, etc. as needed to establish communications.

2. For each different application number used to *monitor or control zones* in the SiPass ACCs add Points 1 and 2 for one FLN drop.

3. Using the MMI, add the application for each of the drops set up in Step 2.

   a. **A**pplication / fl**N** device / **T**ec / **E**dit / **A**dd

   b. When prompted, enter the TEC System Name and the TEC name.

   c. When prompted, enter the application number. The application number must match the initial value entered for Point 2 in Step 2.

4. Open the System Profile, and then do the following:

a. Add the driver.

b. Add the FLN(s) used by the driver.

It is not necessary to add the TECs.

5. From the Insight workstation, perform a Full Backup for the driver. When the upload is complete, refresh System Profile. All applications that you defined through the MMI should now display correctly in System Profile.

Appendix C - Adding Applications Using the MMI or MMI/MODEM Port and CommTool

Requirement needed to perform the steps in Appendix C

- CommTool Revision 4.7 or later.

When defining the system profile at the job site or without access to the corporate network, use the MMI port and CommTool to define your applications.

The first time you attempt to assign an application for the driver using CommTool, the application numbers used by the driver most likely will NOT appear in the list of TEC applications. The following steps describe how to import the application into CommTool.

If the needed application numbers already appear in CommTool's list of TEC applications, you do not need to do the following procedure. CommTool has already imported these applications.

If any applications for the driver are displayed on the CommTool System Profile as Application 65535 or as Application 5000, you must delete these TECs from CommTool. Then, coldstart the driver before proceeding.

CAUTION:

Attempts to add the applications using CommTool via any method other than what is described in the following steps is likely to cause unexpected results.

Uploading Applications to CommTool

1. Connect a terminal (or computer running FLT, HyperTerminal, etc.) to the MMI or MMI/MODEM port on the driver hardware. Adjust the communication speed, etc. as needed to establish communications.

2. For each different application number used to *monitor or control zones* in the SiPass ACCs, add Points 1 and 2 for one FLN drop.

3. Using the MMI, add the application for each of the drops set up in Step 2.

   a. **A**pplication / fl**N** device / **T**ec / **E**dit / **A**dd

   b. When prompted, enter the application number. The application number must match the initial value entered for Point 2 in Step 2.

4. Open System Profile, and then do the following:

   a. Add the driver.

   b. Add the FLN(s) used by the driver.

It is not necessary to add the TECs.

5. From CommTool, perform a Full Backup for the driver. When the upload is complete, refresh System Profile. All applications that you defined through the MMI should now display correctly in System Profile.

Learning Applications in CommTool

1. Select a TEC in the right area of the MMI Database Transfer screen.
2. From the **File** menu, click **Learn TEC**. The application is uploaded into the CommTool ATOM database. Wait for the upload to complete.
3. In System Profile, select **Auto-unbundling, Import Application**.
4. Repeat Steps 1 through 3 for each TEC with a different application number.