

The logo for SPiRiT features the word "SPiRiT" in a black, lowercase, sans-serif font. The letter "i" is stylized with a dot and a tail that forms a large, sweeping, light blue and purple wing-like shape. Below the word "SPiRiT" is the tagline "the first state agency model" in a smaller, italicized, lowercase font.

s p i r i t
the first state agency model

Smart Card

User Guide

Software Version: 2.37.00

SPiRiT WIC

Smart Card User Guide

Software Version: 2.37.00

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SWEM Smart Card Reader-Writer

The SWEM Smart Card Reader-Writer application (SWEM-SC) handles the actual communications with the Smart Card. SWEM-SC communicates with WIC Direct (through SWEM or WEM) to provide information read from the Smart Card and receives instructions on information to be written to the Smart Card. SWEM-SC consists of a service that resides on a workstation that has a connected Smart Card Reader/Writer device. The user interface on the Smart Card Reader/Writer device is provided through a 2-line textual display and keypad. SWEM-SC is primarily a passive application where activity is initiated by the insertion of a Smart Card into a Smart Card Reader/Writer device.

What Does the Application Do?

When a Smart Card is inserted into the Smart Card Reader/Writer device, the Smart Card Reader/Writer device reads the card number from the card and determines whether the card has been issued. When this process is complete, a "Card Updated." message displays on the Smart Card Reader/Writer device. If the card has been issued, then the Smart Card Reader/Writer device prompts the user for Personal Identification Number (PIN) and the PIN is validated with the Smart Card.

At this point, SWEM-SC processes the transaction by interacting with WIC Direct. The card should not be removed from Smart Card Reader/Writer device until the "Please Remove Card" message displays.

When all operations are finished, SWEM-SC requests one of two options:

"1-Request Update": SWEM-SC will repeat the process.

"2-Send Card Number": SWEM-SC will send the card number to a text box in the foreground application, if applicable.

If the card number cannot be read, then SWEM-SC will ask the user (through the display on the Smart Card Reader/Writer device) if the card was properly inserted. If the user confirms that the card was properly inserted, then the Smart Card Reader/Writer device will ask the user if they want to report the card as damaged. If no, then the application will return to the default state waiting for a card to be inserted. If yes, then the Smart Card Reader/Writer device will prompt for entry of the card number. The card number must be entered twice for validation purposes.

If WIC Direct responds with an error code for the card, then the SWEM-SC application will display the following message: "Card Locked Contact Clinic".

Install the cyberJack (Smart Card Reader/Writer device) Terminal Driver

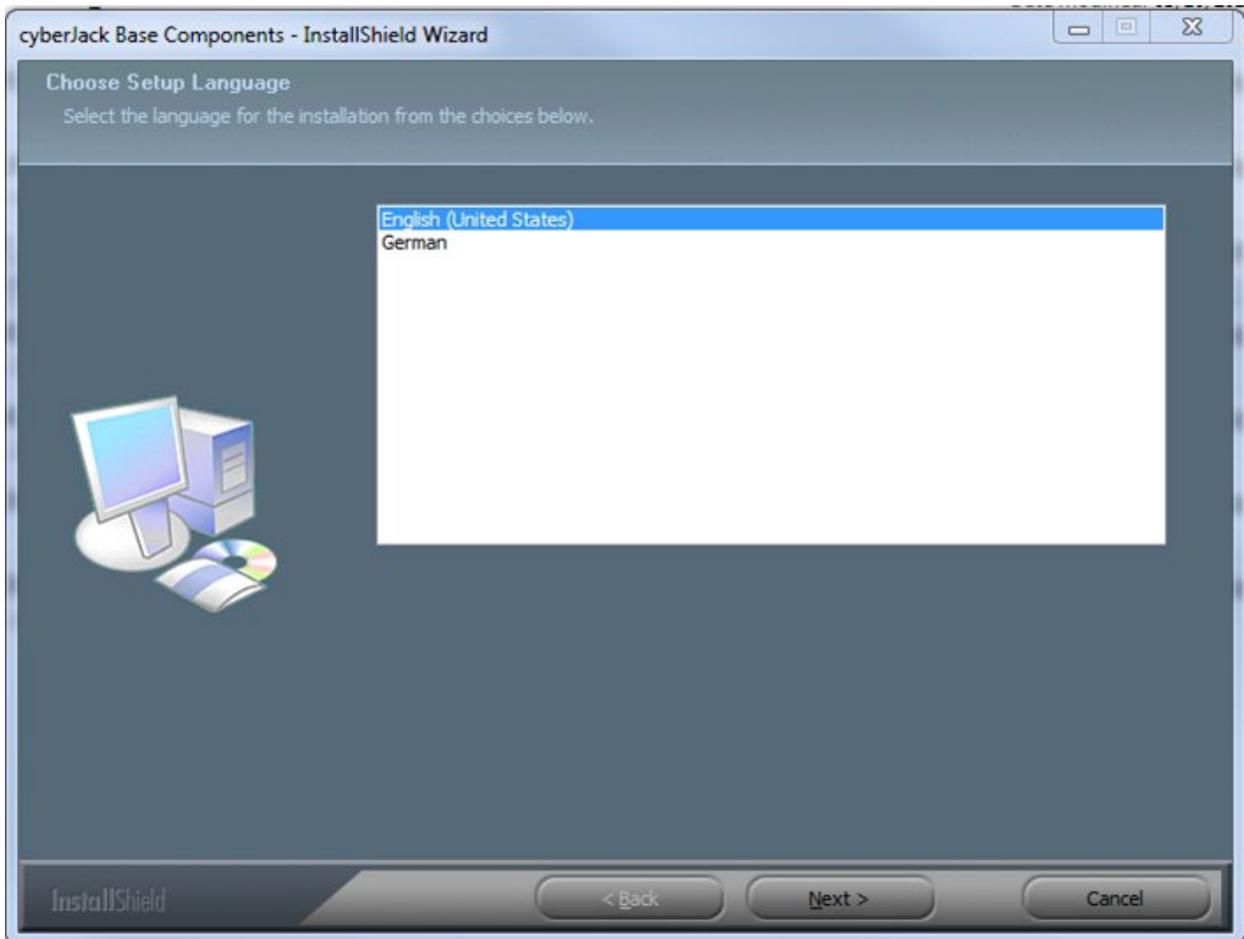
Complete the following steps to install the cyberJack terminal driver:



NOTE:

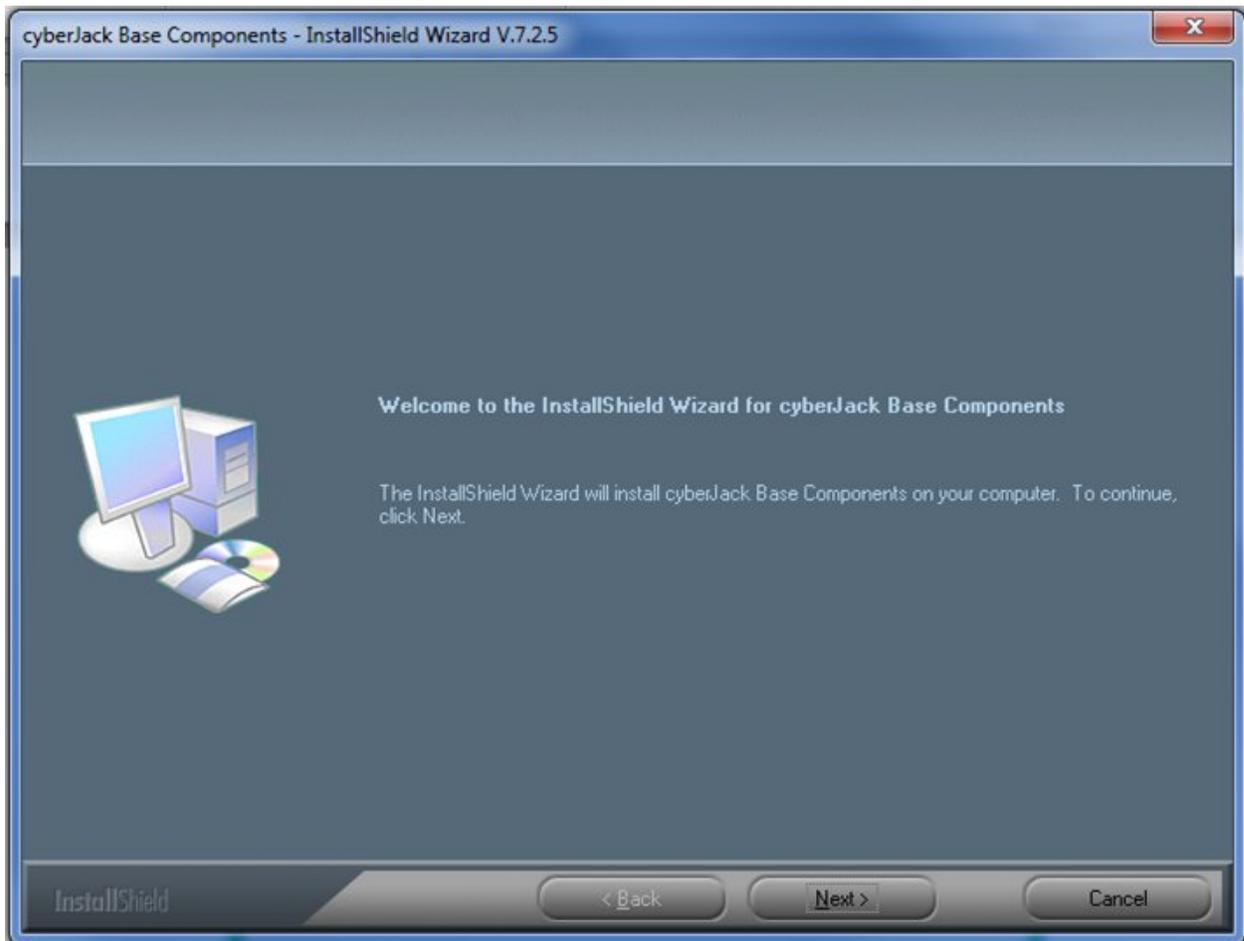
- The following instructions apply only to Windows operating systems. Refer to the cyberJack user manual for setting up additional features, or for other operating systems.
- Messages and screens may display differently on your workstation depending upon your Windows version, system configuration, and security software. Refer to the cyberJack user manual for additional information.
- Do **NOT** connect the device to the workstation until after the cyberJack terminal driver is installed.

1. Execute the Smart Card Reader/Writer device driver installer by right-clicking, and select **Run as Administrator**. Grant administrator permissions when prompted.
2. Select a language and click the **Next** button.



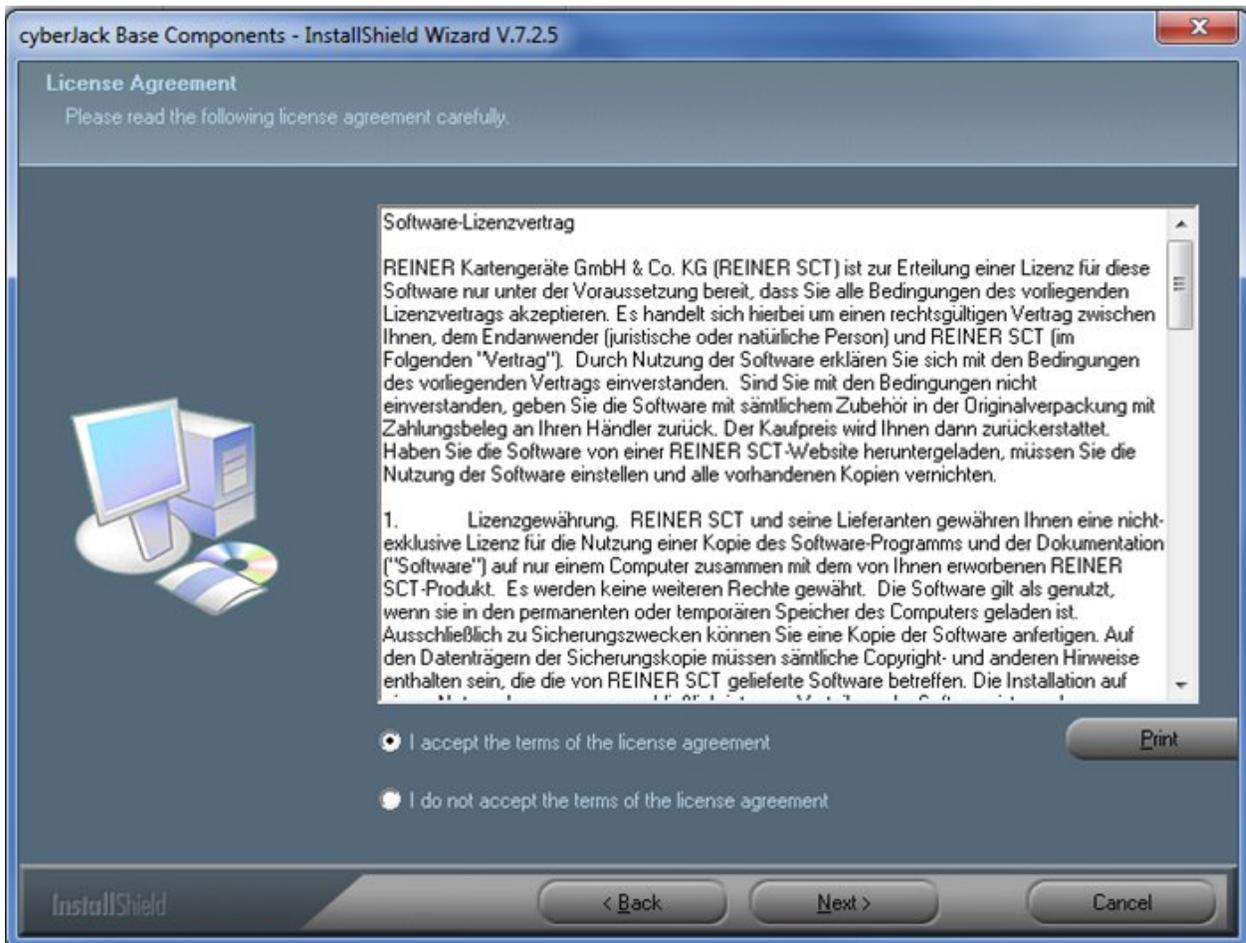
Smart Card Reader/Writer device driver - InstallShield Wizard

3. Click the **Next** button.



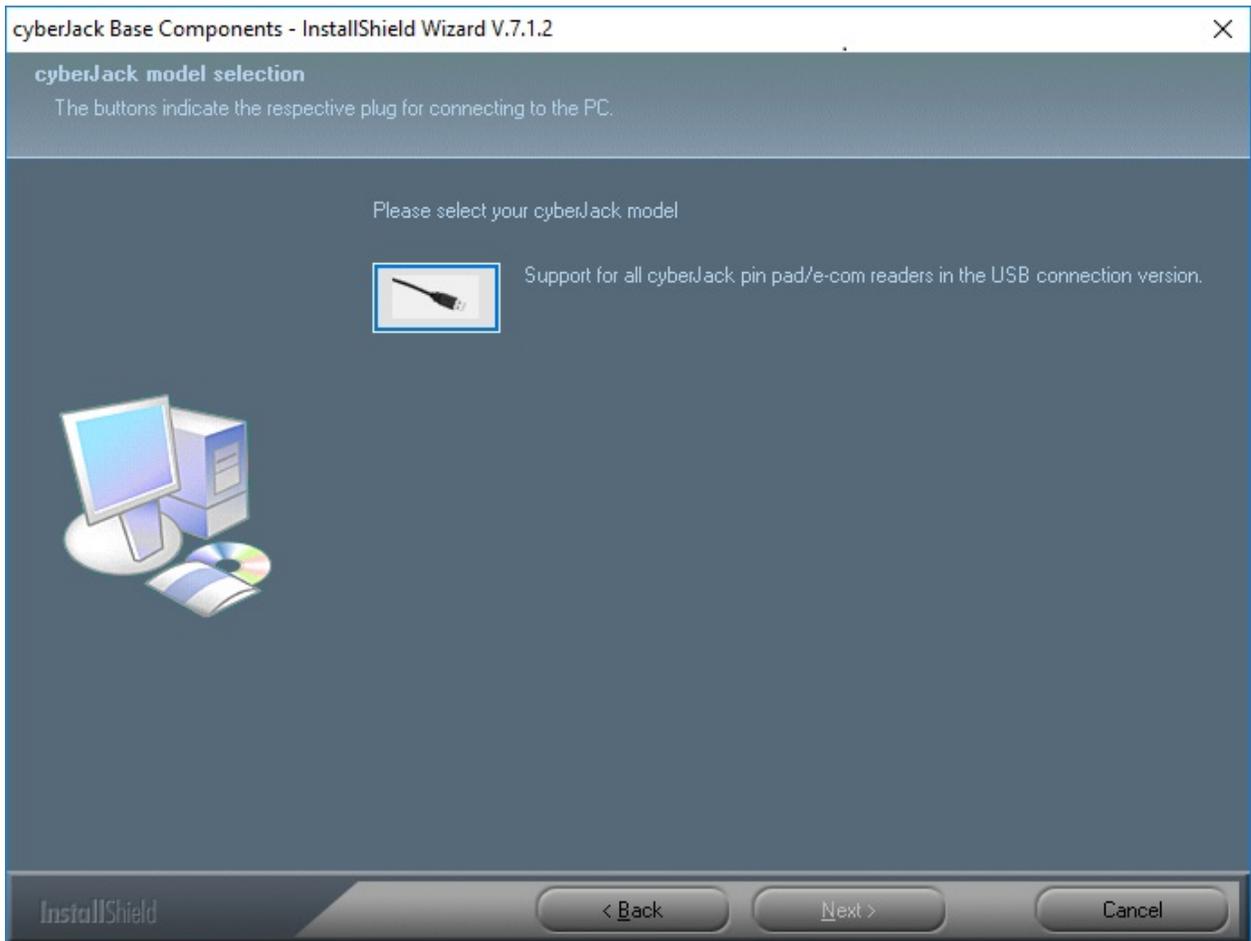
Smart Card Reader/Writer device driver - InstallShield Wizard

4. Select the **I accept terms of the license agreement** radio button and click the **Next** button.



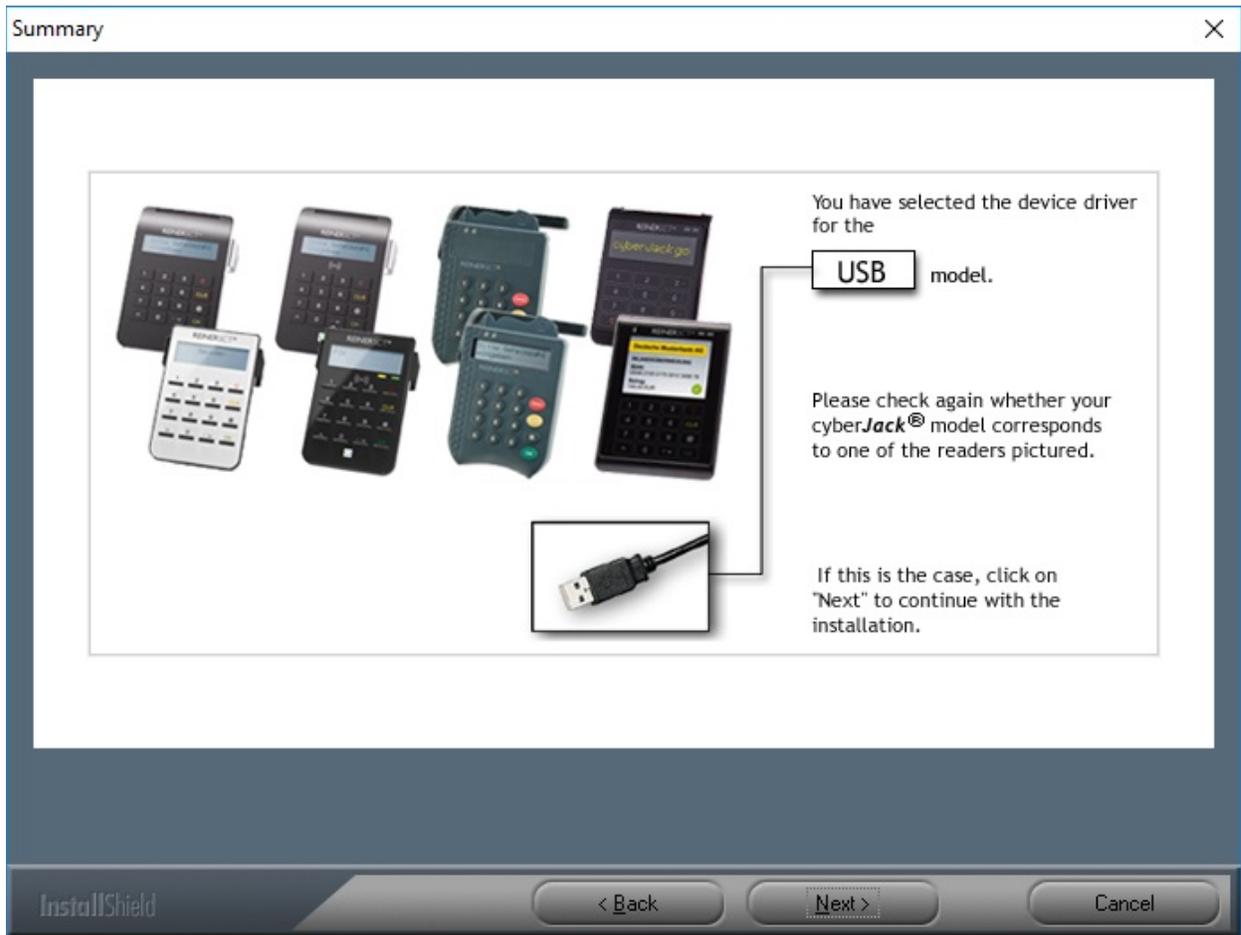
Smart Card Reader/Writer device driver - InstallShield Wizard

5. Select the cyberJack model and click the **Next** button.



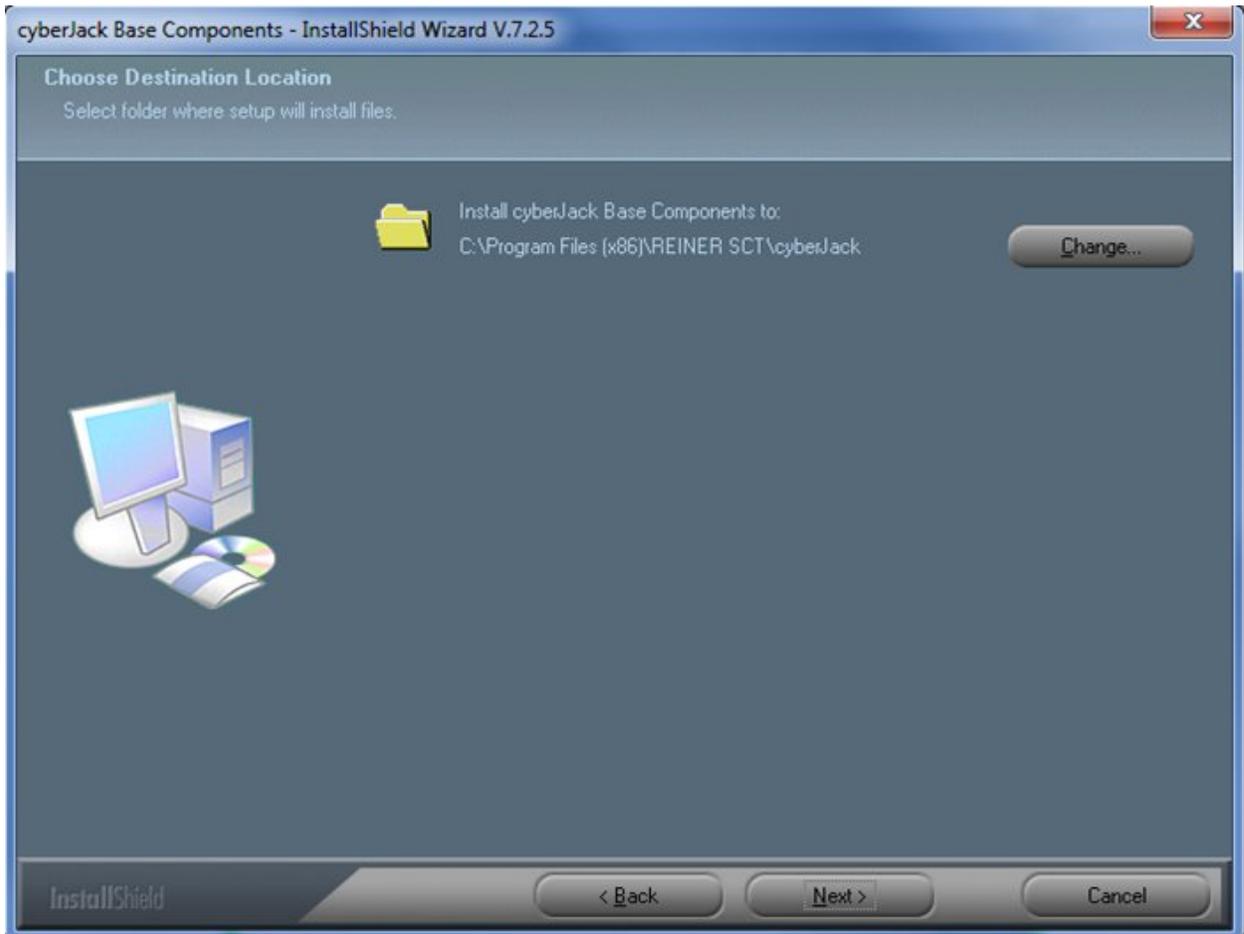
Smart Card Reader/Writer device driver - InstallShield Wizard

6. Click the **Next** button.



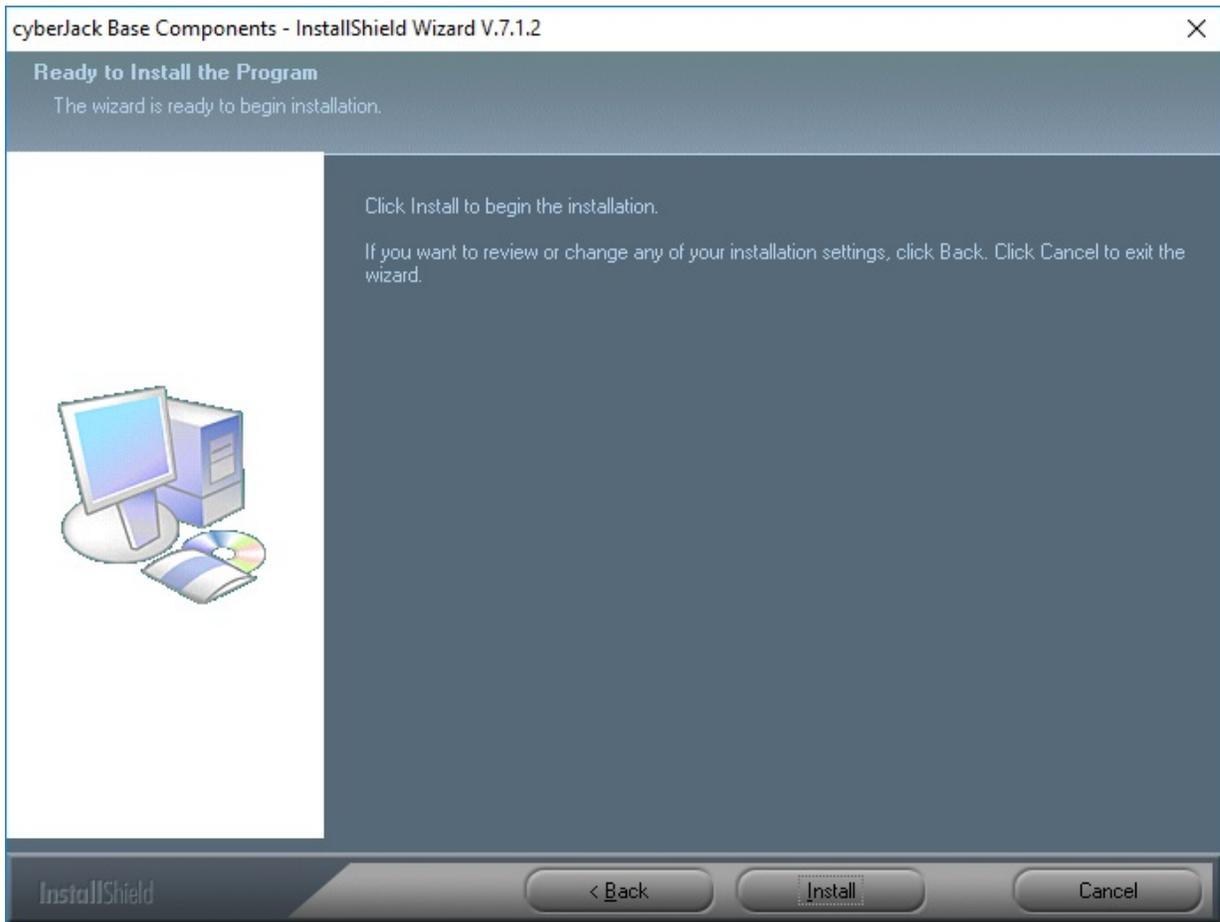
Smart Card Reader/Writer device driver - InstallShield Wizard

7. Specify the destination folder if the preferred folder differs from the default folder displayed and click the **Next** button.



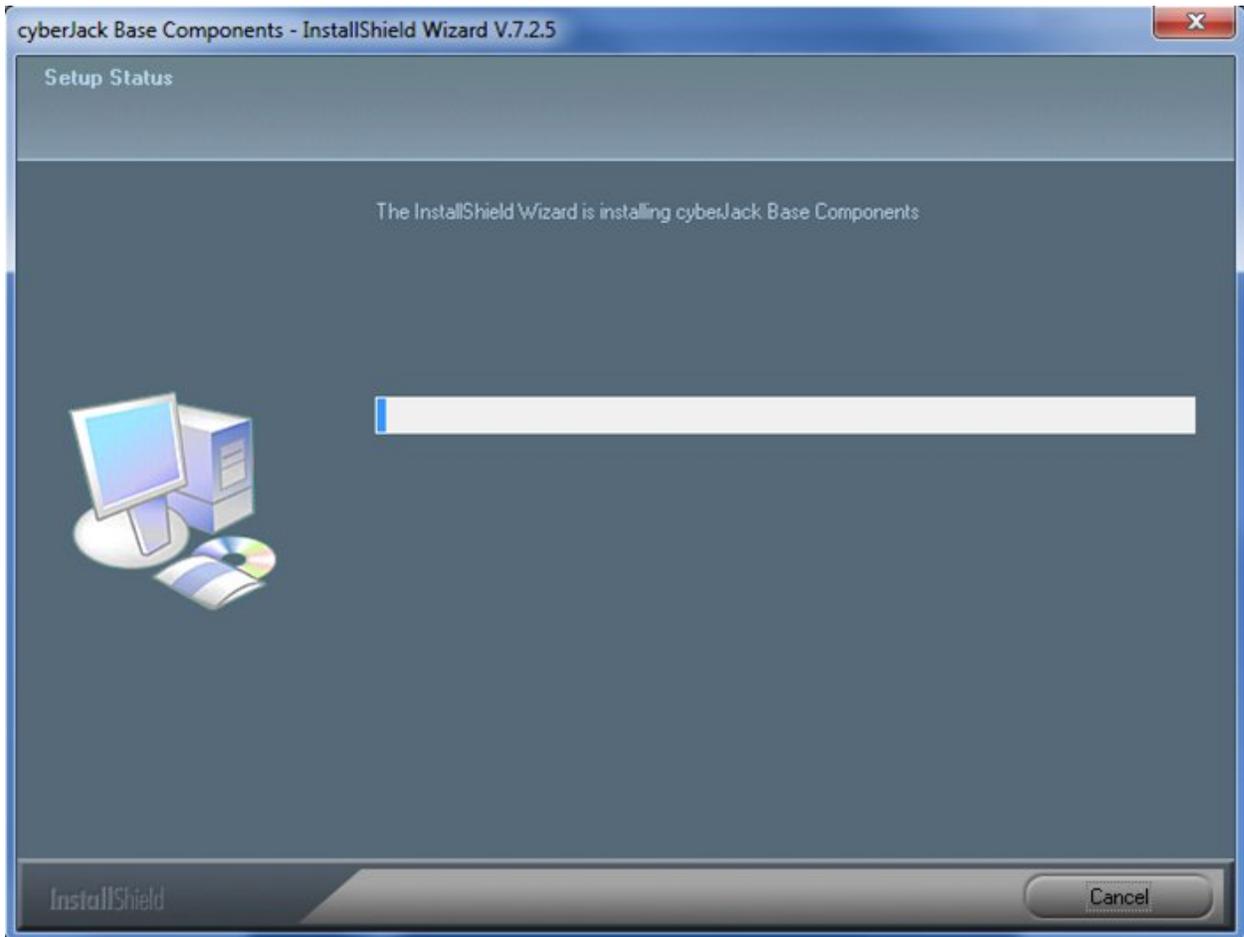
Smart Card Reader/Writer device driver - InstallShield Wizard

8. Click the **Install** button to begin the installation process.



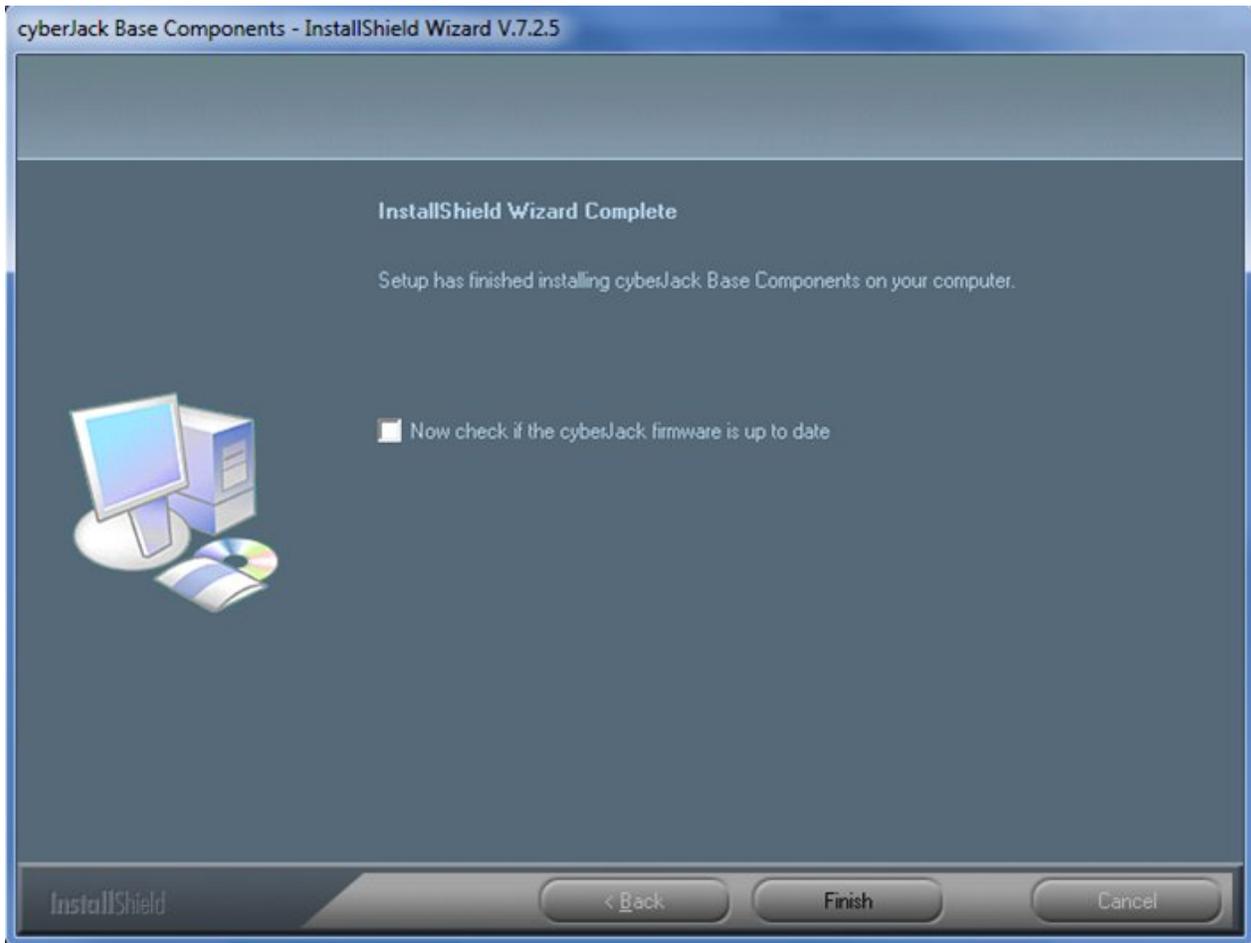
Smart Card Reader/Writer device driver - InstallShield Wizard

9. The InstallShield Wizard installs the cyberJack terminal driver.



Smart Card Reader/Writer device driver - InstallShield Wizard

10. Once the cyberJack terminal driver installation process is complete, click the **Finish** button.



Smart Card Reader/Writer device driver - InstallShield Wizard

11. Reboot the workstation to activate the cyberJack terminal driver.
12. Connect the Smart Card Reader/Writer device to the workstation and launch the cyberJack Device Manager to verify the cyberJack terminal driver was installed successfully. If the correct cyberJack terminal driver was not installed, allow the cyberJack Device Manager to update the driver.



NOTE:

- A Smart Card is required to test the cyberJack terminal driver installation.
- For information on the Device Manager, refer to the cyberJack RFID User Manual.

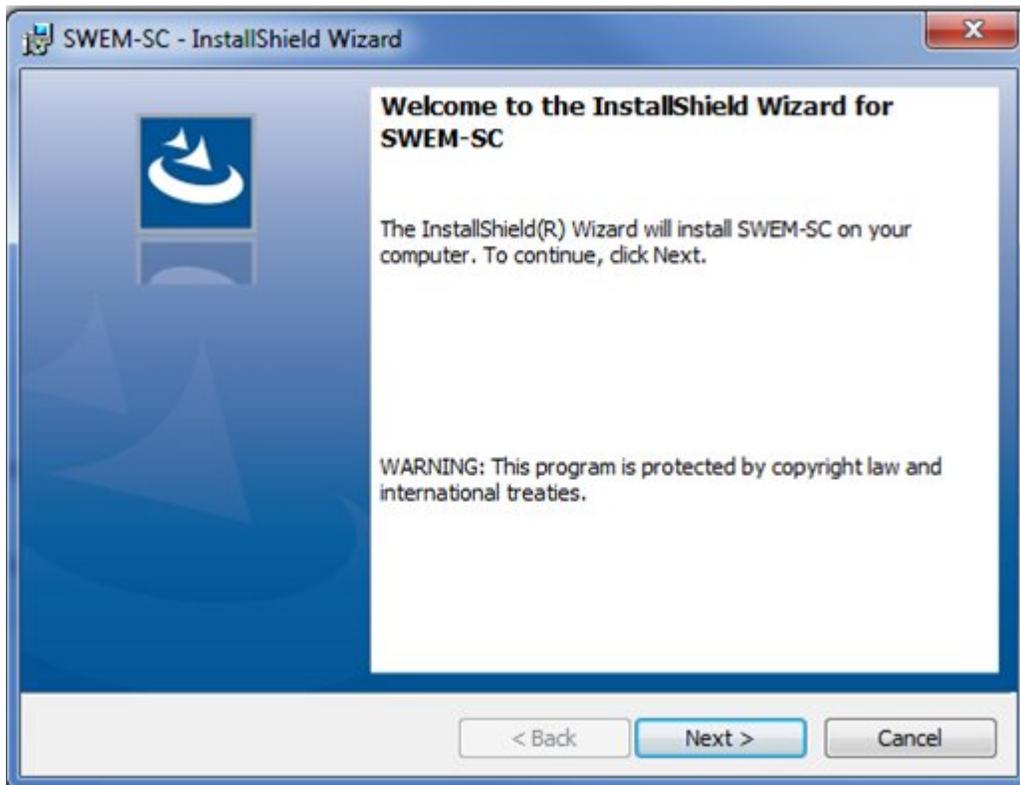
Install SWEM-SC

Complete the following steps to install SWEM-SC:



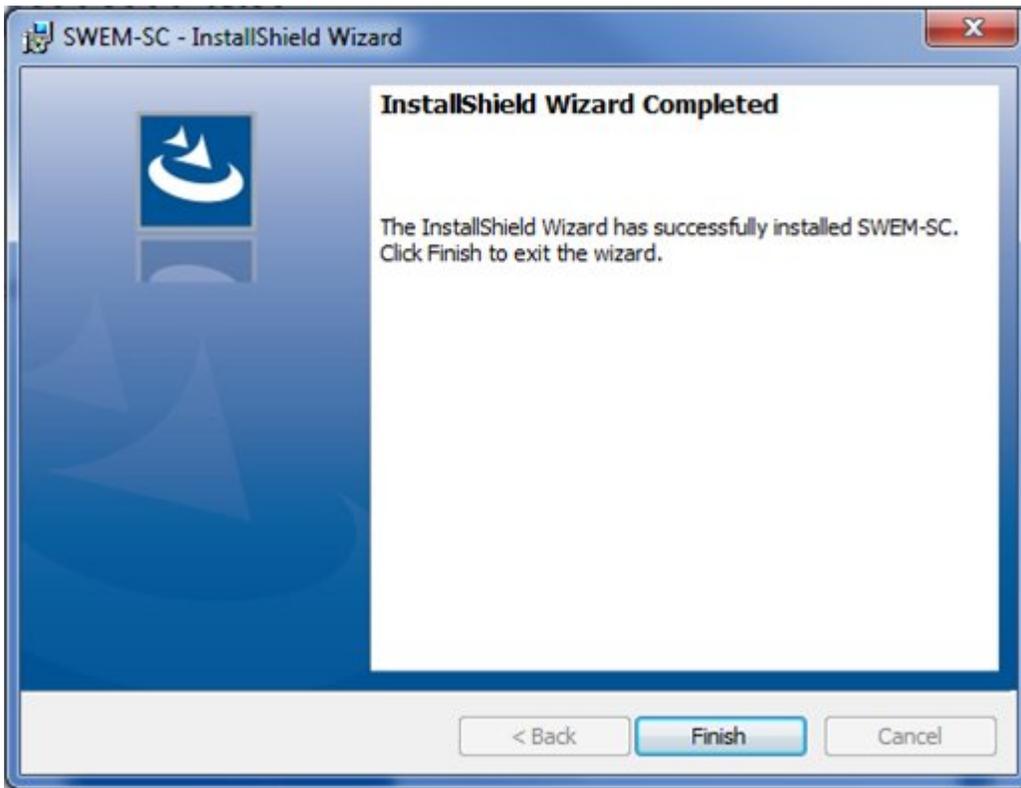
NOTE: Messages and screens may display differently on your workstation depending upon your Windows version, system configuration, and security software. Refer to the cyberJack user manual for additional information.

1. Execute the SWEM-SC installer and grant administrator permissions when prompted.
2. Click the **Next** button to begin the installation process.



SWEM-SC - InstallShield Wizard

3. Once the SWEM-SC installation process is complete, click the **Finish** button.



SWEM-SC - InstallShield Wizard

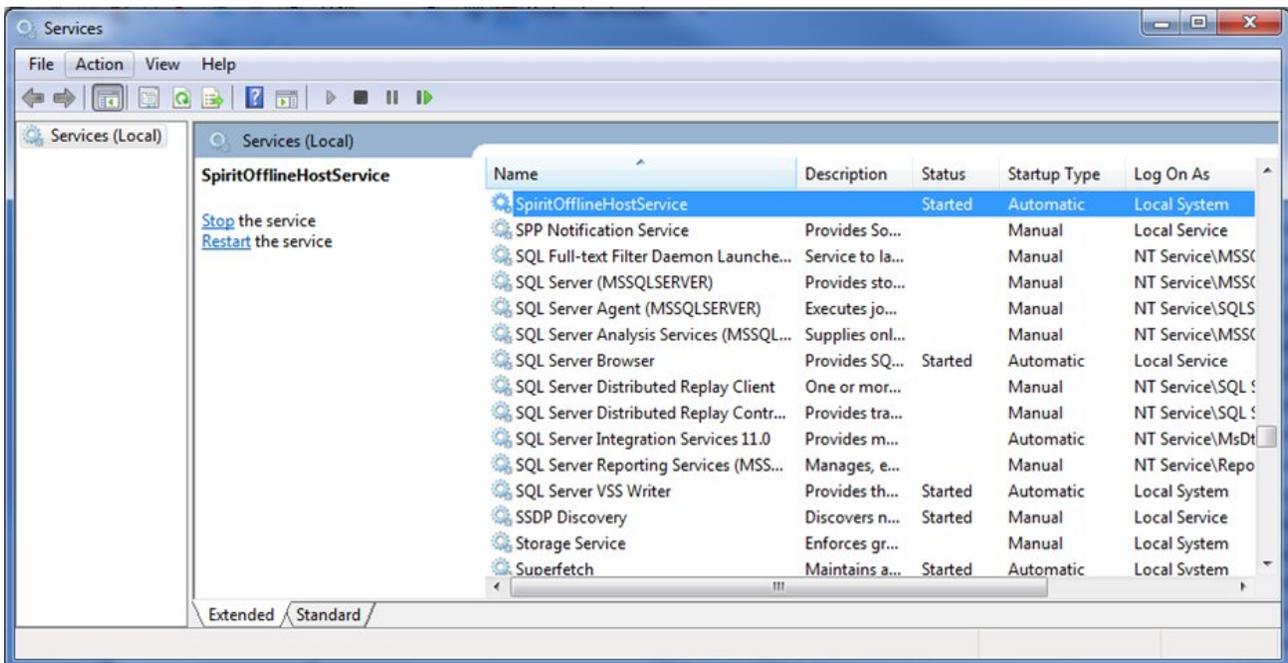
Host Service Configuration

After installation is complete, the following processes occur:

- A new **SWEM-SC** shortcut icon is added to the Windows Desktop.
- A new **SPIRITOfflineHostService** local service is added to Windows Services, and the new service defaults to "Started" in the **Status** column on the Windows Services screen.

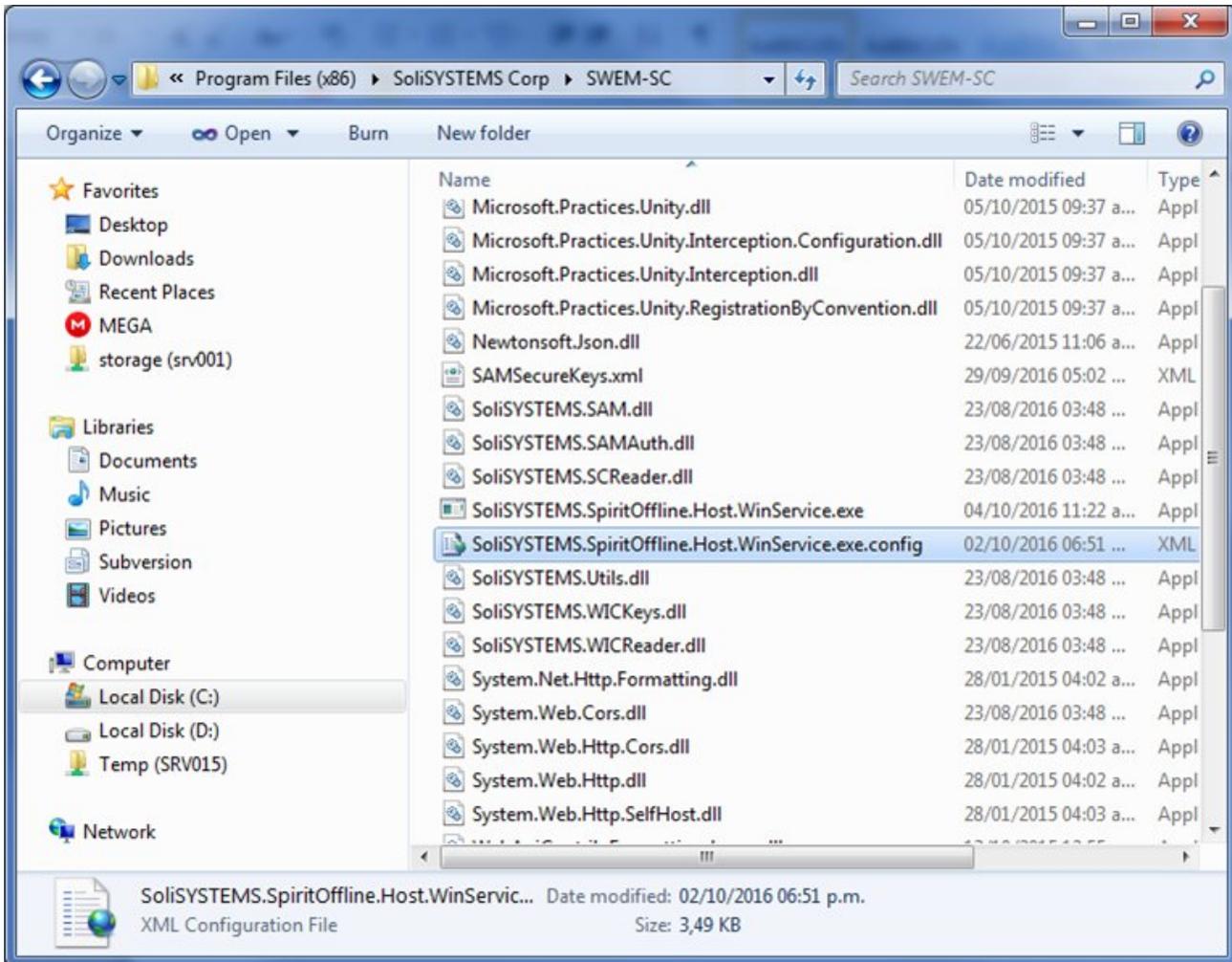


NOTE: Messages and screens may display differently on your workstation depending upon your Windows version, system configuration, and security software. Refer to the cyberJack user manual for additional information.



Windows Services screen

In the folder where the application was installed, an XML configuration file named **SoliSYSTEMS.SpiritOffline.Host.WinService.exe.config** is stored.



Windows File Explorer screen

The **SoliSYSTEMS.SpiritOffline.Host.WinService.exe.config** XML configuration file contains the Secure Access Module (SAM) parameter values as follows:

- **BIN**: the Bank Identification Number. The BIN is a six-digit number assigned by the Food and Nutrition Service (FNS) specifically to support EBT.
- **KeySLOT**: a slot number that contains the BIN keys.
- **KeyVersion**: use this value with the version within the SLOT that you need.
- **HashAdditionalValue**: 4 bytes length Hash Value used during a secure PIN Reset.

To switch between Production Keys and Test Keys, the **KeyVersion** value in the **SoliSYSTEMS.SpiritOffline.Host.WinService.exe.config** XML configuration file can be modified as follows:

- "1" - Production Keys Version 1.
- "0" - Test Keys.

```
<applicationSettings>
  <SolisSYSTEMS.eWicSCWeb.Host.WinService.Properties.Settings>
    <setting name="BIN" serializeAs="String">
      <value>610309</value>
    </setting>
    <setting name="KeySlot" serializeAs="String">
      <value>5</value>
    </setting>
    <setting name="KeyVersion" serializeAs="String">
      <value>1</value>
    </setting>
    <setting name="HashAdditionalValue" serializeAs="String">
      <value>A1B2C3D4</value>
    </setting>
  </SolisSYSTEMS.eWicSCWeb.Host.WinService.Properties.Settings>
</applicationSettings>
```

XML Editor screen

The port where the service will be started can be modified by changing the **UriServer** key in the XML configuration file.

```
<appSettings>
  <add key="UriServer" value="http://127.0.0.1:12346" />
  <add key="ClientSettingsProvider.ServiceUri" value="" />
</appSettings>
```

XML Editor screen

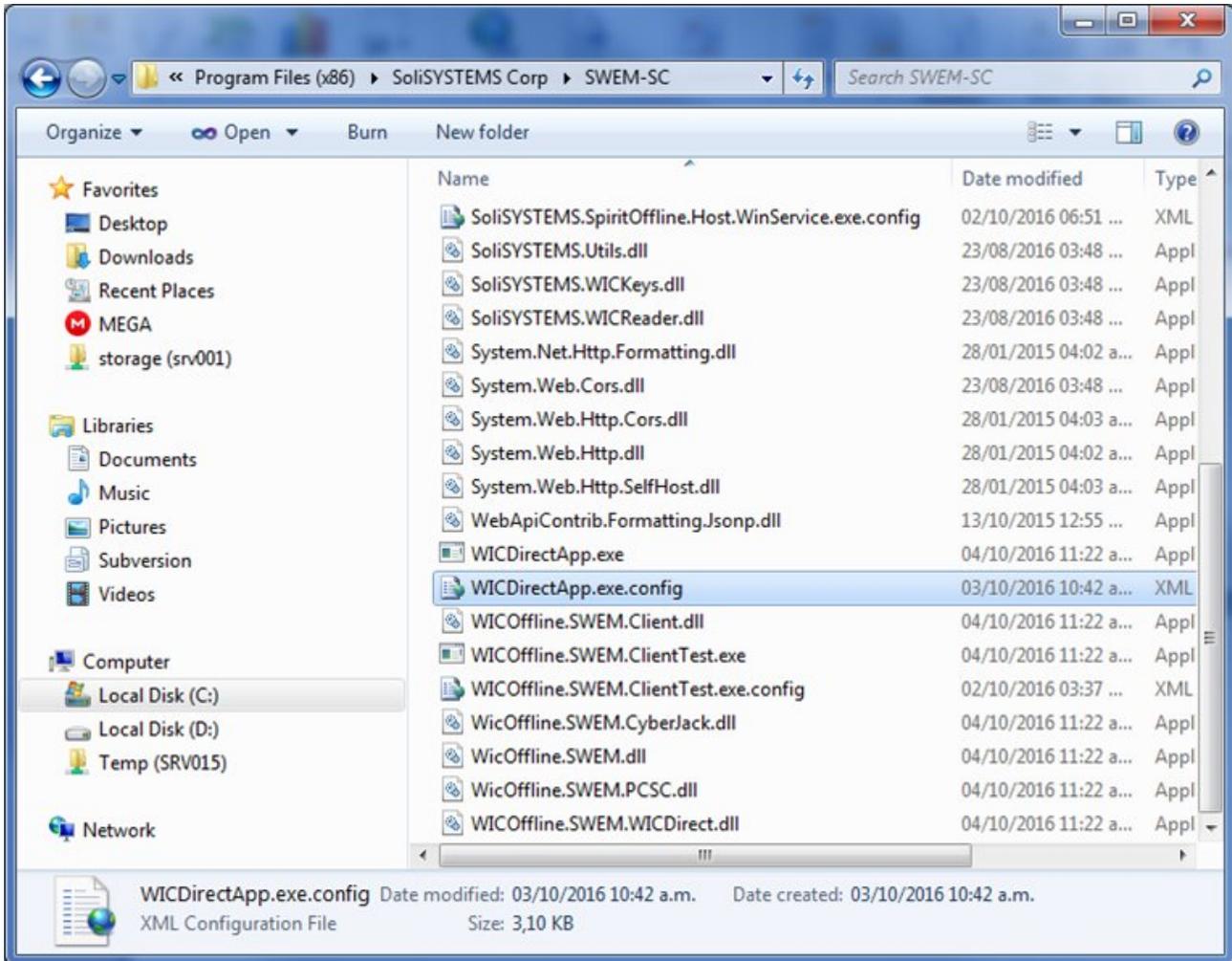


NOTE: Whenever a change is made to the XML parameters file, you must restart the service.

If the UriServer value is modified, then the SWEM-SC configuration file must also be modified to match to that IP and PORT under the UriServer key value.

SWEM-SC Configuration

In the folder where the application was installed, an XML configuration file named **WICDirectApp.exe.config** is stored.



Windows File Explorer screen

The **WICDirectApp.exe.config** XML configuration file should be modified to change the following key values:

LogFile: This value contains the path and file name where SWEM-SC will write log information. In the log file, information about different applications, their statuses, and any errors encountered are written.

URIServer: This value contains the IP address and TCP port of the **SPIRITOfflineHostService**. The URIServer value is the WEM Server Configuration.

WicDirectUri: This value is not used in this version.

In the **WICDirectApp.exe.config** XML configuration file, the following values are hard-coded from the message structure:

```
<appSettings>
  <add key="logfile" value="C:\temp\SWEMSC.log" />
  <add key="UriServer" value="http://127.0.0.1:12346/" />
  <add key="ClientSettingsProvider.ServiceUri" value="" />
  <add key="wicDirectUri" value="https://ebttest08.cdpehs.com:10011/UniversalInterface2014/EBT2?singlewsdl" />
  <add key="ClinicID" value="0" />
  <add key="LocalAgencyID" value="1" />
  <add key="ICDMessageVersion" value="ICD.2014.2.5" />
  <add key="WICEBTSystemID" value="3" />
  <add key="WICMISSystemID" value="24" />
  <add key="WICStateAgencyID" value="044" />
  <add key="InitialSequenceNumber" value="120" />
  <add key="CardAbsentTimeout" value="20" /><!-- In seconds -->
  <!-- ADDED IN NEW VERSION 2017/10 -->
  <add key="DatabaseFile" value="SwemSC.sqlite"/> <!-- Must there be a SwemSC.sqlite file in user AppData\Roaming folder-->
  <add key="SequenceNumberParamName" value="SEQUENCE_NUMBER" /> <!-- Modify only when you modify the SQLite parameter-->
  <add key="PINAttemptsLimit" value="3" />
  <add key="ReInsertCardTimeout" value="30"/> <!-- In seconds -->
</appSettings>
```

XML Editor screen

The WIC Direct endpoint configuration is specified. Within this section, the **endpoint address** can be modified to a valid WIC Direct SOAP WSDL. The endpoint is the URL in which the WEM configuration setting resides.

```
59 <client>
60   <endpoint address="https://ebttest08.cdpehs.com:10011/UniversalInterface2014/EBT2" binding="wsHttpBinding"
      bindingConfiguration="UniversalInterface2014HttpBindingSecureEndpoint1" contract="WicDirectApi.UniversalInterface" name
      ="UniversalInterface2014HttpBindingSecureEndpoint1" />
61 </client>
```

XML Editor screen

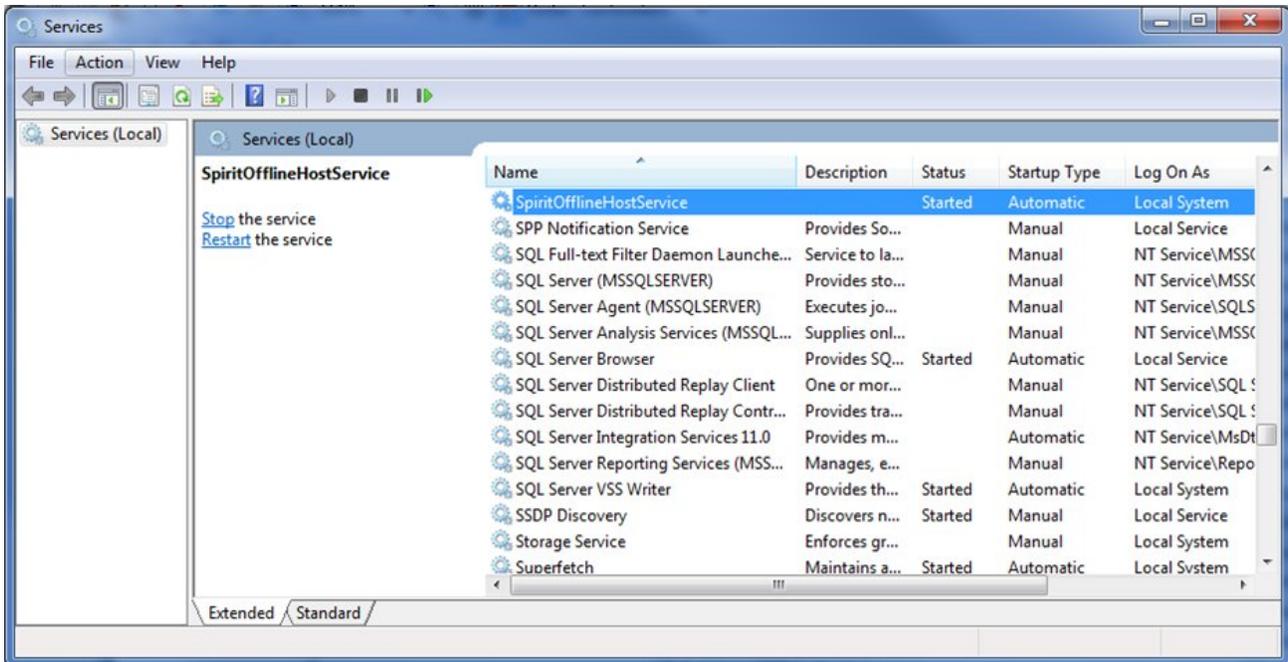
Using the SWEM-SC Application

Before starting the SWEM-SC application, connect the Smart Card Reader/Writer device and verify that it is working properly.

Also, verify that the new **SPIRITOfflineHostService** local service is "Started" in the **Status** column on the Windows Services screen.



NOTE: There is also a "Smart Card" service that resides on Windows platforms, which is not related specifically to the **SPIRITOfflineHostService**.



Windows Services screen

To start SWEM-SC, double-click the **SWEM-SC** shortcut icon on the Windows Desktop, or run the **WICDirectApp.exe** file from the default installation folder listed below.

C:\Program Files (x86)\SoliSYSTEMS Corp\SWEM-SC\WICDirectApp.exe



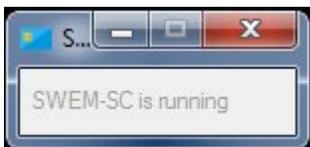
NOTE: If you specified a location other than the default during the installation process, the **WICDirectApp.exe** file will be located in that folder instead.

Once SWEM-SC is started, the following processes occur:

- The card reader terminal displays the message: "Please Insert card!"
- The SWEM-SC icon is available on the Windows Taskbar.



- The SWEM-SC screen displays. The SWEM-SC screen can be minimized to run in the background.





NOTE: Once the Terminal Driver and SWEM-SC are installed, the Smart Card Reader/Writer device can be connected to the workstation. For more information, see the [Smart Card Reader Process Flows](#) documentation.

Smart Card Reader Process Flows

When a Smart Card is inserted into the Smart Card Reader/Writer device, various process flows occur based on the interactions with the keypad on the Smart Card Reader/Writer device. These process flows are documented below.

Connect a Smart Card Reader

When a Smart Card Reader/Writer device is plugged in to a workstation, the Smart Card Reader/Writer device attempts to communicate with SWEM-SC.



NOTE: For more information about the SWEM-SC, see the [SWEM Smart Card Reader-Writer](#) topic.

If the Smart Card Reader/Writer device *cannot* communicate with SWEM-SC, the Smart Card Reader/Writer device displays the "cyberJack RFID SoliSYSTEMS" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "cyberJack RFID SoliSYSTEMS"



NOTE: It may be necessary to start, or stop and start, the SWEM-SC application for the Smart Card Reader/Writer device to communicate with SWEM-SC.

If the Smart Card Reader/Writer device can communicate with SWEM-SC, the Smart Card Reader/Writer device displays the "Please Insert card!" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "Please Insert card!"

Insert the Smart Card

When a Smart Card is inserted into a Smart Card Reader/Writer device, the Smart Card Reader/Writer device attempts to read the Smart Card and displays the "Please Wait..." message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "Please Wait..."

Based on the Smart Card inserted, the following processes occur:

- If the Smart Card *cannot* be read, the Smart Card Reader/Writer device begins the [Card Cannot be Read](#) process.
- If the Smart Card can be read, the Smart Card Reader/Writer device begins the [Card Can be Read](#) process.

Card Cannot be Read

When a Smart Card is inserted in the Smart Card Reader/Writer device and the card inserted *cannot* be read by the Smart Card Reader/Writer device, the Smart Card Reader/Writer device displays the "Card Inserted? 1-Yes 2-No" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "Card Inserted? 1-Yes 2-No"

Based on the interaction with the keypad on the Smart Card Reader/Writer device, the following processes occur:

- If the **1** key is pressed on the keypad, the Smart Card Reader/Writer device begins the [Prompt to Report Damaged Card](#) process.
- If the **2** key is pressed on the keypad, the Smart Card Reader/Writer device begins the [Prompt to Reinsert Card](#) process.

Card Can be Read

When a Smart Card is inserted in the Smart Card Reader/Writer device and the card inserted can be read by the Smart Card Reader/Writer device, the Smart Card Reader/Writer device reads the card (even if the card is not currently assigned to an account), and the following processes occur:

- If the card *has not* been associated with an account, the Smart Card Reader/Writer device begins the [Assign Card Number](#) process.
- If an account has been created, and the card has been associated with an account, the following processes occur:
 - If a PIN *has not* already been created for the Smart Card, the Smart Card Reader/Writer device begins the [Prompt for New PIN](#) process.
 - If an existing PIN has already been created for the Smart Card, but the **Reset PIN** button was clicked for the Smart Card on the EBT Household Demographics screen in the Clinic application module (or the EBT Household Demographics screen in the Vendor application module for Compliance Buy Benefits), the Smart Card Reader/Writer device begins the [Prompt for New PIN](#) process.
 - If an existing PIN has already been created for the Smart Card, the Smart Card Reader/Writer device begins the [Prompt for Existing PIN](#) process.

If the **C** key is pressed on the keypad of the Smart Card Reader/Writer device at any time once the card has been successfully read, the Smart Card Reader/Writer device begins the [Prompt to Remove Card](#) process.

If the Smart Card is removed from the Smart Card Reader/Writer device at any time once the card has been successfully read, the Smart Card Reader/Writer device displays the "Please Insert card!" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "Please Insert card!"

Assign Card Number

If the card *has not* been associated with an account when the [Card Can be Read](#) process completes, the Smart Card Reader/Writer device displays the "1-Request Update 2-Send Card" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "1-Request Update 2-Send Card"

If the **1** key is pressed on the keypad, the Smart Card Reader/Writer device displays the "Please Do Not Remove Card..." message on the Smart Card Reader/Writer device screen and begins the [Card Present](#) process again to communicate the changes and determine whether another update is required for the card.



Smart Card Reader/Writer device - "Please Do Not Remove Card..."

With the card inserted, if the **2** key is pressed on the keypad, the Smart Card Reader/Writer device pushes the card number to any text entry field in which the cursor is resting. For example, if the cursor resides in the **Insert or Swipe Card, or Type PAN** text box on the Assign Card screen in the Clinic application module, the card number is inserted into the text box. Prior to establishing a PIN on the card, the account must be set up, and the card assigned to the account on the EBT Household Demographics screen in the Clinic application module.

Prompt for New PIN

The Smart Card Reader/Writer device displays the "Enter new PIN" message on the Smart Card Reader/Writer device screen in the following situations:

- At any point after the card has been assigned on the Assign Card screen in the Clinic application module and a PIN *has not* already been created for the Smart Card.
- If an existing PIN *has* already been created for the Smart Card, but the **Reset PIN** button was clicked for the Smart Card on the EBT Household Demographics screen in the Clinic application module (or the EBT Household Demographics screen in the Vendor application module for Compliance Buy Benefits).
- If *no interaction* with the keypad occurs, the Smart Card Reader/Writer device continues to display the "Enter new PIN" message on the Smart Card Reader/Writer device screen until SWEM-SC eventually times out in the background. Once this occurs, the Smart Card Reader/Writer device begins the [Prompt to Remove Card](#) process.



Smart Card Reader/Writer device - "Enter new PIN"

At this time, a new PIN for the Smart Card is entered using the keypad on the Smart Card Reader/Writer device. Based on the interaction with the keypad on the Smart Card Reader/Writer device, the following processes occur:

- If a new PIN for the Smart Card is entered and the **OK** key is pressed on the keypad, the Smart Card Reader/Writer device begins the [Validate New PIN](#) process.
- If a new PIN for the Smart Card is entered and the **OK** key *is not* pressed on the keypad, the Smart Card Reader/Writer device begins the [Wrong PIN Reset](#) process.

- If *no interaction* with the keypad occurs, the Smart Card Reader/Writer device continues to display the "Enter new PIN" message on the Smart Card Reader/Writer device screen until SWEM-SC eventually times out in the background. Once this occurs, the Smart Card Reader/Writer device begins the [Prompt to Remove Card](#) process.

Wrong PIN Reset

When creating a new PIN for a smart card, if the **OK** key *is not* pressed on the keypad or if the new PIN *is not* entered identically both times when the **OK** key is pressed on the keypad, the Smart Card Reader/Writer device displays the "Wrong PIN Reset" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "Wrong PIN Reset"

Once the "Wrong PIN Reset" message displays on the Smart Card Reader/Writer device, the Smart Card Reader/Writer device begins the [Prompt to Remove Card](#) process.

Validate New PIN

While a new PIN for the Smart Card is being entered on the Smart Card Reader/Writer device, the Smart Card Reader/Writer device displays the "Enter new PIN" message and an asterisk for each keypress made on the Smart Card Reader/Writer device screen.

Once the new four-digit PIN is completely entered, the Smart Card Reader/Writer device displays the "Enter new PIN ****" message on the Smart Card Reader/Writer device screen (as depicted below).



Smart Card Reader/Writer device - "Enter new PIN ****"

Once the new four-digit PIN for the Smart Card is entered a second time for confirmation, the following processes occur:

- If the **OK** key is pressed on the keypad, the Smart Card Reader/Writer device displays the "Please repeat" message on the Smart Card Reader/Writer device screen to prompt entry of the new PIN a second time for confirmation.
- If the **OK** key *is not* pressed on the keypad, SWEM-SC eventually times out in the background and the Smart Card Reader/Writer device begins the [Wrong PIN Reset](#) process.



Smart Card Reader/Writer device - "Please repeat"

At this time, the new four-digit PIN for the Smart Card is entered a second time for confirmation using the keypad.

Based on the interaction with the keypad on the Smart Card Reader/Writer device, the following processes occur:

- If *no interaction* with the keypad occurs, the Smart Card Reader/Writer device continues to display the "Repeat:" message on the Smart Card Reader/Writer device screen until SWEM-SC eventually times out in the background. Once this occurs, the Smart Card Reader/Writer device begins the [Prompt to Remove Card](#) process.
- If interaction with the keypad occurs, the process continues as documented below.

While the new PIN for the Smart Card is being entered again on the Smart Card Reader/Writer device, the device displays the "Please repeat" message and an asterisk for each keypress made on the Smart Card Reader/Writer device screen.

Once the new four-digit PIN is completely entered again for confirmation, the Smart Card Reader/Writer device displays the "Please repeat ****" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "Please repeat ****"

Once the new four-digit PIN is completely entered again on the keypad on the Smart Card Reader/Writer device, the following processes occur:

- If the new PIN is entered identically both times when the **OK** key is pressed on the keypad, the Smart Card Reader/Writer device briefly displays the "cyberJack RFID SoliSYSTEMS" message and begins the [Card Present](#) process.
- If the **OK** key *is not* pressed on the keypad, SWEM-SC eventually times out in the background and the Smart Card Reader/Writer device begins the [Wrong PIN Reset](#) process.
- If the new PIN *is not* entered identically both times when the **OK** key is pressed on the keypad, the Smart Card Reader/Writer device begins the [Wrong PIN Reset](#) process.

Prompt for Existing PIN

If a PIN has already been created for the Smart Card when the [Card Can be Read](#) process completes, the Smart Card Reader/Writer device displays the "Please enter PIN" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "Please enter PIN"

At this time, the four-digit PIN for the Smart Card is entered using the keypad on the Smart Card Reader/Writer device.

Based on the interaction with the keypad on the Smart Card Reader/Writer device, the following processes occur:

- If the correct PIN for the Smart Card is entered and the **OK** key is pressed on the keypad, the following processes occur:
 - If the account associated with the Smart Card *is not* currently active, the Smart Card Reader/Writer device begins the [Card is Locked](#) process.
 - If the account associated with the Smart Card is currently active, the Smart Card Reader/Writer device begins the [Validate Existing PIN](#) process.



NOTE: Accounts become inactive when the **On Hold** radio button is selected in the **Account Status** radio button group and the **Send EBT Data** button is clicked on the following screens in the SPIRIT WIC system:

- EBT Household Demographics (Clinic)
- EBT Household Demographics (Vendor)

Accounts can also become inactive when benefits are out of sync with the EBT processor.

- If the correct PIN for the Smart Card is entered and the **OK** key *is not* pressed on the keypad, SWEM-SC eventually times out in the background, and the Smart Card Reader/Writer device begins the [PIN Validation Timeout](#) process.
- If the correct PIN for the Smart Card *is not* entered on the keypad, the Smart Card Reader/Writer device begins the [Invalid PIN](#) process.
- If *no interaction* with the keypad occurs, the Smart Card Reader/Writer device continues to display the "Please enter PIN" message on the Smart Card Reader/Writer device screen until SWEM-SC eventually times out in the background. Once this occurs, the Smart Card Reader/Writer device begins the [Prompt to Remove Card](#) process.

PIN Validation Timeout

If the correct PIN for the Smart Card is entered and the **OK** key *is not* pressed on the keypad, the Smart Card Reader/Writer device displays the "Please Wait..." message on the Smart Card Reader/Writer device screen .



Smart Card Reader/Writer device - "Please Wait..."

Once the "Please Wait... " message displays on the Smart Card Reader/Writer device, the Smart Card Reader/Writer device begins the [Prompt to Remove Card](#) process.

Validate Existing PIN

While a PIN for the Smart Card is being entered on the Smart Card Reader/Writer device, the Smart Card Reader/Writer device displays the "Please enter PIN" message and an asterisk for each keypress made on the Smart Card Reader/Writer device screen.

Once the four-digit PIN is completely entered, the Smart Card Reader/Writer device displays the "Please enter PIN *****" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "Please enter PIN *****"

Once the four-digit PIN is entered and the **OK** key is pressed on the keypad, the following processes occur:

- If the correct PIN for the Smart Card is entered on the keypad, the Smart Card Reader/Writer device begins the [Card Present](#) process.
- If the correct PIN for the Smart Card *is not* entered on the keypad, the Smart Card Reader/Writer device begins the [Invalid PIN](#) process.
- If the correct PIN for the Smart Card *is not* entered on the keypad for a specified number of attempts (as configured in the **PINAttemptsLimit** field in the WICDirectApp.exe.config file), the Smart Card Reader/Writer device begins the [PIN Lock the Card](#) process.

Invalid PIN

If the correct PIN for the Smart Card *is not* entered and the **OK** key is pressed on the Smart Card Reader/Writer device, the Smart Card Reader/Writer device displays the "Invalid PIN Try Again" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "Invalid PIN Try Again"

Once the "Invalid PIN Try Again" message displays on the Smart Card Reader/Writer device, the Smart Card Reader/Writer device begins the [Prompt for Existing PIN](#) process.

PIN Lock the Card

If the correct PIN for the Smart Card *is not* entered on the keypad for a specified number of attempts (as configured in the **PINAttemptsLimit** field in the WICDirectApp.exe.config file), the Smart Card Reader/Writer device displays the "Invalid PIN Card Locked" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "Invalid PIN Card Locked"

Once the "Invalid PIN Card Locked" message displays on the Smart Card Reader/Writer device, the Smart Card Reader/Writer device begins the [Prompt to Remove Card](#) process.



NOTE: Once a card is PIN locked, it can no longer be used.

Card is Locked

If the account associated with the Smart Card *is not* currently active for the Smart Card, the Smart Card Reader/Writer device displays the "Card Locked Contact Clinic" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "Card Locked Contact Clinic"

Once the "Card Locked Contact Clinic" message displays on the Smart Card Reader/Writer device, the Smart Card Reader/Writer device begins the [Prompt to Remove Card](#) process.

Card Present

In this background process, the Smart Card Reader/Writer device connects with WIC Direct through SWEM-SC to communicate transaction data.

The Smart Card Reader/Writer device prepares a "Card Present" message for the card number, which is sent from SWEM-SC to the WIC Direct API to check the household and benefits for the card number with the household information in WIC Direct.



NOTE: For more information about the "Card Present" message, refer to the **POS Data Code** section of the Universal Interface Data Elements Matrix topic.

The "Card Present" message is then communicated back to the Smart Card Reader/Writer device from WIC Direct by SWEM-SC, and data is written to the Smart Card.

Once "Card Present" message processing completes, the Smart Card Reader/Writer device begins the [Verify the Smart Card is Still Inserted](#) process.

Verify the Smart Card is Still Inserted

Once the Smart Card Reader/Writer device successfully completes the [Card Present](#) process, the Smart Card Reader/Writer device verifies that a Smart Card is still inserted into the Smart Card Reader/Writer device and the following processes occur:

- If the Smart Card was removed, the Smart Card Reader/Writer device begins the [Prompt to Reinsert Card](#) process.
- If the Smart Card *was not* removed, the Smart Card Reader/Writer device begins the [Check for Update](#) process.

Check for Update

In this background process, the Smart Card Reader/Writer device determines if a transaction occurred or an update is required for the Smart Card and the following processes occur:

- If an update to the Smart Card is required, the Smart Card Reader/Writer device begins the [Confirm Smart Card Update](#) process.
- If an update to the Smart Card *is not* required, the Smart Card Reader/Writer device begins the [Prompt to Remove Card](#) process.

Confirm Smart Card Update

In this background process, the Smart Card Reader/Writer device prepares a "Confirm Smart Card Update" message for the card number, which is sent from SWEM-SC to the WIC Direct API to update the household and benefits for the card number with the household information in WIC Direct. It contains any transactions that occurred and updates the household information in WIC Direct with the benefits from the transactions, then it is sent back from WIC Direct to SWEM-SC to update the card to match the data in WIC Direct.

- Once "Confirm Smart Card Update" message processing completes, a "Card Updated." message will be displayed on the Smart Card Reader/Writer device momentarily and the Smart Card Reader/Writer device begins the [Update Card](#) process.

Update Card

Once "Confirm Smart Card Update" message processing completes, the Smart Card Reader/Writer device displays the "1-Request Update 2-Send Card" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "1-Request Update 2-Send Card"

If the **1** key is pressed on the keypad, the Smart Card Reader/Writer device displays the "Please Do Not Remove Card..." message on the Smart Card Reader/Writer device screen and begins the [Card Present](#) process again to communicate the changes and determine whether another update is required for the card.



Smart Card Reader/Writer device - "Please Do Not Remove Card..."

When completed, a "Card Updated." message displays on the Smart Card Reader/Writer device.



Smart Card Reader/Writer device - "Card Updated."

If the **2** key is pressed on the keypad, the Smart Card Reader/Writer device pushes the card number to any text entry field in which the cursor is resting. Then, the Smart Card Reader/Writer device begins the [Prompt to Remove Card](#) process.

If *no interaction* with the keypad occurs, the Smart Card Reader/Writer device continues to display the "1-Request Update 2-Send Card" message.

Prompt to Reinsert Card

If the Smart Card was removed from the Smart Card Reader/Writer device any time before the [Verify the Smart Card is Still Inserted](#) process begins, the Smart Card Reader/Writer device displays the "Card Inserted? 1-Yes 2-No" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "Card Inserted? 1-Yes 2-No"

Once the "Card Inserted? 1-Yes 2-No" message displays on the Smart Card Reader/Writer device screen, the Smart Card Reader/Writer device waits a few seconds for the Smart Card to be reinserted into the Smart Card Reader/Writer device. After a few seconds have elapsed, the following processes occurs:

- If the same Smart Card is inserted into the Smart Card Reader/Writer device before the time-out period expires, the Smart Card Reader/Writer device begins the [Verify the Same Card was Reinserted](#) process.
- If the same Smart Card *is not* reinserted into the Smart Card Reader/Writer device before time expires, the Smart Card Reader/Writer device displays the "Please Insert card!" message on the Smart Card Reader/Writer device screen.

Verify the Same Card was Reinserted

If the same Smart Card is reinserted into the Smart Card Reader/Writer device during the [Prompt to Reinsert Card](#) process, the Smart Card Reader/Writer device begins the [Validate Existing PIN](#) process again.

If the same Smart Card *is not* reinserted into the Smart Card Reader/Writer device during the [Prompt to Reinsert Card](#) process, the Smart Card Reader/Writer device displays the "Card Present" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "Card Read Error Please Retry"

Once the "Card Read Error Please Retry" message displays on the Smart Card Reader/Writer device screen, the Smart Card Reader/Writer device begins the [Prompt to Remove Card](#) process.

Prompt to Report Damaged Card

When the "Card Inserted? 1-Yes 2-No" message displays and the **1** key is pressed on the keypad, the Smart Card Reader/Writer device displays the "Report Damaged Card? 1-Yes 2-No" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "Report Damaged Card? 1-Yes 2-No"

Based on the interaction with the keypad on the Smart Card Reader/Writer device, the following processes occur:

- If the **1** key is pressed on the keypad, the Smart Card Reader/Writer device begins the [Prompt to Enter Card Number](#) process.
- If the **2** key is pressed on the keypad, the Smart Card Reader/Writer device displays the "Please Insert card!" message. If the Smart Card remains in the reader after the **2** key is pressed on the keypad, the Prompt to Report Damaged Card process automatically starts again.

Prompt to Enter Card Number

When the "Report Damaged Card? 1-Yes 2-No" message displays and the **1** key is pressed on the keypad, the Smart Card Reader/Writer device displays the "Card Number:" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "Card Number:"

At this time, the card number for the Smart Card is entered using the keypad on the Smart Card Reader/Writer device.

Based on the interaction with the keypad on the Smart Card Reader/Writer device, the following processes occur:

- If a card number for the Smart Card is entered and the **OK** key is pressed on the keypad, the Smart Card Reader/Writer device begins the [Validate Card Number](#) process.
- If a card number for the Smart Card is entered and the **OK** key *is not* pressed on the keypad, SWEM-SC eventually times out in the background. Once this occurs, the Smart Card Reader/Writer device begins the [Prompt to Remove Card](#) process.
- If *no interaction* with the keypad occurs, the Smart Card Reader/Writer device continues to display the "Card Number:" message on the Smart Card Reader/Writer device screen until SWEM-SC eventually times out in the background. Once this occurs, the Smart Card Reader/Writer device begins the [Prompt to Remove Card](#) process.

Validate Card Number

While a card number for the Smart Card is being entered on the Smart Card Reader/Writer device, the Smart Card Reader/Writer device displays the "Card Number:" message and a numeric digit for each keypress made on the Smart Card Reader/Writer device screen.

Once the sixteen-digit card number is completely entered, the Smart Card Reader/Writer device displays the "Card Number: 1234567890123456" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "Card Number: 1234567890123456"



NOTE: In the Smart Card Reader/Writer device image above, the card number represented is an example of a card number and does not represent an actual card number.

Once the sixteen-digit card number for the Smart Card is entered on the keypad, the following processes occur:

- If the **OK** key is pressed on the keypad, the Smart Card Reader/Writer device displays the "Repeat:" message on the Smart Card Reader/Writer device screen to prompt entry of the card number a second time for confirmation.
- If the **OK** key *is not* pressed on the keypad, SWEM-SC eventually times out in the background and the Smart Card Reader/Writer device eventually displays the "Repeat:" message on the Smart Card Reader/Writer device screen to prompt entry of the card number a second time for confirmation.



Smart Card Reader/Writer device - "Repeat:"

At this time, the sixteen-digit card number for the Smart Card is entered a second time for confirmation using the keypad on the Smart Card Reader/Writer device.

Based on the interaction with the keypad on the Smart Card Reader/Writer device, the following processes occur:

- If *no interaction* with the keypad occurs, the Smart Card Reader/Writer device continues to display the "Repeat:" message on the Smart Card Reader/Writer device screen. If SWEM-SC times out in the background, the Smart Card Reader/Writer device begins the [Prompt to Remove Card](#) process.
- If interaction with the keypad occurs, the process continues as documented below.

While the card number for the Smart Card is being entered again on the Smart Card Reader/Writer device, the Smart Card Reader/Writer device displays the "Repeat:" message and a numeric digit for each keypress made on the Smart Card Reader/Writer device screen.

Once the sixteen-digit card number is completely entered again for confirmation, the Smart Card Reader/Writer device displays the "Repeat: 1234567890123456" message on the Smart Card Reader/Writer device screen.



Smart Card Reader/Writer device - "Repeat: 1234567890123456"



NOTE: In the Smart Card Reader/Writer device image above, the card number represented is an example of a card number and does not represent an actual card number.

Once the sixteen-digit card number is completely entered again for confirmation on the keypad on the Smart Card Reader/Writer device, the following processes occur:

- If the sixteen-digit card number is entered identically both times when the **OK** key is pressed on the keypad, the Smart Card Reader/Writer device briefly displays the "Please Wait..." message and the following processes occur:
 - The Smart Card Reader/Writer device reads the card number and sends it to SWEM-SC.
 - SWEM-SC communicates the card number to WIC Direct in a "Report Damage Card" message handler to validate the damaged card data in WIC Direct.
 - SWEM-SC communicates the damaged card information from WIC Direct back to the Smart Card Reader/Writer device.
 - The Smart Card Reader/Writer device begins the [Prompt to Remove Card](#) process.
- If the sixteen-digit card number *is not* entered identically both times when the **OK** key is pressed on the keypad, the Smart Card Reader/Writer device displays the "Please Insert card!" message.
- If the **OK** key *is not* pressed on the keypad despite the sixteen-digit card number being entered exactly, the Smart Card Reader/Writer device displays the "Please Insert card!" message.
- If *no interaction* with the keypad occurs, the Smart Card Reader/Writer device displays the "Please Insert card!" message.

Prompt to Remove Card

When a transaction is cancelled or terminated, the Smart Card Reader/Writer device displays the "Please Remove Card" message on the Smart Card Reader/Writer device screen and all Smart Card Reader Process Flows end.



Smart Card Reader/Writer device - "Please Remove Card"

Replacement Card Wait Period

When a card is replaced on an existing EBT account, the card reader/writer acknowledges the wait period determined by the EBT Processor configuration. If a card is inserted into the Smart Card Reader/Writer device and the wait period has not yet been reached, the Smart Card Reader/Writer device displays a "Card not allowed until mm/dd/yyyy" message and will show the date on which reflects the card can successfully be used.



Smart Card Reader/Writer device - "Card not allowed until mm/dd/yyyy"