

ShowCase

User Guide

ShowCase User Guide

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Revision History

Changes to the original manual are listed below:

Change	Date	Description
-01 Rev A	February 2006	Initial Release
-		

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Introduction

This *User Guide* describes how to install the ShowCase tool, and how to use the system to view an RFID reader.

Chapter Descriptions

Topics covered in this guide are as follows:

- [Chapter 1, Getting Started](#) provides a description of ShowCase and its features.
- [Chapter 2, Installation](#) describes the recommended requirements for ShowCase and how to install ShowCase on the host computer.
- [Chapter 3, ShowCase Set-Up](#) describes how to set up a reader on the ShowCase application.
- [Chapter 4, Using ShowCase](#) describes how to use ShowCase to manage tags, view tag activity, and log tag information.
- [Chapter 5, Repair / Remove / Update](#) describes how to repair, remove and update the ShowCase software.

Notational Conventions

Conventions used in this document:

- *Italics* are used to highlight the following:
 - Chapters and sections in this and related documents
 - Dialog box, window and screen names
 - Drop-down list and list box names
 - Check box and radio button names
 - Icons on a screen.
- **Bold** text is used to highlight the following:
 - Key names on a keypad
 - Button names on a screen.
- Bullets (●) indicate:
 - Action items
 - Lists of alternatives
 - Lists of required steps that are not necessarily sequential.
- Sequential lists (e.g., those that describe step-by-step procedures) appear as numbered lists.

Related Documents and Software

For more information about the AR and XR RFID Readers refer to:

- *XR400/XR480 Series RFID Readers Quick Reference Guide*, p/n 72-71466-xx
- *XR Series Integrator Guide*, p/n 72E-71773-xx
- *XR Series Readers Interface Control Guide*, p/n 72E-71803-xx
- *XR400 Reader C API Programmer Reference Guide*, p/n 72E-73028-xx
- *DC600 Portal Integrator Guide*, p/n 72E-71772-xx
- AR400 Readers, refer to: <http://www.symbol.com/AR400>.

For the latest version of this guide and related guides, go to: <http://www.symbol.com/manuals>.

Service Information

If an equipment problem occurs, contact the appropriate regional [Symbol Support Center](#). Before calling, locate the product model number and serial number. Call the Support Center from a phone near the equipment so that the service person can try to talk through the problem.

If the Symbol product was purchased from a Symbol Business Partner, contact that Business Partner for service

Symbol Support Center

For service information, warranty information or technical assistance contact or call the Symbol Support Center listed below. For the latest service information go to <http://www.symbol.com>.

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Symbol Technologies, Inc.
One Symbol Plaza
Holtsville, New York 11742-1300
1-800-653-5350

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1

Getting Started

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Introduction

ShowCase is a tool which allows a host computer running the ShowCase application to connect to Symbol RFID readers. ShowCase uses the reader interface not only to read tags, but to monitor multiple readers. It also allows the reader software to be upgraded through the ShowCase interface.

ShowCase features:

- **Connection to Multiple Readers:** ShowCase allows monitoring multiple readers (connecting in multiple modes) in the environment from a single host.
- **Simplifies Software Upgrade:** ShowCase allows the reader(s) software to be upgraded using ShowCase.
- **Local Tag Naming:** ShowCase allows the tag to be re-named locally.
- **Ready to Use:** The ShowCase default configuration matches reader settings, so installation and configuration of the system and readers is quick and simple.



Screens and windows pictured in this guide are for illustration purposes and may differ from actual screens.

The applications described in this guide are not available on (or applicable to) all devices.

Procedures provided in this guide are not device specific and are intended to provide the application developers with an overview of how the application works.

System Requirements

The minimum recommended configuration for a host computer is:

- Microsoft® Windows XP/2000 operating system with a Pentium 200Mhz processor and 128 MB RAM
- Minimum resolution of 1024x768 on a 24bit color
- 20 MB free disk space
- .NET Framework 1.1
- Minimum resolution: Include 96 dpi (normal font size).
- ShowCase requires an external ftp server for firmware upgrades.

Prerequisites

The following items are required for ShowCase:

- XR or AR reader with power supply
- Laptop (or other host computer)
- If using the LAN Update procedure, a Cat5 ethernet cable is required
- If using the Direct-Connect update procedure a Cat5 Crossover cable is required
- Null modem serial cable (optional)
- An (optional) ftp server on the host computer

Supported Readers

The ShowCase software currently supports the four port XR400 readers. The following readers are not supported:

- AR400
- XR480 (8 port functionality is not supported)

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Installation

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Introduction

The ShowCase *InstallShield Wizard* enables quick and easy installation on the host computer.

Download the ShowCase Software

The ShowCase software is available for download from RFID Products downloads on the Symbol Developer Zone.

1. Create a folder on a host computer and name it: \ShowCaseInstall.
2. Login to the Symbol Developer Zone at <http://www.devzone.symbol.com>.
3. From the *Developers Downloads* page, select *RFID Products* and select the *ShowCase Software* download page. Download the software zip file onto the host computer (\ShowCaseInstall directory) and unzip the file.

Installing ShowCase

The ShowCase software is included in the *Symbol - ShowCase.exe* file. Follow the steps to install the ShowCase software.

1. Double click the *ShowCaseInstall.exe* file to launch the setup wizard. The *ShowCase InstallShield Wizard* automatically launches the *Preparing Setup* window (see [Figure 2-2](#)).

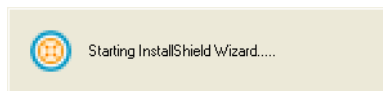


Figure 2-1. ShowCase InstallShield Startup Window

2. The *Preparing Setup* window automatically launches the *ShowCase Welcome* window (see [Figure 2-3](#)).

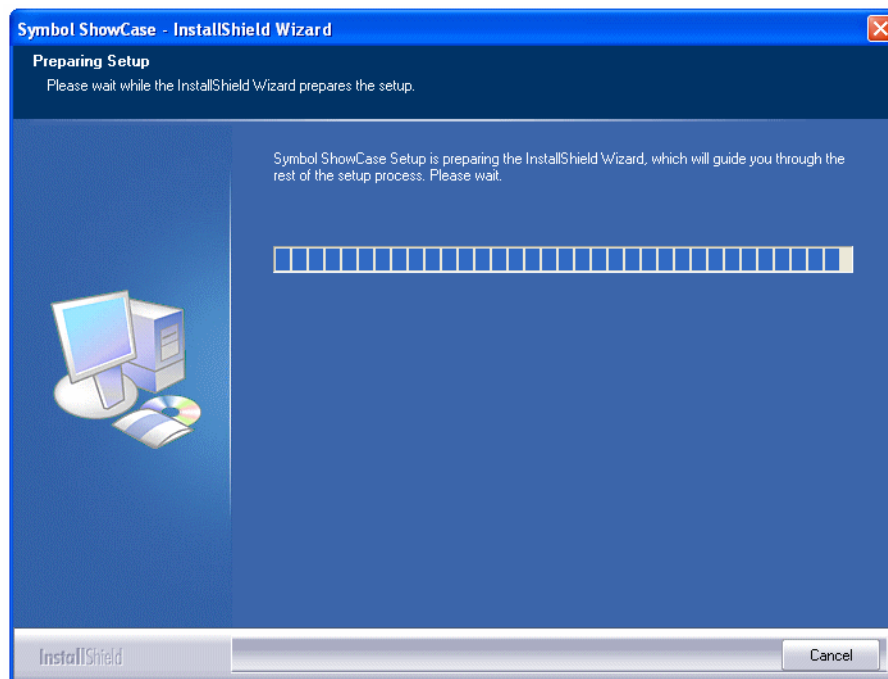


Figure 2-2. Preparing Setup Window



If ShowCase was previously installed the *ShowCase Modify, Repair or Remove* window appears (see [Figure 5-8 on page 5-7](#)). Complete the [Remove ShowCase on page 5-6](#), and re-start the installation procedure from the beginning.

3. Click **Next** on the *ShowCase Welcome* window and the *Licence Agreement* window appears (see [Figure 2-4](#)).

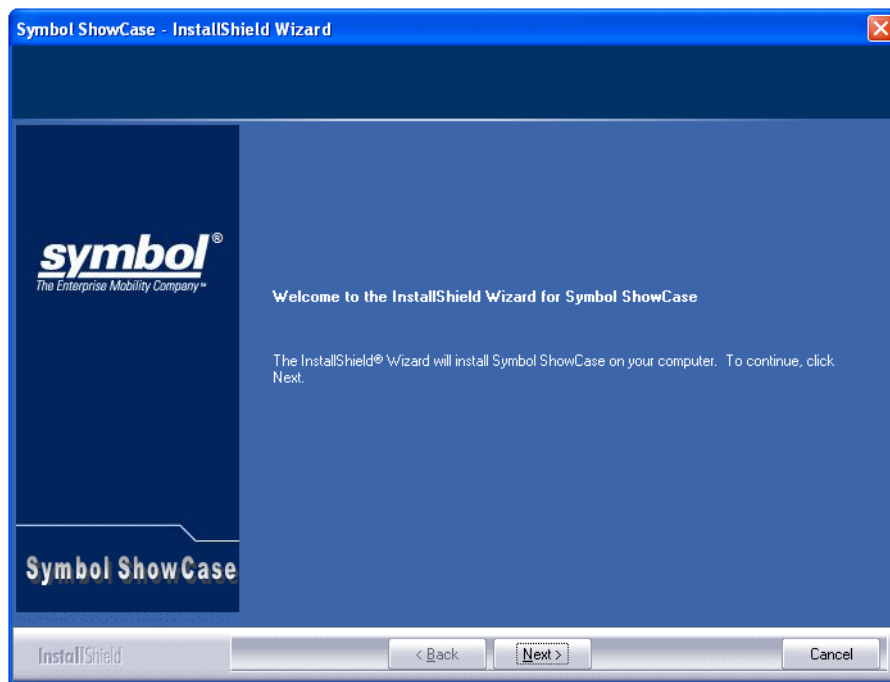


Figure 2-3. ShowCase Welcome Window

4. Click **Yes** to accept the licence agreement and continue, the *Destination* window appears (see [Figure 2-5](#)).

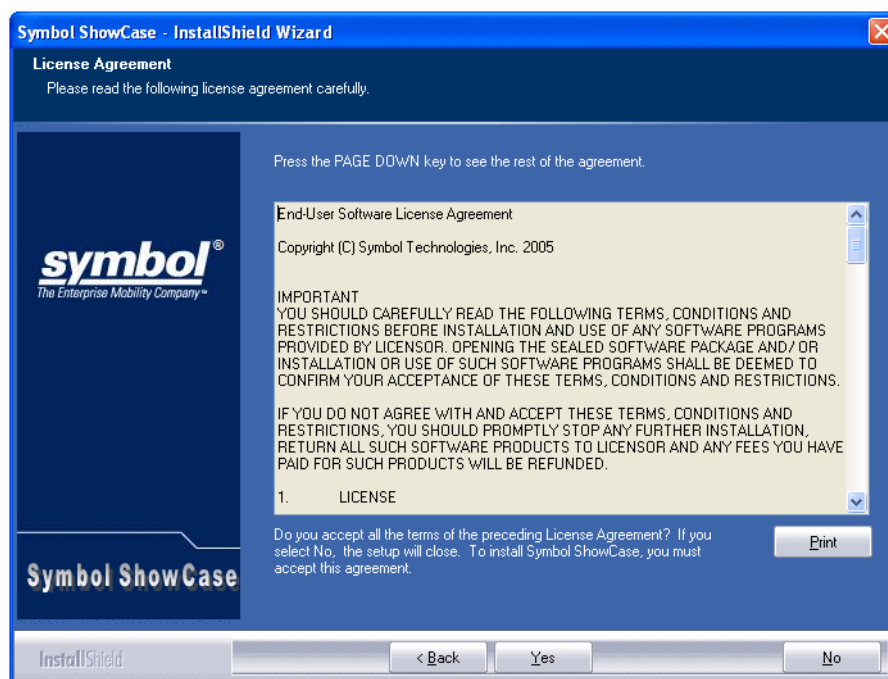


Figure 2-4. Software License Agreement Window

5. Click **Browse** to select a different installation folder, or click **Next** to accept the default location and continue with the installation, the *Setup Status* window appears (see [Figure 2-6](#)).

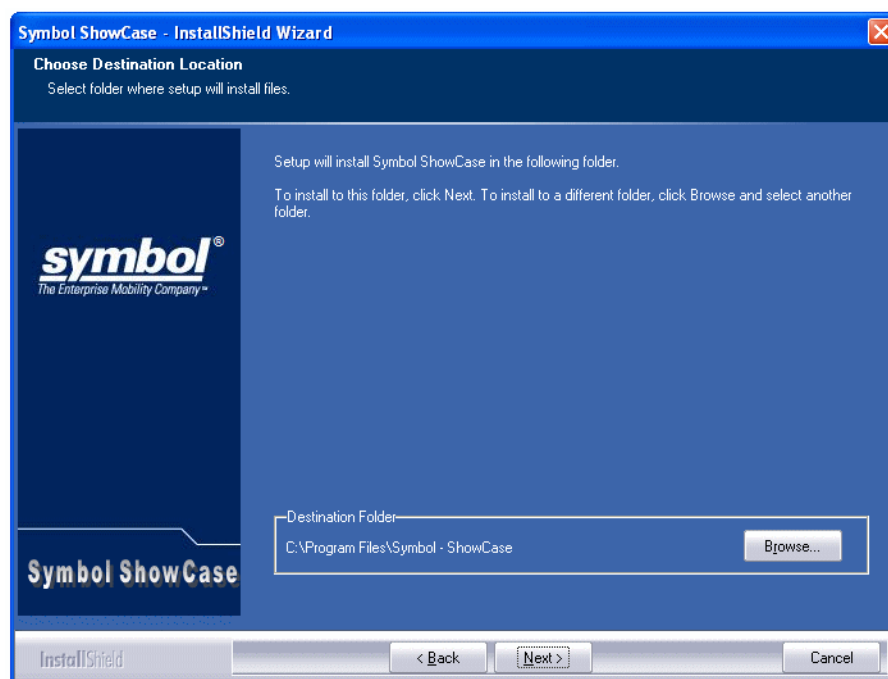


Figure 2-5. Destination Window

6. The *Setup Status* window automatically launches *Installation Complete* window (see [Figure 2-7](#)).

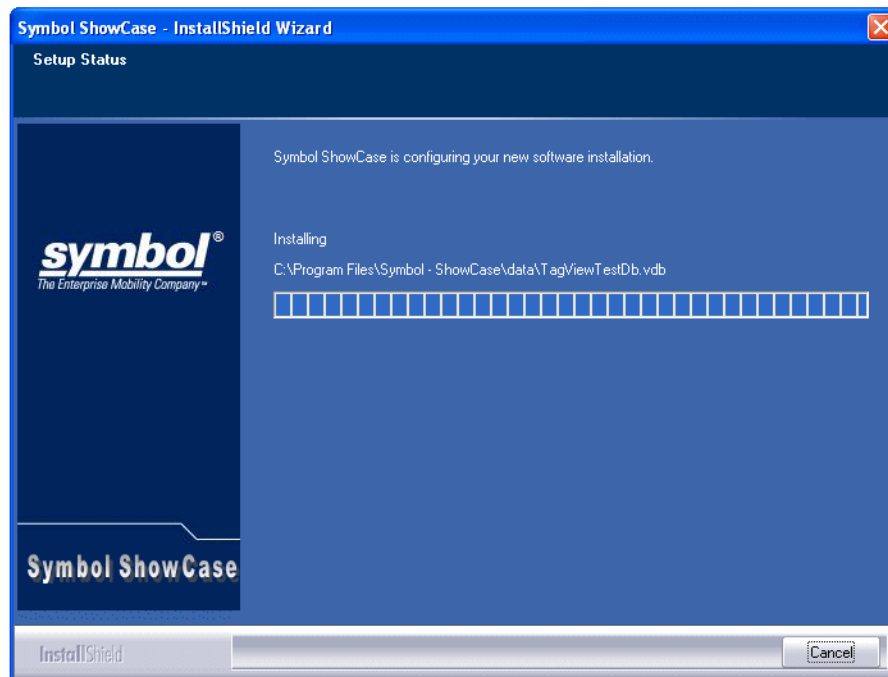


Figure 2-6. Setup Status Window

7. Click **Finish** to complete the installation.

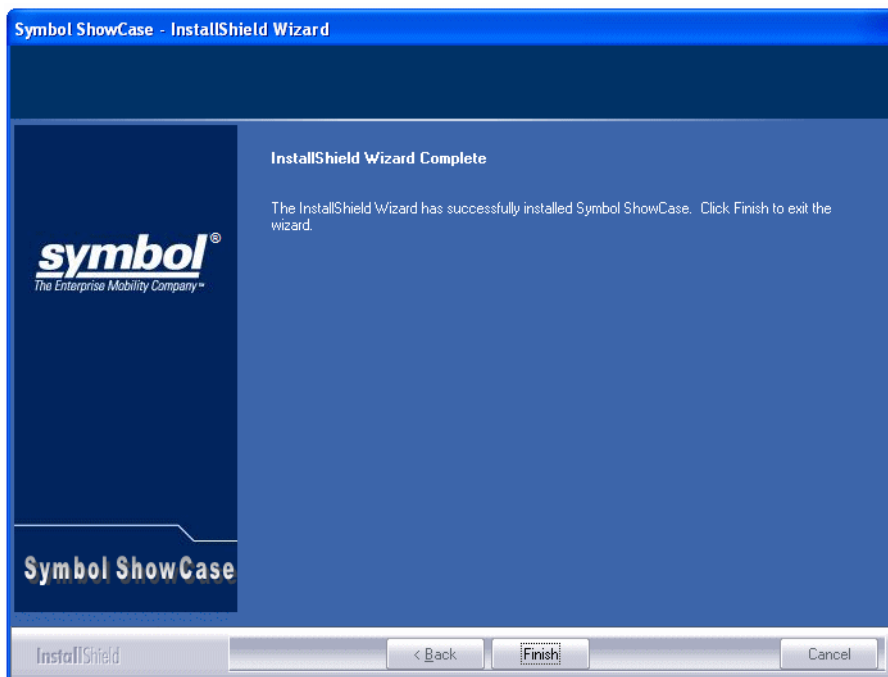


Figure 2-7. Installation Complete Window

8. Double click the ShowCase icon (on the computer desktop) to launch the ShowCase software.

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ShowCase Set-Up

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Introduction

This chapter describes how to set up the ShowCase application, how to add a reader, how to view zones, how to view templates. It also discusses how to view the readers. [Table 3-1](#) provides the ShowCase icon descriptions and [Table 3-2 on page 3-4](#) provides the ShowCase button descriptions.

When showcase is started the [ShowCase Console View on page 3-5](#) appears.

Table 3-1. Icon Names and Functions

Icon	Name	Function	Accessible By Right Mouse Click
	Delete Item	This command deletes the selected reader.	Yes
	Add New Item	This command adds a new item to the application, the item added is dependant on the location.	Yes
	Edit/View	Edit/View reader properties.	Yes
	Reboot Reader	Reboots reader, requires user to wait for some time while the reader reboots.	No
	Display Unique Tags	Displays unique tags, from all readers.	No
	Read Point On	On- Read-Point icons represent the Autonomous (XML Based) or OnCommand 1 mode antenna (read point) status.	No
	Read Point Off	Off- Read-Point icons represent the Autonomous (XML Based) or OnCommand 1 mode antenna (read point) status.	No
	Export	Export tags data to a file, ShowCase opens the window <i>Select/Enter File Name to Export Data</i> window and prompts the user to enter the file name and the location to save.	No
	Start	Starts the tag read in one of the following manners: Autonomous (XML) Notification: Uses notification from reader to report tags read to the user. Autonomous (XML) Continuous: It queries the readers database to get tags information. OnCommand (Byte Stream) Continuous: Sends ReadFull command to get the tags read OnCommand (Byte Stream) For Number of Read Cycles: Sends ReadFull command to get the tags read for the specified number of read cycles by the user. When the <i>All Readers</i> selection is highlighted. Starts all connected readers.	Yes
	Stop	Stop reading from selected reader. When the <i>All Readers</i> selection is highlighted. Stops all connected readers.	Yes
	Return to Console View	Home, return to main menu.	No
	Uninstall	Uninstalls the ShowCase software	No
	Disconnected	Red: Indicates that the reader is not connected.	No
	Connected	Green: Indicates that the reader is connected.	No

Table 3-2. Button Functions

Button	Function
Connect	Can connect the selected reader in Autonomous (XML) / OnCommand (Byte Stream) mode. Once connected user can not modify the mode before disconnecting.
Connect All	Can connect all selected readers in Autonomous (XML) / OnCommand (Byte Stream) mode. Once connected user can not modify the mode before disconnecting.
Disconnect	Can disconnect in Autonomous (XML) / OnCommand (Byte Stream) mode.
Disconnect All	Can disconnect all in Autonomous (XML) / OnCommand (Byte Stream) mode.
Purge Tags	Purges the tag data from the screen.
Browse	Allows the host directories to be browsed.
Download	Downloads selected files.
Power Off	Turns off the specific read point power.
Power On	Turns on the specific read point power.
Save	Saves the ShowCase parameters.
Cancel	Cancels the ShowCase parameters inputs.
Fetch	Retrieves configuration information from the reader.
Advanced Configuration	View advanced configuration parameters.
Hide	Hides the advanced configuration parameters.
Apply	Applies the selected function.
Connect All	Available only when the <i>All Readers</i> selection is highlighted. Connects all defined readers.
Disconnect All	Available only when the <i>All Readers</i> selection is highlighted. Disconnects all defined readers.

ShowCase Console View

To Start ShowCase double click the ShowCase icon (on the computer desktop) or select *Start - Programs - Symbol - Symbol RFID ShowCase - ShowCase*. The *ShowCase Console View* window appears. The console view provides access to:

- Readers - Add/delete readers, and edit ShowCase options.
- Zones - View zones.
- Templates - View templates.
- Configuration Management - Used to update the reader firmware and software to the latest configuration.

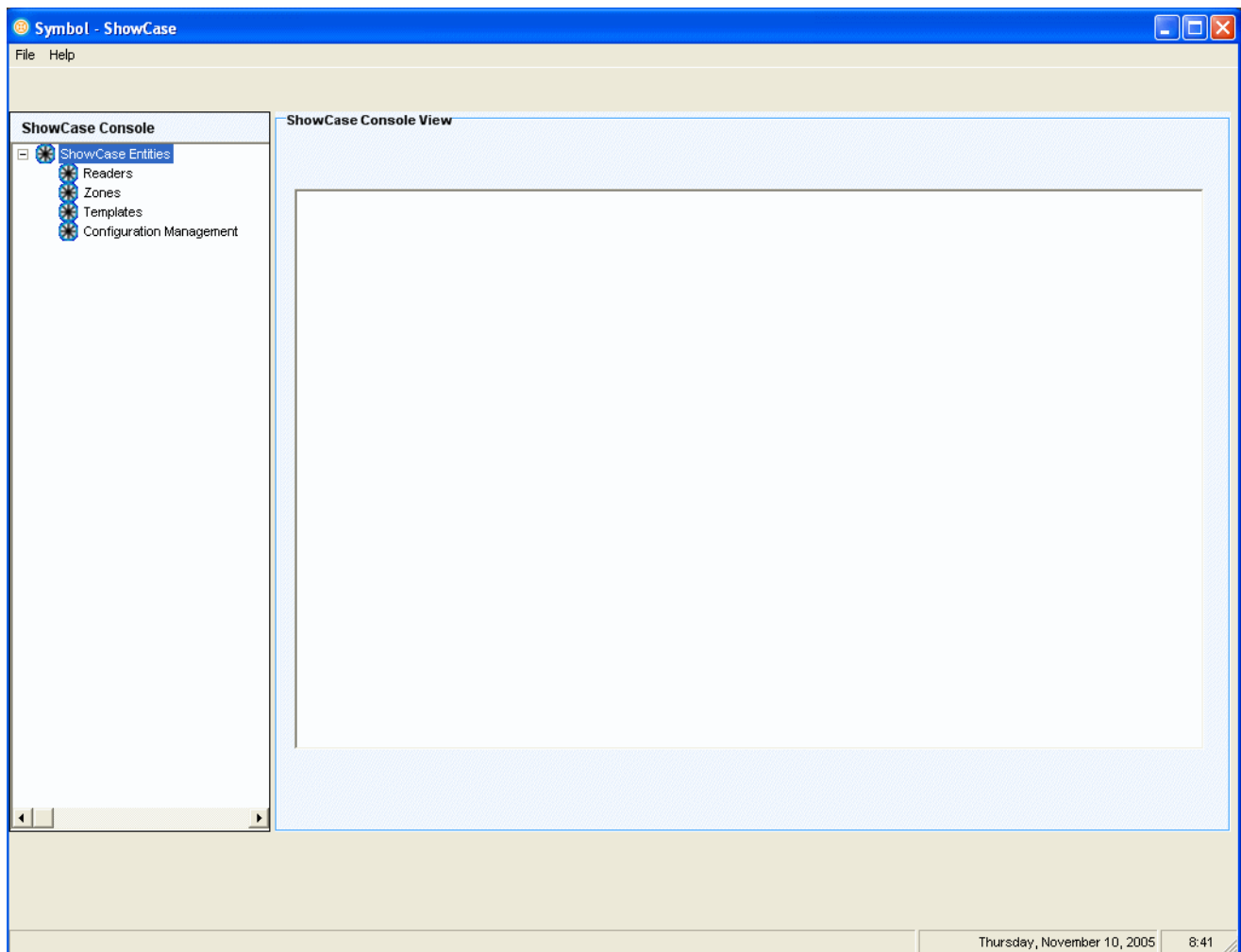


Figure 3-1. ShowCase Console View

Add a Reader

The readers must be added to the ShowCase tool.

To add a new reader to ShowCase:

1. From the *ShowCase Console View* (see [Figure 3-1 on page 3-5](#)) click Readers, the *All Readers* screen appears.
2. Click the *Add New Reader* icon (or right-click on *All Readers*), the *Add/Edit Reader* window appears.

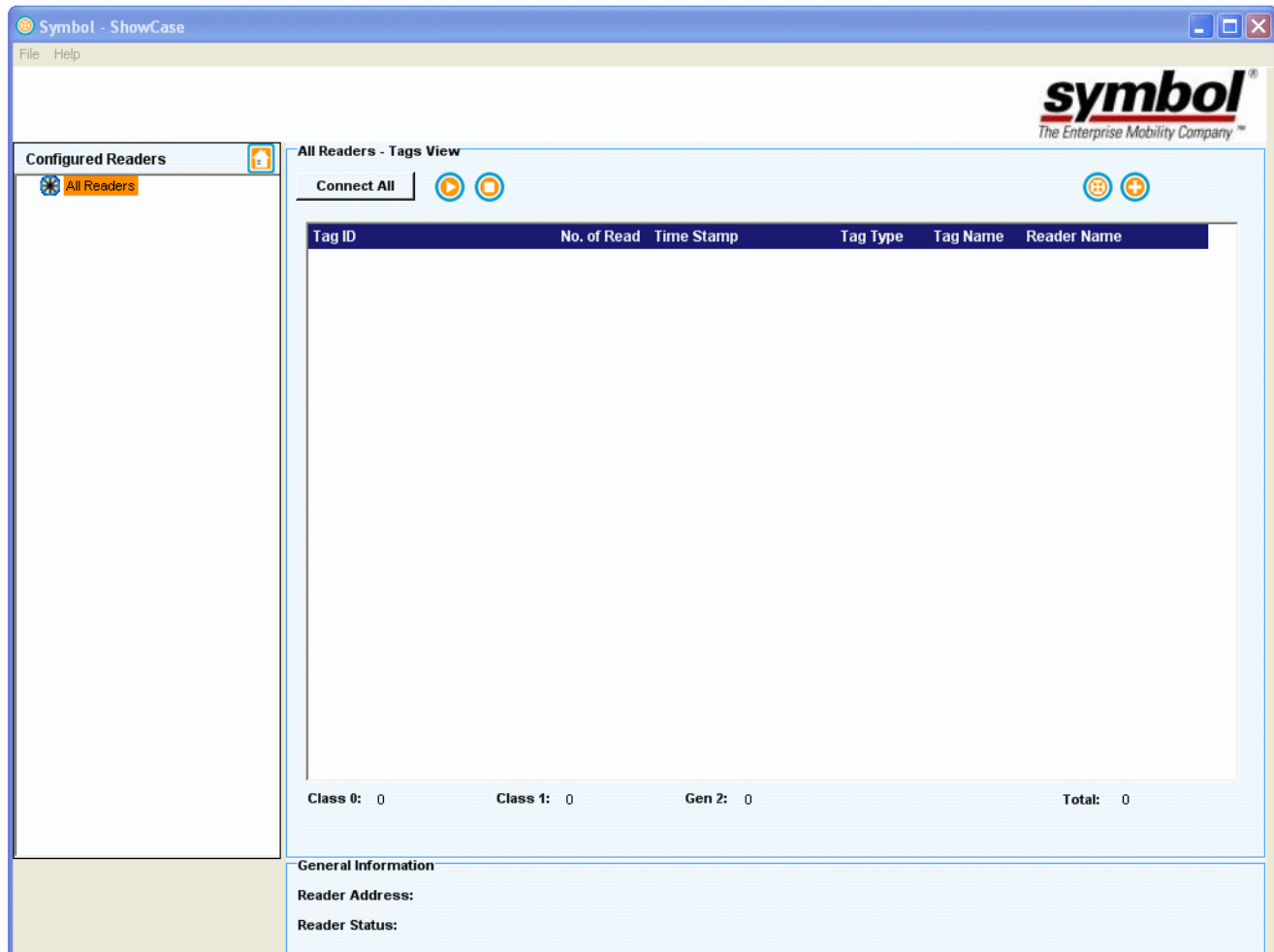


Figure 3-2. All Readers Screen

3. Enter the required configuration information into the Add/Edit Readers window (see [Table 3-3](#) for input descriptions).

ShowCase - Add/Edit Reader

Reader Setup
TCP/IP Communication

Reader Configuration

Reader Name: Mode:

TCP/IP Address: Application Type: ☐ Enable Motion Detector

User Name: Password:

Configuration Options: ☐ Add Manually ☒ Fetch Config From Reader

Antenna Configuration

Add/Delete	Antenna Name	Zone	Template	Antenna Enable
1 ☐		Default	Default	☐ On ☐ Off
2 ☐		Default	Default	☐ On ☐ Off
3 ☐		Default	Default	☐ On ☐ Off
4 ☐		Default	Default	☐ On ☐ Off

Figure 3-3. Add/Edit Readers Window

Table 3-3. Add/Edit Readers Window Inputs

Input Name	Input Description
Reader Name	Enter a unique reader name.
TCP/IP Address	Enter the Reader TCP/IP address.
User Name	Enter the user name that has been set in the reader.
Configuration Options	Select the method of adding the reader.
Add Manually	The user enters all the information manually.
Fetch Config From Reader	Select this option to retrieve the committed configuration from a reader and automatically populates the reader properties. Enter a valid reader TCP/IP address and select the <i>Fetch Config from Reader</i> radio button, the Fetch button appears. Click Fetch , ShowCase retrieves the configuration from the reader. ShowCase does not validate the TCP/IP address but it notifies user if its not able to retrieve the configuration.
Mode	Select the mode of operation.
OnCommand	Selects the ByteStream mode of operation and sends the command for performing the operation to the reader.
Autonomous	Selects the XML mode of operation and sends the command for performing the operation to the reader.
Enable Motion Detector	Displays the motion detector enable status.
Password	Enter the password for the reader.
Application Type	Displays the application type.
Add/Delete	Displays the status of the Add/Delete check box.

Table 3-3. Add/Edit Readers Window Inputs (Continued)

Input Name	Input Description
Antenna Name	Displays the antenna name.
Zone	Displays the read point zone.
Template	Displays the template.
Antenna Enable	Displays the antenna enable status.

- Click **Save** to save the ShowCase settings or click **Cancel** to exit the *Add/Edit Readers* window.
- Click **Advanced Configuration** to view the advanced configuration options. The *Add/Edit Readers, Advanced Configuration* window appears (see [Table 3-4](#) for advanced configuration descriptions).

The screenshot shows the 'ShowCase - Add/Edit Reader' window. The title bar is blue. The main window has a white background with a blue header area containing the title 'Reader Setup' and the subtitle 'TCP/IP Communication'. Below the header, there are three main sections: 'Reader Configuration', 'Antenna Configuration', and 'Advanced Configuration'. The 'Reader Configuration' section includes fields for 'Reader Name', 'Mode' (set to 'Autonomous'), 'TCP/IP Address', 'Application Type' (set to 'General'), 'User Name', 'Password', and 'Configuration Options' (with 'Add Manually' selected). The 'Antenna Configuration' section features a table with columns for 'Add/Delete', 'Antenna Name', 'Zone', 'Template', and 'Antenna Enable'. The 'Advanced Configuration' section is currently active, showing 'Event Notification' settings. It includes a 'Hide' button and a table with columns for 'Event Types', 'Notify', and 'Time (Sec) 0 - 255 Sec'. The 'Event Types' listed are 'New Tag', 'Tag Not Visible', 'Visibility Changed', 'Threshold', and 'Exception', each with a 'Never' notification setting and a '0' time value. At the bottom of the window are 'Save' and 'Cancel' buttons.

Figure 3-4. Add/Edit Readers, Advanced Configuration Window, Event Notifications Tab

ShowCase - Add/Edit Reader

Reader Setup

TCP/IP Communication

Reader Configuration

Reader Name: Mode:

TCP/IP Address: . . : Application Type: ☐ Enable Motion Detector

User Name: Password:

Configuration Options: ☒ Add Manually ☐ Fetch Config From Reader

Antenna Configuration

Add/Delete	Antenna Name	Zone	Template	Antenna Enable
1 ☒	Read Point 1-1-1-1-2	Default	Area	☒ On ☐ Off
2 ☒	Read Point 1-1-1-2-1	Default	Area	☐ On ☒ Off
3 ☒	Read Point 1-1-1-3-1	testZone	Area	☐ On ☒ Off
4 ☒	Read Point 1-1-1-4-1	Default	Area	☐ On ☒ Off

Advanced Configuration

Event Notification | **Antenna Check** |

☒ Enable
☐ Disable

Figure 3-5. Add/Edit Readers, Advanced Configuration Window, Antenna Check Tab

Table 3-4. Add/Edit Readers Advanced Configuration Window Inputs

Input Name	Input Description
Add/Edit Readers, Advanced Configuration Window, Event Notifications Tab (see Figure 3-4 on page 3-8)	
Event Types (display only)	Displays the reader generated events: • <i>Visibility</i> and <i>Threshold</i> events report tag activity • <i>Network Status</i> and <i>Exception</i> events report device/system activity.
Visibility Events	Changes in tag visibility can generate three types of visibility events: • <i>New Tag Event</i> - A special case event generated when a new tag (not known by the reader) appears for the first time. Process this event promptly for best results. The default <i>Notify</i> option is <i>Immediate</i> for this event. To disable notification when this event occurs, set the <i>Notify</i> option to <i>Never</i> using the <i>Administrator Console</i>. The event is then promoted to a generic <i>Visibility Changed Event</i>. Note, that the <i>Notify</i> option must be set to <i>Never</i> (from the <i>Administrator Console</i>). • <i>Tag Not Visible Event</i> - A special case event generated when a visible tag disappears from all read points. For example, if a tagged item is removed from a shelf, is out of RF range and is not visible to any read point. The event reports where the tag was located when last visible to the system. During normal operation, a tag can experience transient periods when it can not be read reliably in the system. To overcome this issue, set the <i>Notify</i> option for this event to <i>Moderated</i>. The system then generates an event only when the tag is not read for a period of time longer than the specified moderate time-out. The system remembers the tag, but it is not visible to any read point. To disable notification when this event occurs, set the <i>Notify</i> option to <i>Never</i>; the event is then promoted to a generic <i>Visibility Changed Event</i>. • <i>Visibility Changed Event</i> - An event generated when the visibility of a tag changes, such as due to the change of the set, or the number of read points at which the RFID tag is visible. For example, a <i>Visibility Changed Event</i> occurs when a tagged item moves from a shelf on aisle 2 to another shelf on aisle 4 (visibility changes from one read point to another). Note, that if the <i>Tag Not Visible Event</i> is enabled, a previously visible tag that becomes not visible to any read points generates the more specific <i>Tag Not Visible Event</i>. A <i>New Tag Event</i> occurs for the first visibility change when applicable. Process this event promptly for best results. The default <i>Notify</i> option is <i>immediate</i>.
Threshold	A <i>Threshold Event</i> occurs when the number of visible tags satisfies the threshold rule for the tag group. The default <i>Notify</i> option setting for this event is <i>Never</i> . To activate the threshold condition, specify user-defined IDs and relevant threshold rules through an import tag list. Also <i>Enable</i> the <i>Notify</i> option to generate event notification for this event. During normal operation, a tag can experience transient periods when it is changing visibility in the system. To overcome this issue, set the <i>Notify</i> option for this event to <i>Moderated</i> , and generate an event only when the tag is not experiencing temporary invisibility.
Exception	<i>Exception Events</i> provide (via XML) the same type of information available via SNMP. An <i>Exception Event</i> provides information when a device goes off-line; polling is turned off, etc. Select this option if SNMP not being used but feedback is still required for changes in the device or program state. To enable XML, in the <i>Event Notifications</i> window, set the <i>Notify</i> option for <i>Exception Events</i> to <i>Immediate</i> in the <i>Notify</i> column.
Notify (display only)	To receive notification when particular events occur, choose (subscribe to) the events using the <i>Notifications</i> window. To receive event notifications, enter a valid link for the <i>Host Notification Link</i> . The system tests the validity using the <i>Test</i> option. To specify the event notifications to receive, select the appropriate <i>Notify</i> option for each event type.
Never	Event notifications are not sent.
Immediate	Event Notifications are sent immediately (providing they are not filtered out).

Table 3-4. Add/Edit Readers Advanced Configuration Window Inputs (Continued)

Input Name	Input Description
Add/Edit Readers, Advanced Configuration Window, Event Notifications Tab (see Figure 3-4 on page 3-8) (Continued)	
Moderated	Specify the duration (in seconds), for which reader should send an event notification. The system retests this condition, up to the time-out value. If the condition still exists and an intervening event has not occurred, the system generates notifications for this event type (providing they are not filtered out).
Time (display only)	Displays the Time value. When Moderated notification is selected, the system retests this condition, up to the set time-out value. If the condition still exists and an intervening event has not occurred, the system generates notifications for this event type (providing they are not filtered out).
Add/Edit Readers, Advanced Configuration Window, Antenna Check Tab (see Figure 3-5 on page 3-9)	
Antenna Check	Select radio button to enable/disable the antenna check function. When the Antenna Check is enabled it checks for a standard 10KOhm load and if it does not find then it generates an exception. When the Antenna Check is disabled the exception is not generated.
Enable	Enable the reader antenna check.
Disable	Disable the reader antenna check.

6. Click **Save** to save the configuration inputs, the *Configured Reader* screen appears.

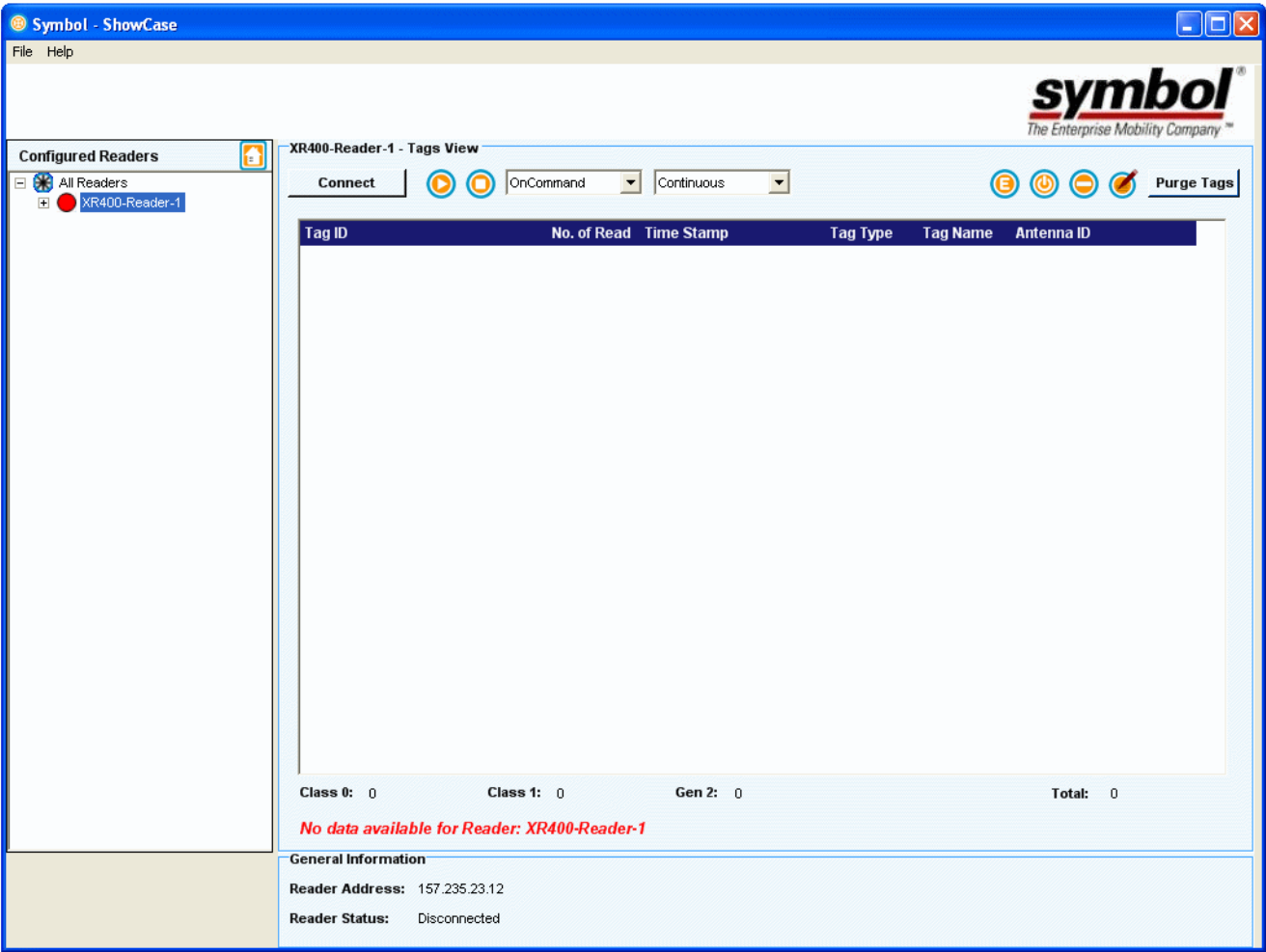


Figure 3-6. Configured Reader Screen

View a Zone

A zone (or a read point zone) is a virtual grouping of antenna(s) used to configure the expected antenna position within the specified area. This allows the user to track tags read in the particular area.

Zones are used to configure read point setup information the zones must be set up for all readers and antenna. The zones are defined to group tag data from multiple antennas (belonging to the same or different readers) together. This allows collective data across readers (that may be deployed in non-overlapping zones) to be viewed.

To view a zone:

1. From the *ShowCase Console View* (see [Figure 3-1 on page 3-5](#)) click Zones, the *Zones* screen appears.
2. Select *All Zones*, the tag data for all the zones is displayed.

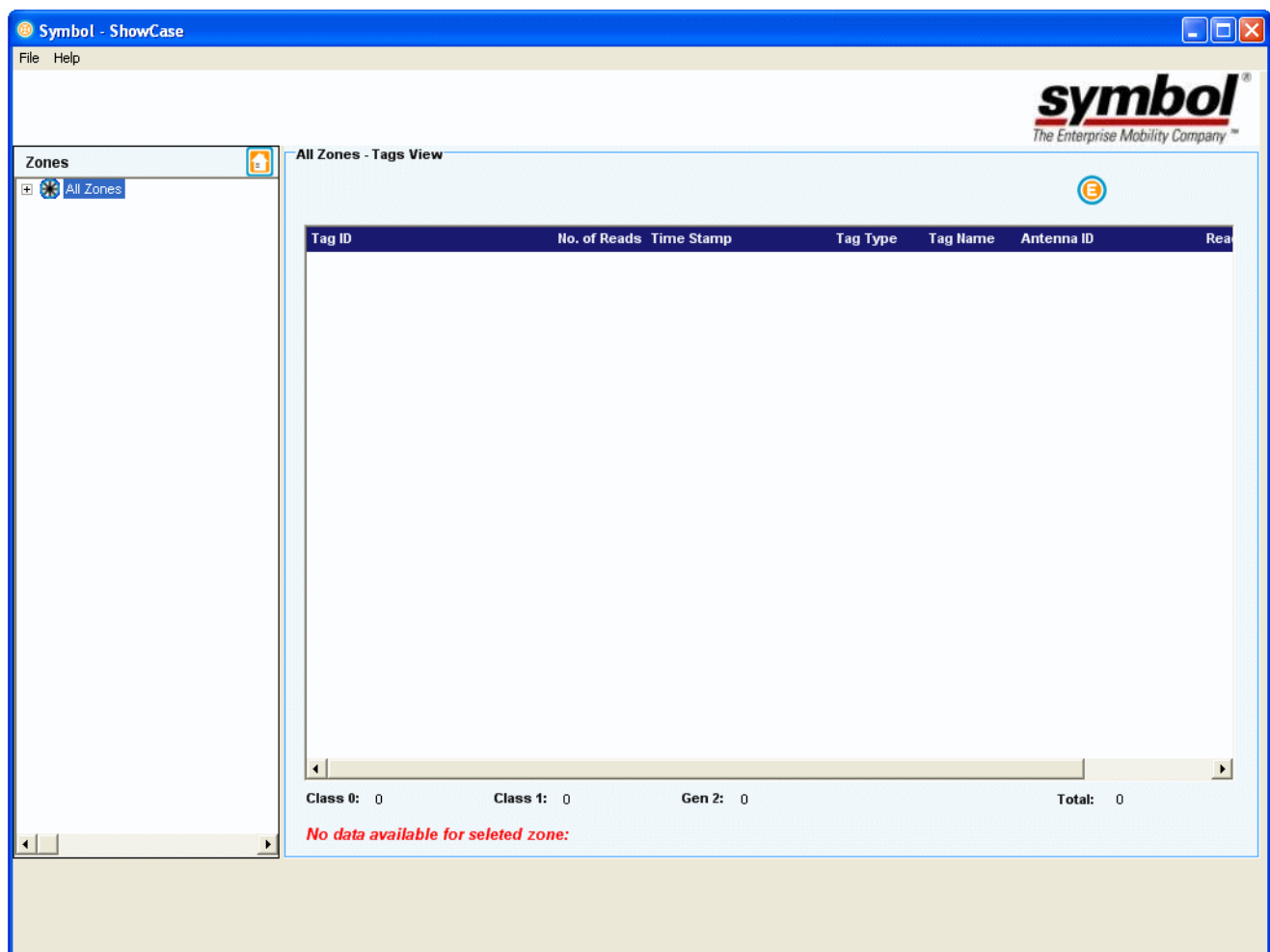


Figure 3-7. Zones Screen

3. Click on the "+" to display the available Zones.
4. Select a zone to view the tag data for that zone.

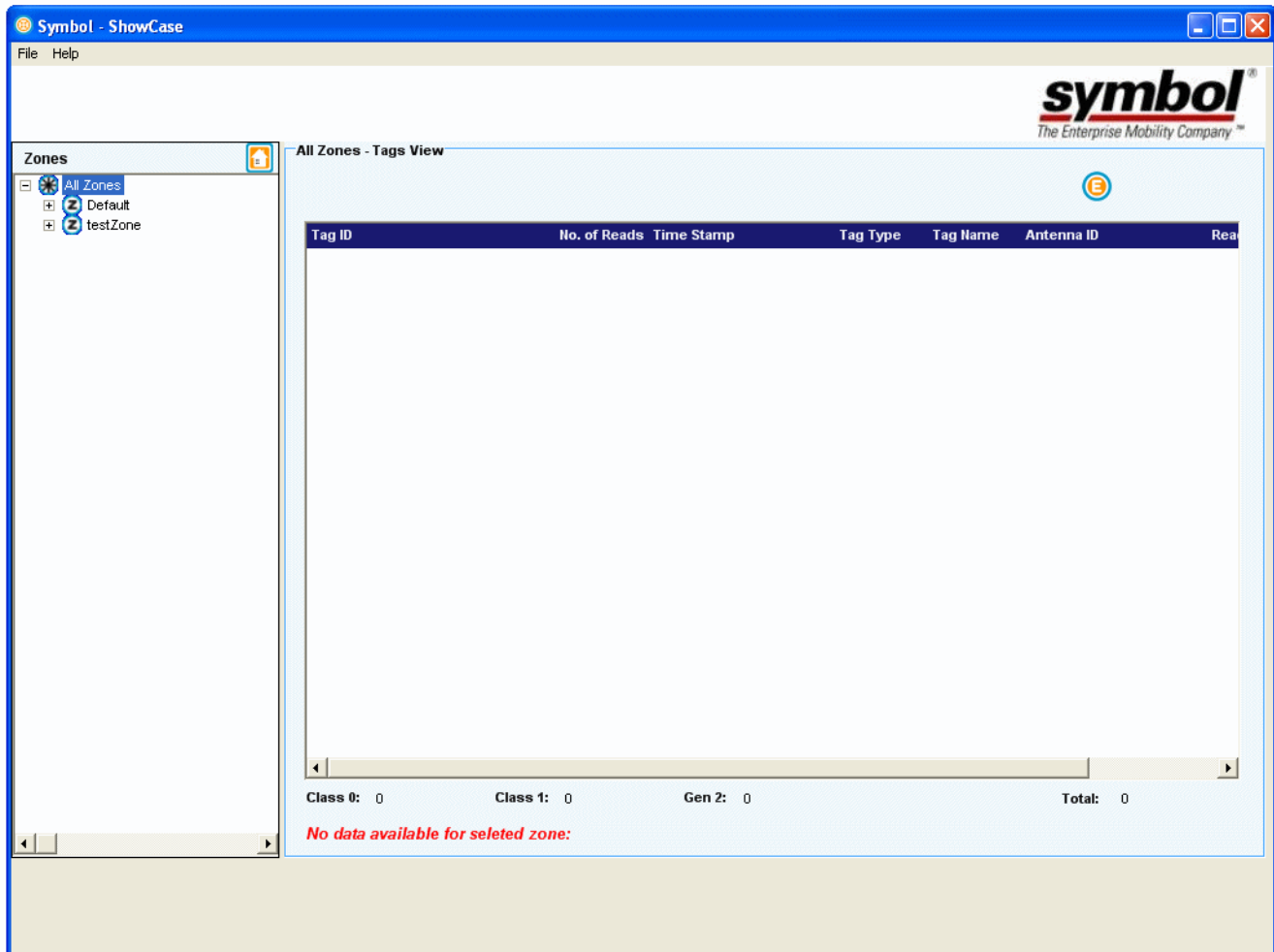


Figure 3-8. New Zone Screen

5. Click on the "+" to display the available readers for the zone.
6. Select a reader to view the reader tag data for that zone.

View Templates

Antenna Templates are a set of reader independent configuration parameters that can be applied to various antennas on different or same readers. The template maps to *Read Point Class* in *Admin Console* and used to define antenna properties. ShowCase also allows the use of one template to configure multiple antennas from same and/or different readers.

Antenna template parameters include EPC type to be read (class-0, class-1, Gen-2, etc.) power levels of the antenna, read retry counts etc. Once the templates are defined and configured they can be applied to antennas in the *Reader Properties* feature.

To view a template:

1. From the *ShowCase Console View* (see [Figure 3-1 on page 3-5](#)) click Templates, the *View Template* screen appears.

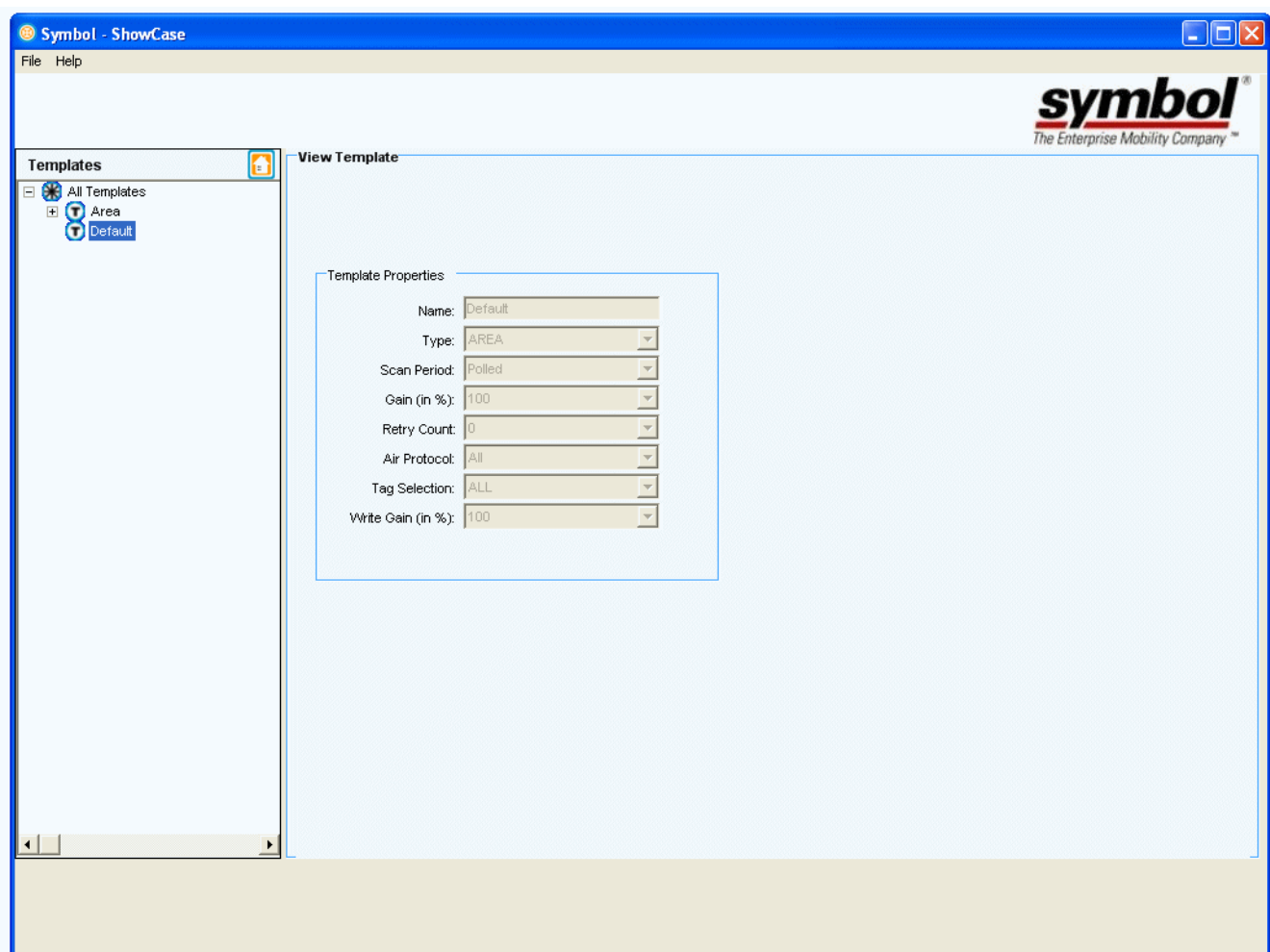


Figure 3-9. Add Template Screen



When a configuration is fetched from reader the name of the fetched configuration is compared to the names of the already saved templates (in ShowCase). If the name of the fetched template matches the name of an already saved template, the new fetched template will automatically update the existing ShowCase template.

If the ShowCase is being used with multiple readers that have the same *Read Point Class* name but different properties, the template used by ShowCase is from the last reader connected.

Table 3-5. View Template Configuration Window Inputs

Name	Description
Name	View the unique template name.
Type	View the template type.
AREA	Identifies an area template type.
SHELF	Identifies a shelf template type.
COMBINED1	Identifies a combined1 template type.
COMBINED2	Identifies a combined1 template type.
Scan Period	View the scan period.
Polled	Polled to issues read commands continuously, back-to-back.
OnDemand	The user to decide when to read tags.
5 Minutes	Issues a read command every five minutes.
10 Minutes	Issues a read command every ten minutes.
30 Minutes	Issues a read command every 30 minutes.
1 Hour	Issues a read command once every hour.
2 Hour	Issues a read command once every two hours.
8 Hour	Issues a read command once every eight hours.
12 Hour	Issues a read command once every 12 hours.
Gain (in %)	The read gain in % of full power. The gain for the read/write operations are set as separate parameters. The read operations take less energy than write operations, to balance the gains to the point that the RF field is comparable reduce the read gain to match the effective write gain range. The read gain should typically be reduced to about 1/3 (depending on the tag type and environment).
Retry Count	The retry count (not applicable to Gen2 tags) between 1 and 25. The value represents the number of additional frequencies to use, when traversing the tag tree. All the tags found, regardless of which pass they were found are reported as replies to the single read command. To optimize the <i>Retry Count</i> setting for the application set the value to as low as possible (0 or AR or XR) if the tag is moving (to achieve the quickest results) and set the value higher (typically around 8) if the tag is stationary. The higher <i>Retry Count</i> increases both the individual read times and the number of tags harvested on each pass.
Air Protocol	The air protocol types to be read.
All	Read all air protocol read types.
Class 1, Class 0	Read only the class 1 and class 0 protocols.
Gen2	Read only the Gen2 protocol.
Gen2, Class 0	Read only the Gen2 and class 0 protocols.
Gen2, Class 1	Read only the Gen2 and class 1 protocols.
Tag Selection	ALL
Write Gain (in %)	Displays the write gain setting. The gain for the read/write operations are set as separate parameters. The write operations take more energy than read operations, so to balance the gains to the point that the RF field is comparable reduce the read gain to match the effective write gain range. The read gain should typically be reduced to about 1/3 (depending on the tag type and environment).

Configuration Management

Configuration Management is used to update the firmware and software to the latest configuration using a valid *Config.xml* file.

Reader Firmware Management

Reader Firmware Management is used to update the firmware for the selected reader. Required ftp server information (where the firmware directory is located) includes the *Directory Path*, *User Name* and *Password*. To update the reader software using ShowCase:

1. Create a folder on a local ftp server and name it: \XR400UPDT\ReleaseXXX.
2. Download the firmware files from <http://www.devzone.symbol.com> into the local ftp server \XR400UPDT\ReleaseXXX directory and unzip the files if they are zipped.
3. Ensure that the readers can be pinged from the host computer. If they cannot, consult with the network administrator.
4. From the *ShowCase Console View* (see [Figure 3-1 on page 3-5](#)) click Configuration Management, the *Configuration Management View* appears.
5. Click the "+" to expand the *Readers* selection and select a reader to update.
6. Enter the ftp server IP address in the URL Directory text box and enter the user name and password in the appropriate text boxes.
7. Click **Download** to start the software update.

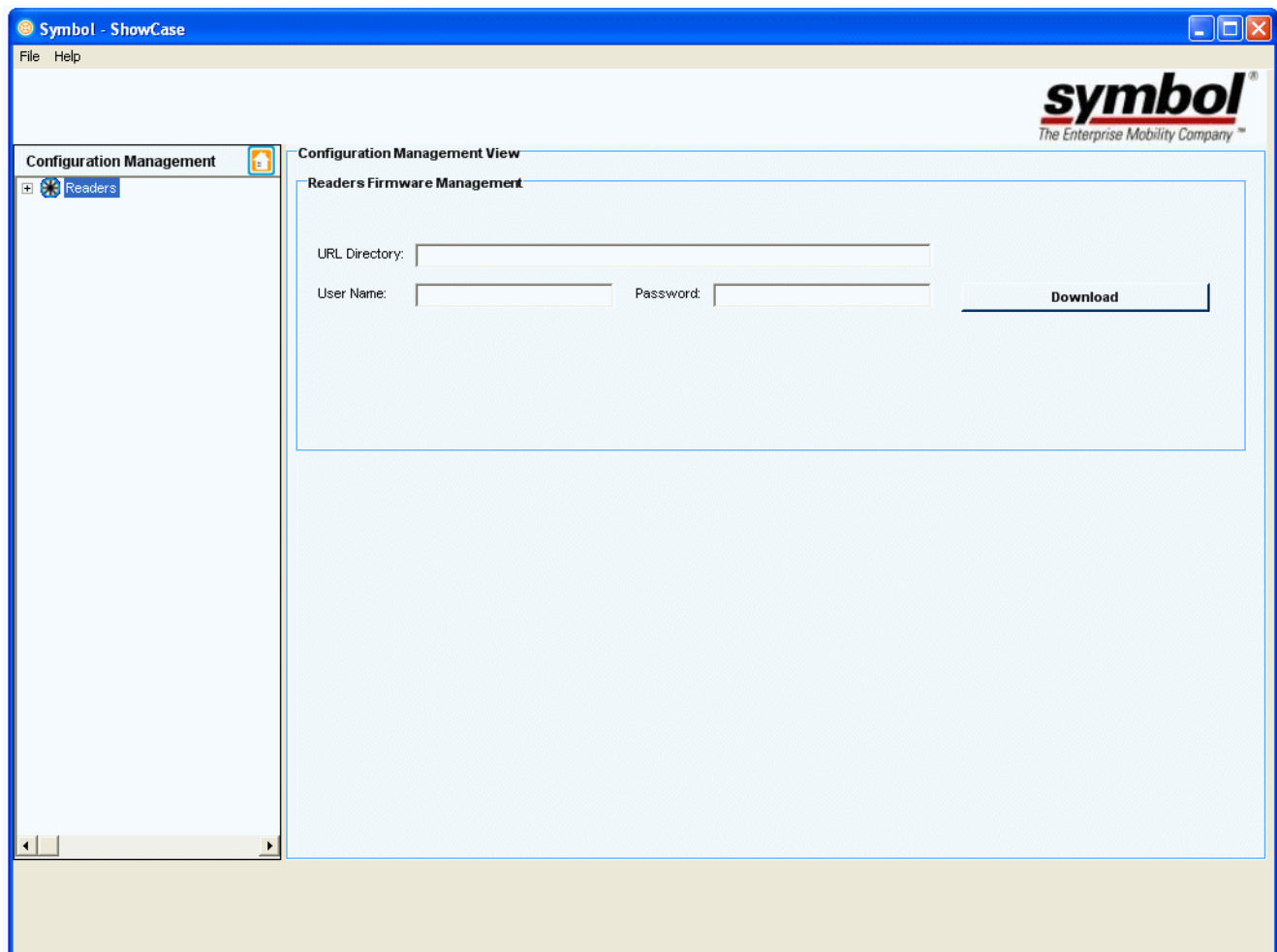


Figure 3-10. Configuration Management View

8. The green LED on the reader flashes while the update is in progress. The reader application software first downloads *osupxr400.exe*, *FlashUpdateUtility.dll*, and *Response.txt* files, starts running *Osupdate*, and shuts itself down. *Osupdate* then downloads all the files specified in the *Response.txt* file into RAM, and if the download is successful, starts writing the files to flash. If the ftp is not successful for any reason, none of the files will be written into flash.
9. The update can take up to 15 minutes. Do not remove power to the reader or reboot the reader while update is in progress.
10. The reader reboots itself when the update is complete.
11. If the reader had been set up with a static IP address, it restores the static IP address and reboots again.



During the FPGA update, all the LEDs is turned OFF for about 90 seconds.

12. Verify that the new upgrade version is now running.

4

Using ShowCase

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Introduction

This chapter describes how to use ShowCase to manage readers, tags, view tag activity, and log tag information. Prior to using ShowCase perform the setup procedures listed in [Chapter 3, ShowCase Set-Up](#).

Open ShowCase

To assign a name to a tag, open ShowCase the *ShowCase Console View* appears (see [Figure 3-1 on page 3-5](#)).

ToolBar Dropdown Menus

The *File* and the *Help* menus are used to exit the application or to view the *About* window.

File Menu

Use the *File* menu to exit the application. Tap *File - Exit*. To exit the application.

Help Menu

Use the *Help* menu to display the *About* window.

1. Tap *Help - About*. The application *About* window appears.
2. From the *About* window, tap **OK** to close the *About* window and return to the application.

Select A Reader

1. From the *ShowCase Console View* click *Readers*, the *Configured Readers* window appears (see [Figure 3-6 on page 3-12](#)).
2. Click a reader to select (the readers were entered during the ShowCase setup, in this example XR400-Reader-1) the reader is highlighted. [Table 4-1](#) provides the reader settings selection descriptions.

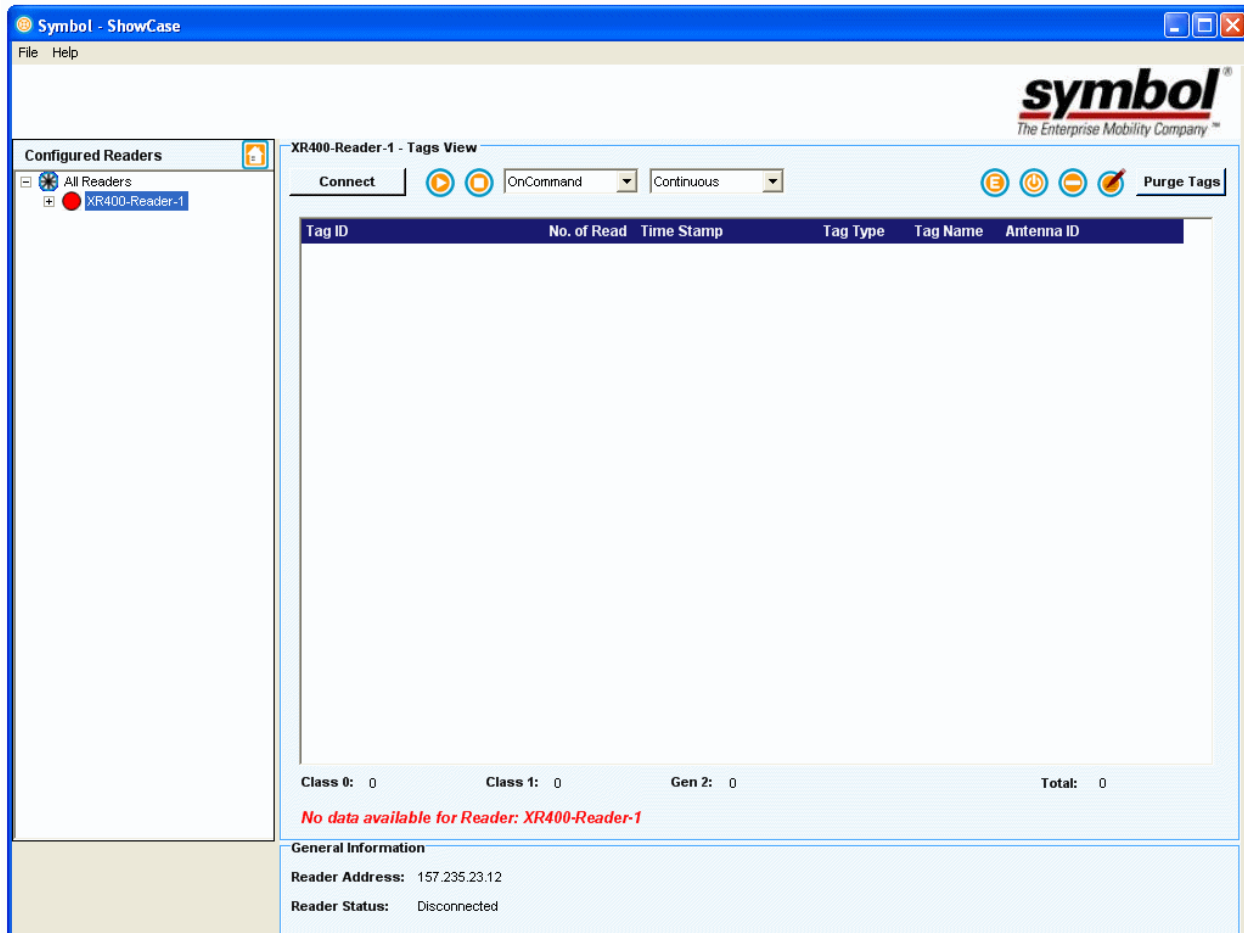


Figure 4-1. XR400-Reader-1 Window

Table 4-1. Reader Settings

Selection	Description
OnCommand - Continuous:	Selecting this mode sends <i>ReadFull</i> commands synchronously and updates the tags read. If a tag is read more than once, the tag count is incremented.
OnCommand - #of Read Cycles:	Selecting this mode sends <i>ReadFull</i> commands synchronously for specified number of read cycles and updates the tags read. If a tag is read more than once, the tag count is incremented.
Autonomous - Notification:	Selecting this mode sends <i>QueryEvents</i> commands and reads only the new tags seen by the reader for the first time. At the start of read operation, it purges all the tags inside reader database and reads the tags so that all tags flashed in front of antenna are seen as new tags.
Autonomous - Continuous:	Selecting this mode sends <i>QueryTags</i> commands and updates the tags read. If a tag is read more than once in this process the tag count is incremented.
Purge Tags:	This operation clears the current tags for the selected items. If a reader is selected (out of 'n' configured readers) then execution of this command only deletes tags for the selected reader.

- Click to select *OnCommand* or *Autonomous* from the first drop down menu (see [Table 4-1 on page 4-4](#) for selection descriptions). For the *OnCommand* mode, click to select *Continuous* or *# of Read Cycles* from the second drop down menu. Enter the number of read cycles, if that option was selected.
- Click **Connect** the reader connected window appears, click **OK**. The XR400-Reader-1 connection bullet turns to green to indicate that the reader is now connected and the *XR400-Reader-1 Connected* window appears.
- Click **OK** when the reader has successfully connected, the *XR400-Reader-1 Connected* window appears (see [Figure 4-3](#)).

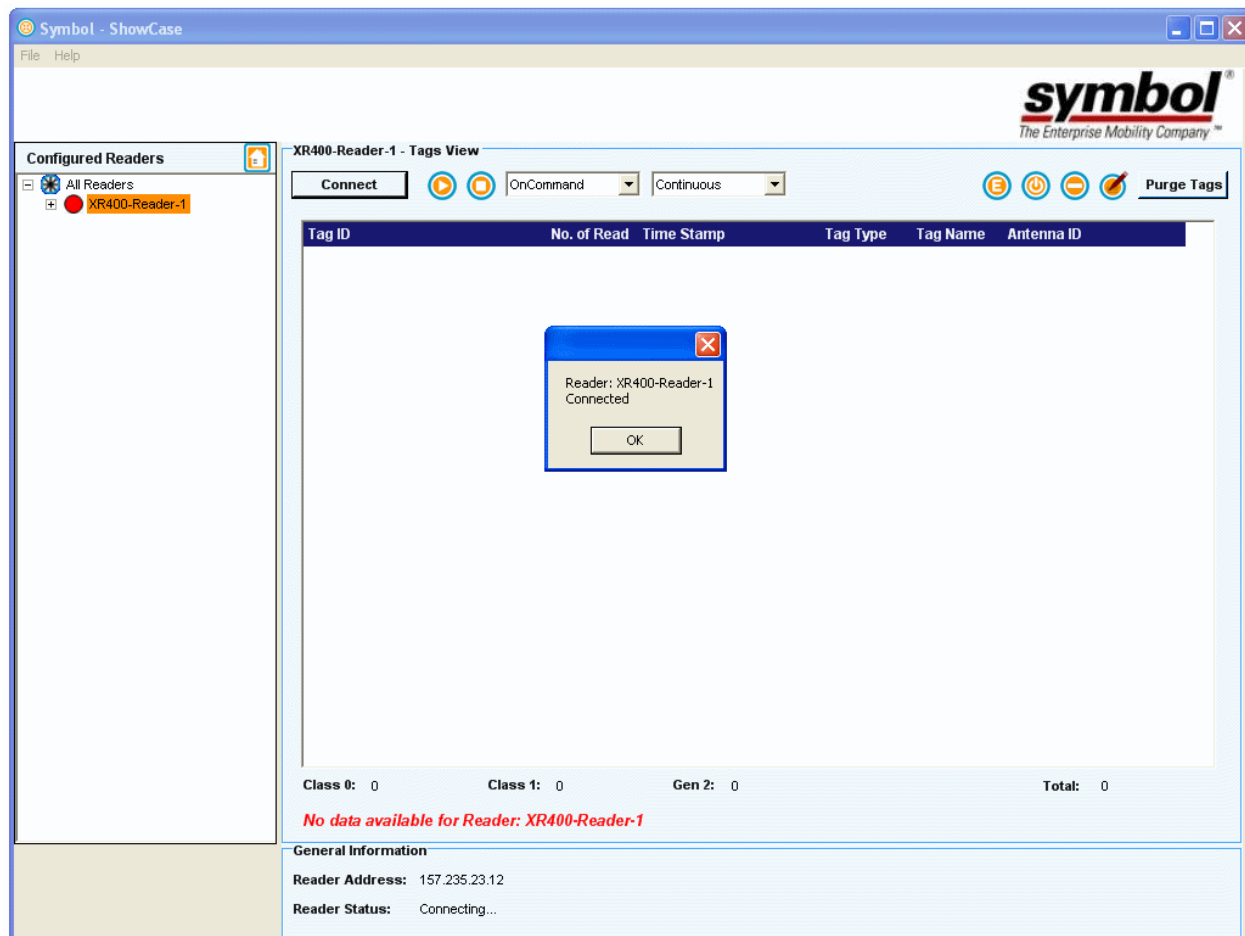


Figure 4-2. Reader Specific Screen and Reader Connected Window

Read Tags

1. Click the start icon to read tags, the *XR400-Reader-1 Tag Data* window appears (see [Figure 4-4](#)).

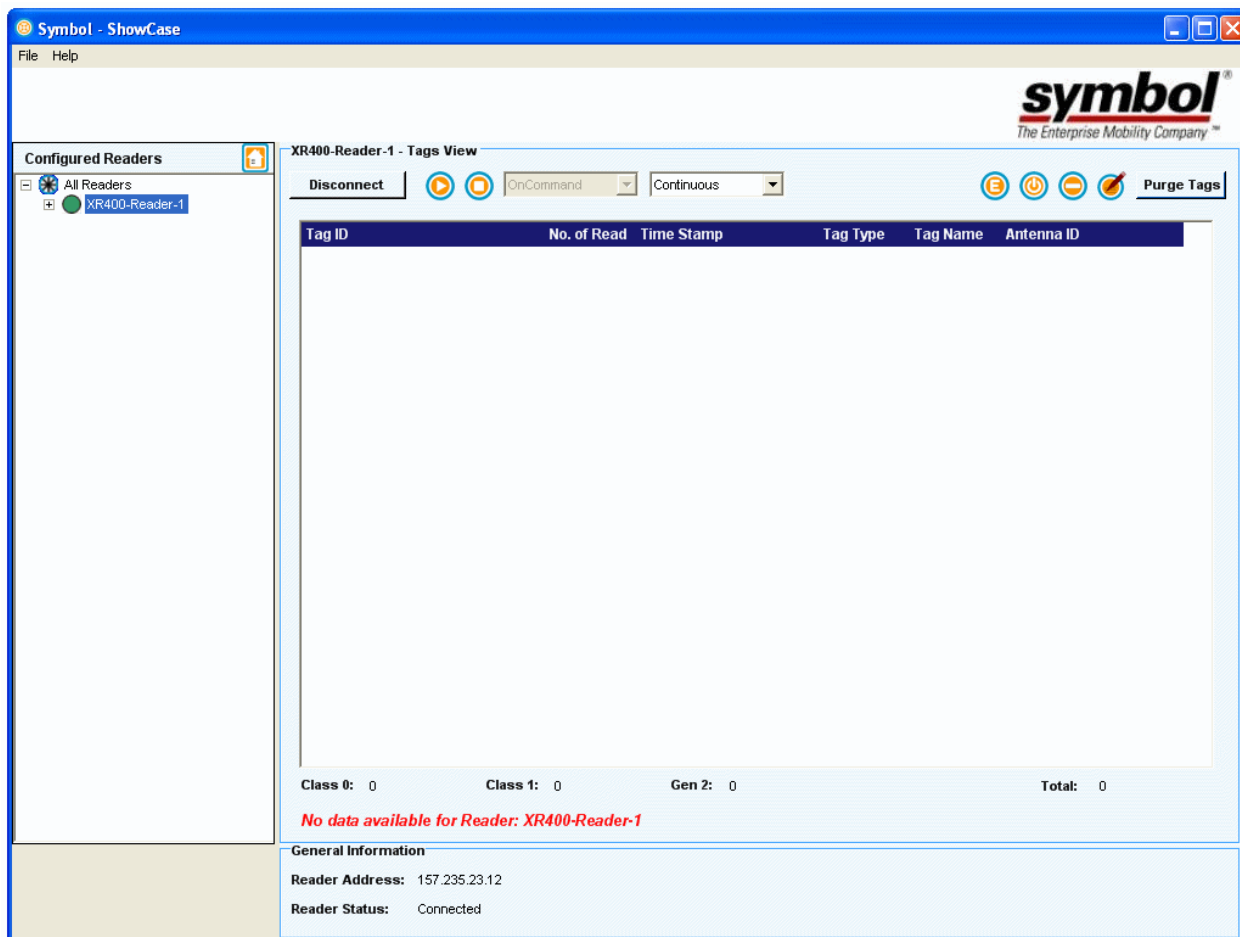


Figure 4-3. XR400-Reader-1 Connected Screen

- Click **OK** on the read completed successfully window. The example shown is for the *OnCommand* mode, with the *# of Read Cycles* set to 8.

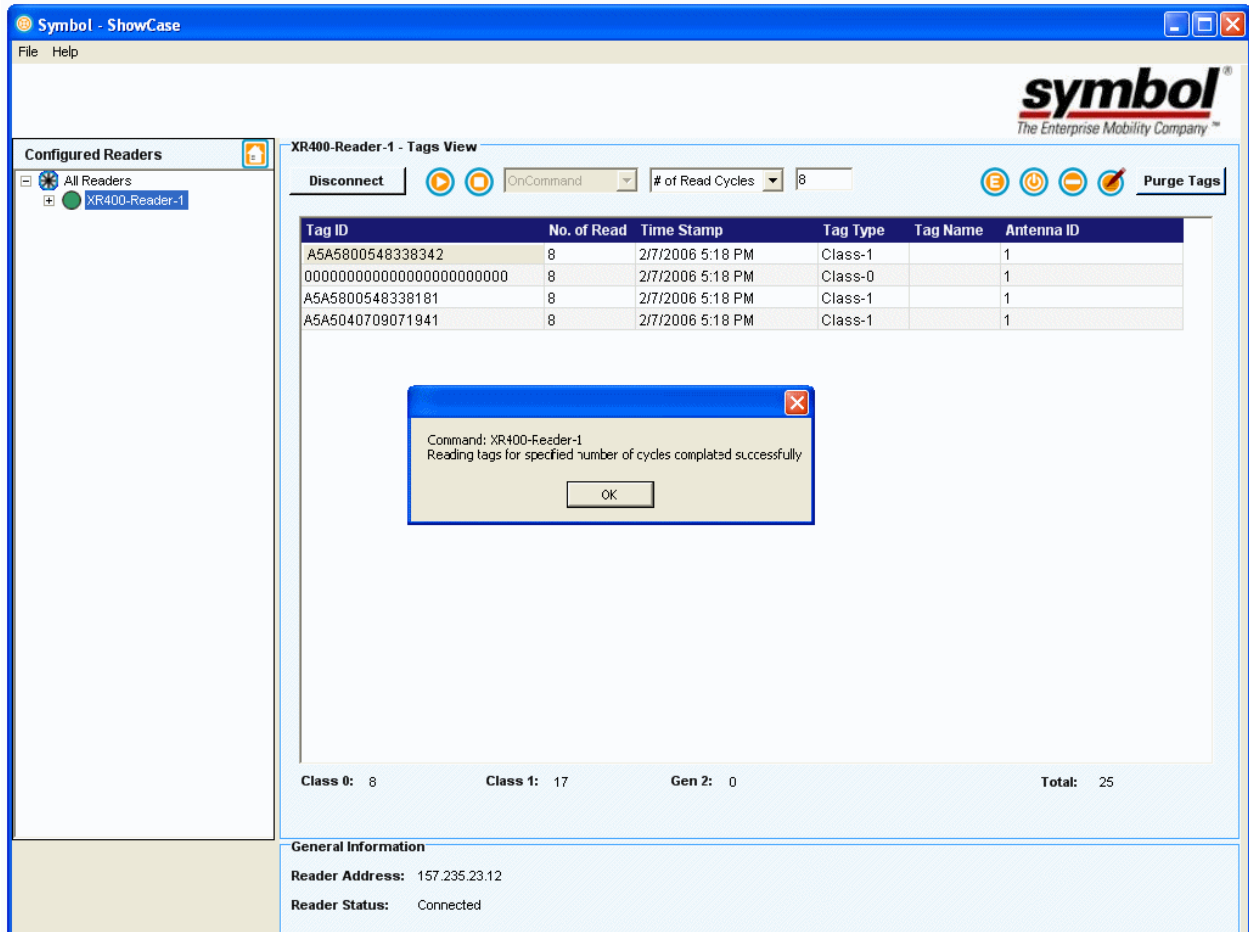


Figure 4-4. XR400-Reader-1 Tag Data Screen

3. Click the **+** on the *XR400-Reader-1* entry to expand the read points.
4. Drag the Read Gain slide bar to adjust the read gain.



The *Tag Type* selections are only available in *OnCommand* mode of operation.

5. Click the *Tag Type* drop down menu and select the tag type(s) to read:

All	ISO
Class 1	ISO, Class 0
Class 0	ISO, Class 1
Class 1, Class 0	ISO, Class 1, Class 0
Gen2	ISO, Gen2
Gen2, Class 0	ISO, Gen2, Class 0
Gen2, Class 1	ISO, Gen2, Class 1
Gen2, Class 1, Class 0	

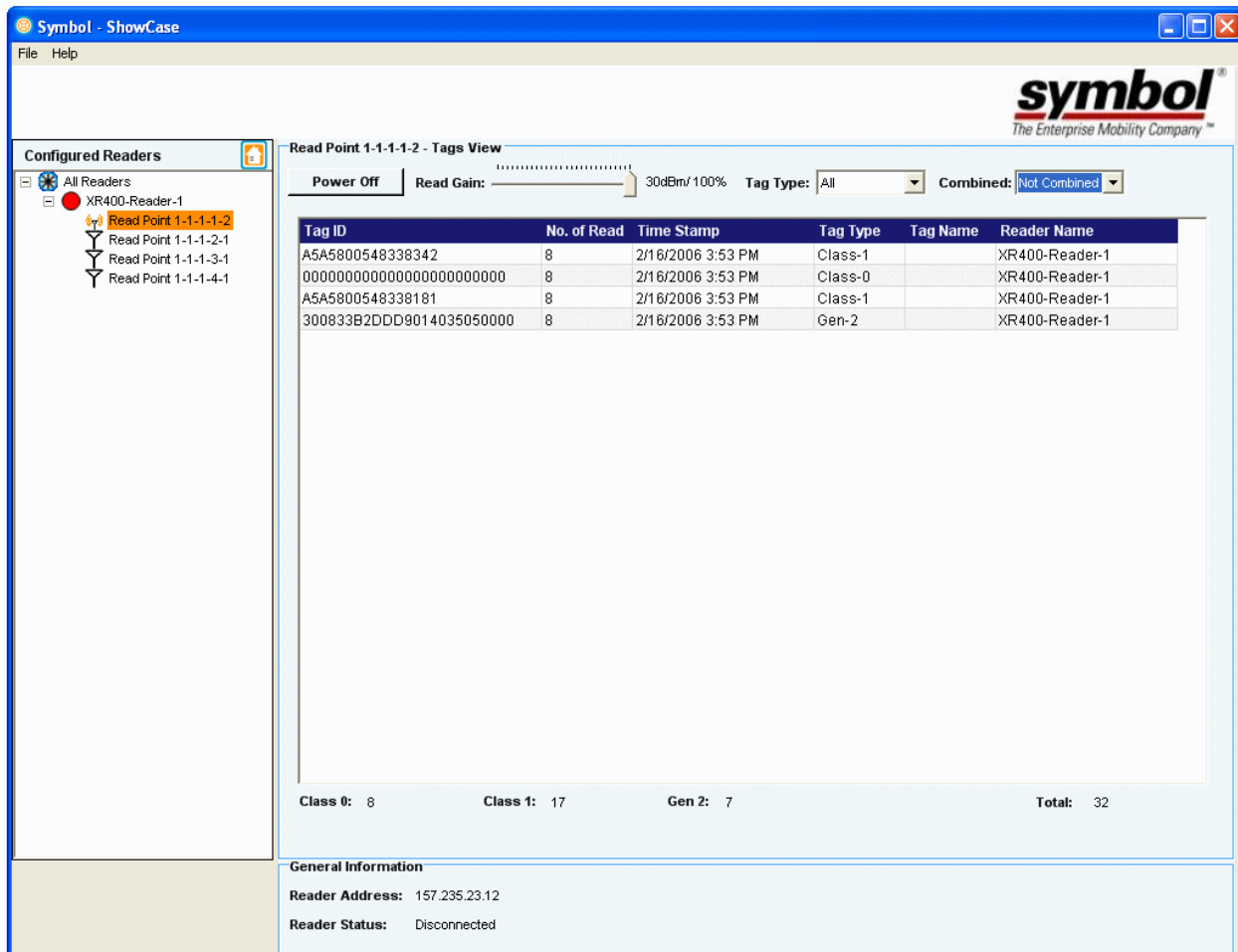
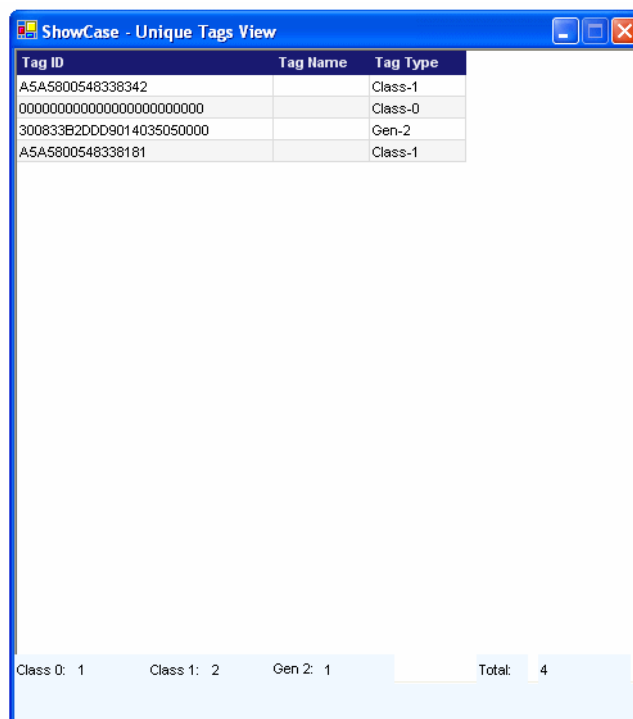


Figure 4-5. Read Point Settings Window

6. Click stop to stop the tag read.

Unique Tags View

1. Click the *Unique Tags View* icon to display the *Unique Tags View* window. The *Unique Tags View* window displays all of the unique tag information. The tag type totals are listed along the bottom of the window.
2. Click the "X" to exit the *Unique Tags View* window.



Tag ID	Tag Name	Tag Type
A5A5800548338342		Class-1
000000000000000000000000		Class-0
300833B2DD9014035050000		Gen-2
A5A5800548338181		Class-1

Class 0: 1	Class 1: 2	Gen 2: 1	Total: 4
------------	------------	----------	----------

Figure 4-6. Unique Tags View Window

Exporting Tag Data

To export the tag data:

1. From the *Read Successfully Completed* window (see [Figure 4-4 on page 4-7](#)), click the *Export* icon. The *Select/Enter File Name to Export Data* window appears.

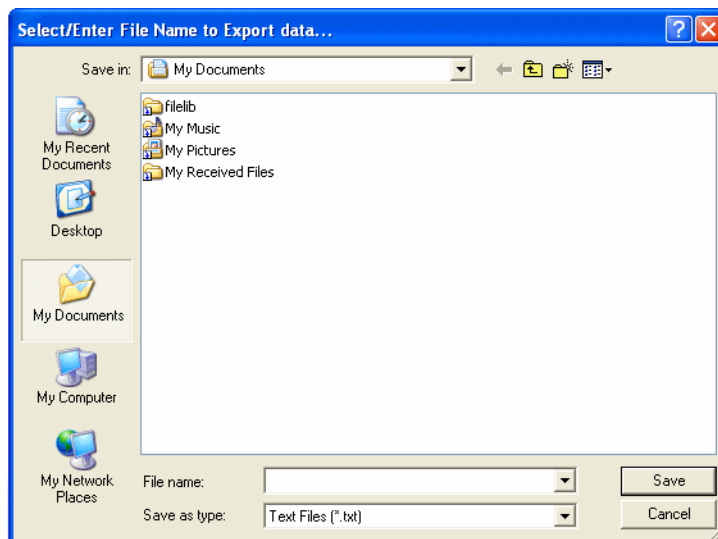


Figure 4-7. Select/Enter File Name to Export Data Window

2. Select a location, enter a file name and click **OK**.
3. A confirmation window appears confirming the filename and the location, click **OK** to proceed.
4. From the selected location, open the *.txt file to view the contents, the *Tag Data Text* window appears.

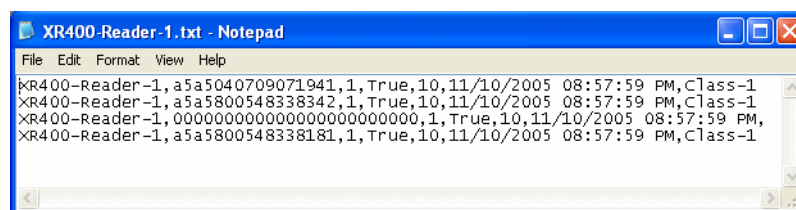


Figure 4-8. Tag Data Text Window

- 3. Enter the tag name in the *Tag Properties* window, *Tag Name* field (the example tag name used is *TagName1*).
- 4. Click **Save Name** to save the tag name.

Tag Name Edit

Tag ID

00000000000000000000000000000000

Tag Name

TagName1

Tag Type

Class-0

No. of Reads

8

Reader

XR400-Reader-1

Antenna Port

1

Visible

True

Time Stamp

2/15/2006 1:31:17 PM

Save Name

Cancel

Figure 4-10. Tag Name Edit Window

- 5. The example tag name (*TagName1*) appears in the *Tag Name* column on the *Tag Named* window.

Symbol - ShowCase

File Help

symbol

The Enterprise Mobility Company

Configured Readers

All Readers

XR400-Reader-1

Read Point 1-1-1-1-2

Read Point 1-1-1-2-1

Read Point 1-1-1-3-1

Read Point 1-1-1-4-1

All Readers - Tags View

Disconnect All

Tag ID	No. of Read	Time Stamp	Tag Type	Tag Name	Reader Name
A5A5800548338342	8	2/15/2006 1:31 PM	Class-1		XR400-Reader-1
00000000000000000000000000000000	8	2/15/2006 1:31 PM	Class-0	TagName1	XR400-Reader-1
300833B2DDD9014035050000	12	2/15/2006 1:31 PM	Gen-2		XR400-Reader-1
A5A5800548338181	8	2/15/2006 1:31 PM	Class-1		XR400-Reader-1

Class 0: 8

Class 1: 16

Gen 2: 12

Total: 36

General Information

Reader Address:

Reader Status:

Figure 4-11. Tag Named Window

Exit Read Tags View

1. Click **Purge Tags** to clear the tag read information from the selected view.
2. Click **Power Off** (if required) to turn off the read point power.
3. Click **Disconnect** (if required) to disconnect the reader.
4. Click the home icon to return to the ShowCase console screen.

Functions Dropdown Menu

To activate the functions dropdown menu:

1. From the *ShowCase Tags View*, select the tag and right click on a tag ID to display the *Functions Dropdown Menu* window.



The tag must be selected before the right click. Right clicking a non-selected tag provides a different menu. Not all of the menu items are available for all field selections.

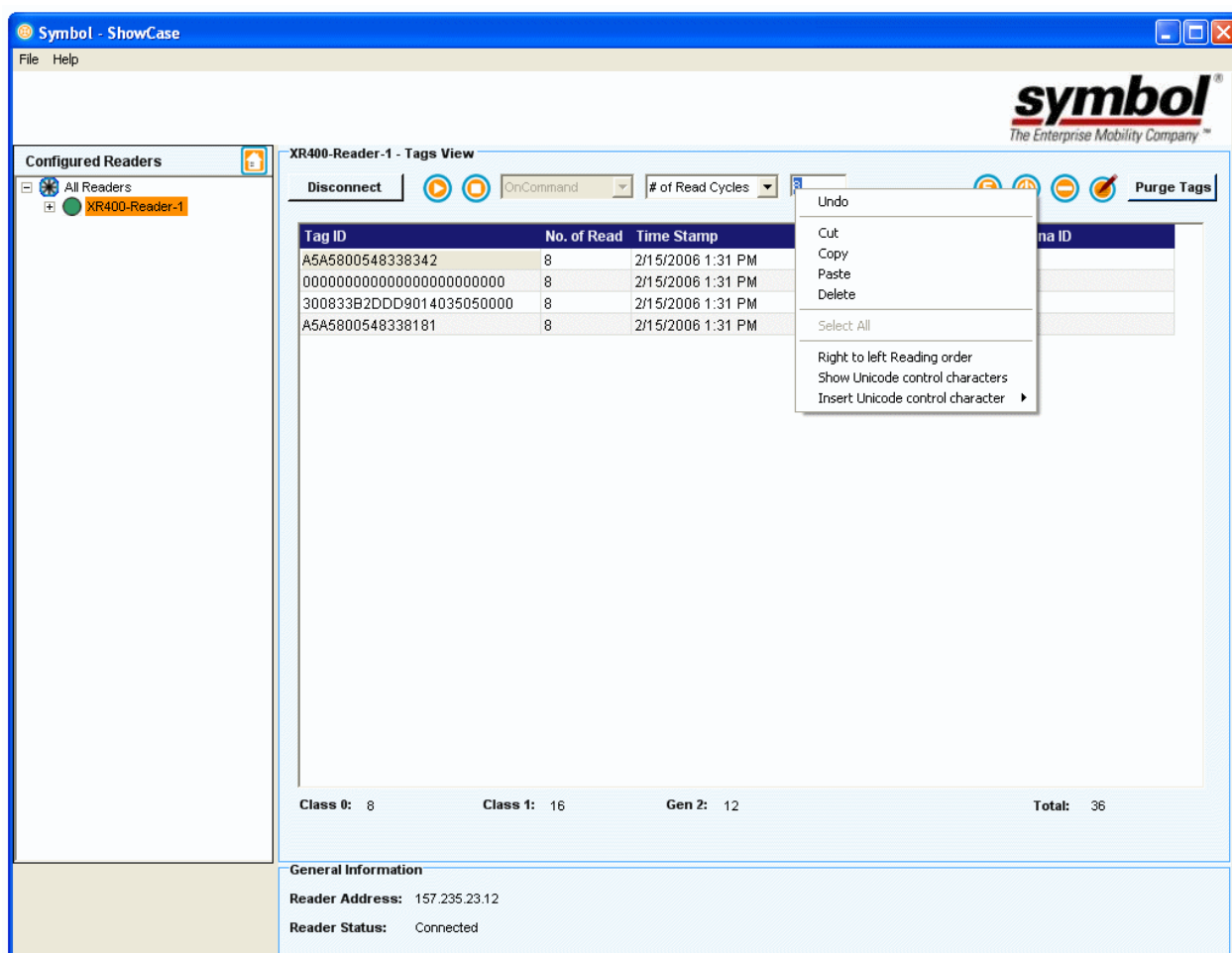


Figure 4-12. Functions Dropdown Menu Window

2. Click a menu item to perform the function, see [Table 4-2](#) for function descriptions.

Table 4-2. Functions Dropdown Menu

Function	Description
Undo	Removes the last change to the selected field.
Cut	Deletes the selected item from the selected field and copies the item into computer memory.
Copy	Copies the selected text into computer memory.
Paste	Pastes text from computer memory into selected field. Note that the function is not enabled for fields that cannot accept inputs.
Delete	Deletes the selected item.
Select All	Function is not enabled
Right to Left Reading Order	Switches to right justify.
Show Unicode control characters	The show unicode control characters function is not enabled.
Insert Unicode control characters	The insert unicode control characters function is not enabled.

5

Repair / Remove / Update

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Introduction

The ShowCase *InstallShield Wizard* enables repair and/or removal of ShowCase. This chapter describes how to repair and/or remove ShowCase.

Download the ShowCase Software

The *ShowCaseInstall.exe* file is required for the *Repair / Remove / Update* procedures. If the original version is no longer available or for the latest update of the *ShowCaseInstall.exe* file, download the file from RFID downloads on the Symbol Developer Zone.

1. Create a folder on a host computer and name it: \ShowCaseInstall.
2. Login to the Symbol Developer Zone at <http://www.devzone.symbol.com>.
3. From the *Developers Downloads* page, select *RFID Products* and select the *ShowCase Software* download page. Download the software zip file onto the host computer (\ShowCaseInstall directory) and unzip the file.

Repair ShowCase

The ShowCase repair software is included in the *Symbol - ShowCaseInstall.exe* file. Download the *ShowCaseInstall.exe* file (see [Figure on page 5-3](#)) and follow the provided steps to repair the ShowCase software.

1. Launch the setup wizard: *Symbol - ShowCaseInstall.exe*. The *ShowCase InstallShield Startup* window appears and automatically launches the *Preparing Setup* window.

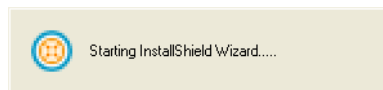


Figure 5-1. ShowCase InstallShield Startup Window

2. The *Preparing Setup* window automatically launches the *ShowCase Modify, Repair or Remove* window (see [Figure 5-3 on page 5-4](#)).

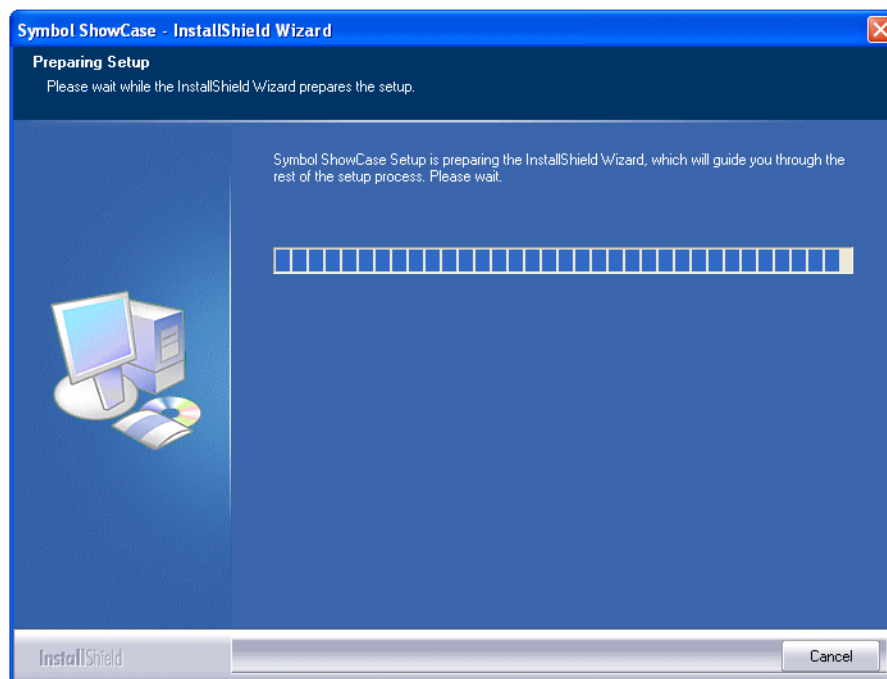


Figure 5-2. Preparing Setup Window

- When the setup is complete the *ShowCase Modify, Repair or Remove* window appears.

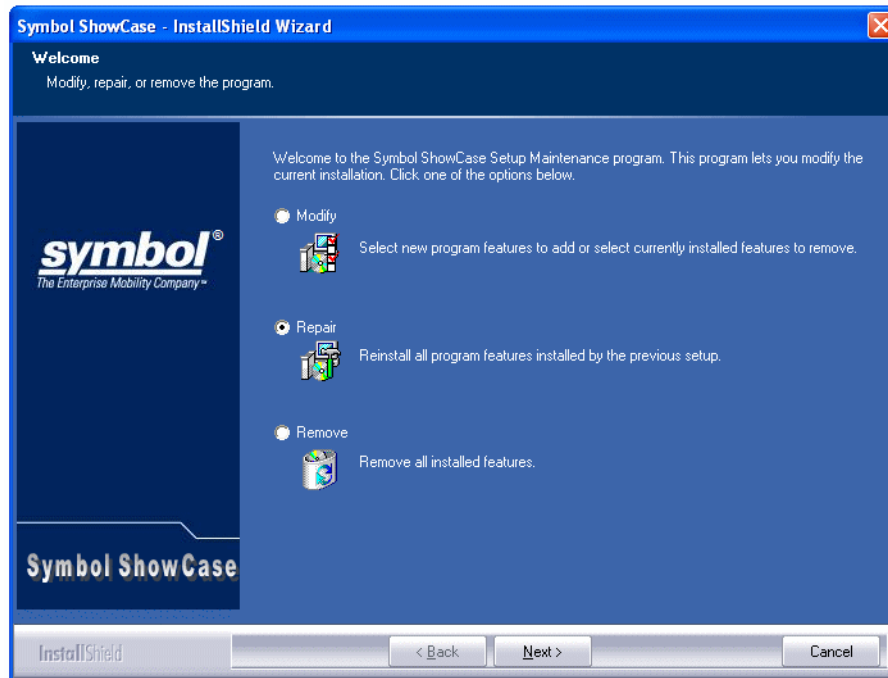


Figure 5-3. ShowCase Modify, Repair, or Remove Window

- To repair, select the Repair radio button and click **Next** the *ShowCase Repair* window appears.

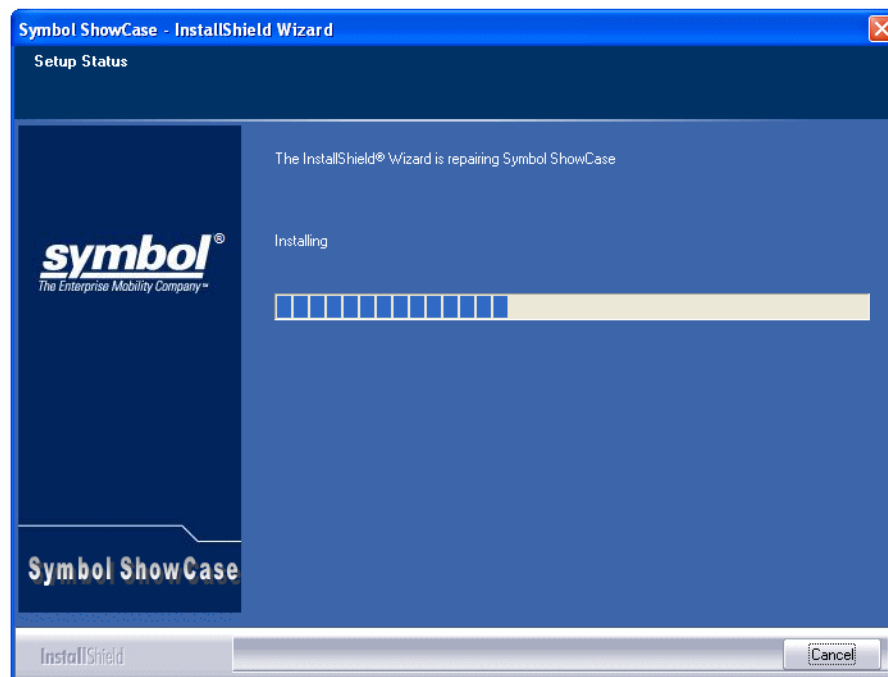


Figure 5-4. ShowCase Repair Window

5. When the repair is complete the *ShowCase Maintenance Complete* window appears.

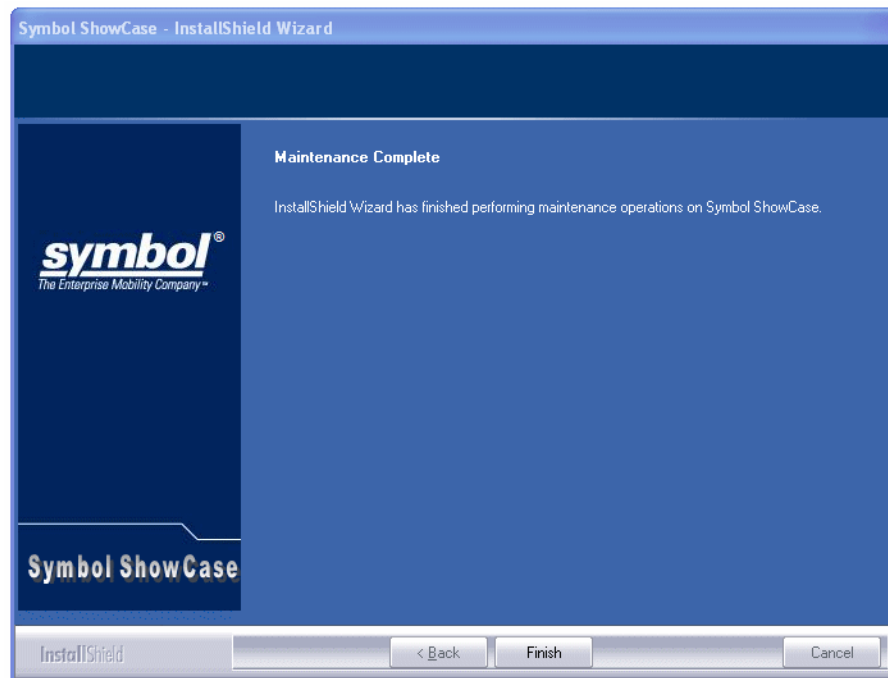


Figure 5-5. ShowCase Maintenance Complete Window

6. Click **Finish** to complete the repair.

Remove ShowCase

The ShowCase remove software is included in the *Symbol - ShowCaseInstall.exe* file. Download the *ShowCaseInstall.exe* file (see [Download the ShowCase Software on page 5-3](#)) and follow the provided steps to uninstall the ShowCase software.

1. Double click the *ShowCaseInstall.exe* file to launch the setup wizard. The *ShowCase InstallShield Wizard* automatically launches the *Preparing Setup* window.

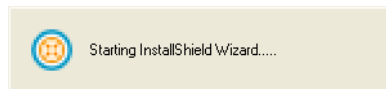


Figure 5-6. ShowCase InstallShield Startup Window

2. The *Preparing Setup* window automatically launches the *ShowCase Modify, Repair or Remove* window (see [Figure 5-8 on page 5-7](#)).

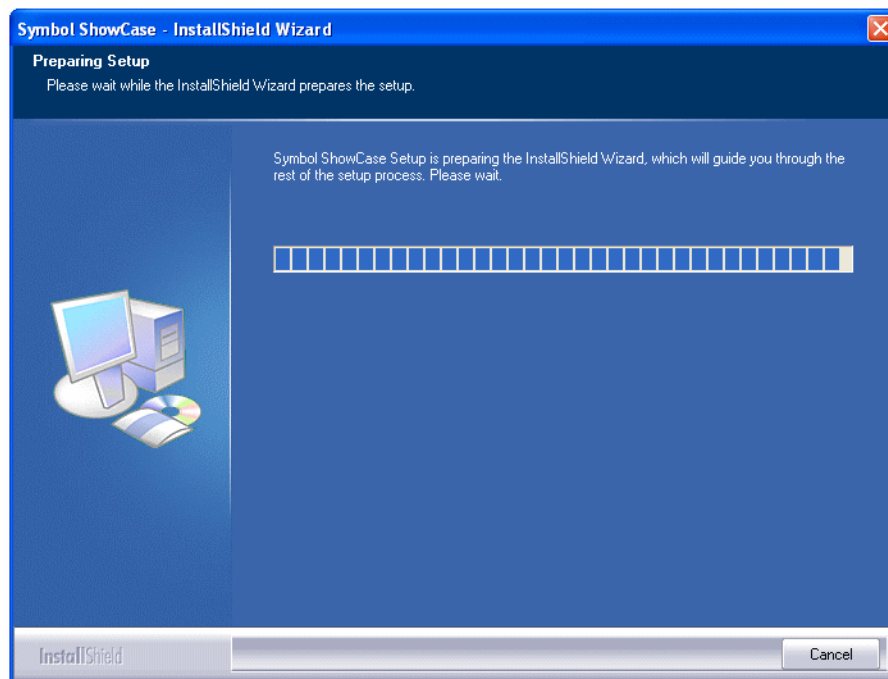


Figure 5-7. Preparing Setup Window

- When the setup is complete the *ShowCase Modify, Repair or Remove* window appears.

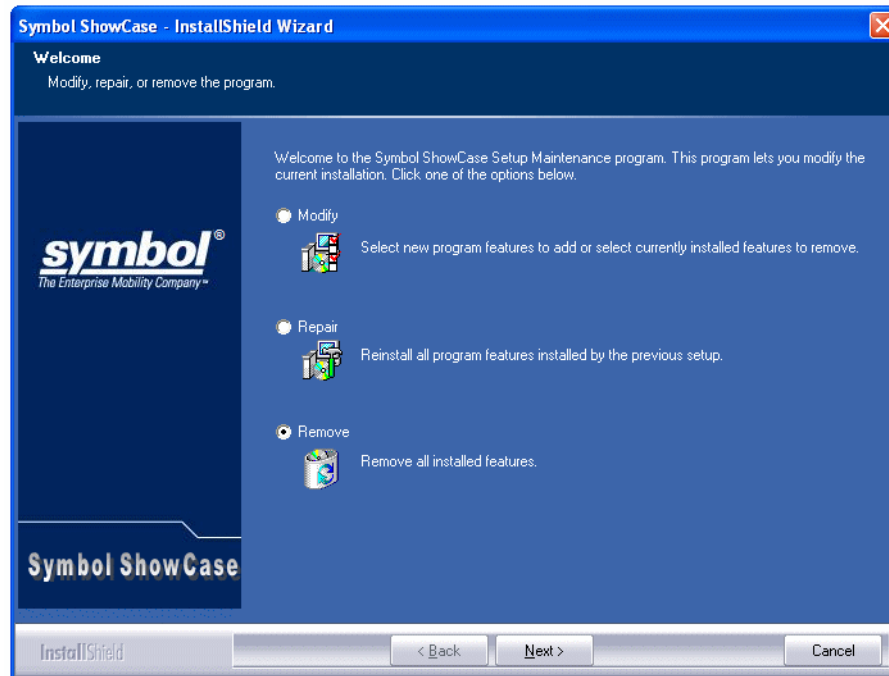


Figure 5-8. ShowCase Modify, Repair, or Remove Window

- To remove, select the *Remove* radio button and click **Next** the *ShowCase Remove Confirmation* window appears.

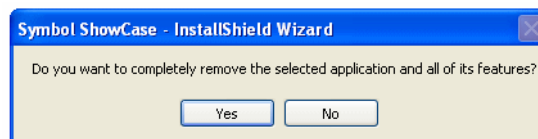


Figure 5-9. ShowCase Remove Confirmation Window

- Click **Yes** to continue. The ShowCase InstallShield launches the uninstall application.

6. The *Uninstall* window appears.

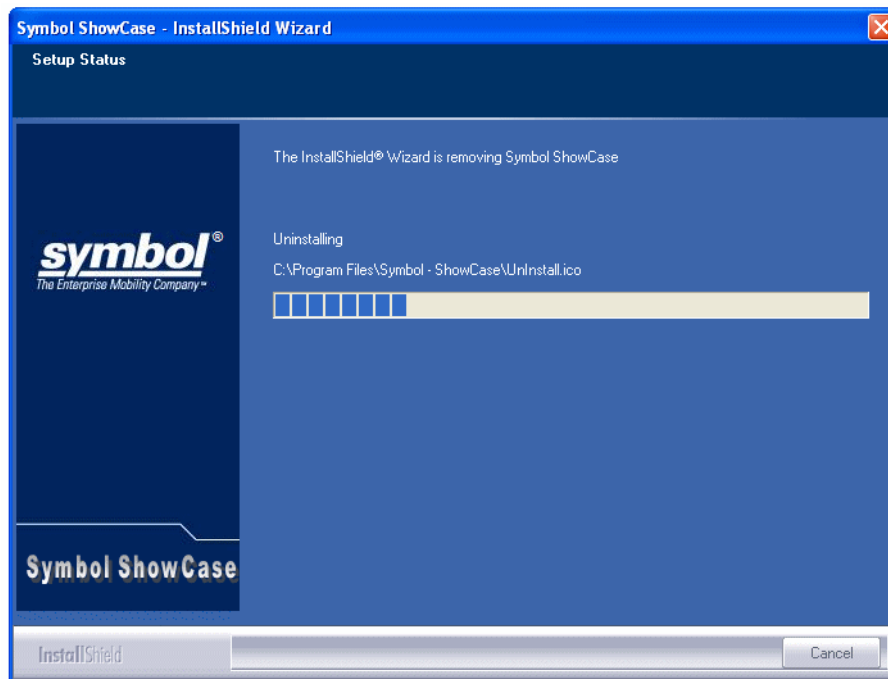


Figure 5-10. Uninstall Window

7. The *Uninstall* window automatically launches the *Uninstall Complete* window when the uninstall is completed.

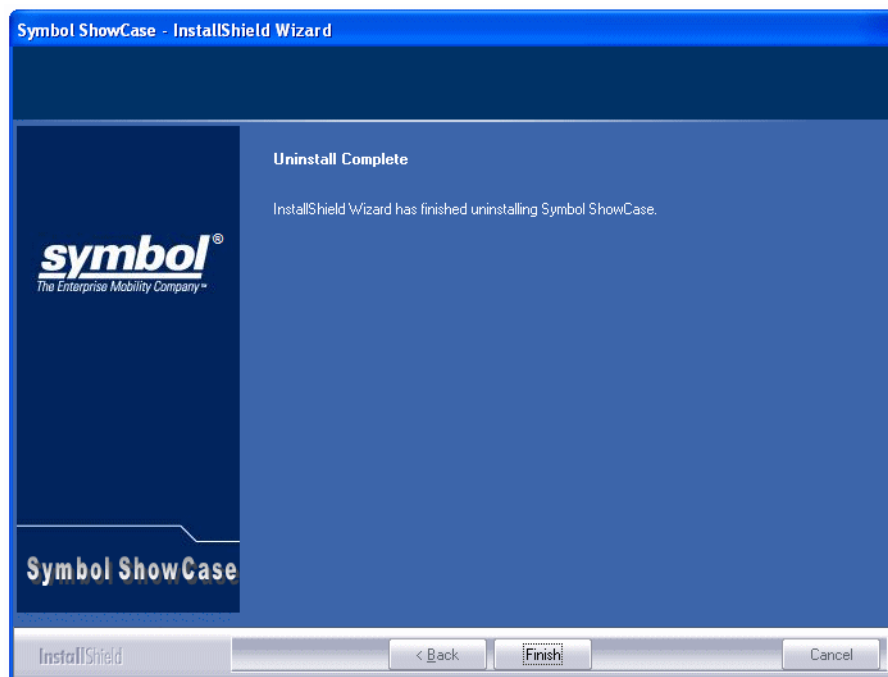


Figure 5-11. Uninstall Complete Window

8. Click **Finish** to complete the removal.

Update ShowCase

To update ShowCase:

1. Download the new *ShowCaseInstall.exe* file (see [Download the ShowCase Software on page 2-3](#)).
2. Follow the provided steps to install the updated version of ShowCase software (see [Installing ShowCase on page 2-3](#)).

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