OnGuard® 7.4

BadgeDesigner User Guide

LENEL United Technologies

Lenel® OnGuard® 7.4 BadgeDesigner User Guide
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Introduction

CHAPTER 1

Introduction to BadgeDesigner

BadgeDesigner is a unique graphic design program used to create badge layouts for use with ID CredentialCenter software. Permanent badges can be printed on CR-80 badge card media while temporary badges can be printed on regular 8 ½" x 11" sheets of paper.

Each BadgeDesigner badge layout can include the following types of elements or objects: text, graphics, barcodes, photos, signatures and shapes. Text and barcode objects can be linked to database fields.

Each badge layout is stored in the access control database using a unique layout name. A layout consists of a set of layout property settings, a set of badge objects and a set of attribute settings for each object. All of these layout elements can be added and edited via BadgeDesigner's easy-to-use graphical interface.

BadgeDesigner's flexibility allows you to work with either English or Metric measurements, rounded to 1/1000th inches or 1/100th millimeters.

Conventions Used in this Documentation

- Where a term is defined, the word is represented in *italics*.
- Field names and file names are shown in **bold**.
- Menus and menu choices are shown in ***bold italics***.
- Keyboard keys are represented in angle brackets. For example: <Tab>, <Ctrl>.
- Keyboard key combinations are written in two ways:
  - <Ctrl> + <Z> means hold down the first key, then press the second
  - <Alt>, <C> means press the first key, then press the second

Window buttons on the screen are represented in square brackets. For example: [OK], [Cancel].

Getting Started

Passwords

OnGuard includes strong password enforcement, which checks the user's password against password standards. This functionality is designed to enhance password security if single sign-on is not used. If single sign-on is used (automatic or manual), OnGuard does not enforce password standards. For more information on single sign-on, refer to Single Sign-On on page 15.

The system's strong password enforcement also checks the Lenel database user's password when logging into applications. Database user passwords apply only to Oracle and SQL databases. For information on changing your database password, refer to the Accounts and Passwords chapter in the Installation Guide.

Password Standards

When creating a strong password keep the following guidelines in mind:

- Passwords cannot be blank.
- Passwords cannot be the same as the user name (e.g. SA, SA).
- Passwords cannot be Lenel keywords.
- Although not required, your password should contain numbers, letters, and symbols. Spaces are also acceptable. (e.g. August 18, 2002).
- OnGuard user passwords are not case-sensitive.
- Database passwords conform to the rules of the specific database being used; passwords in SQL Server and Oracle are case sensitive.
- The maximum value for a strong password is 127 characters. The minimum value is 1.

Notes: For Oracle databases the following account username and passwords are not allowed to be used together:

System and Manager

Internal and Oracle

Sys and Change_On_Install

Change User Passwords

User passwords are checked every time a user logs into any application. After a user logs into an application he/she can change his/her user password.

1. From the ***Layout*** menu select ***Change Password***.
2. The Change Password window displays. Enter your old password and new password in the appropriate fields. Refer to the Password Standards on page 12 for guidelines in choosing a secure password.
3. A message confirms that you have successfully changed your password.
4. Click [OK].

Note: If you get a weak password message the next time you log into the application, carefully read the message. It may be telling you that your database password is weak and not your user password. To change your database password, refer to the Accounts and Passwords chapter in the Installation Guide.

Error Messages

Read weak password messages/warnings carefully to avoid confusion about whether your user password or database password is weak.

If you have a weak database password you will receive a warning every time you log into any application, until you change your database password. Although it is not recommended, you can acknowledge the warning and continue working in the application. This table describes the password-related error messages that may be generated and which password you need to correct.

- To correct the database password, refer to the Accounts and Passwords chapter in the Installation Guide.
- To correct the user password, select a password that meets the standards specified in Password Standards on page 12.

Warning message	Password to correct
Database password violations: Your password is a keyword that is not allowed. It is highly recommended that you change your password to meet our minimum password standards.	Database
Your password cannot be blank. Please enter a password.	User
User password violations: Passwords cannot be the same as the user name.	User
Your password is a keyword that is not allowed.	User

Accounts

Anyone who wishes to use OnGuard applications must enter a user name and password in order to access the software. The System Administrator should create a unique account for each user of the applications. The System Administrator can also, for each user, create a list of permissions, which specifies precisely which screens, fields, and buttons the user can access.

During initial installation of the application, default accounts are created. These include:

User name	Password	Type
sa	sa	system account
admin		sample
user		sample
badge		sample

These are provided as samples. You may change the passwords and use the accounts, or remove them. The exception to this is the system account, SA. By definition this account has permission to do anything in the system. A user with system access has unlimited access to the application. You cannot delete or change the system account except to modify the password, which you are strongly encouraged to do as soon as possible to discourage unauthorized use.

The first time you log into OnGuard to configure the application, you should log in as **SA** and your password should be **SA**.

Log In

This procedure describes how to log in without using single sign-on. For a description of single sign-on, refer to Single Sign-On on page 15. To log in using single sign-on, refer to Configure Single Sign-On on page 16.

1. In Windows, start the desired application.

   For more information, refer to “Using OnGuard on Supported Operating Systems” in the Installation Guide.
2. Your system may be configured to prompt you to select a database to log into. If it is not, proceed to the next step. If it is:
   a. In the **Database** drop-down, all ODBC system databases currently defined on your computer are listed. Select the database that you wish to use for your application.
   b. Click [OK].
3. The Log On window displays.
   a. In the **User name** field, type the user name assigned to you. When logging in for the first time, your user name is **SA**.
   b. In the **Password** field, type the password assigned to you. When logging in for the first time, your password is **SA**. Note that the characters you type do not appear in the field. Instead, for each character you type, an “*” displays. This is intended to protect against unauthorized access in the event that someone else can see the screen while you type.

      IMPORTANT: After logging in for the first time, you are strongly encouraged to modify the password for the system account as soon as possible to discourage unauthorized use.

   c. In the **Directory** field, select the directory that you wish to log into. For user accounts not using single sign-on, the default is “<Internal>.”
   d. Select the **Remember user name and directory** checkbox if you want the values you just entered in the **User name** and **Directory** fields to automatically be selected the next time that you log in.
   e. Click [OK].
4. Your system may be configured to prompt you to confirm that you are authorized to use the application. To accept the terms of the authorization warning click [Yes].
5. If segmentation is not enabled, skip this step. If segmentation is enabled:
   a. The Select Segment window opens. Select the segment you wish to log into.
   b. Click [OK].

Single Sign-On

Single sign-on simply means logging into OnGuard with the same user name and password that you use to log into Windows or logging into OnGuard using an LDAP user name and password for authentication. *LDAP* (Lightweight Directory Access Protocol) is a software protocol that enables you to locate businesses, people, files, and devices without knowing the domain name (network address).

Notes: Windows Authentication should be used when single sign-on is desired. In other scenarios, use Anonymous Authentication. For more information, refer to:

http://support.microsoft.com/kb/258063

and

http://msdn.microsoft.com/en-us/library/aa292114%28VS.71%29.aspx.

Single sign-on allows scripts using the DataConduIT API to authenticate. These scripts will be run under a Windows account. The account that is making the call to the API can be obtained easily this way, and the script can be restricted to those actions that the user is permitted to perform (using standard OnGuard permissions).

Note: The use of the explicit username and password for directory authentication to Windows is strongly discouraged. It is recommended that you do not store Windows passwords in the OnGuard system, since OnGuard uses reversible encryption and Windows does not. If explicit authentication is required, you should use an account that has view only permission to the directory in question.

It is possible to assign both an internal account and one or more directory accounts to a single user. Assigning both types of accounts increases the flexibility of the system during the authentication process. If the directory service is down or cannot be found from the workstation where the user is logging on, that user can instead use the internal account. Using both types of accounts means that you need to manage the internal account user names and passwords in addition to managing the directory accounts.

IMPORTANT: Allowing a user to log on in multiple ways increases the probability that the user's access to the system could be compromised. It is recommended that you standardize on either internal or directory accounts, but not both.

There are cases where assigning both an internal account and a directory account to a user may make sense. In a system where directory accounts are predominantly used, you may also assign an internal account to a user who needs to access the system from locations where the directory service is unavailable. If internal accounts are predominantly used, you may want to assign a directory account to a user so that the user does not need to enter in a password to log on.

Directory Accounts

To log into OnGuard using single sign-on, a user name, password, and directory are required. A *directory* is a database of network resources, such as printers, software applications, databases, and users. The following directories are supported by OnGuard: Microsoft Active Directory, Microsoft Windows NT 4 Domain, Microsoft Windows Local Accounts, and LDAP.

Automatic and Manual Single Sign-On

When a user account is configured for single sign-on, the user can log into OnGuard automatically or manually.

For example, with automatic single sign-on, users simply start OnGuard and they are automatically logged in under their Windows account and directory.

With manual single sign-on, users must manually enter their Windows or LDAP account information (user name and password). Users also have the option of selecting a different configured directory.

If single sign-on is not used, users manually enter a user name and a password that is different from their Windows or LDAP password. The directory is hard-coded to refer to the internal OnGuard user directory.

Notes: Manual single sign-on can be used with the following directories: Microsoft Active Directory, Microsoft Windows NT 4 Domain, and LDAP.

Automatic single sign-on can be used with every directory supported by OnGuard except LDAP because it doesn't provide all the account information required.

Configure Single Sign-On

By default, user accounts do not use sign-on. To configure single sign-on the System Administrator must add a directory and link a user account to the directory.

Notes: For more information, refer to "Add a Directory" in the Directories folder chapter of the System Administration or ID CredentialCenter User Guide.

For more information, refer to "Link a User Account to a Directory Account" in the Users folder chapter of the System Administration or ID CredentialCenter User Guide.

Log In Using Automatic Single Sign-On

Automatic single sign-on is supported with Windows domain accounts.

1. In Windows, start the desired application.

   For more information, refer to "Using OnGuard on Supported Operating Systems" in the Installation Guide.
2. Your system may be configured to prompt you to select a database to log into. If it is not, proceed to step 3. If it is:
   a. In the **Database** drop-down, all ODBC system databases currently defined on your computer are listed. Select the database that you wish to use for your application.
   b. Click [OK].
3. If your Windows account is linked to a user, a message will be displayed that says, "Attempting to automatically log you on using your Windows account. To bypass this, hold down SHIFT." To automatically be logged in, do nothing.
4. Your system may be configured to prompt you to confirm that you are authorized to use the application. To accept the terms of the authorization warning, click [Yes].
5. If segmentation is not enabled, skip this step. If segmentation is enabled:
   a. The Select Segment window opens. Select the segment you wish to log into.
   b. Click [OK].

Log In Using Manual Single Sign-On

Both users who want to log into OnGuard using an LDAP user name and password for authentication and users who want to log in using a Windows domain account can do so using manual single sign-on.

1. In Windows, start the desired application.

   For more information, refer to "Using OnGuard on Supported Operating Systems" in the Installation Guide.
2. Your system may be configured to prompt you to select a database to log into. If it is not, proceed to step 3. If it is:
   a. In the **Database** drop-down, all ODBC system databases currently defined on your computer are listed. Select the database that you wish to use for your application.
   b. Click [OK].
3. If your Windows account is linked to a user, a message will be displayed that says, "Attempting to automatically log you on using your Windows account. To bypass this, hold down SHIFT."

   To manually login or to login using a different user name and password, hold down the <Shift> key. The Log On window opens.
   a. In the **Directory** field, select the directory that you wish to log into. The default is "<Internal>."
   b. In the **User name** field, type the Windows user name assigned to you. Do not enter the domain\user name just enter your user name.
   c. In the **Password** field, type the Windows password assigned to you.
   d. Select the **Remember user name and directory** checkbox if you want the values you just entered in the **User name** and **Directory** fields to automatically be selected the next time that you log in.
   e. Click [OK].

Note: Your system may be configured to prompt you to confirm that you are authorized to use the application. To accept the terms of the authorization warning, click [Yes].

4. If segmentation is not enabled, skip this step. If segmentation is enabled:
   a. The Select Segment window opens. Select the segment you wish to log into.
   b. Click [OK].

Troubleshoot Logging In

If you attempted to log in and were unable to do so, make sure that the following conditions have been met:

- You entered a correct user name/password and specified the correct directory.
- If your system is configured to display an authorization warning, you accepted the terms.
- A valid license is installed.
- You have permission to use the application.
- If you attempted to log in and were unable to do so, make sure the following conditions have been met:
  - You entered the correct user name and password for the selected directory of a user with permission to use the application.
  - If the system is configured to display an authorization warning, then you accepted the terms.
  - Verify your License Server settings (refer to the *Configuration Editor* appendix in the *Installation Guide*). The LS License Server service must be started on the specified Host.
  - Log into the License Administration application to verify a valid license is installed.

- Software based licenses must be activated.
- USB licenses must have License Key Drivers installed.
- If using single sign-on, ensure the pc user you are logged in as is linked to an internal OnGuard user through an operational directory.

Assigning Directory and Internal Accounts to the User

It is possible to assign both an internal account and one or more directory accounts to a single user. Assigning both types of accounts increases the flexibility of the system during the authentication process. Meaning, if the directory service is down or cannot be found from the workstation where the user is logging on, then the user can use the internal account instead.

However, using both types of accounts means that you need to manage the internal account user names and passwords in addition to managing the directory accounts. Allowing a user to log on in multiple ways increases the probability that the user's access could be compromised. For that reason, it is recommended that you standardize on either internal or directory accounts, but not both.

There are cases where assigning both an internal account and a directory account to a user may make sense. In a system where directory accounts are predominantly used, you may also assign an internal account to a user who needs to access the system from locations where the directory service is unavailable. If internal accounts are predominantly used, you may want to assign a directory account to a user for that user's convenience, so that the user does not need to enter in a password to log on.

Set User Permissions for BadgeDesigner Access

The System Administrator should create a unique account for each user. The System Administrator can also create a list of permissions, which specifies precisely which screens, fields and buttons each user can access. BadgeDesigner permissions are set via the System Administration or ID CredentialCenter software application.

1. Log into System Administration or ID CredentialCenter.
2. From the ***Administration*** menu select ***Users***.
3. Refer to the following table for additional navigation instructions and settings you should apply For more information, refer to the Configure User Permissions in the System Administration User Guide.

Required Permissions for BadgeDesigner

BadgeDesigner operation/feature enabled	**Navigation sequence**	**Settings required**
ALL BadgeDesigner Operations	System Permission Groups tab > Software Options - Applications > **BadgeDesigner** AND Cardholder Permission Groups tab > Badges > **Badge types and layouts**	 AND 

Required Permissions for BadgeDesigner (Continued)

BadgeDesigner operation/feature enabled	Navigation sequence	Settings required
• Database Login • New Layout, Export Layout	Cardholder Permission Groups tab > Badges > **Badge types and layouts**	
Save Layout and Rename Layout	Cardholder Permission Groups tab > Badges > **Badge types and layouts**	
Save Layout As	Cardholder Permission Groups tab > Badges > **Badge types and layouts**	 OR 
	Note: If permission to “Modify” is given (and not “Add”), the user will only be able to perform the “Save Layout As” operation to overwirte existing layouts.	
Import Layout	Cardholder Permission Groups tab > Badges > **Badge types and layouts**	
Delete Layout	Cardholder Permission Groups tab > Badges > **Badge types and layouts**	
Multimedia Capture window (Capture layout graphic via FlashPoint/ MCI video or WDM video)	Cardholder Permission Groups tab > Capture > **Photo**	
Multimedia Capture window (Capture layout graphic via digital camera or scanner)	Cardholder Permission Groups tab > Capture > **Chromakey**	
Multimedia Capture window (Image processing)	Cardholder Permission Groups tab > Capture > **Image processing**	
Multimedia Capture window (Effects gallery tab)	Cardholder Permission Groups tab > Capture > **F/X gallery**	

Log Out of the Application

1. To log out of the application, select ***Log Off*** from the ***Layout*** menu.
2. If a layout is open, it automatically closes.If there are unsaved changes you will be asked if you want to save the changes before the map closes.

Note: After you log out of the application the main window remains opened but most of the toolbar and menu options are dimmed. To access all the application’s features you must log in again.

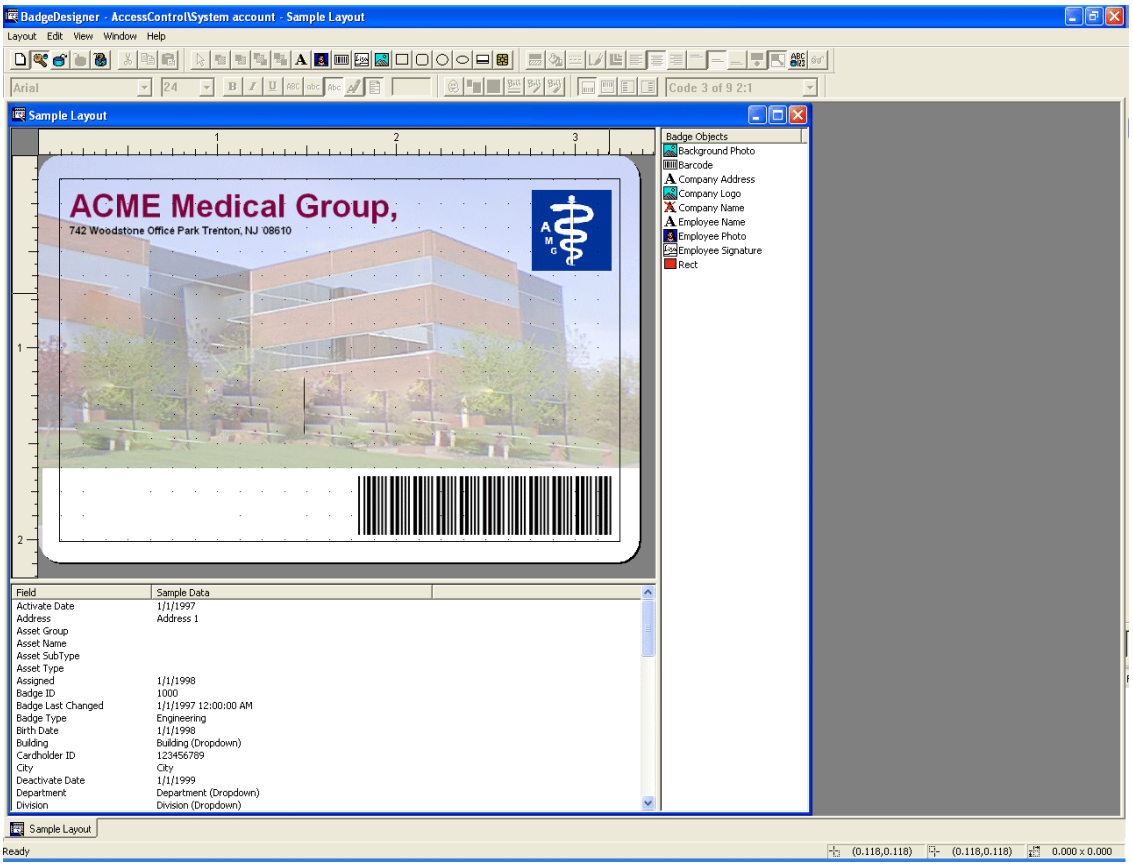
Exit the Application

The main window can be closed using either of the following methods:

- Select ***Exit*** from the ***Layout*** menu.
- Double-click the icon located in the upper left corner of the title bar. If you are prompted to log off click the [Yes] button.
- Single click the icon located in the upper left corner of the title bar and select Close. If you are prompted to log of click the [Yes] button.
- Click the close button in the window's upper right corner. If you are prompted to log of click the [Yes] button.

CHAPTER 2

BadgeDesigner Main Window



Menus and Toolbars

The menu bar is a horizontal list of options that appears at the top of the main window. Each option has a pull-down menu.

A toolbar is a strip of buttons that is positioned by default just below the menu bar on the main window. You can:

- Change toolbars from anchored to floating:

  The toolbars are anchored by default. Anchored toolbars are displayed in horizontal rows below the menu bar. Anchored toolbars can be changed to floating toolbars, which allows the toolbar to be repositioned anywhere in the main window. For more information, refer to How to Use the Toolbars on page 27.

- Control which toolbars are displayed:

  Which toolbars are displayed is determined in the ***Toolbars*** sub-menu of the ***View*** menu. By default, all toolbars are displayed. You can control which toolbars are displayed by selecting or deselecting the toolbar entries. For more information, refer to How to Use the Toolbars on page 27.

Menus

The following is a description of the pull-down menu options available from the main menus and the corresponding toolbar button.

Layout menu

New

 Creates a new badge layout.

New From Template...

 Opens the Load Template window for you to choose the print media template you are using for the badge design.

Open

 Opens an existing badge layout.

Gallery

Displays thumbnail views of all layouts in the database. Opens the Select Graphic from Database window, from which badge layouts can be opened, renamed, deleted, imported or exported.

Close

Closes the badge layout in the active BadgeDesigner window.

Save

 Saves the active badge layout to the database.

Save As

 Saves the active badge layout with a new name.

Update Database Field List

Re-queries the database for new fields defined in FormsDesigner and new values defined using List Builder (located in System Administration or ID CredentialCenter). The Sample Data view is then updated with this information.

numbered options

Displays a history of the last four layouts previously opened. Select the option to open it.

Log On

 Opens the BadgeDesigner Login window, enabling you to log back in to the BadgeDesigner database.

Change Password

Opens the Change Password dialog, enabling you to change your password (you must have the corresponding system level permission to do so.)

Log Off

 Logs you out of the BadgeDesigner database.

Exit

Exits the BadgeDesigner application.

Edit menu

Cut

 Cuts selected objects from the badge layout.

Copy

 Copies selected objects onto a clipboard.

Paste

 Pastes objects (which are currently on the clipboard) into the badge layout.

Delete

Deletes selected objects from the badge layout.

Insert

Adds objects to the badge layout. The following types of objects can be added to a badge layout: barcodes, photos, signatures, circles, ellipses, graphics, magnetic stripes, rectangles, round rectangles (rectangle with rounded corners), text and smart chip contacts.

Magnetic stripe and smart chip contacts are designed to block out printing of any objects that overlap them.

Rename Object

Renames selected objects in the badge layout.

Object Text
Launches the Text Object dialog box.

Select Graphic
Launches the Gallery window.

Select Previous
Selects the object that is before the currently selected object in the badge layout's object layer order. For more information, refer to Object Layer Numbers on page 58.

Select Next
Selects the object that is after the currently selected object in the badge layout's object layer order.

Select All
Selects all objects in the badge layout.

Deselect All
 Deselects all objects in the badge layout.

Move Forward
 Moves the selected object up one layer in the badge layout's object layer order.

Move Back
 Moves the selected object back one layer in the badge layout's object layer order.

Move to Front
 Moves the selected object to the highest layer in the badge layout's object layer order.

Move to Back
 Moves the selected object to the lowest layer in the badge layout's object layer order.

View menu

Toolbars
Toggles (on/off) the display option for each of the following toolbars: Layout, Drawing, General Formatting, Graphic Formatting, Text Formatting, and Barcode Formatting.

Status Bar
Toggles (on/off) the display option for the BadgeDesigner status bar.

Layout Properties
Opens the Layout Properties window, from which layout specifications such as badge size, orientation and unit of measure are set.

Object Properties

 Opens the Object Properties window for the selected object in layout view. Allows you to edit the properties of the badge object(s).

Options

Launches the Options dialog, where you can configure behavior for your workstation.

Window menu

Cascade

Displays each open badge layout in separate windows, one on top of the other, with the active layout in the topmost window.

Tile Horizontally

Displays each open badge layout in separate windows, one under the other, with the active layout in the uppermost window.

Tile Vertically

Displays each open badge layout in separate windows, next to the other, with the active layout in the left most window.

Close All

Closes all open badge layouts.

Switch Panes

Switches back and forth between the Layout view, the Sample Data view and the Object List view.

numbered options

Displays the titles of all the badge layouts currently open. A checkmark is displayed next to the active layout.

Help menu

Contents

Starts BadgeDesigner's online help application.

Search

Allows the online help to be searched for a specific topic.

About BadgeDesigner

Displays software version and copyright information for BadgeDesigner.

Toolbars

The BadgeDesigner window contains six toolbars. Each toolbar contains a set of buttons that are used to perform specific BadgeDesigner application functions. Most toolbar buttons perform the same function as a menu command on one of the BadgeDesigner main menus. When BadgeDesigner is started, these toolbars are "docked," or positioned, underneath the menu bar.

Layout toolbar

Contains buttons to create, open and save badge layouts as well as cut, copy and paste objects. For more information, refer to Chapter 4: Create, Open and Save Layouts on page 37.

Drawing toolbar

Contains buttons to add and select badge objects in the badge layout as well as move badge objects. For more information refer to Chapter 6: Add, Select and Delete Badge Objects on page 57. and refer to Chapter 7: Move, Rename, Resize, and Rotate Badge Objects on page 67..

General Formatting toolbar

Contains buttons to set fill and border attributes for badge objects and to set background transparency and scale attributes for photo, signature, graphic and text objects. For more information, refer to Chapter 8: Set General Formatting Attributes on page 73.

The General Formatting toolbar also contains a button to modify the text value for text objects. For more information, refer to Insert Fields into Text Objects on page 89.

Graphic Formatting toolbar

Contains buttons used to set ghosting, aspect and tiling attributes for photo, signature and graphic objects and to set pen width and color attributes for signature objects. For more information, refer to Chapter 9: Set Graphic, Photo and Signature Attributes on page 79.

Text Formatting toolbar

Contains buttons used to set font, font point size, font style, display case, color, word wrap and maximum character attributes for text objects. For more information, refer to Set Text Attributes on page 85.

Barcode Formatting toolbar

Contains buttons used to set rotation and type attributes for barcode objects. For more information, refer to Chapter 12: Set Barcode Attributes on page 101.

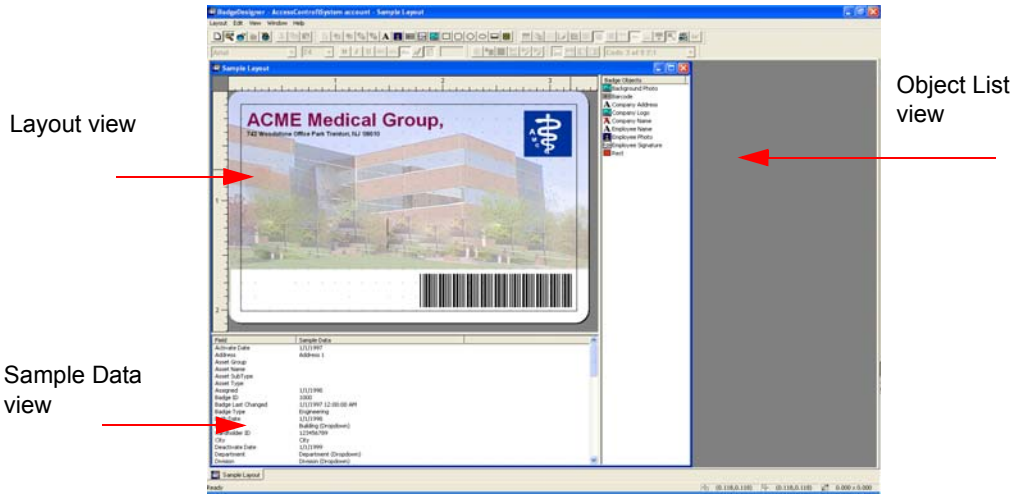
How to Use the Toolbars

If you want to:	Procedures:
Display the name of a toolbar button (tool tip)	Point to the toolbar button with the mouse (without clicking).
Use a toolbar button to perform a command or function	Click the toolbar button with the left mouse button.
Change a toolbar from “anchored” to “floating” or from “floating” to “anchored”	Double-click any empty area of the toolbar.
Rearrange floating toolbars	1. Click in an empty area of the toolbar. 2. Drag the toolbar to its new position. 3. Release the mouse button to anchor it.
Rearrange anchored toolbars	1. Click in an empty area of the toolbar. 2. Drag the toolbar to its new position. 3. Release the mouse button.
Hide or display a toolbar	1. From the ***View*** menu select ***Toolbar***. 2. A sub-menu displays, containing the name of each BadgeDesigner toolbar. Click the desired toolbar name. (A checkmark appears next to each toolbar that is not currently hidden.) Toolbars can be toggled in order to be displayed or hidden.

BadgeDesigner Views

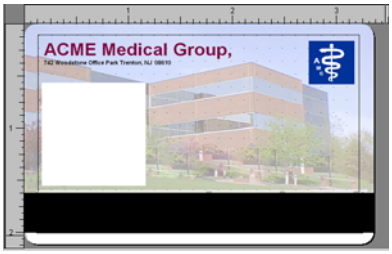
The BadgeDesigner main window contains three work areas or views that are used to display information about badge objects. The Layout view displays each badge object in the format, position and size in which it will be printed. The Object List view displays the badge objects in list form (in order by object name). The Sample Data view contains data fields and sample data. These views are updated simultaneously - when an object is selected in the Layout view, it is automatically selected in the Object List view and vice-versa.

Objects can be selected, renamed and deleted using the Layout or Object List views, but objects can be added using the Layout view only.



Layout View

The Layout view displays the badge layout template - it is the main work area in which the badge layout is actually created. Objects are added to the badge layout template via the Layout view.



Ruler

Horizontal and vertical guides used to help position and size objects in the badge layout template. Top-left intersection is 0,0. Unit of measure is inches or millimeters.

To set the unit of measure select ***Layout Properties*** from the ***View*** menu. Click the Editor tab and set the unit of measure in the appropriate field.

Page Margin

Non-printing guides used to show where the top, bottom, left and right page margins are set for the badge layout.

To set the Page Margin select ***Layout Properties*** from the ***View*** menu. Click the Layout tab and set the page margins in the appropriate fields.

Grid

Non-printing dotted lines used to help position and size objects on the badge layout template. A grid can be used to automatically align or “snap” objects to nearest grid line or the grid can be hidden when not needed.

To change the grid settings select ***Layout Properties*** from the ***View*** menu. Click the Editor tab and select the appropriate check boxes.

Right-click Menu Options in Layout View

If you right-click while your cursor is in Layout view the following shortcut options are available:

View Object Text

Opens the Text window, from which static text data and variable database data specifications can be set for selected text and barcode objects. The text or barcode object must be selected for this right-click option to be available.

Select Graphic

Opens the Select Graphic from Database window, from which badge layouts can be opened, renamed, deleted, imported or exported. A graphic must be selected for this right-click option to be available.

Rename

Allows you to rename an object listed in the Badge Objects view. An object must be selected for this right-click option to be available.

Cut

Removes or cuts the object from the layout view and places it on a clipboard. An object must be selected for this right-click option to be available.

Copy

Copies an object onto a clipboard. An object must be selected for this right-click option to be available.

Insert

Adds objects to the badge layout. The types of objects include: text, graphics, barcodes, photos, signatures, rectangles, round rectangles, circles and ellipses.

Paste

Pastes objects (which are currently on the clipboard) into the badge layout.

Delete

Deletes selected objects from the badge layout.

Database

Saves the badge layout to the database.

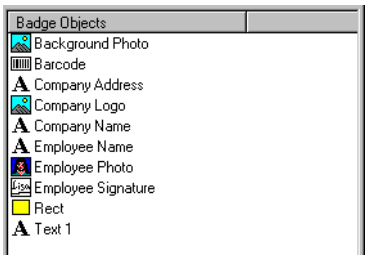
Properties

Opens the Layout Properties window, from which specifications such as badge size, orientation and unit of measure are set. For more information, refer to Chapter 5: Set Layout Properties and View Options on page 41.

Object List View

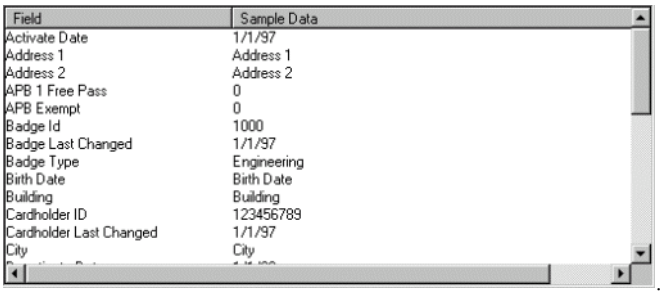
The Object List view is helpful for selecting objects that have been placed behind other objects (layered) in the badge layout template. The Object List view displays small object icons and object names for each object in a badge layout. Objects are listed in alphabetic order by object name.

If you right-click with the cursor in Object List view, the same options are available as when you right-click in Layout view. For more information, refer to Right-click Menu Options in Layout View on page 28.



Sample Data View

The Sample Data view displays the various fields and sample cardholder data that can be used in the badge layout. Its function resembles the Sample Field Data tab in the Layout Properties folder. For more information, refer to Sample Field Data Form on page 50.



Field	Sample Data
Activate Date	1/1/97
Address 1	Address 1
Address 2	Address 2
APB 1 Free Pass	0
APB Exempt	0
Badge Id	1000
Badge Last Changed	1/1/97
Badge Type	Engineering
Birth Date	Birth Date
Building	Building
Cardholder ID	123456789
Cardholder Last Changed	1/1/97
City	City

Field

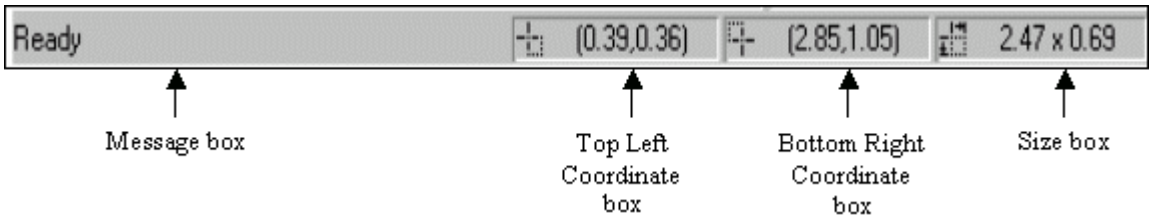
Displays the external field names for each standard cardholder field and custom UDF (user-defined field) in the BadgeDesigner database that can be linked to a badge object.

Sample Data

Displays sample data values for each BadgeDesigner database field. You can also edit the default values. Highlight the sample, edit the data as required, then press <Enter>, <Arrow Up> or <Arrow Down> to set the value.

Status Bar

The BadgeDesigner window contains a Status Bar that displays the size and location information of selected objects in the badge layout template.



Message box

Displays information about the selected menu command or toolbar button or about a function in progress.

Top Left Coordinate box
Displays the offset, in inches or millimeters, of the top left corner of the selected object in the badge template layout.

Bottom Right Coordinate box
Displays the offset, in inches or millimeters, of the bottom right corner of the selected object in the badge template layout.

Size box
Displays the height and width, in inches or millimeters, of the selected object.

Hide/Display the BadgeDesigner Status Bar

From the ***View*** menu select ***Status Bar*** to hide or display the status bar.

Note: A check mark appears next to the Status Bar menu option if the status bar is not currently hidden.

Design a Badge

CHAPTER 3

Design a Badge Overview

The BadgeDesigner main window opens automatically when the BadgeDesigner application starts. From this window you can create badge layouts and edit them.

Designing a Badge

Use the following procedures for designing a badge.

Create and Save Badge Layouts

The first step in creating a new badge layout is to open a new layout. Once a new layout is open, it can be assigned a unique badge layout name and saved to the database. For more information, refer to Chapter 4: Create, Open and Save Layouts on page 37.

Set Layout Properties

The next step is to set the layout specifications or layout properties. Layout properties include badge size, orientation, unit of measure specifications and optional magnetic stripe specifications. For more information, refer to Chapter 5: Set Layout Properties and View Options on page 41.

Using Avery Badge Templates

BadgeDesigner supports the use of Avery print media in the badge design process and a number of different options are available for you to choose from.

To use Avery badge templates in BadgeDesigner:

1. From the ***Layout*** menu, select ***New From Template***. The Load Template window is displayed.
2. Choose the template that matches the print media you are using.
3. Click [OK].

The following Avery products are compatible with BadgeDesigner:

- Avery® 2940 Self-Adhesive Name Badge Labels™

- Avery® 2941 Self-Adhesive Name Badge Labels™
- Avery® 2942 Clean Edge Name Badges, Business Card Size™
- Avery® 2943 Clean Edge Name Badges, Business Card Size™
- Avery® 2944 Clean Edge Name Badges, Convention Size™
- Avery® 2945 Clean Edge Name Badges, Convention Size™
- Avery® 2946 Laminated Name Badges & Self-Adhesive Clips, Business Card Size™
- Avery® 2951 Laminated Name Badges & Self-Adhesive Clips, Business Card Size™
- Avery® 2947 Fold & Clip Name Badges, Landscape, Business Card Size™
- Avery® 2948 Fold & Clip Name Badges, Portrait, Business Card Size™
- Avery® 2949 Fold & Clip Name Badges, Landscape, Convention Size™
- Avery® 2960 Direct Thermal Self-Adhesive Name Badge Labels™ (Roll)
- Avery® 2961 Direct Thermal Fold & Clip Name Badges, Landscape™ (Roll)
- Avery® 2962 Direct Thermal Fold & Clip Name Badges, Portrait™ (Roll)
- Avery® 2990/2992 Label for Access Control Card - Landscape
- Avery® 2990/2992 Label for Access Control Card - Portrait
- Avery® 2991/2993 Label for Access Control Card - Portrait
- Avery® W5000 Plastic card + Dry peel Clear Media - Landscape
- Avery® W5000 Plastic card + Dry peel Clear Media - Portrait
- Avery® W7100/W9100 Name Badge Media with Hole - Two-Sided - Landscape
- Avery® W9150 Name Badge Media without Hole - Two-Sided - Landscape
- Avery® W9150 Name Badge Media without Hole - Two-Sided - Portrait
- CR-80
- CR-90
- CR-100

Managing Badge Layouts

After the badge layout is created you can customize the layout to meet your specific needs. You can move, rename and resize badge layouts, set object attributes and even program badge objects.

The following types of badge objects can be added to a badge layout: text, graphics, barcodes, cardholder photos, cardholder signatures, magnetic stripes, smart chip contacts and various shapes. A badge layout can contain any combination, size and number of these object types.

When an object is added to a badge layout, it is automatically assigned a set of object attributes including size, position, fill style, fill color, border style, border color and width. These object attributes can be edited at any time during the badge design process. For example, each object is automatically assigned an object name. However, you may rename any object, to assign your own meaningful names to the objects in your badge layout.

When you program a badge (template), you select a badge object attribute to automatically populate with cardholder specific information when the badge is printed. For example, you can program a badge template so that when a badge is printed, an object attribute such as the cardholder's department prints a different color depending on the department they are in.

CHAPTER 4

Create, Open and Save Layouts

BadgeDesigner layouts are created via the Layout view and saved in the BadgeDesigner database.

Create a New Badge Layout

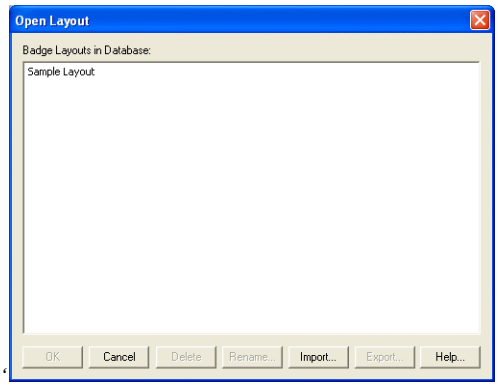
To create a new BadgeDesigner badge layout choose one of the following:

- Menu command: ***Layout >New***
- Shortcut key: <Ctrl>+N
- Toolbar button: 

Open an Existing Badge Layout

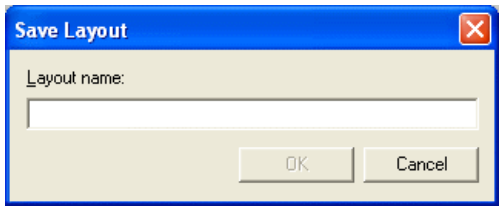
1. To open an existing badge layout choose one of the following:
   - Menu command: ***Layout > Open***
   - Shortcut key: <Ctrl>+O
   - Toolbar button: 
2. The Open Layout window displays a list of the layout names for all existing badge layouts in the BadgeDesigner database. Select the name(s) of the badge layout(s) to open and click the [OK] button.

Note: You can use the <Shift> key or the <Ctrl> key to select multiple layouts simultaneously. Each layout opens in its own window.



Save a Badge Layout

1. To save a badge layout to the database choose one of the following:
   - Menu command: ***File > Save*** or ***Save As***
   - Shortcut key: <Ctrl>+S or <Ctrl>+A
   - Toolbar button:  or 
2. The Save Layout window or Save Layout As window opens. Type the desired badge layout name in the **Layout name** field and click [OK].



Close a Badge Layout

1. To close a badge layout choose one of the following:
   - Menu command: ***Layout > Close***
   - Shortcut key: <Ctrl>+<F4>
2. If no changes have been made to the badge layout since the last time it was saved, the layout closes.

   If changes have been made to the layout since the last time it was saved to the database, a message window opens, from which one of the following options must be chosen:
   - [Yes] to continue the close function, abandoning the unsaved changes.
   - [No] to cancel the close function, so that the layout can be saved.

Working with Multiple Layouts

BadgeDesigner allows you to have multiple badge layouts open at once, each in their own window. Every time a new badge layout is opened, it becomes the "active" layout and is assigned a window number. For example, the first layout opened is assigned window one, the third window opened is assigned window three.

If you are working with multiple open layouts, BadgeDesigner enables you to easily switch between the different layout windows as well as minimize and arrange all of the windows.

Switch Between Open Layouts

To switch to another open badge layout, one layout at a time, press <Ctrl> + <Tab>. The next open badge layout window is made active.

Note: The next window is the one that was most recently active.

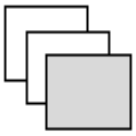
To switch to a specific open badge layout:

- From the ***Window*** menu, choose the numbered menu command for the window number of the appropriate badge layout. (The ***Window*** menu contains a numbered menu command for each open layout.) The selected badge layout is made active.

Automatically Minimize and Arrange Open Layouts

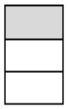
BadgeDesigner provides three different options for automatically minimizing and arranging open badge layout windows: cascade, tile horizontally and tile vertically.

Cascade



The cascade option minimizes the windows and arranges them in an overlapping layers starting in the top left corner of the screen and moving down and to the right progressively for each window. The windows are positioned in this cascade hierarchy according to the last time they were active, with the active window (gray rectangle) displaying as the last or topmost window.

Tile Horizontally



The tile horizontally option minimizes the windows and arranges them side by side in a column, starting at the top of the screen with the active window (which remains active).

Tile Vertically

The tile vertically option minimizes the windows and arranges them side by side, starting on the left side of the screen with the active window (which remains active).

Note: To automatically minimize and arrange all open badge layout windows choose ***Cascade*** or ***Tile Horizontally*** or ***Tile Vertically*** from the ***Windows*** menu.

Close All Open Layouts

To close all open BadgeDesigner badge layouts at once:

1. From the ***Window*** menu select ***Close All***.
2. If no changes have been made to any of the badge layouts since the last time they were saved to the database, the layouts close.
3. If changes have been made to any of the layouts since the last time they were saved to the database, a message window displays for each such layout. From each message window, one of the following button options must be chosen:
   - [Yes] to continue the close function, abandoning the unsaved changes.
   - [No] to cancel the close function, so that the layout can be saved.

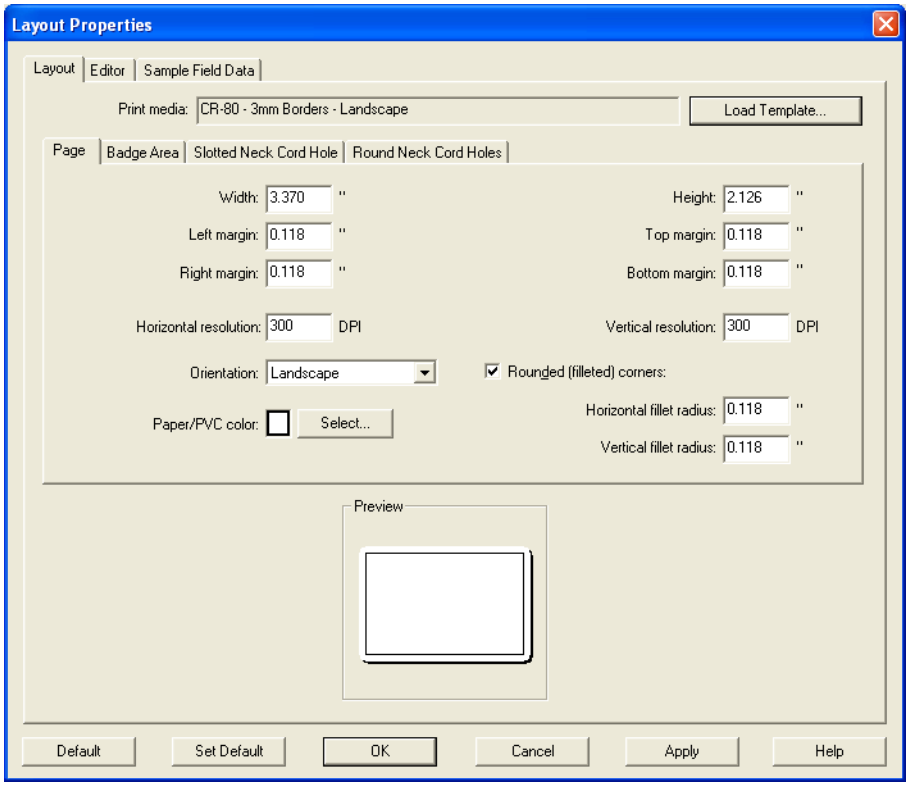
CHAPTER 5

Set Layout Properties and View Options

The Layout Properties window is used to customize badge layout specifications. You can also use the Layout Properties window to establish default layout properties that will be applied every time a new badge is created.

Layout Form (Page Sub-tab)

The Page sub-tab is used to set page-size and orientation specifications.



Width
Determines the width (inches or millimeters) of the badge media.

Height
Determines the height (inches or millimeters) of the badge media.

Left margin
Determines where badge(s) are printed in relation to the left edge of the badge media. Enter the left “page” margin (inches or millimeters). Badge margin guides display accordingly.

Top margin
Determines where badge(s) are printed in relation to the top edge of the badge media. Enter the top margin (inches or millimeters). Badge margin guides display accordingly.

Right margin
Determines where badge(s) are printed in relation to the right edge of the badge media. Enter the right “page” margin (inches or millimeters). Badge margin guides display accordingly.

Bottom margin
Determines where badge(s) are printed in relation to the bottom edge of the badge media. Enter the bottom margin (inches or millimeters). Badge margin guides display accordingly.

Horizontal resolution
Determines the horizontal DPI of the badge layout as it displays on the screen in BadgeDesigner and in print preview. Set the horizontal and vertical resolution to simulate the printer resolution. This allows BadgeDesigner and print preview to estimate the amount of space that text and barcodes will occupy on the printed page. The actual DPI during printing is not affected by this setting.

MAGICARD printer users should set both the horizontal and vertical resolution layout properties to 298 DPI for better accuracy in predicting text and barcode placement on the printed page.

Vertical resolution
Determines the vertical DPI of the badge layout as it displays on the screen in BadgeDesigner and in print preview. Set the horizontal and vertical resolution to simulate the printer resolution. This allows BadgeDesigner and print preview to estimate the amount of space that text and barcodes will occupy on the printed page. The actual DPI during printing is not affected by this setting.

MAGICARD printer users should set both the horizontal and vertical resolution layout properties to 298 DPI for better accuracy in predicting text and barcode placement on the printed page.

Orientation
Determines the orientation of the badge which affects how the other information displays.

Values: **Portrait**  , **Landscape** 

Rounded (filleted) corners
Used for BadgeDesigner and print preview display purposes only, to show rounded corners of badges. If checked, the badge will show rounded (filleted) corners.

Horizontal fillet radius
Displays only if the **Rounded (filleted) corners** check box is selected. Enter the radius (inches/millimeters) for the horizontal radius.

Vertical fillet radius
Displays only if the **Rounded (filleted) corners** check box is selected. Enter the radius (inches/millimeters) for the vertical radius.

Paper/PVC color
Used for BadgeDesigner and print preview display purposes only. Displays the color of badge media, selected from the Color Palette window. To open the Color Palette window, click the [Select] button located to the right of the **Paper/PVC Color** field.

Default
Sets the values on this form to its pre-defined default values.

Set Default
Saves the current values as default values.

OK
Saves the current values, applies them to the active badge layout(s) and exits the Layout Properties window.

Cancel
Exits the Layout Properties window without saving the current settings or changes.

Apply
Applies the current values to the active badge layout(s).

Help
Displays online assistance for this topic.

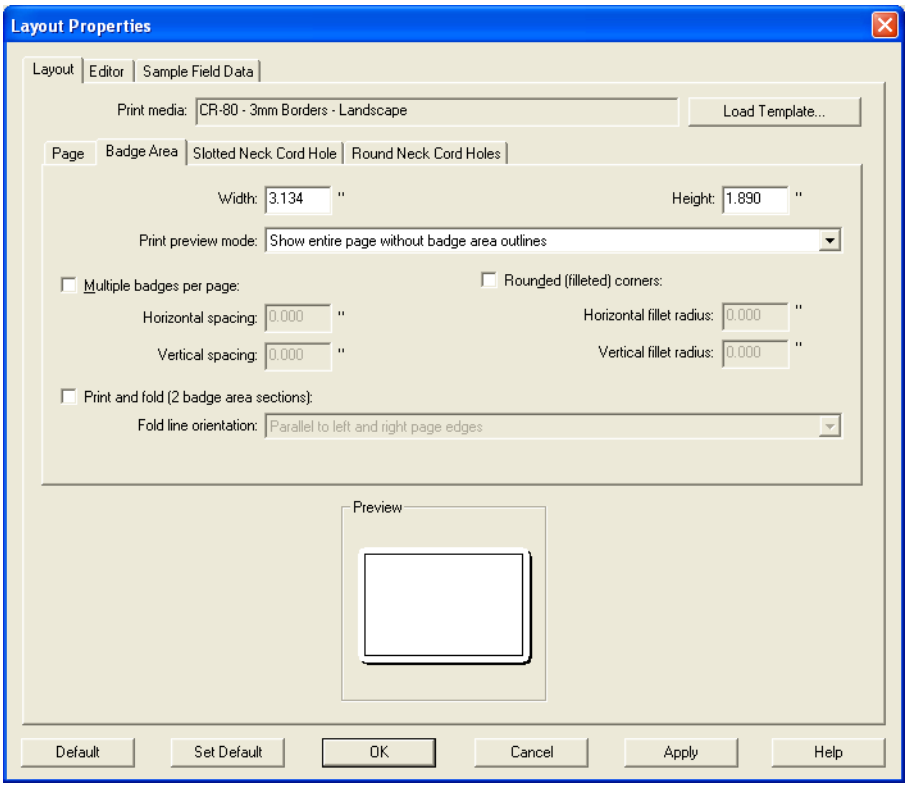
Notes: When setting the Left, Right, Top and Bottom margin, consider the non-printable area specifications of the printer.

For full-bleed printing of the entire page, set the all the margin fields to 0 and set the badge width and height to equal the media's width and height.

Printing over a magnetic stripe will damage your print head.

Layout Form (Badge Area Sub-tab)

The Badge Area sub-tab is used to set the badge options such as size and print spacing.



Width

Determines the badge width (inches or millimeters). Defines the printable area for each badge and the display badge margin guides on the badge layout template.

Height

Determines the badge height (inches or millimeters). Defines the printable area for each badge and the display badge margin guides on the badge layout template.

Print preview mode

Choose the way you would like to view the badge in print preview mode.

Multiple badges per page

Enables more than one badge to be printed per badge card/paper if this check box is selected. For example, multiple badges can be printed on an 8.5” X 11” piece of paper. This is useful when printing out temporary badges.

Spacing on the page may have to be adjusted to fit the badges depending on the print media you are using.

Horizontal spacing

Displays only if the **Multiple badges per page** check box is selected. Enter the amount of blank space you want between each badge and the badge printed to the right of it.

Vertical spacing

Displays only if the **Multiple Badges Per Page** check box is selected. Enter the amount of blank space you want between each badge and the badge printed underneath it.

Rounded (filleted) corners

Used for BadgeDesigner and print preview display purposes only. Used for BadgeDesigner display purposes only, to show rounded corners of badges. If checked, the badge will show rounded (filleted) corners.

Horizontal fillet radius

Displays only if the **Rounded (filleted) corners** check box is selected. Controls the horizontal fillet radius.

Vertical fillet radius

Displays only if the **Rounded (filleted) corners** check box is selected. Controls the vertical fillet radius.

Print and fold (2 badge area sections)

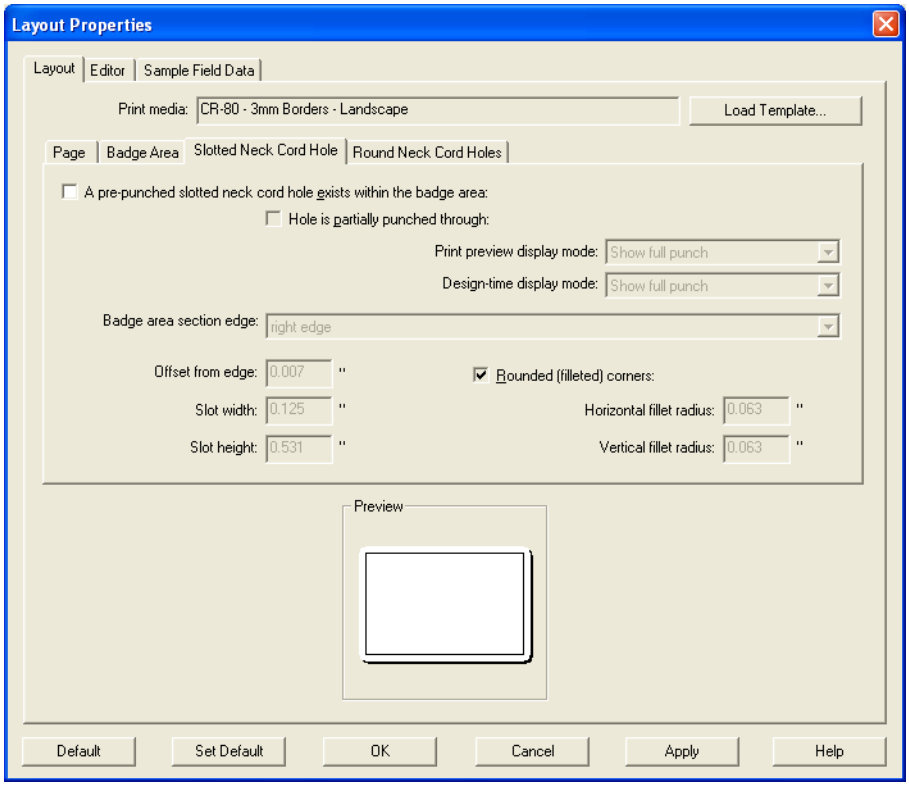
Select this option for each badge on the page to be split into two sections.

Fold line orientation

Displays only if the **Print and fold (2 badge area sections)** check box is selected. Use this to select where the fold line will appear on the badge.

Layout Form (Slotted Neck Cord Hole Sub-tab)

The Slotted Neck Cord Hole sub-tab is used to set the placement of the slotted neck cord hole on the badge.



The following fields are used only for BadeDesigner and print preview display purposes only.

A pre-punched slotted neck cord hole exists within the badge area
Selecting this option adds a pre-punched slotted hole onto the badge template.

Hole is partially punched through
Select this option if the hole on your badges is only partially punched through.

Print preview display mode
Select how the hole will be shown during print preview and the layout thumbnails shown in the badge layout gallery.

Design-time display mode
Select how the hole will be shown in BadgeDesigner (in all places except the layout gallery).

Badge area section edge
This drop-down box allows you to place the punched hole at the bottom edge, left edge, right edge, or top edge of the badge.

Offset from edge
This option allows you to change where the punched hole is placed on the badge.

Slot width
This option allows you to change the slot width of the punched hole.

Slot height
This option allows you to changes the slot height of the punched hole.

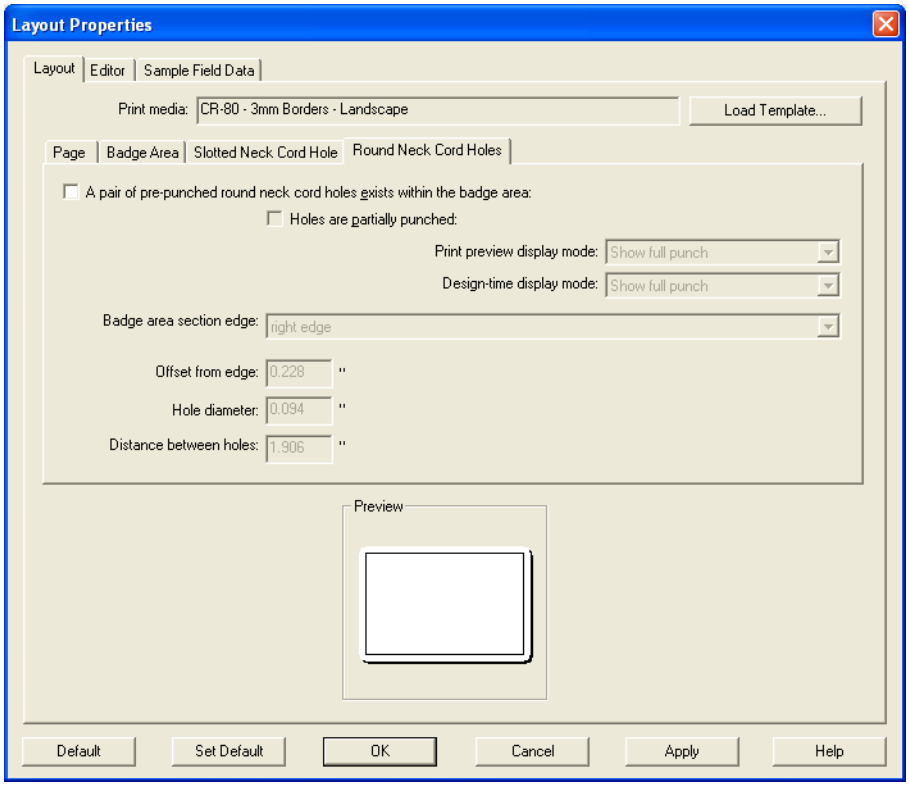
Rounded (filleted) corners
Used for BadgeDesigner display purposes only. If checked, the badge will show rounded (filleted) corners.

Horizontal fillet radius
Displays only if the **Rounded (filleted) corners** check box is selected. This option allows you to change the horizontal fillet radius of the punched hole.

Vertical fillet radius
Displays only if the **Rounded (filleted) corners** check box is selected. This option allows you to change the vertical fillet radius of the punched hole.

Layout Form (Round Neck Cord Holes Sub-tab)

The Round Neck Cord Holes sub-tab is used to set the placement of the round neck cord holes on the badge.



The following fields are used only for BadeDesigner and print preview display purposes only.

A pair of pre-punched round neck cord holes exists within the badge area
Selecting this option adds pre-punched round holes onto the badge template.

Holes are partially punched through
Select this option if the holes on your badges are only partially punched through.

Print preview display mode
Select how the hole will be shown during print preview and the layout thumbnails shown in the badge layout gallery.

Design-time display mode
Select how the hole will be shown in BadgeDesinger (in all places except the layout gallery).

Badge area section edge
This drop-down box allows you to place the punched holes at the bottom edge, left edge, right edge, or top edge of the badge.

Offset from edge
This option allows you to change where the punched holes are placed on the badge.

Hole diameter
This option allows you to change the diameter of the hole on the badge.

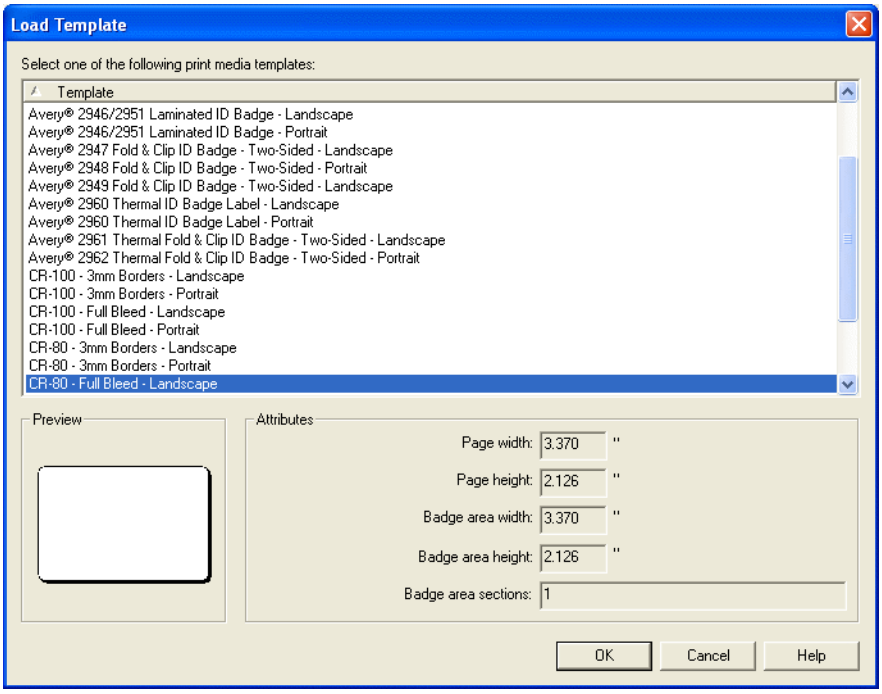
Distance between holes
This option allows you to change the distance between the holes on the badge.

Load Template Form

The Load Template window is displayed by clicking [Load Template] on the Layout folder.

The Load Template window allows you to choose from a number of badge templates to use depending on which layout and badge media you are using.

To choose a template: double-click on the template name.



Print Media Templates

Print media templates are available for the following media:

- Avery® 2940 Self-Adhesive Name Badge Labels™ (100 count box)
- Avery® 2941 Self-Adhesive Name Badge Labels™ (500 count box)
- Avery® 2942 Clean Edge Name Badges, Business Card Size™ (100 count box)
- Avery® 2943 Clean Edge Name Badges, Business Card Size™ (500 count box)
- Avery® 2944 Clean Edge Name Badges, Convention Size™ (100 count box)
- Avery® 2945 Clean Edge Name Badges, Convention Size™ (500 count box)
- Avery® 2946 Laminated Name Badges & Self-Adhesive Clips, Business Card Size™ (25 count box)
- Avery® 2951 Laminated Name Badges & Self-Adhesive Clips, Business Card Size™ (50 count box)
- Avery® 2947 Fold & Clip Name Badges, Landscape, Business Card Size™
- Avery® 2948 Fold & Clip Name Badges, Portrait, Business Card Size™
- Avery® 2949 Fold & Clip Name Badges, Landscape, Convention Size™
- Avery® 2960 Direct Thermal Self-Adhesive Name Badge Labels™ (Roll)
- Avery® 2961 Direct Thermal Fold & Clip Name Badges, Landscape™ (Roll)
- Avery® 2962 Direct Thermal Fold & Clip Name Badges, Portrait™ (Roll)

- Avery® 2990/2992 Label for Access Control Card - Landscape
- Avery® 2990/2992 Label for Access Control Card - Portrait
- Avery® 2991/2993 Label for Access Control Card - Portrait
- Avery® W5000 Plastic card + Dry peel Clear Media - Landscape
- Avery® W5000 Plastic card + Dry peel Clear Media - Portrait
- Avery® W7100/W9100 Name Badge Media with Hole - Two-Sided - Landscape
- Avery® W9150 Name Badge Media without Hole - Two-Sided - Landscape
- Avery® W9150 Name Badge Media without Hole - Two-Sided - Portrait
- CR-80
- CR-90
- CR-100

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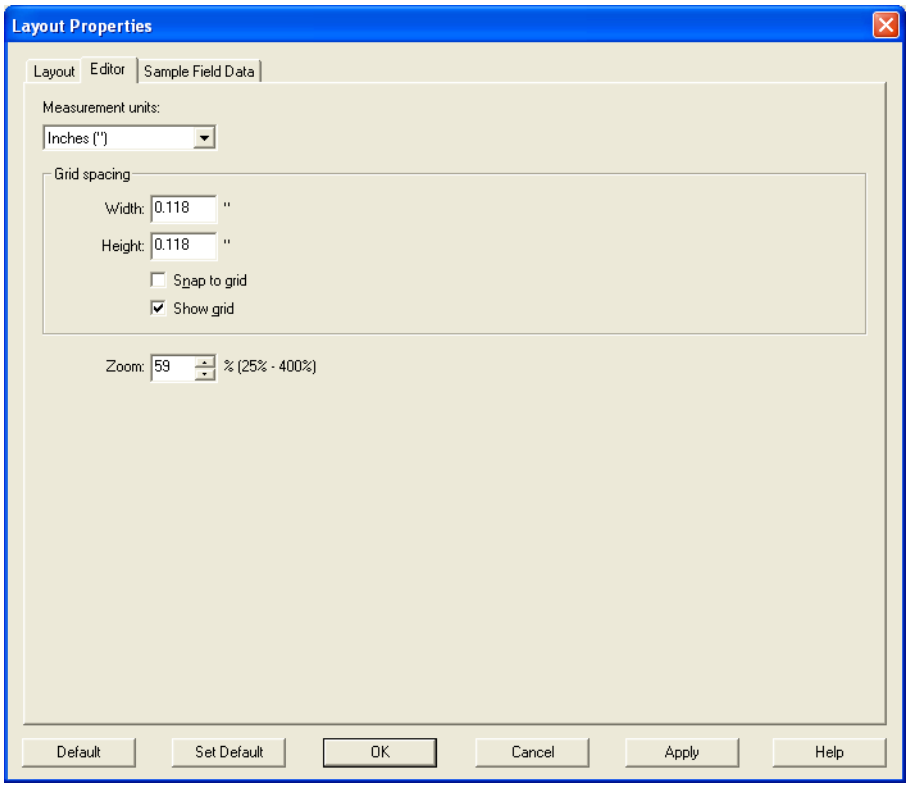
Editor Form

To display the Editor form/tab select ***Layout Properties*** from the ***View*** menu and click the Editor tab. This tab is used to set the unit of measure and other general specifications for the badge layout.



Measurement units
Determines the unit of measure to be used for the badge layout. Values: **Inches** ("), **Millimeters** (mm)

Grid spacing (Width)
Determines the width (inches or millimeters) between dots on the badge layout.

Grid spacing (Height)
Determines the height (inches or millimeters) between dots on the badge layout.

Snap to grid
Determines whether BadgeDesigner's automatic snap-to-grid feature is "on" or "off". Values: Checked (Snap to Grid feature is "on"), Not Checked (Snap to Grid feature is "off")

Show grid
Displays the grid or dots on the badge layout template. Used for display purposes only. Values: Checked (dots display), Not Checked (dots do not display)

Zoom
Determines the percentage of zoom used to display the badge layout template in the BadgeDesigner window. Values: 25 (%) to 400 (%)

Default
Sets the values on the Editor tab to its previously saved default values.

Set Default
Saves the current values on the Editor tab as default values.

OK
Saves the current values, applying them to the active badge layout(s) and exits the Layout Properties window.

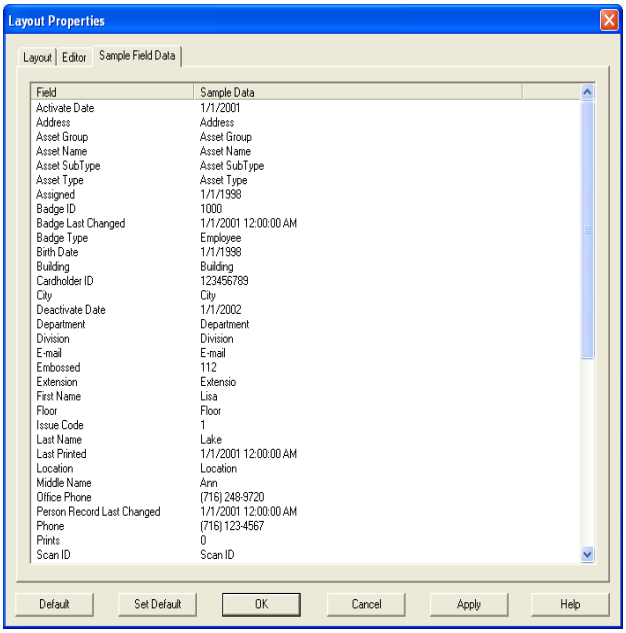
Cancel
Exits the Layout Properties window without saving the current settings or changes.

Apply
Applies the current values to the active badge layout(s).

Help
Displays online assistance for this topic.

Sample Field Data Form

To display the Sample Field Data form/tab select ***Layout Properties*** from the ***View*** menu and click the Sample Field Data tab. This tab is used to change the BadgeDesigner's default sample data values. These data values are used to display badge objects that are linked to BadgeDesigner database fields.



Field

Displays the external field names for each standard cardholder field and custom UDF (user-defined field) in the BadgeDesigner database that can be linked to a badge object.

Sample Data

Used to edit the sample data values for each BadgeDesigner database field. Highlight the sample data value, edit the data as required, then press <Enter>, <Arrow Up> or <Arrow Down> to set the value. (The default sample data value for each user-defined field is equal to the external field name itself - the descriptive database field name.)

Default

Sets the values on this form to its previously saved default values.

Set Default

Saves the current values as the default values.

OK

Saves the current values, applying them to the active badge layout(s) and exits the Layout Properties window.

Cancel

Closes the Layout Properties window without saving the current settings or changes.

Apply

Applies the current values to the active badge layout(s).

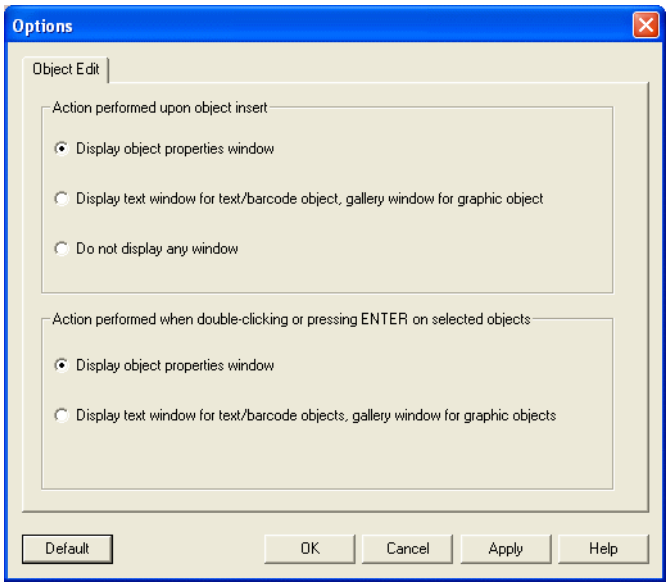
Help

Displays online assistance for this topic.

Note: The database fields, "Visit Time In UTC" and "Visit Time Out UTC" will be printed in the time zone of the visit. They will not be printed in UTC time, despite the name of the field.

BadgeDesigner View Options

Certain BadgeDesigner behaviors can be configured by individual users. The options users select determine what window, if any, displays when an object is added to a badge layout. Users can also configure what type of window displays when an object is selected. The default settings for the BadgeDesigner view options are shown below.



Action performed upon object insert

Display object properties window

Displays the Object Properties window when an object is inserted in the badge layout.

Display text window for text/barcode object, gallery window for graphic object

Displays the Text window (for text or barcode objects) or Gallery window (for graphic objects) when an object is inserted in the badge layout.

Do not display any window

Allows you to insert objects without having any property/defining windows appear.

Action performed when double-clicking or pressing <Enter> on selected objects

Display object properties window

Displays the Object Properties window when double-clicking or pressing <Enter> on selected object(s).

Display text window for text/barcode objects, gallery window for graphic objects

Displays the Text window (for text/barcode objects) or the Gallery window (for graphic objects) when double-clicking or pressing enter on selected object(s).

Default

Resets to default settings (which is launch Object Properties window).

OK
Saves your changes and exits from the window.

Cancel
Exits this window without saving your changes.

Apply
Saves your changes.

Help
Displays online help for this topic.

Layout Property Procedures

Use the following procedures for Layout Properties.

Open the Layout Properties Window

From the ***View*** menu select ***Layout Properties***.

Restore Default Values

To restore the default field values for the current Layout Properties window tab:

1. From the ***View*** menu select ***Layout Properties***.
2. Click [Default].

Set New Default Values

To save the field values entered on the current Layout Properties window tab as default settings for the badge layout:

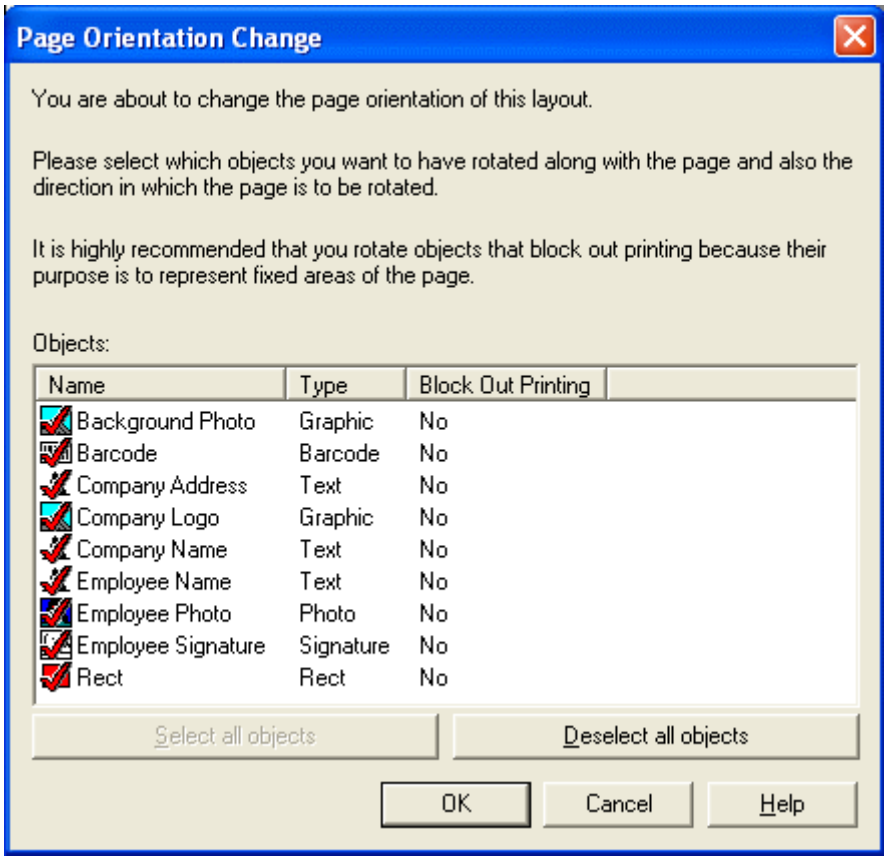
1. From the ***View*** menu select ***Layout Properties***.
2. Change the appropriate field values.
3. Click [Set Default]. The current field values are saved as default values.

Change Badge Orientation

The Page Orientation Change window allows the user to define what objects will be rotated in turn with the page.

1. With a badge layout displayed, select ***Layout Properties*** from the ***View*** menu.
2. Select **Landscape** or **Portrait** from the **Orientation** drop-down list.
3. Click either [OK] or [Apply].
4. The Page Orientation Change window displays. Select the objects you want rotated along with the page. A red checkmark beside the object name indicates the object is selected. Click the object name to toggle the checkmark on/off.

Note: Click the **Select all objects** or **Deselect all objects** to select or deselect all the objects respectively.



5. Click [OK].

Save The Layout Property Settings (All Pages)

To save all edited Layout Properties settings to the layout without closing the Layout Properties window:

1. From the ***View*** menu select ***Layout Properties***.
2. Edit the layout property settings.
3. Click [Apply].

To save all edited Layout Properties settings to the layout and close the Layout Properties window:

1. From the ***View*** menu select ***Layout Properties***.
2. Edit the layout property settings.
3. Click [OK].

Manage Badge Objects

CHAPTER 6

Add, Select and Delete Badge Objects

Once a badge layout has been opened and its properties are set, you can start adding objects to the layout template.

Objects are added to a badge layout using the Layout view in the BadgeDesigner main window. For more information, refer to Layout View on page 28.

Types of Objects

In addition to the standard badge objects (text, photo, barcode, signature, graphic, rectangle, round rectangle, circle and ellipse), the software also supports magnetic stripe objects and smart chip contacts.

Note: A magnetic stripe object does not permit any other object to overlap it while it displays in BadgeDesigner and during printing.

A *smart card* is a badge ID card that contains a computer chip rather than having a magnetic stripe on the back of the card. The smart chip contact can store cardholder data, access control data and biometric data, depending on the smart card format.

Object Names

BadgeDesigner automatically assigns an object name to every object added to the badge layout. The object name is derived using the object type and a sequential number to uniquely identify each object. For example, the first graphic object added to a badge layout is assigned the object name “Graphic”; the next graphic object added is assigned the name “Graphic 2”; the next is assigned the name “Graphic 3”, etc. Likewise, the first Barcode object added to the layout is assigned the object name “Barcode”; the next is assigned the name “Barcode 2”, etc. (An exception is made for text objects: the first text object added to a badge layout is assigned the name “Text 1”, not “Text”.)

Object names display in the Object List view in alphabetical order. Once an object has been added to the badge layout, it can be renamed by right-clicking the object name, selecting **Rename** and entering the new name. For more information, refer to Rename an Object on page 68.

Object Sizes

BadgeDesigner also allows you to use a ruler to add an object that is a specific size. While adding an object to the badge in Layout view, the ruler displays the size of the object in inches or millimeters. Once an object has been added to the badge layout, it can be resized and positioned as necessary. For more information, refer to Resize an Object Using the Mouse on page 69.

Object Layer Numbers

Because most objects can be placed on top of one another, BadgeDesigner assigns each object an object layer number. When an object is added to a badge layout its object layer number is a sequential number that is one greater than the previous object added to the badge layout. For example, the first object added to a badge layout is assigned the order layer number “1”; the fifth object added is assigned the order number “5”, etc.

BadgeDesigner does not display object layer numbers. These numbers are used only to facilitate tabbing through the objects in the badge layout and selecting objects that may be hidden behind other objects.

Object layer numbers can be changed by moving objects to different layers in the badge layout. For more information, refer to Move an Object To Another Layer on page 68.

Types of Object Property Windows

Different object property windows display depending on the type of object you are working with: Text, Cardholder Photo, Barcode, Signature, Graphic, Rectangle, Round Rectangle, Circle and Ellipse properties windows. There is also a Magnetic Stripe Properties window and a Smart Chip Contacts Property window.

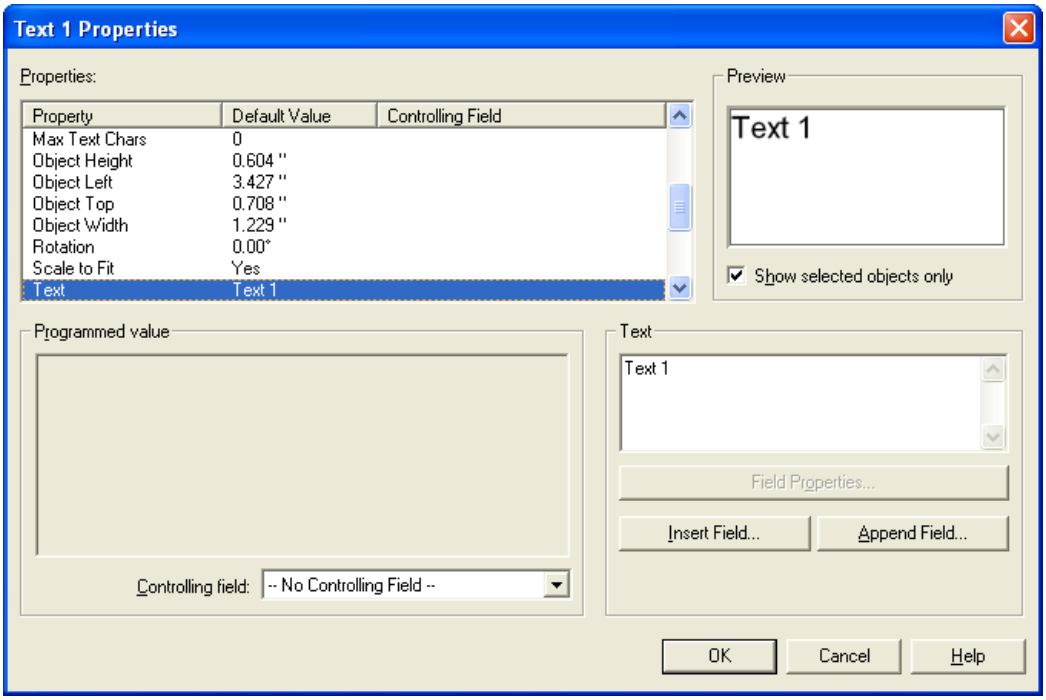
Each of these windows contain four sections:

- Properties section - upper left corner
- Preview section - upper right corner
- Programmed value section - lower left corner
- Property value section - lower right corner

The Properties section (upper left corner) displays properties appropriate for the type of object you are working with. For example some of the properties listed for a Graphic object include Ghost Factor, Tile Rows and Fill Color, while some of the properties listed for a Barcode object include Barcode Format, Rotation and Fill Color. The example that follows shows the Text Object Properties window.

The Property value section (lower right corner) changes according to the property highlighted in the Properties section (upper left corner). The values displayed in the Property value section (lower right corner) can be changed according to user preference.

In the example that follows, the text property is highlighted in the Properties section (upper left corner) and the Property value section (lower right corner) displays a field where you can enter text as well as buttons to insert data fields and check digits for barcoding.



Properties

Displays a list box of object properties and their default values. The object properties listed are unique to the type of Object Properties window displayed. For example, the properties listed in Text Object Properties window will be different than the properties listed in the Signature Object Properties window.

Preview

Displays a magnified preview the objects and its properties. The preview window automatically updates to reflect any changes made to the object properties.

Show selected objects only

Displays the selected object in the Preview section, when the check box is selected. If the check box is not selected, the object you selected and any other object that overlaps it displays in the Preview section.

Programmed value field

Contains the Programmed value display and the Controlling field. These settings are utilized if you are using the Program Badge feature. For more information, refer to Program a Badge Object on page 111.

Property value field

Located in the lower right portion of the screen. Displays the values that you can assign to an object property. Select the object property from the Properties section (upper left corner). The Property value field (lower right corner) displays the name of the property (the example above displays the Text property values) and the values of that property that you can change. Clicking on a different property displays different values.

OK

Applies the current settings to the badge layout and closes the Object Properties window.

Cancel
Exits the Object Properties window without saving any of the values.

Help
Provides online help for the window.

Object Properties Window Procedures

Use the following procedures in this window.

Display an Object Property Window

1. Open the badge layout.
   a. From the ***Layout*** menu, select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. You can display the Object Properties window several ways depending on how the BadgeDesigner options are set up. Complete any one of the following:
   - Select the object you want to edit and click the toolbar button.

Toolbar Shortcut

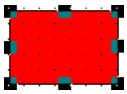
   - Select the object you want to edit and press the <Enter> key.
   - Double-click the object you want to edit.

Note: If the Object Properties window does not display, check your view options by selecting ***View > Options***.

Select, Deselect or Delete Objects in the Badge Layout

In order to move, rename, resize or delete a badge object, it must be selected. When objects are layered over each other, finding and selecting the object you want is not always easy.

Highlighted object



You can verify an object is selected in the Layout view when the selected object displays selection handles, eight points surrounding the object. In the Object List view, the name of selected objects is also highlighted.

Find an Individual Object

When working with overlapping objects you can quickly find an individual object by taking advantage of their object layer number. BadgeDesigner automatically assigns an object layer number to every object added to the badge layout. Using the <Tab> key you can select different objects in the badge layout.

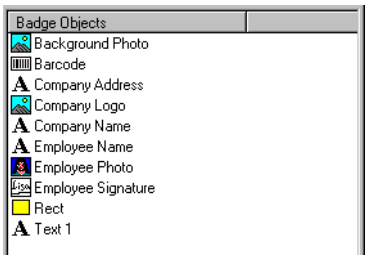
To find and select individual objects by order layer number:

1. Open the badge layout.
   a. From the ***Layout*** menu, select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Choose one of the following:

Menu command	Shortcut key
Edit > Select Previous	<Shift> + <Tab>
Edit > Select Next	<Tab>

3. The next object or previous object is selected, based on the object layer number of the most recently selected object.

Note: If you know the name of the object you are looking for, it can also be selected via the Object List view. Click anywhere in the Object List view and begin typing the name of the object you are looking for. The object will automatically be highlighted in both the Object List view and the Layout view.



Select One Object

If you do not have overlapping objects you can quickly select a single object:

1. Open the badge layout.
   a. From the ***Layout*** menu, select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Click the object with the mouse or click and drag the mouse to create a selection box that completely encloses the object.

Note: If you know the name of the object you can also select the object by selecting its name in the Object List view.

Select a Group of Objects

You can select a group of objects via the Layout view or Object List view.

Select a Group of Objects Using the Layout View

1. Open the badge layout.
   a. From the ***Layout*** menu, select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.

2. Hold the <Ctrl> key down while clicking each object to be selected with the mouse, OR click and drag the mouse to create a selection box that completely encloses all of the objects.

Select a Group of Objects Using the Object List View

1. Open the badge layout.
   a. From the ***Layout*** menu, select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Hold the <Ctrl> key down while clicking individual objects or select (highlight) the first object in a sequence, hold the <Shift> key down and select (highlight) the last object in a sequence.

Select Every Object

You can select every object via the Layout view or Object List view.

Select Every Object Using the Layout View

1. Open the badge layout.
   a. From the ***Layout*** menu, select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Choose one of the following:

Menu command	Shortcut key
Edit > Select All	<Ctrl> + <Keypad 5> Make sure the number lock is off

Select Every Object Using the Object List View

1. Open the badge layout.
2. From the ***Layout*** menu, select ***Open***.
3. Select the desired layout from the Open Layout window and click the [OK] button.
4. Select (highlight) the first object in the Object List view.
5. Hold the <Shift> key down and select the last object in listed in the Object List view.

Deselect All Objects

To deselect all objects in the Layout or Object List view, click the mouse anywhere there is an empty space in the Layout or Object List view, or choose one of the following:

Menu command	Shortcut key
Edit > Deselect All	<Shift> + <Esc>

Delete Objects

To delete an object or group of objects from the badge layout:

1. Select one or more objects to be deleted.

2. Choose one of the following:

Menu command	Shortcut key
Edit > Delete	<Delete>

Add Objects to the Badge Layout

A badge layout can contain any combination, size and number of badge objects. When an object is added to the badge layout template, it displays in both the Layout view and the Object List view in the BadgeDesigner window. For more information, refer to BadgeDesigner Views on page 27.

1. Display the layout view by selecting ***New*** or ***Open*** from the ***Layout*** menu.
   - If you selected ***Open*** from the ***Layout*** menu, select the desired layout from the Open Layout window and click the [OK] button.
2. Add an object to the badge layout by selecting the appropriate menu commands or toolbar button. Refer to the table below.

Note: Executing the menu commands may automatically display new windows.

Object to be added	Menu command	Toolbar button
Barcode	***Edit > Insert > Barcode Object***	
Cardholder Photo	***Edit > Insert > Cardholder Photo Object***	
Cardholder Signature	***Edit > Insert > Cardholder Signature Object***	
Circle	***Edit > Insert > Circle Object***	
Ellipse	***Edit > Insert > Ellipse Object***	
Graphic	***Edit > Insert > Graphic Object***	
Magnetic Stripe	***Edit > Insert > Magnetic Stripe Object***	
Rectangle	***Edit > Insert > Rectangle Object***	
Round Rectangle	***Edit > Insert > Round Rectangle Object***	
Smart Chip Contacts	***Edit > Insert > Smart Chip Contacts***	
Text	***Edit > Insert > Text Object***	

3. If you used the toolbar button to add an object, move the cursor into Layout view. Notice, the cursor changes to cross-hairs. Click and drag the mouse to position the object on the Badge layout. Use the status bar display to determine the object size. For more information, refer to Status Bar on page 30.

   If you used the menu commands to add an object, the object is automatically inserted into the upper right corner of the badge layout.

4. Depending on how the BadgeDesigner view options are configured, the Object Property window may automatically open. For more information, refer to BadgeDesigner View Options on page 52.

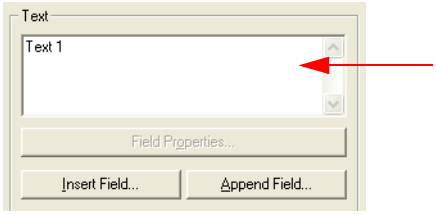
   If the Object Property window does not automatically open, click the cancel button to close any open window, verify the object is selected in the layout view and choose ***View > Object Properties*** from the menu options.

5. Make any changes in the Object Properties window by completing the following:
   a. Highlight an object property, that you want to change, in the properties section (upper left corner of the Object Properties window).
   b. The lower right corner of the Object Properties window displays any fields or buttons that can be changed or clicked on for that property.
   c. Make the appropriate changes and click the [OK] button.

6. The new object displays in the badge layout template (Layout view) and the badge object list (Object List view).

Insert Static Text

1. Open a badge layout by completing the following:
   a. From the ***Layout*** menu, select ***Open***.
   b. Select the desired layout and click the [OK] button.
2. Right-click a text object and select **Properties**. The Object Properties window displays.
3. Place the cursor in the Property values section's **Text** field (lower right corner of the Object Properties window) and using the keyboard enter static text.



Insert Graphics

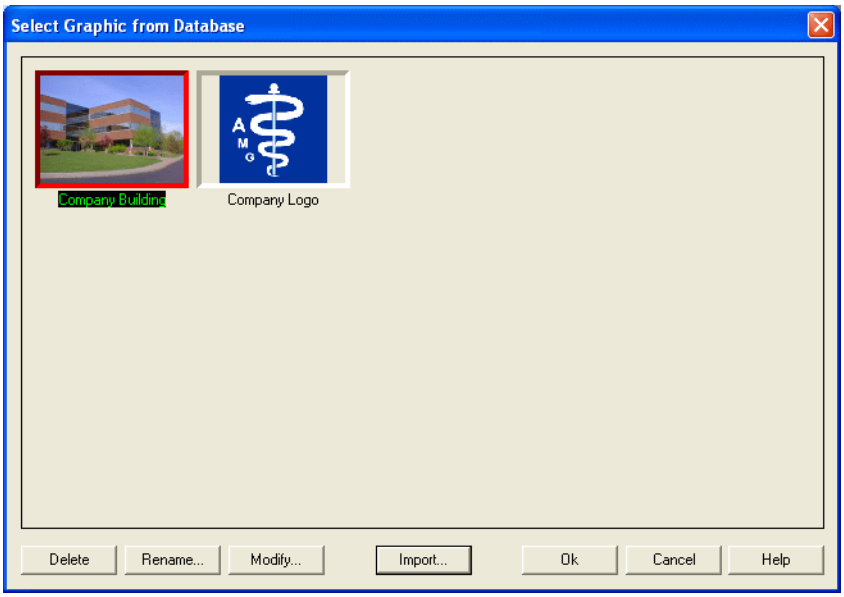
To insert a new graphic or change an existing graphic in the BadgeDesigner layout:

1. Open the badge layout.
   a. From the ***Layout*** menu, select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Right-click a graphic and choose **Select Graphic**. The Select Graphic from Database window displays. For more information, refer to Select Graphic from Database Window on page 65.

Note: Depending on your view options (***View > Options***) you can also double-click the graphic to display the Select Graphic from Database window.

3. Select the graphic and click the [OK] button.

Select Graphic from Database Window



Graphic Views area

Displays miniature views of each graphic file in the BadgeDesigner database. Used to link a graphic file to selected graphic objects in the badge layout. Also used to select graphic or image files to modified, deleted or exported using the [Modify], [Delete] and [Export] buttons. To select a graphic or image file, click the appropriate view.

Delete

Deletes or removes the graphic/image files from the BadgeDesigner database.

Rename

Renames a graphic/image file in the BadgeDesigner database.

Modify

Modifies or changes graphic/image files selected in the Graphic Views area. Opens the Multimedia Capture for window. For more information, refer to Appendix A: Multimedia Capture on page 125.

Import

Imports new graphic files into the BadgeDesigner database by opening the Multimedia Capture for window. Once a graphic file is imported using the Multimedia Capture window, it displays in the Graphic Views area and can be linked to a graphic object in the badge layout. For more information, refer to Import a Supported Image File on page 157.

OK

Completes the process of linking a graphic from the BadgeDesigner database to the graphic object in the badge layout and closes the Select Graphic from Database window.

Cancel

Cancels or stops the process of linking a graphic or image file to the graphic object and to close the Select Graphic from Database window.

CHAPTER 7

Move, Rename, Resize, and Rotate Badge Objects

Any badge object or group of badge objects can be moved to another position within the badge layout template. Objects are moved using the Layout view in the BadgeDesigner main window.

Move an Object

1. Open the badge layout.
   a. From the ***Layout*** menu, select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Select the object(s) to be moved. For more information, refer to Select, Deselect or Delete Objects in the Badge Layout on page 60.
3. In the Layout view, position the cursor within the boundaries of one of the selected objects - the cursor changes to cross-arrows.
4. Click and hold the mouse to “pick up” the selected objects; drag the mouse to the desired location.
5. Release the mouse to complete the move and leave the object(s) in the new location.

“Push” an Object

The keyboard arrow keys can be used to “push” or nudge selected objects up, down, to the left or right. The distance an object moves when you nudge it depends on whether the snap-to-grid is on or off.

To “push” or nudge an object or group objects of objects:

1. Open the badge layout.
   a. From the ***Layout*** menu, select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Select the object to be “pushed”. For more information, refer to Select, Deselect or Delete Objects in the Badge Layout on page 60.

3. Use any combination of the following shortcut keys.

Shortcut key	Moves object(s)	Distance moved if Snap-to-grid is ON	Distance moved if Snap-to-grid is OFF
<Up Arrow>	up	1 grid unit	.001 inches (.01 mm)
<Down Arrow>	down	1 grid unit	.001 inches (.01 mm)
<Left Arrow>	to the left	1 grid unit	.001 inches (.01 mm)
<Right Arrow>	to the right	1 grid unit	.001 inches (.01 mm)
<Ctrl> + <Up Arrow>	up	2 grid units	.100 inches (1.0 mm)
<Ctrl> + <Down Arrow>	down	2 grid units	.100 inches (1.0 mm)
<Ctrl> + <Left Arrow>	to the left	2 grid units	.100 inches (1.0 mm)
<Ctrl> + <Right Arrow>	to the right	2 grid units	.100 inches (1.0 mm)

Note: To change the snap-to-grid setting select ***Layout Properties*** from the ***View*** menu. Click the Editor tab and (de)select the **Snap to grid** check box.

Move an Object To Another Layer

The object layer number for a selected object can be changed by moving the object in front of or behind other objects.

Note: The position of the selected object is not changed when the order layer number changes.

1. Open the badge layout.
   a. From the ***Layout*** menu, select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Select the object to be moved.
3. Move the object by using the following menu commands or shortcut keys.

Menu command	Shortcut key
Edit > Move Forward	<Ctrl> + < - >
Edit > Move Back	<Ctrl> + < + >
Edit > Move to Front	<Alt> + < - >
Edit > Move to Back	<Alt> + < + >

Rename an Object

1. Open the badge layout.
   a. From the ***Layout*** menu, select ***Open***.

b. Select the desired layout from the Open Layout window and click the [OK] button.

2. Select the object.
3. From the ***Edit*** menu select ***Rename Object*** or right-click the object in the Object List view and select **Rename**. The object name in the Object List view becomes editable.

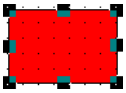
Note: You can also click the object name in the Object List view twice (not double-click). The object name in the Object List view becomes editable.

4. Enter the new name for the object.

Resize an Object Using the Mouse

Objects can be resized using the mouse or the computer keyboard.

1. Open the badge layout.
   a. From the ***Layout*** menu, select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.



2. Select one object to resize.
3. Using the mouse, select one of the selected object's handles.

Notes: If a side handle is selected, the cursor becomes a horizontal or vertical double-arrow and the object can be stretched in either direction indicated by the cursor.

If a corner handle is selected, the cursor becomes a diagonal double-arrow and the object can be stretched in either direction indicated by the cursor.

4. Drag the object placeholder and release the mouse when the object is the desired size. The BadgeDesigner Status Bar displays the changing size of the object.

Resize an Object Using the Keyboard

Objects can be resized using the mouse or the computer keyboard. When you use the keyboard to resize an object the change in object size per keystroke depends on whether the snap-to-grid is on or off.

1. Open the badge layout.
   a. From the ***Layout*** menu, select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Select one object to resize.

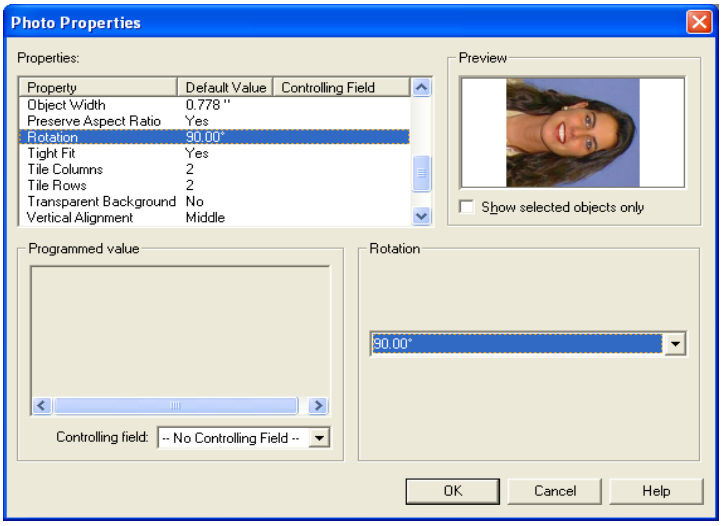
3. Use any combination of the following keyboard keys:

Shortcut key	Effect when Snap-to-grid OFF	Effect when Snap-to-grid ON
<Shift> + <Up Arrow>	Reduces height by .001 inches (.01 mm)	Reduces height by 1 grid unit
<Shift> + <Up Arrow>	Enlarges height by .001 inches (.01 mm)	Enlarges height by 1 grid unit
<Shift> + <Up Arrow>	Reduces width by .001 inches (.01 mm)	Reduces width by 1 grid unit
<Shift> + <Right Arrow>	Enlarges width by .001 inches (.01 mm)	Enlarges width by 1 grid unit
<Shift> + <Ctrl> + <Up Arrow>	Reduces height by .100 inches (1.0 mm)	Reduces height by 2 grid units
<Shift> + <Ctrl> + <Down Arrow>	Enlarges height by .100 inches (1.0 mm)	Enlarges height by 2 grid units
<Shift> + <Ctrl> + <Left Arrow>	Reduces width by .100 inches (1.0 mm)	Reduces width by 2 grid units
<Shift> + <Ctrl> + <Right Arrow>	Enlarges width by .100 inches (1.0 mm)	Enlarges width by 2 grid units

Note: To change the snap-to-grid setting select ***Layout Properties*** from the ***View*** menu. Click the Editor tab and (de)select the **Snap to grid** check box.

Rotating Badge Objects

Photo, signature, and graphic objects can be rotated in the object's properties window. The Rotation attribute determines the degree of rotation.



To rotate an object:

1. Double-click the object you want to rotate.
2. Choose the rotation property in the object's Properties window.
3. Change the degree of rotation in the rotation drop-down box in the Rotation section of the screen.
4. Click [OK].

CHAPTER 8

Set General Formatting Attributes

The General Formatting toolbar contains buttons to set the fill style, fill color, border style, border color and border width as well as text justification, background transparency and scale-to-fit, attributes for most objects. It also contains a button to open the Text window and set database fields for text objects and insert check digits for barcode objects.

Set Fill and Border Attributes

The following table provides General Formatting toolbar shortcuts and instructions.

Set Fill Style

This determines the fill pattern of any object.

1. Open a badge layout and select an object or group of objects.
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Click the **Set Fill Style** toolbar button and select a fill style from drop-down list that displays.

Toolbar button

Fill Options

Notes: You must select a fill style or press <Esc> to close the drop-down list.

For barcode objects, use the solid fill style to create a security block.

Set Fill Color

This determines the fill style color of any object.

1. Open a badge layout and select an object or group of objects.
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Click the **Set Fill Color** toolbar button. 
3. The Color window opens. Select a color or define a custom color, then click the [OK] button.

Notes: If the fill color you selected is not applied, verify that the **Set Fill Style** is set to something other than **None**.

For barcode objects, use a red fill color to create a security block.

Set Border Style

This determines the line style for the border or frame of any object.

1. Open a badge layout and select an object or group of objects.
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Click the Set Border Style toolbar button  and select a border style from drop-down list that displays.

Border options

Note: You must select a border style or press <Esc> to close the drop-down list.

Set Border Color

This determines the color of the border of any object.

1. Open a badge layout and select an object or group of objects.
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Click the **Set Border Color** toolbar button. 
3. The Color Palette window opens. Select a color or define a custom color, then click the [OK] button.

Note: If the border color you selected is not applied, verify that the **Set Border Style** is set to something other than **None**.

Set Border Width

This determines the width of the line used for the border of an object.

1. Open a badge layout and select an object or group of objects.
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Click the **Set Border Width** toolbar button. 
3. The Border Width dialog box opens. Enter a Border Width, then click the [Close] button.

Border width options

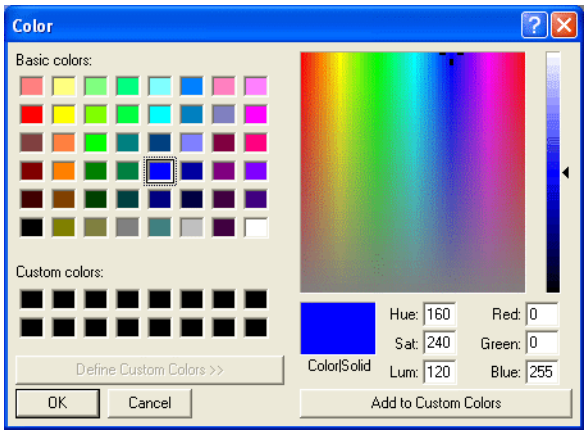
Note: If the border width is set to 0.0, the default line width (usually 1 pixel) is applied.

Create Custom Colors

Custom colors can be defined in BadgeDesigner through use of a standard Windows color selection dialog. Each badge layout can store up to 16 custom colors.

To create a new custom color:

1. Open the badge layout.
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Select an object or group of objects in the badge layout.
3. Click the Set Fill Color  toolbar button.
4. Click the [Define Custom Colors] button in the Color dialog window.
5. The window expands to show the following:



6. Use your mouse to select the color you want or if you know the exact color settings, enter them in the appropriate fields (Hue, Saturation, Luminosity or Red, Green and Blue).
7. Click the [Add to Custom Colors] button. The color is added to the Custom colors display.
8. Click the [OK] button to save and exit from the window.

Set Horizontal Justification

The horizontal justification attribute can be set for every photo, signature, graphic and text object. This attribute determines the horizontal placement of an object within its frame or placeholder.

1. Open the badge layout.
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Select the object.
3. Refer to the table below for the appropriate toolbar button to select.

Toolbar button	Description
Left Justify	Sets Horizontal Justification attribute to “Left”.
Center Horizontally	Sets Horizontal Justification attribute to “Center”.
Right Justify	Sets Horizontal Justification attribute to “Right”.

Set Vertical Justification

The vertical justification attribute can be set for every photo, signature, graphic and text object. This attribute determines the vertical placement of an object within its frame or placeholder.

1. Open the badge layout.
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Select the object.

3. Refer to the table below for the appropriate toolbar button to select.

Toolbar button	Description
Top Justify	Sets Vertical Justification attribute to “Top”.
Center Vertically	Sets Vertical Justification attribute to “Center”.
Bottom Justify	Sets Vertical Justification attribute to “Bottom”.

Set Background Transparency Attributes

The Toggle Background Transparency toolbar button can be used with every text, photo, bit map signature and graphic object. The Toggle Background Transparency toolbar button automatically toggles the fill style attribute for objects between “none” and “solid”.

Background transparency on vs. background transparency off:

There are three requirements for background transparency to be activated for text, photos, bit map signatures and graphics:

- The workstation must be licensed for chromakey (via the dongle).
- The background transparency attribute must be turned on for that object via the toolbar button.
- Chromakey must be performed on the object via the Multimedia Capture Window. For more information, refer to Chromakey Sub-tab on page 130.

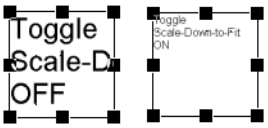
If one of these requirements is not met, the object will be printed/displayed with an opaque background.

1. Open the badge layout.
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Select the object.
3. Click the Toggle Background Transparency toolbar button.

Set Scale-To-Fit Attributes

The Toggle Scale-Down-to-Fit  toolbar button determines whether the font size for the text object should be automatically scaled down so the entire text line fits within its placeholder. The scale-to-fit attribute only applies to text objects.

Scale-to-fit off vs. scale-to-fit on:



1. Open the badge layout.
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Select a text object.
3. Click the Toggle Scale-Down-to-Fit toolbar button.

CHAPTER 9

Set Graphic, Photo and Signature Attributes

The Graphic toolbar contains buttons to set the ghosting, aspect ratio and tiling attributes for photo, signature and graphic objects. It also contains buttons to set the pen width and pen color for signature objects. These attributes can also be defined using the Object Properties window.

Set Ghosting Attributes

The ghosting attribute determines the level of transparency of a selected object. It can be applied to photos, graphics or bit map signatures.

In order to use ghosting:

- The workstation must be licensed for ghosting (via the dongle).
- The object's ghosting factor must be greater than 0.
- The current OnGuard user must have the Ghosting Print Badges Cardholder Level Permission.

Ghosting off vs. ghosting on

To adjust the ghosting factor

1. Click the **Adjust Ghost Factor**  toolbar button. The Ghost Factor dialog box opens.

2. Enter a ghost factor between 0 and 255. The higher the number, the greater the ghost factor.
3. Click the [Close] button.

Set Aspect Ratio Attributes

The aspect ratio is the ratio of the graphic object's width to its height. There are three different modes to choose from when working with aspect ratios:

- **Do not preserve aspect ratio**. If this option is used, a graphic object's width in relation to its height is not maintained when the graphic object is resized.
- **Preserve aspect ratio without cropping**. If this option is used, a graphic object's width in relation to its height is maintained when the graphic object is resized, but blank spaces are used around the image within the bounding rectangle if needed.
- **Preserve aspect ratio with cropping**. If this option is used, a graphic object's width in relation to its height is maintained when the graphic object is resized, but the image is cropped if necessary in order to use all available space within the bounding rectangle.

To select an aspect ratio mode, select a graphic object and then choose an appropriate aspect ratio mode icon on the Graphic Formatting toolbar. The table that follows summarizes the aspect ratio modes.

Aspect ratio modes

Aspect ratio mode	Graphic Formatting toolbar icon	Description	Illustration
Do not preserve aspect ratio		Object's width in relation to its height is not maintained when the graphic object is resized	
Preserve aspect ratio without cropping		Object's width in relation to its height is maintained when the graphic object is resized, but blank spaces are used around the image within the bounding rectangle if needed	
Preserve aspect ratio with cropping		Object's width in relation to its height is maintained when the graphic object is resized, but the image is cropped if necessary in order to use all available space within the bounding rectangle	

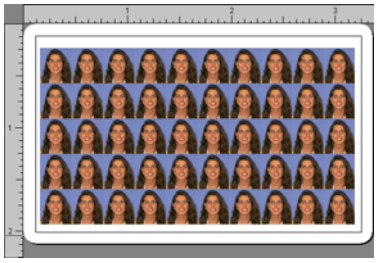
Set Tiling Attributes

The tiling attribute is used to create a tiled pattern using repeated, reduced-size versions of the graphic. The tiled pattern can include a fixed number of rows and/or columns. It can also be set to automatically determine the number of rows and/or columns, based on what will fit within the object frame.

Tiling off vs. tiling on

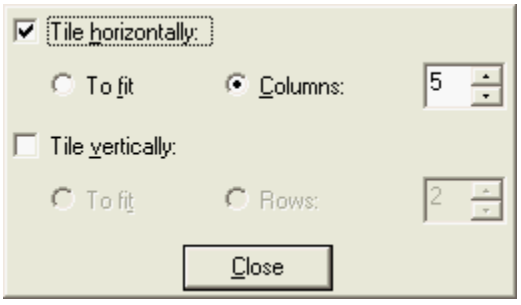
Tiling off

Tiling on



To set tiling attributes:

1. Open the badge layout.
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Select the graphic, photo or signature to be tiled. Click the Set Tiling Parameters toolbar button.
3. The tiling dialog box opens. Choose a tiling option and set the number of tiles to be used then, click the [Close] button.



Set Signature Pen Width and Color

To set signature pen width and color attributes for selected signature objects, use the Graphic toolbar buttons and instructions described in the following table.

Set Signature Pen Width

This determines the width of the line to be used to print the signature itself. If set to 0.0, the default line width for the badge printer (usually 1 pixel) will be used.

1. Open a badge layout and click the Set Signature Pen Width toolbar button. 
2. The Signature Pen Width dialog box opens. Enter a Signature Pen Width, in inches or millimeters, then choose the [Close] button.

Border width dialog box

Set Signature Pen Color

This is used to set the color to be used to print the signature itself.

1. Open a badge layout and click the Set Signature Pen Color toolbar button. 
2. The Color Palette window opens. Select a color, then choose the [OK] button.

Note: This button is disabled when the Use Original Pen Color attribute is on.

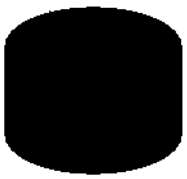
Toggle Original Pen Color Use

This toggles (on/off) the Use Original Pen Color attribute.

If this attribute is on, the signature pen color will be automatically set to the color used when the signature image was captured and the Set Signature Pen Color tool button is disabled.

Set Horizontal and Vertical Fillet Radius

The horizontal and vertical fillet radius is used set rounded corners on the smart chip contact, rounded rectangle, photo, signature, and graphic objects. Refer to the examples below of a rounded-rectangle with a high value for the horizontal fillet radius and a high value for the vertical fillet radius (respectively).



The horizontal fillet radius is greater than the vertical fillet radius

The vertical fillet radius is greater than the horizontal fillet radius

CHAPTER 10

Set Text Attributes

Options to format text are available on both the Text Formatting toolbar and on the General Formatting toolbar. This section describes the options available on the Text Formatting toolbar; for information about the text-related General Formatting toolbar options, refer to Chapter 11: Insert Fields into Text Objects on page 89..

Text Formatting Toolbar Procedures

The Text Formatting toolbar contains buttons for setting font and font size, font style, upper or lower case, text color and word wrap attributes for selected text objects. It also contains a box in which the maximum number of characters for selected text objects can be set.

Note: Badges that will be printed in Visitor Management should be designed using TrueType fonts.

Set Font and Font Size

To set font and font size attributes for selected text objects:

1. Open the badge layout by completing the following:
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout from the Open Layout window.
   c. Click the [OK] button.
2. Set the font and font size attributes by either:
   - Selecting the text object and entering the font and font size using the following sections of the toolbar:

- Double-clicking the text object and setting the font and font size attributes using the Object Properties window (refer to the steps below).
  - i. Highlight the **Font** property in the properties listbox (upper left corner of the Object Properties window).
  - ii. In the lower right corner of the Object Properties window enter the font and font size for the selected text object.
  - iii. Click the [OK] button.

Set Font Style

The font style attribute determines whether the selected objects will be printed using bold, italic and/or underlining font styles.

Toolbar button	Description
	Toggles (on/off) the bold attribute for selected text objects.
	Toggles (on/off) the italics attribute for selected text objects.
	Toggles (on/off) the underlined attribute for selected text objects.

Set Display Case

The display case attribute determines whether a case display mask should be used to print the selected text objects. There are two case display masks that can be used: Upper Case, Lower Case. A mixed display case occurs when both the upper and lower case attributes are toggled off. Refer to the examples below:

Toolbar button	Description	Example
	Toggles the upper case attribute on/off. When this attribute is on, the selected text objects are displayed in all uppercase.	SAMPLE TEXT
	Toggles the lower case attribute on/off. When this attribute is on, the selected text objects are displayed in all lowercase.	sample text
	Toggles the both upper and lower case attributes off.	Sample Text

Set Text Color

The text color attribute determines the foreground color for selected text objects - the color in which the actual text is printed.

To set the text color for selected text objects:

1. Open the badge layout.
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Set the text color attribute by either:
   - Selecting the text object and clicking the **Set Text Color**  toolbar button.
   - Double-clicking the text object and setting the text color attribute using the Object Properties window (refer to the steps below).
     i. Highlight the **Text Foreground Color** property in the properties listbox (upper left corner of the Object Properties window).
     ii. In the lower right corner of the Object Properties window click the [Select] button.
3. The Color window opens, select the desired color or define a custom color.
4. Click the [OK] button.

Set Word Wrap

The word wrap attribute determines whether the text value for each selected text object is automatically "wrapped" to fit within the object frame.

To set the word wrap attribute for selected text objects:

1. Open the badge layout.
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Set the word wrap attribute by either:
   - Selecting the text object and toggling the word wrap attribute on/off using the **Toggle Word-Wrap**  toolbar button.
   - Double-clicking the text object and setting the word wrap attribute using the Object Properties window (refer to the steps below).
     i. Highlight the **Word Wrap** property in the properties listbox (upper left corner of the Object Properties window).
     ii. In the lower right corner of the Object Properties window select the **Word Wrap** check box to turn word wrap on or deselect the check box to turn it off.
     iii. Click the [OK] button.

Note: Word wrap must be turned on in order for the object text to show up as multiple lines.

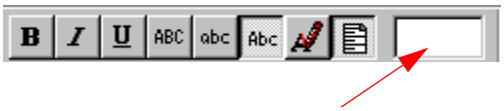
Set the Maximum Characters Displayed

The maximum characters attribute determines the maximum number of characters displayed and printed per text object.

To set the maximum characters for selected text objects:

1. Open the badge layout.
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Set the maximum character attribute by either:

- Selecting the text object and entering the maximum characters, to display and print, using the following toolbar location:



- Double-clicking the text object and setting the maximum characters, to display and print, using the Object Properties window (refer to the steps below).
  - i. Highlight the **Max Text Chars** property in the properties listbox (upper left corner of the Object Properties window).
  - ii. In the lower right corner of the Object Properties window enter the maximum characters to be displayed and printed for the selected text object.
  - iii. Click the [OK] button.

CHAPTER 11

Insert Fields into Text Objects

Text can be formatted using the options on the Text Formatting toolbar. For more information, refer to Chapter 10: Set Text Attributes on page 85.. Text objects can also have a custom layout created that includes fields, which is the focus of this section.

Text-related General Formatting Toolbar Options

The **Set Text and Database Fields** and **Object Properties** functions are on the General Formatting toolbar. Their functionality as it applies to text fields is discussed in this section.

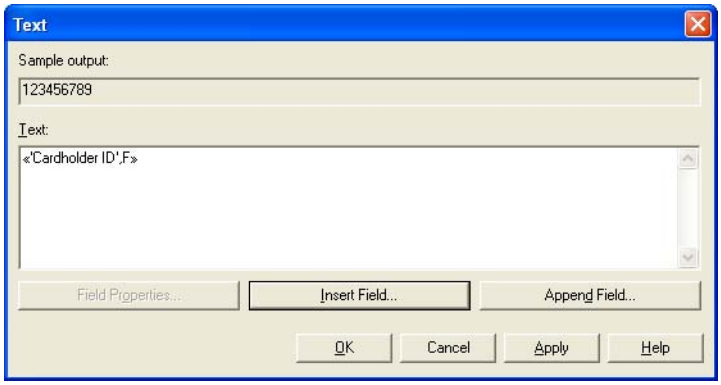
When a text object is selected, clicking the **Set Text and Database Fields** toolbar button opens the Text window. For more information on the Text Properties window, refer to Types of Object Property Windows on page 58. Likewise, when a text object is selected, clicking the **Object Properties** opens the Text Properties window. For more information on the Text window, refer to Text Window on page 90.

In either of these windows, you may insert or append fields to link to the text field. There are three types of fields that can be inserted into a custom layout: ASCII codes, check digits, and database fields.

- ASCII code: Non-printable characters. Opens the ASCII Code Field Properties dialog from which non-printable characters can be selected.
- Check Digit: *Check digits* are special digits used by barcode/magnetic readers to verify that a series of data digits have been properly encoded. A check digit would only be inserted into a barcode field. Opens the Check Digit Field Properties dialog in which different algorithms can be selected.
- Database Field: Opens the Database Field Properties window in which you can select different **Field** values and insert database links.

Text Window

The Text window is used with text and barcode objects. It is displayed by clicking Set Text and Database Fields  on the General Formatting toolbar. Through the Text window you can insert database fields into text objects and insert check digits into barcode objects. *Check digits* are special digits used by barcode/magnetic readers to verify that a series of data digits have been properly encoded.



Sample output

Displays a sample output of the data. This display only field automatically updates whenever changes are made to the Text window.

Text

Displays the text values of an object. Text values consist of a combination of static text, database links to specific BadgeDesigner database fields and non-printable characters. This field may contain static text, check digits (shown inside double-caret brackets and curly brackets: <<{XXX}>>), or database fields (shown inside double-caret brackets: <<field name>>). Select the field and then click [Field Properties] to display information about the field. Enter values in this field using the following methods:

- Use the keyboard to enter static text values.
- Use the [Insert Field] button to display the Select Field Type dialog and add a field wherever the cursor is currently positioned in this field.
- Use the [Append Field] to display the Select Field Type dialog and add a field at the end of all values listed in this field.

Field Properties

Enabled only when a field's text value is selected in the **Text** field. Displays the field properties window for the selected field (Database Field Properties, ASCII Code Field Properties, or Check Digit Field Properties, depending on the field type).

Insert Field

Opens the Select Field dialog, which is used to insert ASCII code, check digits, or database fields into the text values wherever the cursor is in the **Text** field.

Append Field

Opens the Select Field dialog, which is used to append or add ASCII code, check digits, or database fields to the end of all text values listed in the **Text** field.

OK
Saves the settings and closes the Text window.

Cancel
Closes the Text window without saving or applying the settings.

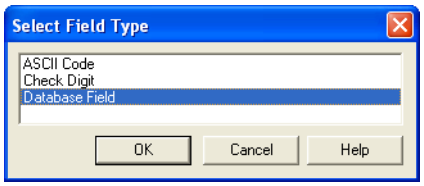
Apply
Applies the settings to the selected object (does not close the Text window).

Help
Used to open a context-sensitive Help topic window.

Select Field Type Dialog

The Select Field Type dialog is used to insert ASCII code, check digit, or database fields into a text field in a badge layout.

To display the Select Field Type dialog, click [Insert Field] or [Append Field] on the Text or Text Properties window.



Field Type
Types of fields that can be inserted into a field in a badge layout include:

- ASCII code: Non-printable characters. Opens the ASCII Code Field Properties dialog from which non-printable characters can be selected.
- Check Digit: *Check digits* are special digits used by barcode/magnetic readers to verify that a series of data digits have been properly encoded. A check digit would only be inserted into a barcode field. Opens the Check Digit Field Properties dialog in which different algorithms can be selected.
- Database Field: Opens the Database Field Properties window in which you can select different **Field** values and insert database links.

OK
Saves the changes you have made and exits the window.

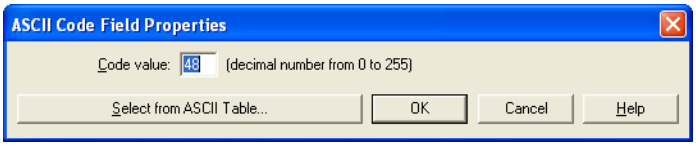
Cancel
Exits the window without saving the changes.

Help
Displays online help for this topic.

ASCII Code Field Properties Dialog

The ASCII Code Field Properties dialog is used to insert non-printable characters into a text field.

To display the Select Field Type dialog, click [Insert Field] or [Append Field] on the Text or Text Properties window, and then select “ASCII Code”.



Code value
Displays the ASCII code value for the non-printable character to insert into the text field. To select a new code value, click [Select from ASCII Table].

Select from ASCII Table
Displays the Select Decimal ASCII Code dialog. Select the code you wish to insert into the field, and then click [OK]. The Select Decimal ASCII Code dialog closes, and the value will be displayed in the **Code value** field. Click [OK] to add it to the field.

OK
Saves the changes you have made and exits the window.

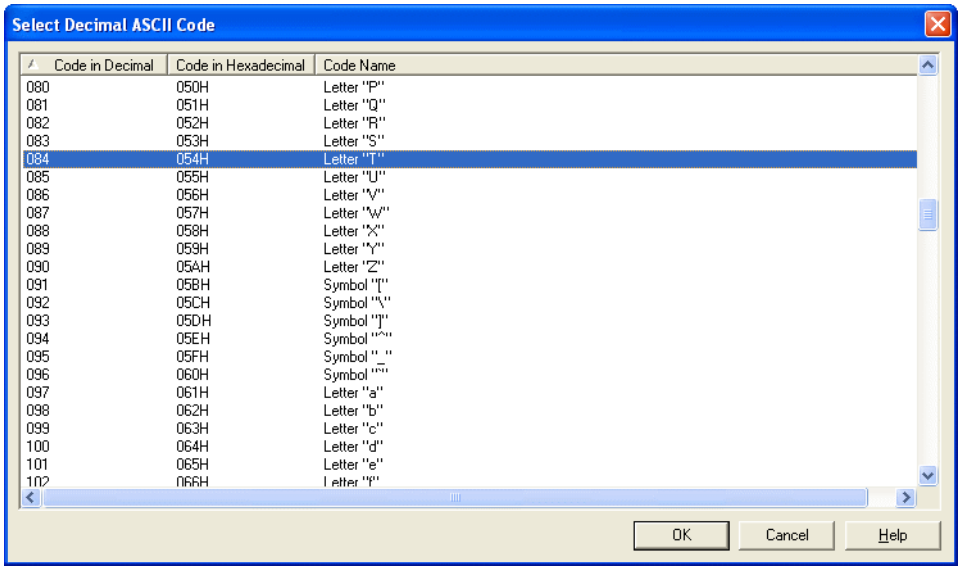
Cancel
Exits the window without saving the changes.

Help
Displays online help for this topic.

Select Decimal ASCII Code Dialog

The Select Decimal ASCII Code dialog lists all ASCII codes in decimal and hexadecimal, as well as the code name for each.

The Select Decimal ASCII Code dialog is displayed by clicking the [Select from ASCII Table] button on the ASCII Code Field Properties window. It is also displayed by clicking the [Select from ASCII Table] button on the Database Field Properties window (Text/numeric).



Code in Decimal
Lists the code for the decimal (base-ten) representation of the character(s).

Code in Hexadecimal
Lists the code for the hexadecimal (base-sixteen) representation of the character(s).

Code Name
Lists the international standard character name.

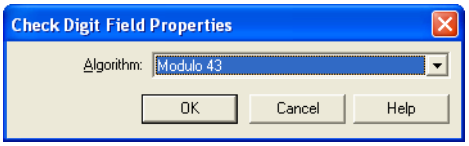
OK
Once you have selected an ASCII code, click this button to save the changes and exit from this window.

Cancel
Exits the window without saving the changes.

Help
Displays online help for this topic.

Check Digit Field Properties Dialog

The Check Digit Field Properties dialog is used to insert non-printable characters into a barcode field.



Algorithm
Lists the check digit types that are available. OnGuard currently supports the following five types:

- ISO7812-1: A check digit of this type immediately follows the associated data and is calculated from all previous digits since the last check digit. It is the same kind of check digit used for data encoded on the magnetic strips of credit cards and is calculated via the Luhn Formula described in the International Standards Organization document ISO/IEC 7812-1:1993.
- Left-to-Right CK01: A check digit of this type immediately follows the associated data and is calculated from all previous digits since the last check digit. It is used for barcodes and is calculated via a modulus 10 based algorithm created by a barcode products company called DATA2.
- Right-to-Left CK01: A check digit of this type immediately precedes the associated data and is calculated from all the digits following the check digit, up to the digit that precedes the next check digit. It is used for barcodes and is calculated via a modulus 10 based algorithm created by a barcode products company called DATA2.
- Modulo 43: The Modulo 43 check character type is the native (symbology level) check character for the Code 3 of 9 barcode symbology. It is the check character type used for HIBC barcode data when using either the Code 128 or the Code 3 of 9 symbology. This is commonly used by the health care industry.
- Modulo 43 Extended: The Modulo 43 Extended check character type is the native (symbology level) check character for the Extended Code 3 of 9 barcode symbology (also known as Code 3 of 9 Full ASCII or Extended Code 39 or Code 39 Full ASCII barcode symbology). This check character type is identical to the Modulo 43 check character type except that it supports all 128 characters in the standard ASCII character set. This check character type is NOT used for HIBC barcodes. This is commonly used by the health care industry.

OK
Saves the changes you have made and exits the window.

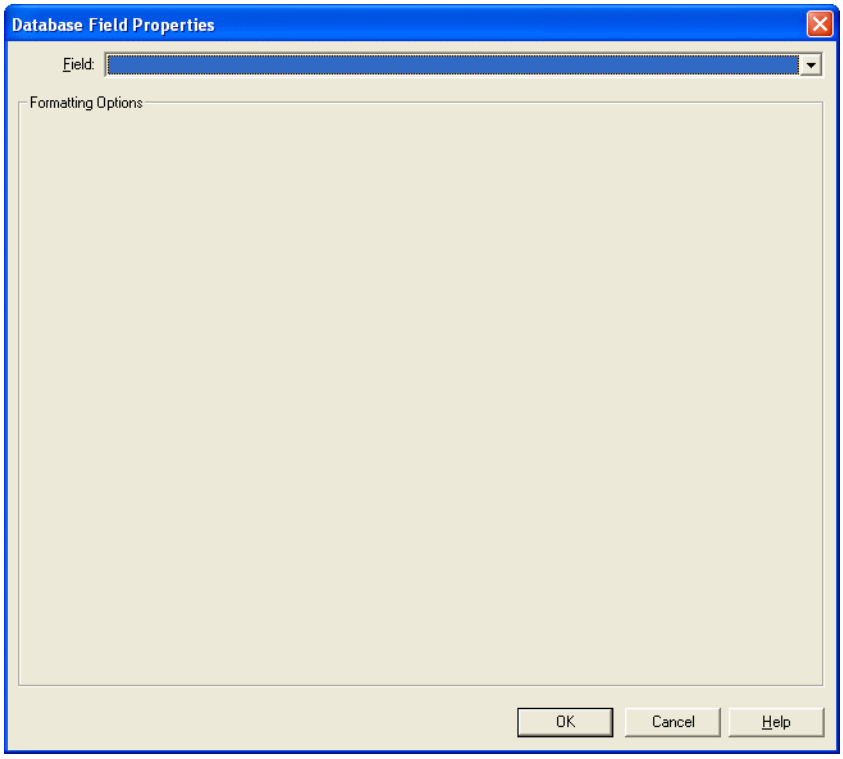
Cancel
Exits the window without saving the changes.

Help
Displays online help for this topic.

Database Field Properties Window (Blank)

The Database Field Properties window (Blank) is used to format the fields you inserted into a text object using the Text window or the Text Properties window. The contents of this window changes depending on whether the type of field selected in the **Field** drop-down is blank, text/numeric, or date/time.

The Database Field Properties window (Blank) displays when you click the [Insert Field] button in the Text or Text Properties window and then select “Database Field” in the Select Field Type dialog.



Field

Displays a list of the BadgeDesigner database fields that can be linked to the object (including standard BadgeDesigner database fields and user-defined database fields). The contents of the Database Field Properties window changes depending on whether the field selected in this drop-down is blank, text/numeric, or date/time.

OK

Saves the changes you have made and exits the window.

Cancel

Exits the window without saving the changes.

Help

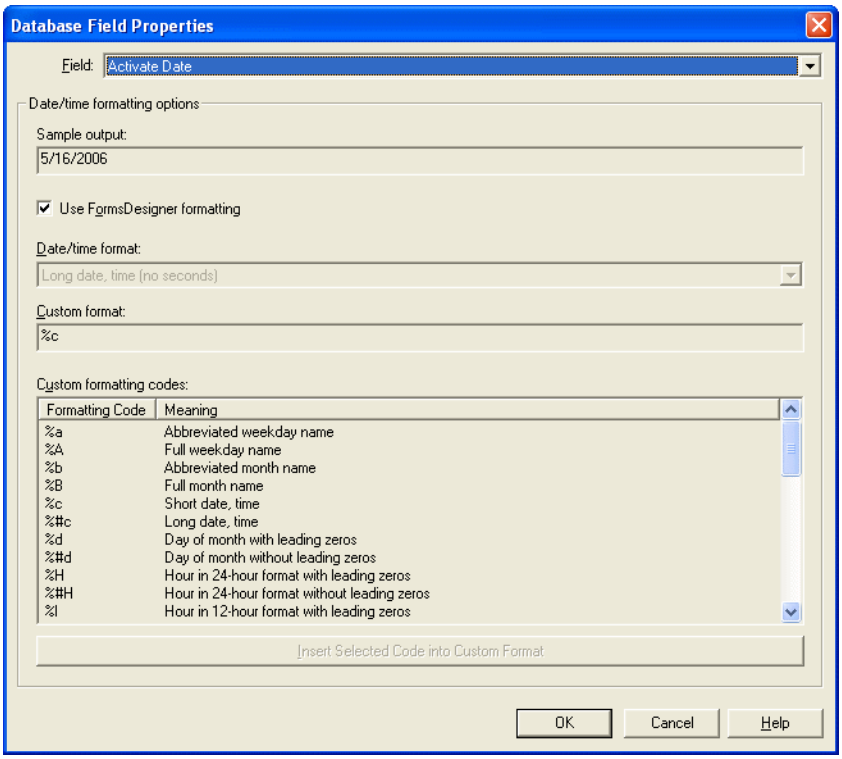
Displays online help for this topic.

Database Field Properties Window (Date/time)

The Database Field Properties window (Date/time) is used to format the date/time database fields you inserted into a text object using the Text window or the Text Properties window. The contents of this window depend on whether the type of value in the **Field** drop-down is blank, text/numeric, or date/time.

Note: In BadgeDesigner, you may select a **Field**; in System Administration and ID CredentialCenter, the **Field** is always grayed out.

The Database Field Properties window (Date/time) displays when you click the [Insert Field] button in the Text or Text Properties window, select "Database Field" in the Select Field Type dialog, and then select a date/time field in the **Field** drop-down in the Database Field Properties window.



Field

Describes the object being modified. The contents of the Database Field Properties window changes depending on whether the field selected in this drop-down is blank, text/numeric, or date/time.

In BadgeDesigner, you may select a **Field**; in System Administration and ID CredentialCenter, the **Field** is always grayed out.

Sample output

Displays a sample output of the data. This field is display-only, and is automatically updated as changes are made.

Use FormsDesigner formatting

Check this box to use the field formatting as shown in the Cardholders form. For example, the activate date could appear as "1/1/2001" instead of "Monday, January 01, 2001 12:00 AM." Newly inserted field references default to having this option checked.

Date/time format

Enabled for selection if the **Use FormsDesigner formatting** check box is deselected. Allows you to choose from a predefined list how the field will be formatted.

Custom format

Enabled for selection if you select **Custom** from the **Date/time format** drop-down list. Allows you to design a customized format using the formatting codes.

Custom formatting codes

Enabled for selection if you select **Custom** from the **Date/time format** drop-down list. Provides a predefined list of formatting codes you can use to customize the field format.

Insert formatting code

Enabled only when an entry is selected in the **Custom formatting codes** list. Click this button to apply a selected custom formatting code to an output. The **Sample output** field will then be updated with a preview of the output.

OK

Saves the changes you have made and exits the window.

Cancel

Exits the window without saving the changes.

Help

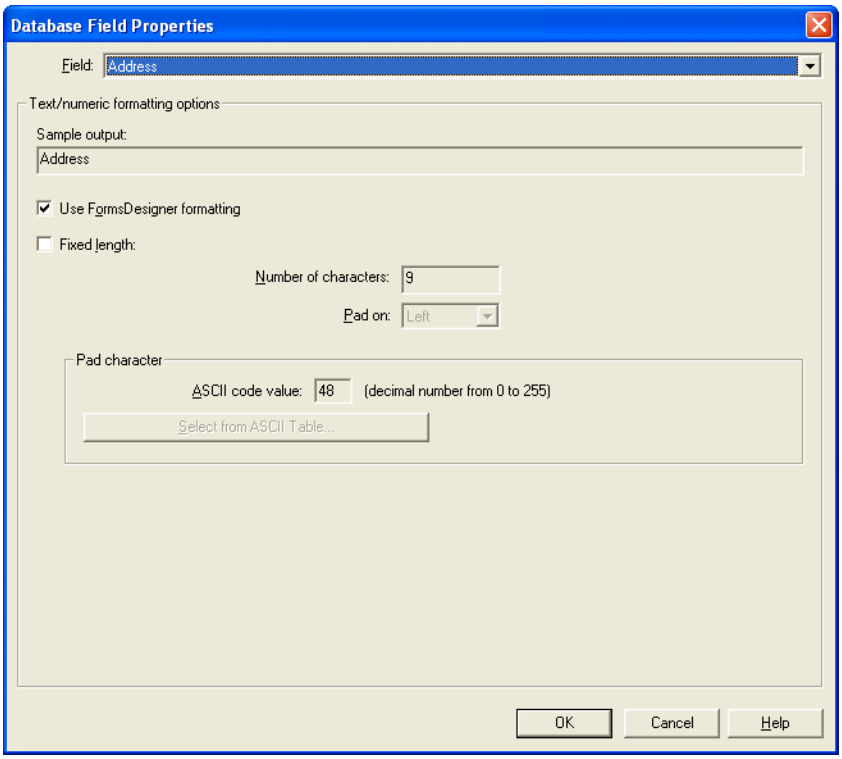
Displays online help for this topic.

Database Field Properties Window (Text/numeric)

The Database Field Properties window (Text/numeric) is used to format the text/numeric database fields you inserted into a text object using the Text window or the Text Properties window. The contents of this window depend on whether the type of value in the **Field** drop-down is blank, text/numeric, or date/time.

Note: In BadgeDesigner, you may select a **Field**; in System Administration and ID CredentialCenter, the **Field** is always grayed out.

The Database Field Properties window (Text/numeric) displays when you click the [Insert Field] button in the Text or Text Properties window, select “Database Field” in the Select Field Type dialog, and then select a text/numeric field in the **Field** drop-down in the Database Field Properties window.



Field

Describes the object being modified. The contents of the Database Field Properties window changes depending on whether the field selected in this drop-down is blank, text/numeric, or date/time.

In BadgeDesigner, you may select a **Field**; in System Administration and ID CredentialCenter, the **Field** is always grayed out.

Sample output

Displays a sample output of the data. This field is display-only, and is automatically updated as changes are made.

Use FormsDesigner formatting

Check this box to use the field formatting as shown on the Cardholder screen. For example, the phone number could appear as "(123) 456-7890" instead of "1234567890." The field defaults to having this option checked.

Fixed length

Check this box if the field data should contain a specific number of characters/numbers.

Number of characters

Specify the number of characters or numbers in this field.

Pad on

Pads or truncates fields on the left or the right. When the **Fixed length** check box is selected, field data will be truncated on the left/right if the cardholder's data for that field exceeds the specified number of characters. If the cardholder's data for that field is less than the specified number of characters the field data will be padded on the left/right.

ASCII code value
Using ASCII Code, choose the pad character. If the data is padded on the left, the pad character(s) will show up before the data. If the data is padded on the right, the pad character(s) will show up after the data.

Select from ASCII Table
Brings up the Select Decimal ASCII Code dialog and allows you to select the pad character from a list.

OK
Saves the changes you have made and exits the window.

Cancel
Exits the window without saving the changes.

Help
Displays online help for this topic.

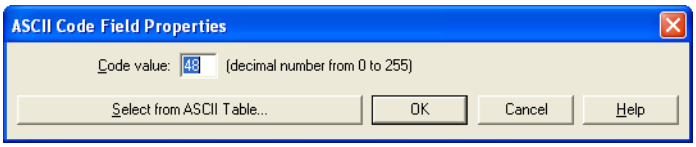
Link Database Fields to Text

Using the Text window or Text Properties window you can link database fields such as cardholder name, building and department to text. Depending on the field type, you can also elect to use FormsDesigner formatting and set a fixed length for the database field.

1. Open the badge layout by completing the following:
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout and click the [OK] button.
2. Right-click a text object and select **Properties** (or click the Object Properties  toolbar button). The Text Properties window displays. Alternately, click the Set Text and Database Fields  toolbar button. The Text window displays.
3. On either the Text Properties window or the Text window, click [Insert Field]. The Select Field Type dialog opens.
4. In the Select Field Type dialog, select the type of field to insert. Choices include ASCII code, check digits, or database field.
   - For more information on ASCII codes, refer to Insert an ASCII Code on page 99.
   - For more information on check digits, refer to Insert a Check Digit on page 104.
   - For more information on database fields, refer to Insert a Database Field on page 100
5. The **Sample output** field is updated to reflect the fields listed in the **Text** field. Once this is satisfactory, click [OK].

Insert an ASCII Code

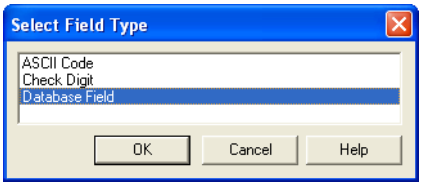
1. In the Select Field Type dialog, select “ASCII Code”.
2. Click [OK].
3. The ASCII Code Field Properties window opens. Click [Select from ASCII Table].



4. The Select Decimal ASCII Code window opens. Select the desired code, and then click [OK].
5. On the ASCII Code Field Properties window, click [OK]. The code is added to the **Text** field.

Insert a Database Field

1. In the Select Field Type dialog, select "Database Field" and then click [OK].



2. The Database Field Properties window opens. In the **Field** drop-down, select the desired field.
3. The fields on the Database Field Properties window change depending on whether the selected **Field** is text/numeric or date/time.
   - If a date/time field is selected:
     1) Select or deselect the **Use FormsDesigner formatting** check box.
     2) If you deselected the **Use FormsDesigner formatting** check box, select the Date/time format from the drop-down list.

        If you select **Custom** from the drop-down list, highlight the Custom formatting codes you want to apply (located at the bottom of the screen) and click the [Insert Selected Code into Custom Format] button.

        Click [OK].
   - If a text/numeric field is selected:
     1) Select the **Use FormsDesigner Formatting** check box if you want to use the field formatting as shown on the Cardholder screen.
     2) Select the **Fixed length** check box if you want the database field to have a fixed length. Enter the number of characters you want the fixed length to be. Using the **Pad on** drop-down list, select whether extra digits will be truncated/add on the left or right. Select the pad character.
     3) Click [OK].

CHAPTER 12

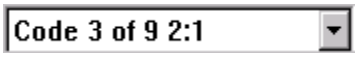
Set Barcode Attributes

The barcode toolbar contains buttons set the barcode rotation and format. Although there is not a toolbar button to insert a check digit, this aspect of working with barcodes is also discussed in this section.

Set Barcode Format

The barcode format attribute determines the actual code scheme used to create barcodes. The attributes can be defined through the Object Properties window or the Set Barcode Type toolbar button.

1. Open the badge layout.
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Set the barcode format by either:
   - Selecting the barcode object and setting the barcode type using the following toolbar button:



   - Double-clicking the barcode object and setting the barcode format using the Object Properties window (refer to the steps below).
     i. Highlight the **Barcode Format** property in the properties listbox (upper left corner of the Object Properties window).
     ii. In the lower right corner of the Object Properties window select the desired barcode type and click the [OK] button.

The following are barcode formats available in BadgeDesigner.

Barcode Formats Table

Barcode type or format	Valid data characters	Check digit
Aztec Code	All 8-bit values can be encoded. Values 0 - 127 are interpreted as the ASCII character set while values 128 - 255 are interpreted as ISO 8859-1, Latin Alphabet No. 1. Two non-data characters can be encoded, FNC1 for compatibility with some existing applications and ECI escape sequences for the standardized encoding of message interpretation information.	Yes
Codabar	0 1 2 3 4 5 6 7 8 9 A B C D - $: / . +	No
Code 128 Auto	full ASCII character set	Yes
Code 128-A	space ! " # $ % & ‘ ( ) * + , - . / 0 1 2 3 4 5 6 7 8 9 : ; < = > ? @ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [\ ] ^ _ (Control code characters currently not supported, see notes below.)	Yes
Code 128-B	space ! " # $ % & ‘ ( ) * + , - . / 0 1 2 3 4 5 6 7 8 9 : ; < = > ? @ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [\ ] ^ _ a b c d e f g h i j k l m n o p q r s t u v w x y z { | } ~ ⌂ (Control code characters currently not supported, see notes below.)	Yes
Code 128-C	0 1 2 3 4 5 6 7 8 9 (Control code characters currently not supported, see notes below.)	Yes
Code 3 of 9 2:1 (2:1 narrow-to-wide bar width ratio)	0 1 2 3 4 5 6 7 8 9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z - . * $ / + %	No
Code 3 of 9 3:1 (ANSI) (3:1 narrow-to-wide bar width ratio)	0 1 2 3 4 5 6 7 8 9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z - . * $ / + %	No
Code 93	0 1 2 3 4 5 6 7 8 9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z - . * $ / + %	Yes
EAN-13	0 1 2 3 4 5 6 7 8 9 For EAN-13 exactly 12 digits must be specified. This is a fixed length symbology	Yes
EAN-8	0 1 2 3 4 5 6 7 8 9 Exactly 7 digits must be specified. This is a fixed length symbology.	Yes
Extended Code 3 of 9	full ASCII character set	No

Barcode Formats Table

Barcode type or format	Valid data characters	Check digit
Extended Code 93	full ASCII character set	Yes
Interleaved 2 of 5 3:1	0 1 2 3 4 5 6 7 8 9	No
PDF417	full ASCII character set **Note:** The PDF417 symbology is a two-dimensional, character self-checking, bi-directionally decodable symbology allowing up to almost 3 KB of data depending on the types of characters within the data.	No
POSTNET	0 1 2 3 4 5 6 7 8 9	Yes
UCC-128 (also known as EAN-128)	0 1 2 3 4 5 6 7 8 9 Exactly 11 digits must be specified. This is a fixed length symbology.	Yes
UPCA (also known as UPC-A)	0 1 2 3 4 5 6 7 8 9 Exactly 11 digits must be specified. This is a fixed length symbology.	Yes

Notes: Code 128 Auto automatically selects back and forth between Code 128-A, Code 128-B and Code 128-C within the same barcode to produce the smallest barcode (fewest number of bars). The switching is driven by minimum length calculations and the characters being printed.

OnGuard currently doesn't allow control codes to be specified in the Text property for barcode objects. Some of these codes would allow users to force the bar patterns to switch amongst Code 128-A, Code 128-B and Code 128-C midstream within the same barcode. Users who want the symbology to switch between these three symbologies within a single barcode must use Code 128 Auto.

Set Barcode Rotation

The barcode rotation attribute determines the degree of rotation to be used to print the barcode.

1. Open the badge layout.
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout from the Open Layout window and click the [OK] button.
2. Set the barcode rotation by either:
   - Selecting the barcode object and setting the barcode type using the toolbar button.
   - Using the Object Properties window (refer to the steps below).
     i. Right-clicking the barcode object and selecting **Properties**.
     ii. Highlight the **Rotation** property in the properties listbox (upper left corner of the Object Properties window).

iii. In the lower right corner of the Object Properties window enter the degree of rotation and click the [OK] button.

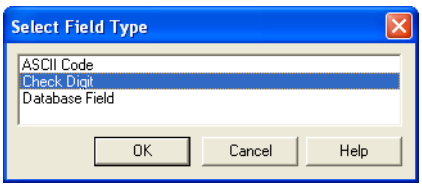
Toolbar button	Description
	The Barcode Not Rotated button sets the Barcode Rotation attribute for selected barcode objects to 0.
	The Barcode Upside-Down button sets the Barcode Rotation attribute for selected barcode objects to 180.
	The Barcode Rotated -90 degrees button sets the Barcode Rotation attribute for selected barcode objects to -90.
	The Barcode Rotated +90 degrees button sets the Barcode Rotation attribute for selected barcode objects to +90 degrees.

Insert a Check Digit

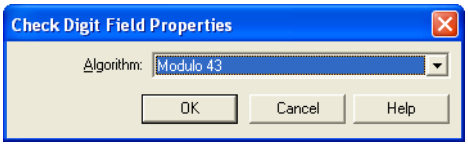
A *check digit* is also known as a checksum character and is the number located on the far side of a barcode. The purpose of a check digit is to verify the barcode (a series of data digits) have been properly encoded. Barcode readers contain decoders that calculate the checksum by performing a series of mathematical operations on the digits that precede the check digit and compare the result of the calculation to the value of the check digit.

The Object Properties window allows you to insert one or more check digit fields. (There are five types of these special check digit fields ISO7812-1, Left-to-Right CK01, Right-to-Left CK01, and two others mainly used by those in the health industry: Modulo 43 and Modulo 43 Extended.) Although these check digit fields are automatically computed from the data in the Text property, they are actually treated as barcode data. Therefore if a barcode contains several check digit fields, OnGuard automatically computes and prints multiple checksums for the entire barcode.

1. Open the badge layout by completing the following:
   a. From the ***Layout*** menu select ***Open***.
   b. Select the desired layout and click the [OK] button.
2. Right-click a barcode object and select **Properties**. The Object Properties window displays.
3. In the Properties listbox, select “Text”.
4. Click [Insert Field]. The Select Field Type dialog opens.
5. In the Select Field Type dialog, select “Check Digit” and then click [OK].



6. The Check Digit Field Properties dialog opens. Select the desired algorithm, and then click [OK].



7. The **Text** field is updated with your selection. Each non-printable ASCII text character inserted displays in double-caret brackets and curly brackets: <<{XXX}>>.

CHAPTER 13

Set Magnetic Stripe, Smart Chip, and Shape Attributes

The procedures listed below do not encompass all the magnetic stripe attribute settings and procedures.

Set Page Edge

The page edge attribute is available for magnetic stripe objects only and determines the orientation/offset origin of the magnetic stripe contained on the badge media. The values include: **Top** (magnetic stripe is vertically oriented and offset from the top of the media), **Bottom** (magnetic stripe is vertically oriented and offset from the bottom of the media), **Left** (magnetic stripe is horizontally oriented and offset from the left side of the media) and **Right** (magnetic stripe is horizontally oriented and offset from the right side of the media).

Determine Offset from Edge

The offset from edge attribute is available for magnetic stripe objects only and determines the distance (inches or millimeters) between the edge of the badge media and the edge of the magnetic stripe. For example, if the page edge attribute for a magnetic stripe is **Top** then the offset from edge is the distance between the top edge of the badge media and the top edge of the magnetic stripe. If the page edge attribute is **Left**, the offset from edge is the distance from the left edge of the badge media to the left edge of the magnetic stripe.

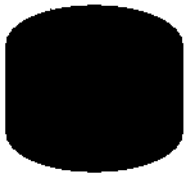
Note: The measurement units (inches or millimeters) is set in the Layout Properties folder on the Editor form. For more information, refer to Editor Form on page 49.

Geometric Shape and Smart Chip Contact Attribute Procedures

The procedures listed below do not encompass all the geometric shape and smart chip contact attribute settings and procedures.

Set Horizontal and Vertical Fillet Radius

The horizontal and vertical fillet radius is used set rounded corners on the smart chip contact, rounded rectangle, photo, signature, and graphic objects. Refer to the examples below of a rounded-rectangle with a high value for the horizontal fillet radius and a high value for the vertical fillet radius (respectively).



The horizontal fillet radius is greater than the vertical fillet radius

The vertical fillet radius is greater than the horizontal fillet radius

Block Out Printing

The block out printing applies to magnetic stripe objects, smart chip contacts and shape objects (rectangle, rounded-rectangle, circle and ellipse). For more information on magnetic stripe objects and smart chip contacts, refer to Types of Objects on page 57.

Block Out Printing with Magnetic Stripe and Smart Chip Contacts

Block out printing is a read-only attribute for both the magnetic stripe and smart chip contact; therefore this attribute is always set to “Yes” and end-users cannot change it. Please note, however, the block out printing attribute is available for shape objects and is NOT a read-only attribute. For more information, refer to Block Out Printing with Shape Objects on page 109.

When the block out printing attribute is set to “Yes” it means an object is a blocker object. Blocker objects do not allow other objects to intersect them in the BadgeDesigner application as well as during the printing process. If another object intersects a blocker object, the part that overlaps the blocker object does not display in the application nor is it printed.

In the example below the employee name intersects the magnetic stripe. The badge will be printed just as it looks in the display. The employee name will be blocked out where it intersects the magnetic stripe. Nothing prints over or on top of the blocker object.

Notes: The only way to override the read-only attribute (block out printing) for the magnetic stripe and smart chip contact is to set their visible attribute to **No**. When the visible attribute is set to **No**, the magnetic stripe and smart chip contact do not display in BadgeDesigner nor do they print on badges.

The visible attribute determines whether the object displays in BadgeDesigner and prints on a badge.

Block Out Printing with Shape Objects

Unlike the block out printing attribute for magnetic stripes and smart chip contacts, the block out printing attribute for shape objects allows users to toggle the attribute on and off. If the block out printing attribute is “Off” then the shape object does not block out printing of objects that intersect it. If the block out printing attribute is “On”, then the shape object blocks out printing if the Visible attribute is also “On”. Refer to the table below for the results that are achieved for the different block out printing and visible attribute settings.These results apply to shape objects as well as magnetic stripe and smart chip contacts.

Block Out Printing Options

Visible Attribute Setting	Block Out Printing Attribute Setting	Result when another object is intersects a shape (blocker) object
Yes	Yes	The shape object displays and blocks out printing. Any object that intersects the shape object will be blocked from and printing on top of the shape object.
Yes	No	The shape object does not display and will not block out printing. Any object that intersects the shape object will display and print on top of the shape object if its layer number is closer to the top. For more info
No	No	The shape object does not display and will not block out printing. Any object that intersects the shape object will display and print.
No	Yes	The shape object does not display and will not block out printing. Any object that intersects the shape object will display and print.

Notes: If the Visible attribute is set to “No” the shape object will not display and will not block out printing regardless of its Block Out Printing attribute setting.

As with other attributes, the block out printing attribute in conjunction with the visible attribute is programmable. For more information, refer to Chapter 14: Program a Badge Object on page 111.

CHAPTER 14

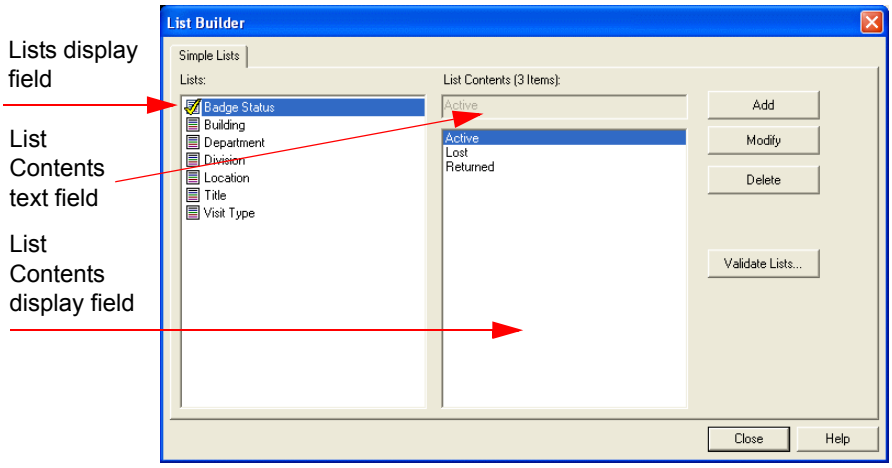
Program a Badge Object

Using the Program Badge feature the properties of an object printed on a badge can be controlled by cardholder data. For example, the background graphic used on a badge can be determined by the building or location assigned to the cardholder.

Note: If you are not licensed to use the Program Badge feature, OnGuard will remove any programming from a badge layout when it is loaded (even if you copied a database from a licensed system). You will only be able to edit values for the properties common to all objects currently selected in the badge layout.

Program a Badge Object

1. Determine the cardholder data field that will be associated with the object properties by completing the following:
   a. Open either the System Administration or ID CredentialCenter application.
   b. From the ***Administration*** menu select ***List Builder***.
   c. In the **Lists** display field, select the name of a list (cardholder data field). In the example below, **Department** is cardholder data field that will be associated with the object property.
2. Create a list of options associated with the data field. These options will be available when programming a badge as well as creating a cardholder. Refer to the screen shot below.
   a. Click the [Add] button.
   b. In the **List Contents** text field, enter the option you want to add to the list.
   c. Click the [OK] button. The new item is inserted alphabetically into the List Contents display field.
   d. Repeat steps a through c for each option to be added to the database.
   e. Click the [Close] button.
   f. Close the software application.

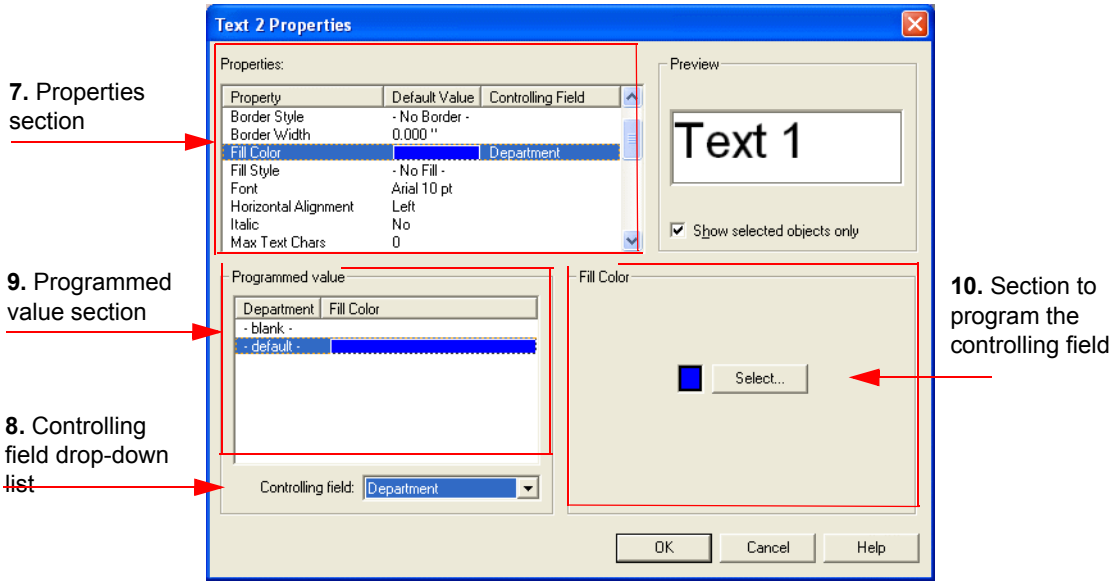


3. Launch BadgeDesigner if you have not already done so. If it is already launched, be sure to have BadgeDesigner re-scan the database for database field information by completing one of the following:
   - Pressing <Ctrl> + <U> on your keyboard
   - Selecting ***Update Database Field List*** from the ***Layout*** menu.
4. Open an existing Badge layout by selecting ***Open*** from the ***Layout*** menu. Select the desired layout from the Open Layout window and click the [OK] button.
5. Select the object(s) you wish to program.
6. Open the Object Properties window by completing one of the following:
   - Right-click on the badge object and then select **Properties**.
   - Click on the Object Properties  toolbar button
   - Select the ***Object Properties*** option from the ***View*** menu.

Notes: Depending on your view settings, not all of the options to open the Object Properties windows will work. For more information, refer to BadgeDesigner View Options on page 52.

A different Object Properties window opens depending on the object selected. For more information, refer to Types of Object Property Windows on page 58.

7. In the Object Properties window, select the property (you wish to program) from the Properties section. In the example below, Fill Color is selected.



8. Select the controlling field from the drop-down list at the bottom of the Object Properties window. This is the cardholder data field that you selected in step 1. The controlling field determines which set of data will be used to program the badge property. In the example above, **Department** is selected as the controlling field.
9. Select a controlling field value to program from the Programmed value section. This is the list of options you associated with the cardholder data field in step 2. In the example above, the **Engineering** controlling field value is selected (highlighted).
10. In the lower right portion of the Object Properties window, set the property value for the controlling field value you selected in step 9. In the example above, the color red is selected and associated with the Engineering department.
11. Repeat steps 9 and 9 for each value in the Programmed value section.
12. Repeat steps 7 through 10 to program additional object properties.
13. Click the [OK] button when you are done.
14. Save your changes to the BadgeDesigner database by clicking the Save Layout  toolbar button or selecting ***Save*** from the ***Layout*** menu.

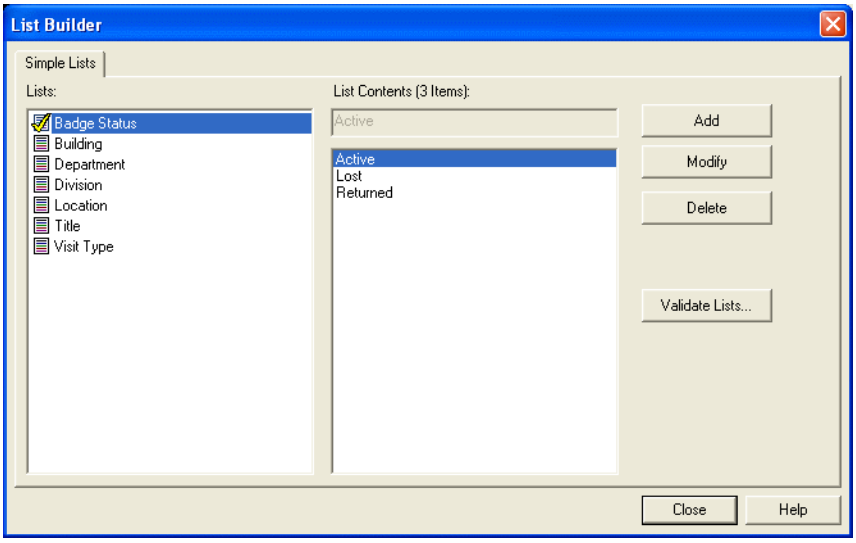
A Program Badge Example

Suppose you want the cardholder's department printed below the cardholder's picture and you want the fill color for the departments color coded.

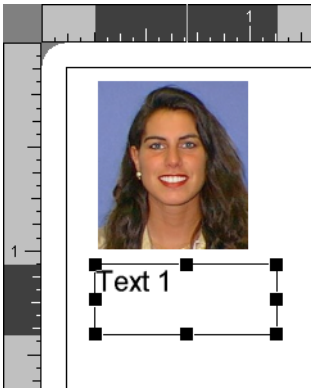
Department	Color
Engineering	Red
Manufacturing	Orange
Marketing	Yellow
Sales	Green
Training	Blue

You would perform the following steps:

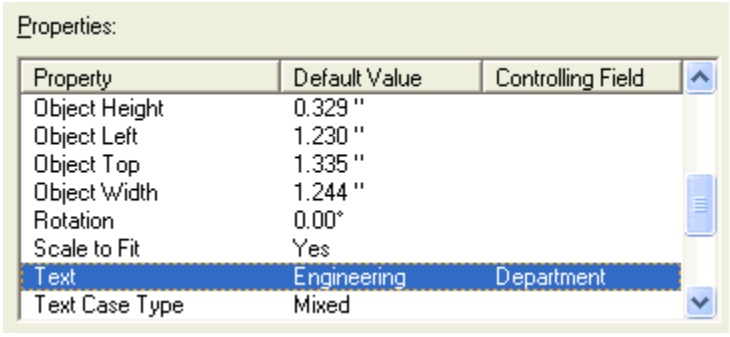
1. First, define the department list field values in the List Builder.
   a. Open the List Builder window via the System Administration or ID CredentialCenter software applications.
   b. Select the name of the list (in this case, “Department”) and click the [Add] button.
   c. Enter several types of departments (in this case you would add Manufacturing, Engineering, Marketing, Sales and Training.)
   d. Click the [OK] button.
   e. Close the software application.



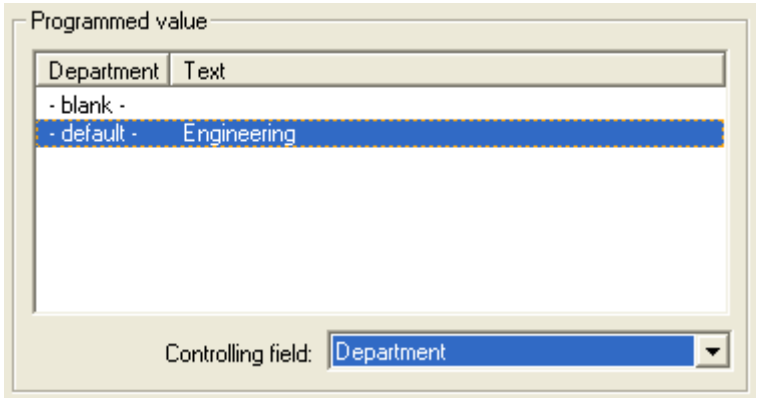
2. Launch BadgeDesigner if you have not already done so. If you have, either press <Ctrl> + U or select ***Update Database Field List*** from the ***Layout*** menu to re-scan the database.
3. Open an existing badge layout or create a new layout. For this example we will create a new layout. For more information, refer to Chapter 4: Create, Open and Save Layouts on page 37.
4. Insert a photo with a text object underneath.



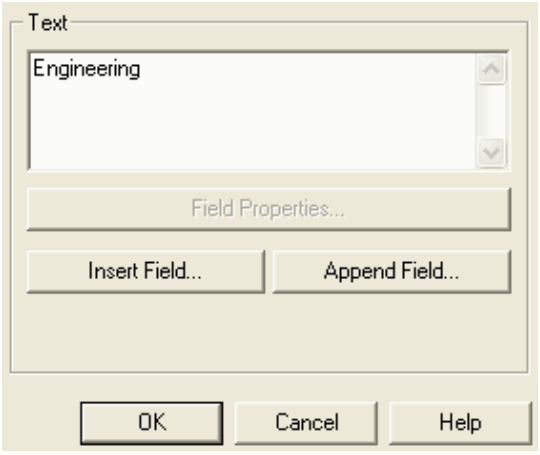
5. Select the text object.
6. Open the Object Properties window.
7. Program the Text property to display the department name. To do this:
   a. Select **Text** from the Properties section.



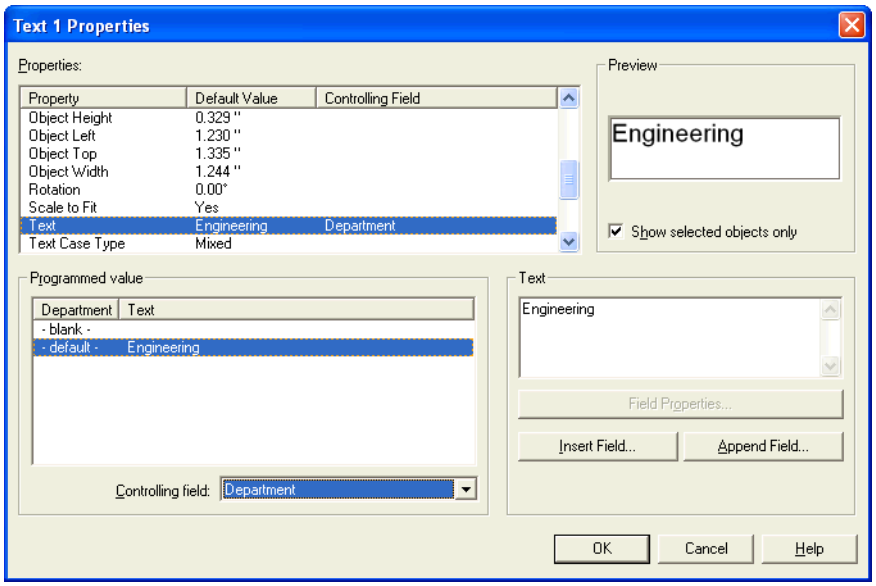
b. Select **Department** from the **Controlling Field** drop-down list.



8. Assign text values to the different departments.
   a. Select the “Engineering” department in the Programmed value section.
   b. In the lower right portion of the Object Properties window, enter `Engineering`.



   c. Continue assigning text values to each department.
   d. When you are finished the object properties window should like the following:



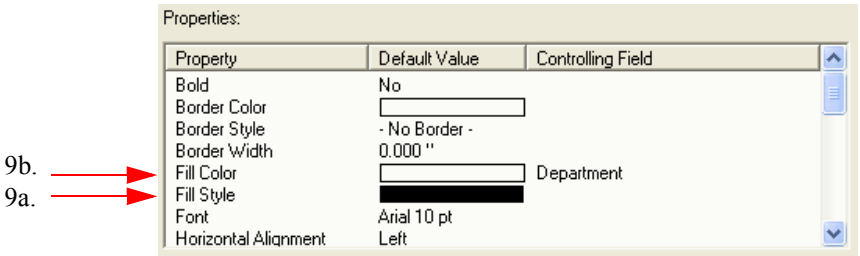
Note: Click on the different programmed values in the lower left corner of the Object Properties window. Notice the Preview window (upper right corner of the Object Properties window) displays the different text values.

9. Program the fill color to display colors by department.

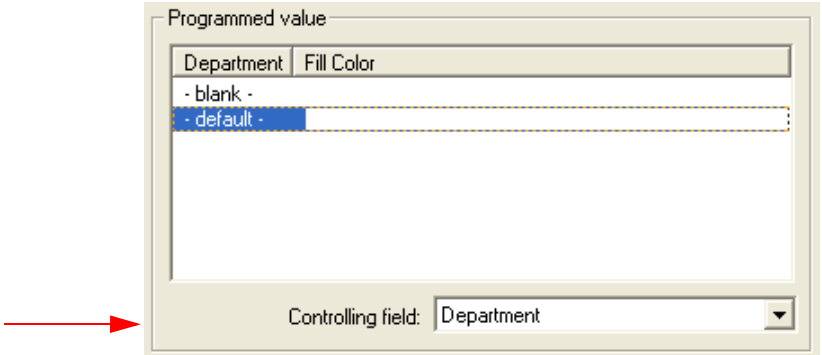
a. Set the Fill Style to solid.

- Select (highlight) Fill Style in the Properties section (upper left corner of the Object Properties window).
- Click the **Fill Style** drop-down list in the lower right corner of the Object Properties window and select the solid fill style (just below the No Fill option).

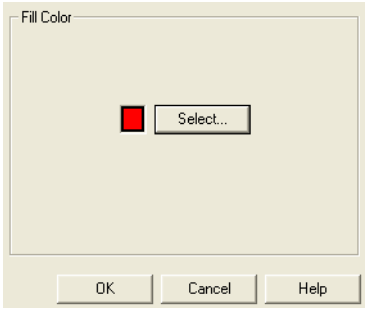
b. Select **Fill Color** from the Properties section.



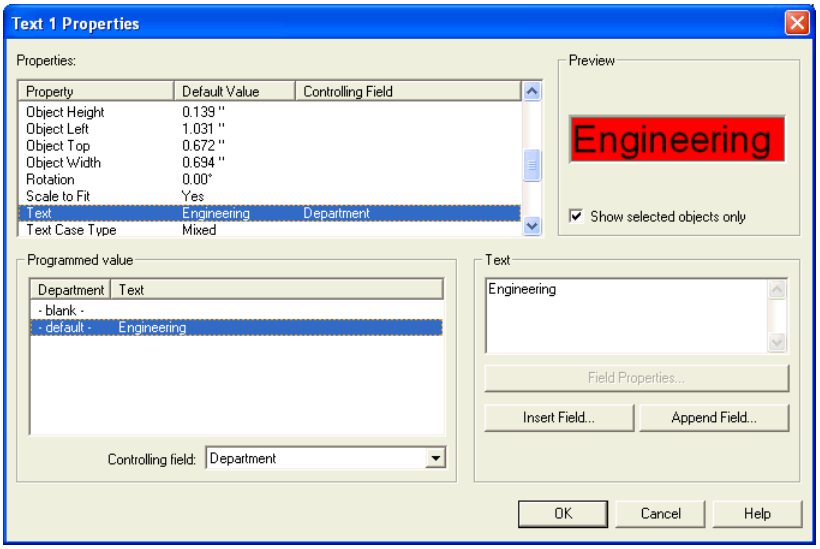
c. Select **Department** from the **Controlling Field** drop-down list.



10. Assign color values to the different departments. Refer to Department on page 113 for the appropriate colors.
    a. Select the “Engineering” department in the Programmed value list.
    b. Press the [Select] button in the Fill Color section (lower right corner of the Object Properties window).
    c. Choose red. Now the text object’s fill color property is programmed to display red for cardholders in the Engineering department and white for all others (because in this example white is the default value).



    d. Continue assigning colors to each department.
11. When you are finished the Text Object Properties window should match the following:



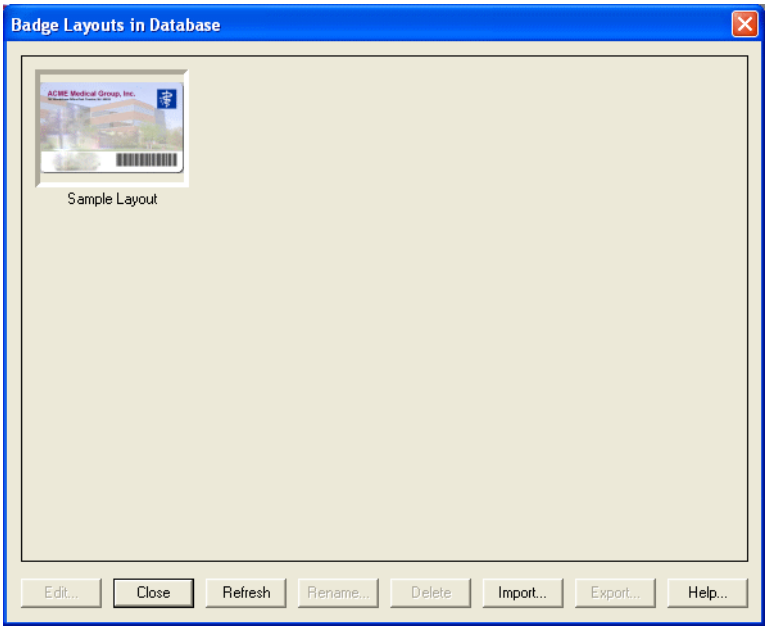
12. You can now click on each department listed in the Programmed value section and watch the object preview change to show the different programmed fill colors and text.
13. Click the [OK] button to exit from the Object Properties window.
14. Save these values to the BadgeDesigner database by choosing ***Save*** from the ***Layout*** menu or by clicking on the Save Layout  toolbar button.

CHAPTER 15

BadgeDesigner Gallery

The BadgeDesigner Gallery displays a miniature view of every badge layout in the BadgeDesigner database. You can use the BadgeDesigner Gallery to open, rename, import, export and delete badge layouts in the BadgeDesigner database.

Note: The BadgeDesigner Gallery is also called the Badge Layouts in Database window.



Open the Gallery Window

From the ***Layout*** menu select ***Gallery*** or use the following shortcut keys: <Ctrl> + <G>.

Select a Layout And Deselect All Other Layouts

1. From the ***Layout*** menu select ***Gallery*** or use the following shortcut keys: <Ctrl> + <G>.
2. Click on a thumbnail. A red border displays around the view, indicating it is selected. Any layout or layouts that were previously selected are now deselected.

Select a Layout Without Deselecting Other Layouts

1. From the ***Layout*** menu select ***Gallery*** or use the following shortcut keys: <Ctrl> + <G.
2. Hold down the <Ctrl> key and click on a thumbnail. A red border is displayed around the view, indicating that it is selected.
3. Repeat step 2 to select additional layouts.

Select Several Layouts in a Sequence

1. From the ***Layout*** menu select ***Gallery*** or use the following shortcut keys: <Ctrl> + <G.
2. Click on the first thumbnail in the layout view.
3. Hold down the <Shift> key and click on the last thumbnail in layout view. A red border is displayed around all views, indicating that they are all selected.

Deselect a Layout

Click the mouse anywhere in the layout view. The red border around the view is removed, indicating that the layout is no longer selected.

Open a Layout

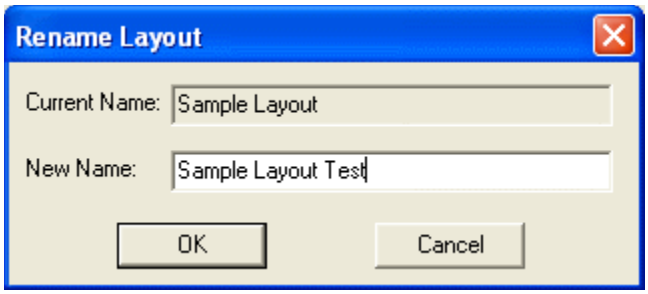
1. From the ***Layout*** menu select ***Gallery*** or use the following shortcut keys: <Ctrl> + <G.
2. Select the appropriate layout view (thumbnail) by clicking on it.
3. Click the [Edit] button or double-click the mouse anywhere in the BadgeDesigner Gallery window.
4. The layout is opened in the BadgeDesigner window.

Open Several Layouts

1. Select the layout(s) to be opened. Be sure to use the <Shift> or <Ctrl> keys to select multiple layouts.
2. Click the [Edit] button. The selected layouts open in the BadgeDesigner window.

Rename Layouts

1. Select one layout to be renamed.
2. Click the [Rename] button. The Rename Layout window opens.



3. Type the new layout name in the **New Name** field and click the [OK] button. The Rename Layout window closes and the layout is renamed.

Delete Layouts

To delete one or more layouts from the database:

1. Select the ***Gallery*** option under the ***Layout*** menu. The Layout Gallery appears.
2. Select the layouts to be deleted and click the [Delete] button.
3. The Confirm Layout Delete window opens. Click the [Yes] button to confirm the deletion. The Confirm Layout Delete window closes and the selected layouts are deleted from the BadgeDesigner database.

Export Layouts

A BadgeDesigner badge layout can be exported to any system drive so that it can be imported to another system where BadgeDesigner is installed.

When a layout is exported, the following files are copied to the selected system drive:

- The ".bdg" layout file (Layout Name.bdg)
- A ".jpg" file for each true-color graphic contained in the badge layout (Graphic Name.jpg)
- A ".png" file for each paletted graphic contained in the badge layout (Graphic Name.png)
- A ".png" mask file for each chromakeyed graphic contained in the badge layout (Graphic NameMask.png).

To export a layout:

1. Select one layout to be exported.
2. Click the [Export] button. The Select Folder window opens.
3. Navigate to the folder into which the layout is to be exported using the [Open] button.
4. When you reach the desired folder location, click the [Save] button. The Select Folder window closes and the layout is exported to the selected folder.

Import Layouts

BadgeDesigner badge layouts can be imported into the BadgeDesigner database from any system drive.

When a layout is imported, the following are copied into the database:

- The layout itself (from the ".bdg" file)
- A graphic for each ".jpg" file and ".png" file

- A chromakey mask for each “Mask.png” file.

To import a badge layout into the BadgeDesigner database:

1. Click the [Import] button. The Open window opens.
2. Select the “.bdg” file to be imported and click the [Open] button. The Open window closes and the selected badge layout is imported into the BadgeDesigner database.

Edit Layouts

To edit a badge layout:

1. Select the ***Gallery*** option under the ***Layout*** menu. The Layout Gallery appears.
2. Select the layouts click the [Edit] button. The badge displays in the BadgeDesigner main window.
3. Edit the sample badge. For more information, refer to Add, Select and Delete Badge Objects on page 57.
4. When you are done, save the layout by clicking ***Save*** in the ***Layout*** menu.

Refresh the Gallery Window

The BadgeDesigner Gallery window can be updated or refreshed, at any time, to display the most current layouts in the BadgeDesigner database. This is useful if you are using BadgeDesigner with a shared database.

To refresh the BadgeDesigner Gallery Window:

- Click the [Refresh] button. The BadgeDesigner Gallery window is refreshed.

Close the Gallery Window

To close the BadgeDesigner Gallery Window:

- Click the [Close] button. The BadgeDesigner Gallery window closes.

Appendices

APPENDIX A

Multimedia Capture

Multimedia Capture contains forms with which you can:

- Import an existing photo
- Optimize photo image quality

Required Licenses and Permissions

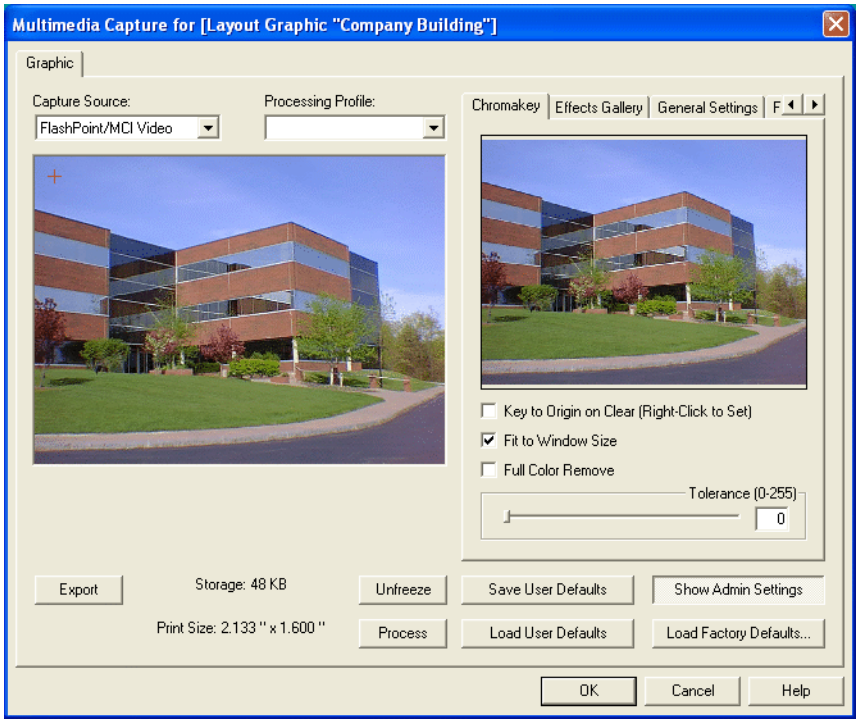
The availability of certain features in Multimedia Capture are subject to licensing restrictions. A user's permissions must also be set on the Cardholder Permission Groups form in the Users folder. For more information, refer to the Users Folder chapter in the System Administration User Guide.

Multimedia Capture feature	Required license	Required Cardholder Level capture permission
Image Processing window	Image Capture (STD)	Image Processing
WDM Video capture source	Image Capture (STD)	Photo
FlashPoint/MCI Video capture source	Image Capture (STD)	Photo
WDM Video Settings, FlashPoint/MCI Video Settings and FlashPoint/MCI Video I/O Settings sub-tabs	Image Capture (STD)	Photo and Advanced
Scanner & Digital Camera capture sources	Image Capture (STD)	Scanner
Scanner & Digital Camera Settings sub-tabs	Image Capture (STD)	Scanner and Advanced
Signature capture source	Image Capture (STD)	Signature
Signature Settings sub-tab	Image Capture (STD)	Signature and Advanced

Note: The BadgeDesigner application does not use the following permissions: File Import, Signature, File Export, Biometrics and Advanced. Users with permission to use BadgeDesigner are automatically authorized to perform layout graphic file import, export and use the General Settings tab.

Graphic Form

The Graphic form is for capturing badge layout graphics to be used in badge layouts. You can control if and how the system determines background transparency information for the currently captured bitmapped image (does not apply to non-bitmapped (vector) images.) Badge printing/print-preview will use this transparency information when told to print/display just the foreground portion of that image onto the badge. A typical application of this feature is to print just the head and shoulders of employees, often on top of some graphics. Setting the tolerance to zero causes no transparency information to be stored for the image into the database.



Capture Source

Select the type of information you want to capture. Choices include:

- WDM Video - the cardholder's photo is captured from live video. When you select the WDM Video capture source, the WDM Video Settings sub-tab becomes available.
- Flashpoint/MCI Video - the cardholder's photo is captured from live video. When you select the FlashPoint/MCI Video capture source, the FlashPoint/MCI Video Settings sub-tab becomes available.
- Signature - the cardholder enters his or her signature using a signature capture tablet and stylus. (This option is only available when Signature form is selected.)
- Scanner - a scanner device creates a computer image file from an existing hardcopy photo. When you select the Scanner capture source, the Scanner Settings sub-tab becomes available.

- Digital Camera - a digital camera is attached to the computer so that images stored in the camera can be transferred to the system. When you select the Digital Camera capture source, the Digital Camera Settings sub-tab becomes available.
- File Import - an existing computer image file is added to the system.

Processing Profile

Select an effect profile for the selected image. Effect profiles are defined in the Image Processing window. Click [Process] to open the Image Processing window. They system is configured with a set of default image processing profiles that can be applied.

Multimedia window

Depending on your selection from the **Capture Source** drop-down list, this window displays either live video, signature input, scanner input, a digital camera image or an imported file.

Export

Click this button to save the current captured image as an image file on a disk. Minimal compression will be used so that the image is stored in the best possible quality. The crop window will be used when exporting if an image is bitmapped. The following default filename and extensions apply when exporting:

When the Photo form is selected:

- If the photo is bitmapped and the crop window is in use, the portion of the image within the crop window will be saved. Otherwise, the whole photo will be saved.
- If the current record has no name assigned to the cardholder, the filename default is “no_name Photo.” Otherwise, the filename will default to the cardholder’s name.
- When the Signature form is selected:
- If the signature is bitmapped and the crop window is in use, the portion of the signature within the crop window will be saved. Otherwise, the whole signature will be saved.
- If the record has no cardholder name, the filename default is “no_name Sig” plus the filename extension. Otherwise, it defaults to the cardholder name plus the filename extension.
- When the Graphic form is selected:
- If the graphic is bitmapped and the crop window is in use, the portion of the graphic within the crop window will be saved. Otherwise, the whole graphic will be saved.
- If the graphic is a new one being imported into the database, the filename default is “New Layout Graphic” plus the filename extension. Otherwise, it defaults to the graphic name plus the file extension.

Freeze

Select this button to freeze the live video in order to capture a cardholder's photo. This button is displayed only when either “WDM Video” or “FlashPoint/MCI Video” is selected from the **Capture Source** drop-down list.

Unfreeze

Select this button to resume live video. This button is displayed only when either “WDM Video” or “FlashPoint/MCI Video” is selected from the **Capture Source** drop-down list.

Open

Click this button to display an Open window from where you can select a drive, directory and filename to import an existing photo. This button is displayed only when “File Import” is selected from the **Capture Source** drop-down list.

Clear

Click this button to clear the contents of the multimedia window. This button is displayed only when “Signature,” “Scanner,” “Digital Camera”, or “File Import” is selected from the **Capture Source** drop-down list.

Sign

Click this button to activate the signature pad so that the cardholder can enter his or her signature. This button is displayed only when “Signature” is selected from the **Capture Source** drop-down list.

Stop

Click this button to notify the system that the cardholder has finished entering his or her signature and deactivate the signature pad. This button is displayed only when “Signature” is selected from the **Capture Source** drop-down list.

Preview

Click this button to activate the scanner, so that the existing image can be digitized (scanned) into the system. This button is displayed only when “Scanner” is selected from the **Capture Source** drop-down list.

Scan

Click this button to activate the scanner, so that the existing image can be digitized (scanned) into the system. This button is displayed only when “Scanner” is selected from the **Capture Source** drop-down list.

Process

Click this button to open the Image Processing window from where you can manipulate the captured photo to improve its quality.

Save User Defaults

Click this button to save the current settings as the default settings on this workstation. The settings will be applied to all Multimedia Capture forms and sub-tabs; however, they do not include the set of image processing profiles, which are maintained separately by the Image Processing window.

Show Admin Settings

Select this button to view all the forms and sub-tabs applicable to the current capture source. When not selected, only the Chromakey and Effects Gallery sub-tabs will be displayed.

Load User Defaults

Click this button to display the previously saved (default) settings for this workstation. The settings will be applied to all Multimedia Capture forms and sub-tabs.

Load Factory Defaults

Click this button to open the Load Factory Defaults window where you can reset the capture settings back to the default values for your specific capture hardware.

OK

Saves your changes and closes Multimedia Capture.

Cancel

Closes the window and returns you to the Cardholder, Badge or Access Levels form. Does not save any changes made in Multimedia Capture.

Help
Displays online assistance for Multimedia Capture.

General Capture Procedures

The following procedures can be used on this form.

1. In BadgeDesigner, display a badge layout.
2. Select a graphic in the badge layout.
3. Select ***Object Properties*** from the ***View*** menu.
4. The graphic Properties window displays.
5. Click [Gallery]. The Select Graphic from Database window displays.
6. Click [Import]. Multimedia Capture opens.

Load (User or Factory) Default Settings

1. In Multimedia Capture, click the Photo, Signature, or Graphic tab.
2. Click [Load Factory Defaults] or [Load User Defaults].
3. If you are loading user defaults, the settings automatically populate.
4. If you are loading factory default settings, the Load Factory Defaults dialog opens.
   a. Select the profile for the hardware capture device.

Note: The difference between high resolution and low resolution digital camera profiles is that they have different default crop window sizes.

   b. Click [OK].

Export an Image

OnGuard exports the most recently saved image. Even if you are displaying live video or recording a signature at the time you initiate export, OnGuard exports the last image saved. If the image is cropped, only the cropped portion is exported.

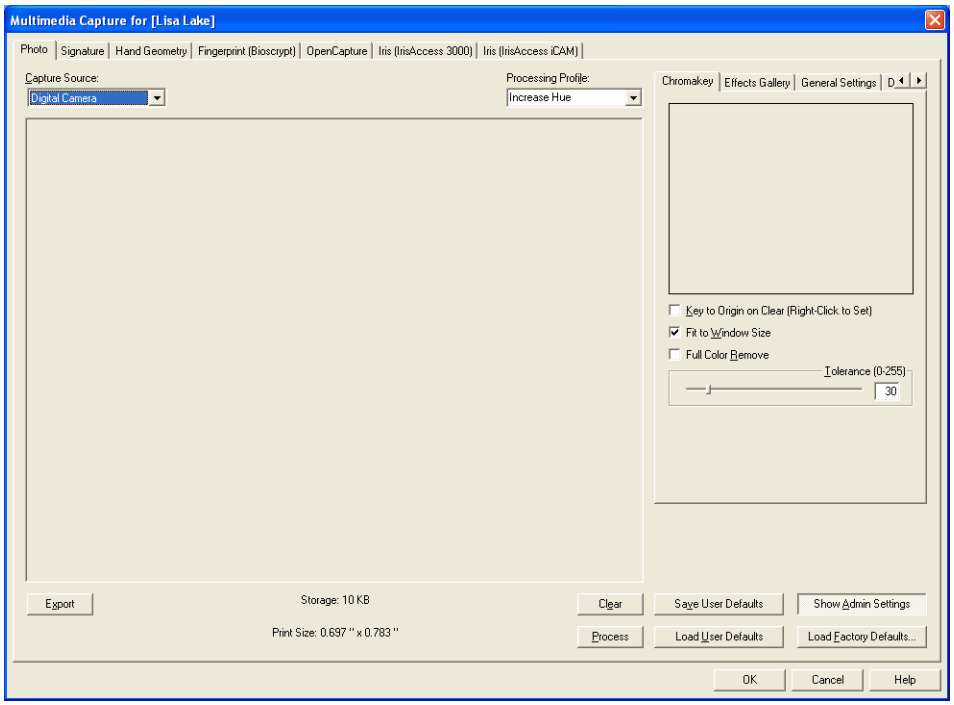
1. In Multimedia Capture, click the Photo, Signature or Graphic tab.
2. Display the image and click [Export].
3. Depending on how the system is configured, the Save As window opens. Enter the filename and click [Save]. Otherwise, the file is automatically named and exported to the default directory set up in the Multimedia Capture admin settings (File I/O Settings sub-tab).

Formats Exported

OnGuard exports images in the following formats:

- JPG format if the image is bitmapped and has more than 256 colors.
- PNG format if the image is bitmapped and has 256 colors or less.
- EMF format if the image is vector.

Chromakey Sub-tab



The Chromakey sub-tab allows you to control if and how the system determines background transparency information for bitmapped images. Chromakey does not apply to non-bitmapped (vector) images.

A typical application of chromakey is to capture cardholder/visitor images using a solid color backdrop. Then, apply chromakey to the images (remove the background color) and print the badge. The cardholder/visitor's image displays over the background image.

Chromakey output

Displays the image with the current Chromakey settings applied. When printing a badge, you may want to first preview the badge and zoom in to enlarge the display, to make sure that your Chromakey settings produced the desirable result.

Key to Origin on Clear (Right-Click to Set)

Controls the position of the key (red cross-hairs) upon loading of a new image. The key position is selected using the mouse to right-click over the image. When this check box is selected, when the current image is cleared, the key position is reset to the origin (at the top left corner of the crop window). When this check box is not selected, when the current image is cleared, the key position is preserved.

Fit to Window Size

When this check box is selected, the current image is scaled to fit within the available viewing area. Depending on the size of the image, it will be reduced or enlarged to fit the window.

Full Color Remove

When this check box is selected, the chromakey feature will determine which pixels are background pixels strictly by color matching alone. Every pixel of the image is compared against the key color, from left-to-right, top-to-bottom. Each pixel that differs from the key color is determined to be a background pixel. The tolerance setting determines how much the

colors have to differ from the key color to be considered as background. When this check box is not selected, the chromakey feature will determine which pixels are background pixels in the same manner as a drawing program's flood-fill feature. The filling starts at the origin and spreads outward, stopping at parts of the image that differ from the key color. The tolerance setting determines how much the colors have to differ to stop the fill.

Full color remove works well with graphic images but not with photos when the color of the person's eyes or clothing is very similar to the background color.

Tolerance (0-255)

Determines how much deviation from the exact chromakey color match is tolerable. Choose a value in the range of 0-100. The higher the tolerance value the more colors that will be chromakeyed out (the more colors that will be converted to background).

Chromakey Sub-tab Procedures

The following procedures can be performed on this form.

Apply Chromakey to an Image

Note: Chromakey is available only when the captured image is bitmapped.

1. In Multimedia Capture, display an image.
2. On the Photo or Graphic tab, click the Chromakey sub-tab.
3. In the main window, identify the color you want to make transparent by right-clicking the mouse over the original image (and inside the crop window if there is one). When you right-click, a red cross hair displays or repositions itself. The red cross hair identifies the color the chromakey tolerance value applies to.
4. On the Chromakey sub-tab:
   a. Select the **Fit to Window** Size check box if you want to view the entire image in the Chromakey window.
   b. Select the **Full color Remove** check box to remove the selected color from the entire screen. This feature works well with graphic images but not photos where the person's eye color may match the background you are trying to remove.
   c. Use the **Tolerance** slider to control the depth of the chromakey effect. The Chromakey window displays the changes.
   d. Use the **Key to Origin on Clear (Right-Click to Set)** check box to reset the cross hair position to the top left corner of the image when you click [Clear].
5. Click [OK].

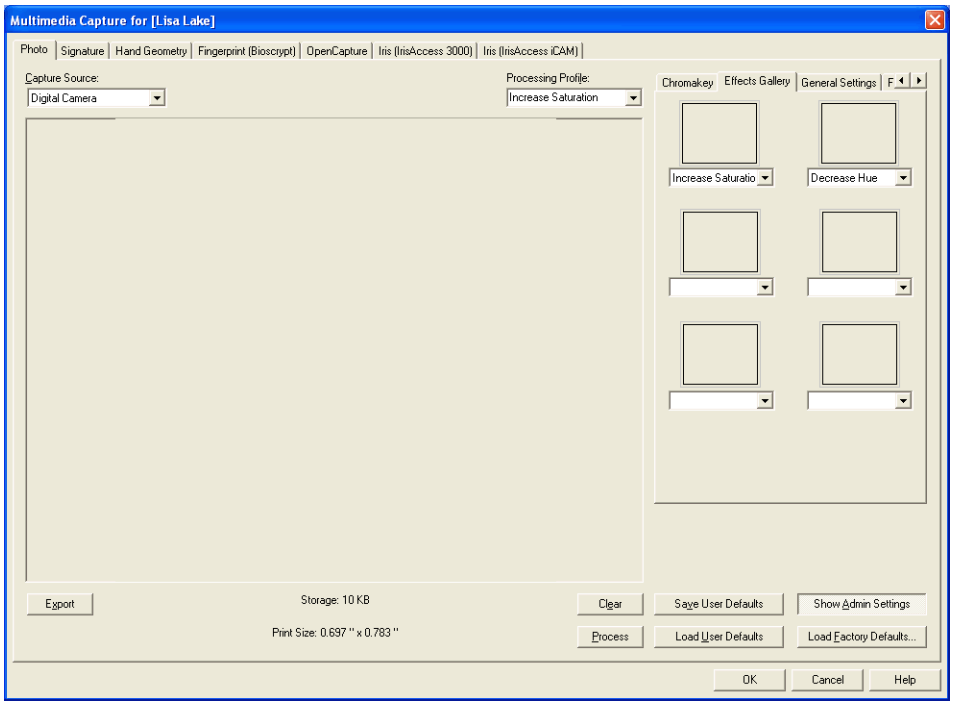
Chromakey Tips

The following characteristics produce the best chromakey results:

- High quality images
- Deep blue or green (highly saturated) backgrounds (light gray and white do not work well)
- Uniform background lighting
- No shadows
- Background color significantly different than the subject's eye and clothing color

Effects Gallery Sub-tab

The Effects Gallery displays up to six pre-defined effect profiles. Choices include: increase or decrease hue, increase or decrease saturation, increase or decrease contrast, and sharpen. An *effect profile* contains special effects that can be applied to bitmapped images only.

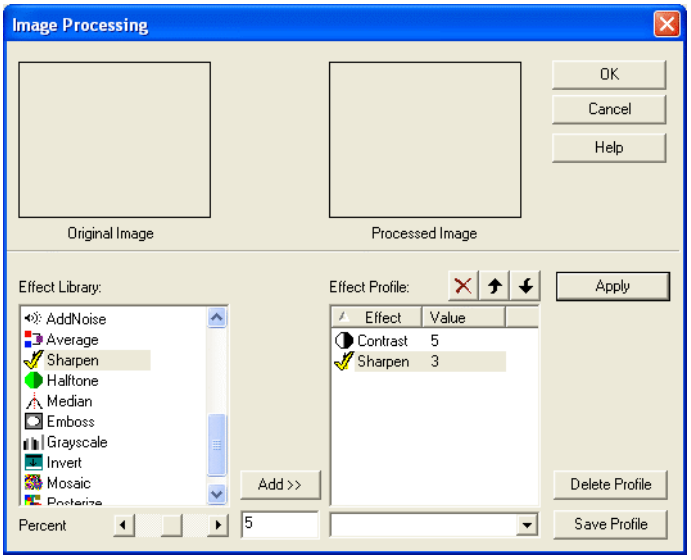


You can also customize an effect profile. When you customize an effect profile you can choose from 21 different effects. Furthermore, many of these effects have settings that allow you to increase or decrease the intensity of that effect. Multiple effects can be combined to achieve the desired result. For more information, refer to Create an Effect Profile on page 136.

Use the Effects Gallery

1. In Multimedia Capture, display an image.
2. On the Photo or Graphic tab, click the Effects Gallery sub-tab.
3. Select an effect profile from the drop-down list.
4. To apply the effect on the currently displayed image, select the thumbnail image such that a blue line encompasses the perimeter of the thumbnail.

Image Processing Window



Preview boxes

Any of the six boxes each containing a thumbnail of the captured image with an effect profile applied.

Effect profile

Choices in these drop-down lists (located below the six thumbnails of the captured image) include the names of all currently defined effect profiles. Select a profile to be applied to each thumbnail.

Image Processing Window

Original Image

Displays a miniature view of an original (unprocessed) captured image.

Processed Image

Displays a miniature view of an image with an effect profile applied. This enables you to preview the outcome of combined image effects.

Effect Library

Lists the available effects you can apply to the captured image. Choices include:

- None - applies no effects to the image.
- Intensity - increases or decreases the overall intensity level of the light in the image. Adjust the brighter areas by making them brighter or darker. You can choose a value in the range of -100% to +100%. Negative values make the image darker; positive values lighten the image.
- Contrast - increases or decreases the range of gray levels contained in the image, adjusting the distinction between the lightest and darkest tones in the image. You can choose a value in the range of -100% to +100%. The higher the positive value the lighter the light areas become and the darker the dark areas become.

- Saturation - adjusts the purity of color (the number of colors used to create a particular color). You can choose a value in the range of -100% to +100%. Positive values increase the saturation (purity); negative values decrease the saturation.
- GammaCorrect - enhances detail in the image by adjusting the middle tones without affecting the darkest and lightest areas. You can choose a gamma value in the range of 1 to 499. The larger the number, the greater the adjustment will be.
- HistoContrast - adjusts the number of pixels per gray level to create a linear relationship between gray levels. This effect can bring out the detail in dark areas of the image. You can choose a value in the range of -100% to +100%.
- Hue - adjusts the main characteristic of a particular color that distinguishes it from other colors. You can choose a value in the range of -360 to +360.
- HistoEqualize - redistributes shades of colors to adjust imbalances. It makes the darkest colors black and the lightest colors white and stretches the colors in between. It is often best to equalize a scanned image first to improve its appearance before applying other effects.
- Flip - flips the image horizontally (the image will appear upside down).
- Reverse - flips the image vertically, creating a mirror image of the original.
- Rotate - you can choose a value in the range of -360 to +360. Negative values rotate the image counterclockwise. Positive values rotate the image clockwise.
- Shear - applies the look of three-dimensionality to the image, while maintaining the original size and shape. You can choose a value in the range of -45 to +45. Negative values apply the effect to the top and left directions, positive values apply the effect to the bottom and right directions. Shear applies its effect only along the horizontal and vertical planes.
- AddNoise - creates a granular effect that adds texture to a flat or overly blended picture. You can choose a value in the range of 0 to 100.
- Average - converts each pixel in the image to the average of itself and the pixels to the right and bottom. The result is a blurring of the image. You can choose a value in the range of 1 to 100.
- Sharpen - enhances the edges and brings out detail. The higher the number, the greater the sharpening. You can choose a value in the range of -100 to +100.
- Halftone - converts the image to a black and white (1 bit/pixel) image in which different shades of gray (luminances) are represented by different patterns of back and white pixels. Denser dot patterns of white represent higher luminances (lighter areas of the image). Denser dot patterns of black dots are used represent lower luminances (dark areas of the image). Adjusting the slider adjusts the angle of the dot patterns (from 0 to 360 degrees). Simulates the image's continuous tone quality using varying hues and combinations of the process (subtractive) colors. You can choose a value in the range of -360 to +360.
- Median - reduces the amount of graininess in an image. It does so by converting each pixel in the image to the midpoint of itself and some number of pixels to the right and bottom. The result is a blurring of the image. You can choose a value in the range of 1 to 100.
- Emboss - converts the image to a raised relief style with its light source directed from the top left. The slider adjusts the depth of the embossing. You can choose a value in the range of 0 to 100.
- Grayscale - represents the image using up to 256 shades of gray.
- Invert - inverts the colors in the image as on a photographic negative.
- Mosaic - converts the image to a grid of square blocks of color. You can choose a value in the range of 1 to 100. The higher the number, the larger the blocks will be.
- Posterize - reduces the color resolution, which is the number of shades of color that can be displayed simultaneously. Gradations are removed, creating areas of solid colors or gray

shades. You can choose a value in the range of 2 to 64. The lower the number, the more pronounced the effect will be.

Value type
Use the slider to adjust the value of the effect selected in the Effect Library listing window. You can also type in a numeric value. Note that some effects are not adjustable.

Add
Click this button to add the item to the Effect Profile listing window.

Click this button to remove the effect from the Effect Profile listing window

Click this button to move the effect up one position in the effect profile.

Click this button to move the effect down one position in the effect profile.

Effect Profile listing window
Lists the sequence of effects that will be performed to produce the combined effect selected in the profile list.

Profile list
Lists all currently defined effect profiles.

OK
Saves your changes and close the Image Processing window.

Cancel
Closes the Image Processing window without saving your changes.

Help
Displays online assistance for this window.

Apply
Applies the current effect profile to the original image and display the results in the Processed Image window for comparison.

Delete Profile
Removes the selected profile from the profile list

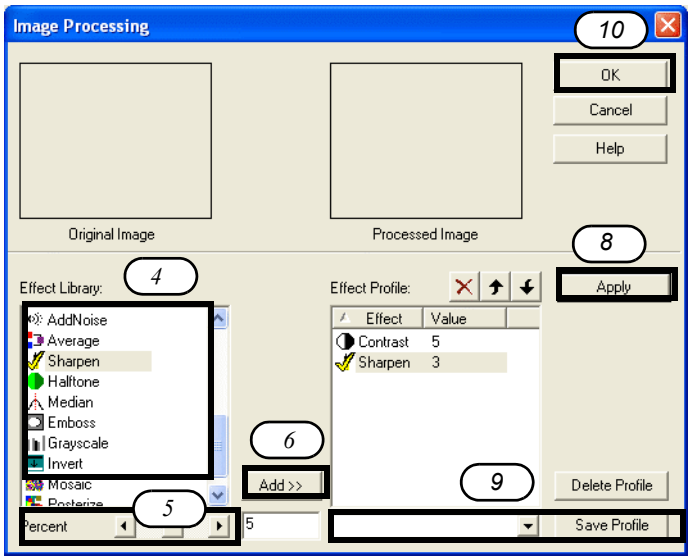
Save Profile
Saves the current profile and add it to the profile list.

Effects Gallery Sub-tab Procedures

The following procedures can be performed on this form.

Create an Effect Profile

1. In Multimedia Capture, display an image.
2. Verify the **Processing Profile** drop-down list (upper right) is empty. Otherwise, you will be modifying an existing profile instead of creating a new one.
3. On the Photo or Graphic tab, click [Process]. The Image Processing window opens.



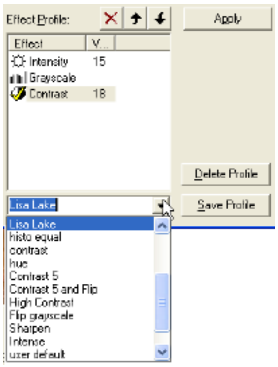
4. Select an entry in the Effect Library listing window. If the effect is adjustable, proceed to step 5. If the effect is not adjustable, proceed to step 6.

Note: The effect is adjustable if one or more fields display below the Effect Library listing window.

5. Adjust the intensity of the effect.
6. Click [Add] to add this effect to your new profile.
7. Repeat steps 4-6 for each effect you want to add to the new profile.
8. To view the result of the entire effect profile, click [Apply].
9. Enter the name of the new profile and click [Save Profile].
10. Click [OK].

Modify an Existing Effect Profile

1. In Multimedia Capture, display an image.
2. On the Photo or Graphic tab, click [Process]. The Image Processing window opens.
3. Select the effect profile from the drop-down list.



4. To delete the effect, click  .
5. To change the value of the effect, you must delete the effect first and then add the effect with a new value.

   For example, if you have an effect that sharpens an image by a value of 10 and you want to modify it to sharpen the image by a value of 12, you cannot simply change the value of the effect. You must first delete the sharpen effect with a value of 10 and then add the sharpen effect with the value of 12.
6. To change the order effects display, select an effect, and click the correct button.
   -  Moves the entry up one position in the list.
   -  Moves the entry down one position in the list.
7. Click [Save Profile].

Delete an Effect Profile

1. In Multimedia Capture, display an image.
2. On the Photo or Graphic tab, click [Process]. The Image Processing window opens.
3. Select an entry from the profile list drop-down list.
4. Click [Delete Profile].

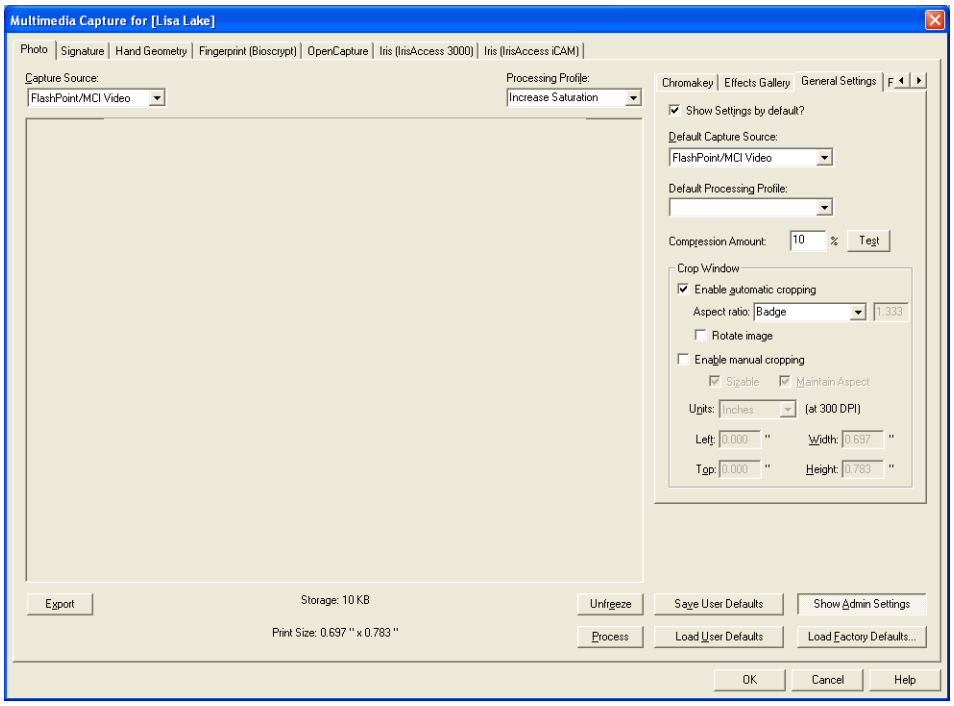
General Settings Sub-tab

The General Settings sub-tab allows you to configure:

- Which capture source (view) is automatically selected when the capture window is launched.
- Whether or not the settings will be automatically shown when the capture window is launched.
- Whether automatic cropping will be used.
- Whether manual cropping will be used.
- For automatic cropping: whether cropped images will be automatically rotated so that the eyes are level in the photograph.
- The amount of compression to be applied to bitmapped images with more than 256 colors before they are stored in the database.

Note: Image cropping only applies to bitmapped images (also known as raster images). It is NOT recommended to crop vector images.

- The size, location, and behavior of the crop window (the rectangle used for specifying which rectangular portion of the current image will be stored into the database or exported to an image file on disk).
- The units used when displaying the width and height of the portion of the image that will be stored in the database or exported to an image file on disk.
- The aspect ratio of the automatic crop window.



Show Settings by default

When this check box is selected, all settings sub-tabs applicable to the current capture source will be displayed. When this check box is not selected, only the Chromakey and Effects Gallery sub-tabs will be displayed. If you change the value of this field, you must click [Save User Defaults] button for the change to take effect.

Default Capture Source

From the drop-down list, choose which capture source you want the system to automatically default to when Multimedia Capture opens.

Default Processing Profile

From the drop-down list, choose which effect profile you want to apply to the captured image when no effect profile is chosen. Effect profiles are defined in the Image Processing window.

Compression Amount ___%

Enter the amount of compression to be applied to the captured bitmapped image (i.e. cardholder photo, bitmapped signature or layout graphic). A captured photo contains a great deal of color information so a large amount of computer disk space is required to store the photo. Compression is the process of reducing the disk space requirement.

You can choose a number between 0 and 100 to balance compression and image quality. Entering 0 (minimal compression) will yield the highest quality image with the largest disk

space requirement. Entering 100 (maximum compression) will result in the poorest quality image, but it will take up very little disk space. Refer also to the **Test** push button. The default value for this field is 10.

Compression applies only to bitmapped images with more than 256 colors. A different compression (PNG) is used for bitmapped images with 256 colors or less, which has a fixed quantity.

Test

Click this button to open the Test Compression window from where you can adjust the captured bitmapped image to achieve the best balance of image quality and disk space required. This applies only to bitmapped images with more than 25 colors.

Crop Window

The crop window displays as a rectangle superimposed over the multimedia window. It is used to select the portion of the captured image that will be saved or exported. With manual cropping, you can change the size and position of the crop window to best frame the subject. With automatic cropping, the frame is automatically sized and positioned to produce a well cropped image. However, you can override the cropped window using the manual crop sizing functions. Image cropping applies only to bitmapped images. It is not recommended for vector images.

Enable automatic cropping

When this check box is selected, the crop window is automatically displayed, cropping the captured photograph to frame the face and shoulder area of the subject. The cropped image area is pre-configured based on the default **Aspect ratio** setting.

During automatic cropping, each photograph is analyzed to ensure that it satisfies the conditions required to produce a well cropped image. For more information, refer to Image Requirements for Automatic Cropping on page 141.

Aspect ratio

Select the aspect ratio (height-to-width) for the crop window or create a custom setting. Aspect ratios can be expressed as ratios, such as 4:3, or as numbers, such as 1.33. Available options include:

- Badge - select to use an **Aspect ratio** of 1.33 for badge images and several types of driver's licenses.
- Passport - select to use an **Aspect ratio** of 1.28 to satisfy requirements for other types of driver's licenses and numerous international passport agencies.
- Mugshot - select to use an **Aspect ratio** of 1.25.
- Custom (User defined) - When this option is selected, the field containing the value of the **Aspect ratio** is enabled allowing you to type in your desired aspect ratio (may be configured within a range of 1.25 to 1.34).

Rotate image

For automatic cropping: select to enable automatic image rotation. If needed, the captured image will be automatically rotated such that the eyes are level in the photograph.

Enable manual cropping

When this check box is selected, the crop window is displayed. Otherwise, the crop window is hidden, the whole captured image is saved or exported, and the **Sizable** and **Maintain Aspect** fields is dimmed.

Sizable
When this check box is selected, the crop window can be resized. This means that the values of the **Width** and **Height** fields can be changed. Manual crop adjustment may be used in conjunction with automatic cropping.

Maintain Aspect
When this check box is selected, the width-to-height ratio of the crop window will remain consistent (when you change the width, the height changes proportionally and vice versa). For example, if the width and height of the crop window are in the ratio of 2:3 and you enter a value of 67 for the width, the height will automatically become 100 if the **Maintain Aspect** check box is selected. This is because 67 and 100 have a 2 to 3 relationship. For more information, refer to the topic “Set Aspect Ratio Attributes” in the BadgeDesigner User Guide.

Units
Select the measurements in which the size is displayed. Choices include pixels, inches or millimeters.

Left
Sets the position of the left border of the crop window. You can also move the left border directly and this value will be automatically updated to reflect the change.

Top
Sets the position of the top border of the crop window. You can also move the top border directly and this value will be automatically updated to reflect the change.

Width
Sets the width of the crop window. You can also move the left or right border directly and this value will be automatically updated to reflect the change.

Height
Sets the height of the crop window. You can also move the top or bottom border directly and this value will be automatically updated to reflect the change.

General Settings Sub-tab Procedures

The following procedures can be performed on this form.

Enable Automatic Cropping

Automatic cropping places the crop window to automatically frame the face and shoulder region in the cardholder's photograph. Green crosshairs are displayed to mark the eye locations in the photo.

With automatic cropping, cropped image resolution is based on a selectable, pre-configured aspect ratio which provides standardized cropping across all cardholders and requires less time and effort from the badge operator.

To enable automatic cropping, select the **Enable automatic cropping** check box on the General Settings sub-tab.

Assumptions:

- Photos are captured of the cardholder's head including at least the top of the shoulders.

- The cardholder's eyes must be visible.
- There is only one face in the image.
- The background is not too busy.
- The image is in color.

Automatic Image Rotation

If the **Rotate image** check box is selected, the captured image is automatically rotated such that the eyes are level in the photograph.

Image Requirements for Automatic Cropping

If a captured image meets the requirements for automatic cropping, the crop window is displayed. However, if the requirements for automatic cropping are not met, an error message is displayed describing the adjustments which need to be performed. Additionally, the crosshairs used to locate the eyes are red rather than green to indicate an error has occurred. For example, if the cardholder is too close to the capture device an error is generated.

- The image dimensions must not be too small.

  Minimum image resolution for automatically cropped images must be no less than 242 x 322 pixels (width x height). Typically, smaller images have been imported. In practice, a minimum image resolution of 640 x 480 is recommended.

- The image dimensions must not be too large.

  A warning is reported if the image resolution is greater than two (2) megapixels (e.g., 1600 x 1200 pixels). Large images require a considerable amount of time to process and it is recommended to decrease the image resolution. The operator is given the option to continue or to stop processing.

- The eyes of the cardholder must be located in the image.
- The cardholder's head must not be too close to the left or right edge of the photograph.
- The cardholder's head must not be too close to the top or bottom edge of the photograph.
- The cardholder must not be too far away from the capture device.

The farther the cardholder is located from the capture device, the less the distance between the eyes. There must be a minimum eye separation of 60 pixels to produce acceptable quality images.

- The cardholder must not be too close to the capture device.

  You must be able to fit the crop window within the image.

- The cardholder's head must not be tilted side-to-side more than 17º for eye location.

Correct Imperfect Eye Detection

The crosshairs displayed on the eye locations allow you to accurately correct imperfect eye detection by re-sizing the crop window. For more information, refer to Resize the Crop Window on page 142.

IMPORTANT: Manual adjustment of the crop window may be done using the **Height** and **Width** controls but this will cause the default aspect ratio to be overridden. For more information, refer to Prevent Manual Crop Adjustment on page 143.

Enable Manual Cropping

You can manually crop images if manual cropping is enabled and the image is bitmapped. To enable manual cropping, select the **Enable manual cropping** check box on the General Settings sub-tab. The crop window will display in the image. If you cannot see the crop window, it may be so large that it encompasses the entire image. Simply resize the crop window.

Resize the Crop Window

To resize the crop window, the **Sizable** check box must be selected on the General Settings sub-tab.

You can resize the crop window using your mouse or, if more accuracy is required, you can enter the exact width and height of the crop window on the General Settings sub-tab.

To resize the crop window using your mouse, hover the mouse over the perimeter of the crop window. In some cases, the crop window encompasses the entire image you so may need to hover the mouse over the perimeter of the image. When the cursor changes to a double arrow, left-click on the crop window and drag it to the desired size.

Move the Crop Window

If the crop window is enabled, you can move the crop window using your mouse. Simply place the cursor inside the crop window, left-click and drag the crop window to the new location.

If more accuracy is required, you can enter the exact coordinates of the crop window on the General Settings sub-tab. Crop window coordinates are relative to the distance from the left side of the image and the distance from the top of the image. Crop window coordinates and unit of measure are entered on the General Settings sub-tab.

Adjust Image Compression

The following procedure applies only to images that are bitmapped and contain more than 256 colors.

1. In Multimedia Capture, display an image.
2. On the Photo, Signature or Graphic tab, click the General Settings sub-tab.

Note: The [Show Admin Settings] button must be depressed in order to view the General Settings sub-tab.

3. If your capture source is live video, click [Freeze] because compression can be applied only to still images. Otherwise, skip to step 4.
4. On the General Settings sub-tab, click [Test]. The Test Compression window opens. The left image is uncompressed and the right image is compressed.
5. Adjust the **Compression Amount** slider to achieve the optimal balance between the amount of compression and image quality. Moving the slider to the right (higher numbers) increases the amount of compression and lowers both the image quality and the database space required. Each time you reposition the slider, click [Compress] to see the effect on the image.
6. When you find the best balance between image quality and disk space, click [OK].

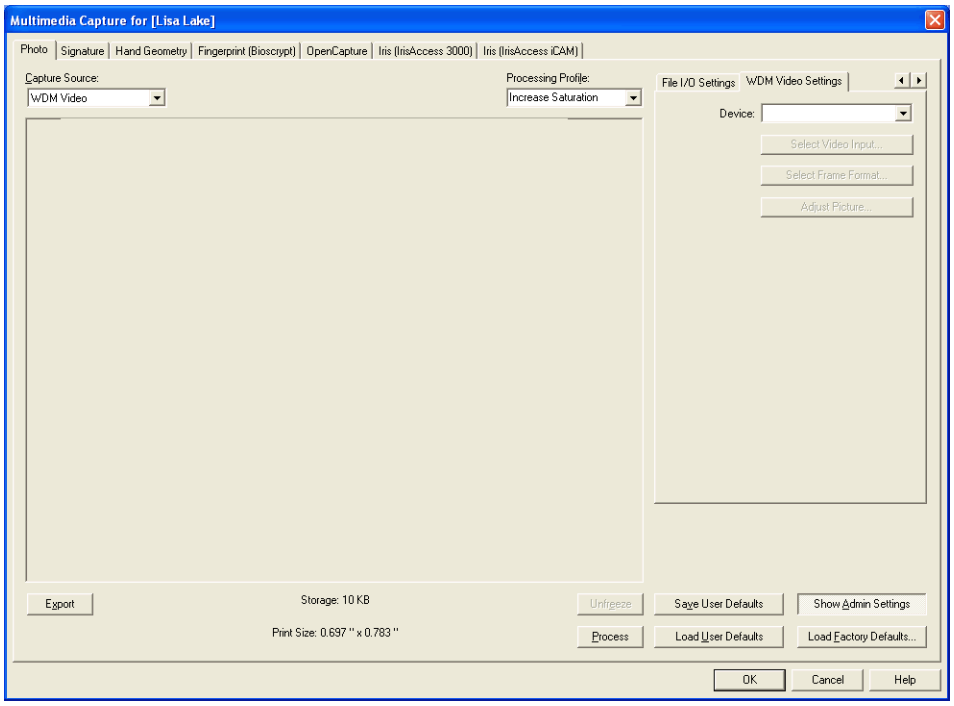
Prevent Manual Crop Adjustment

Permissions must be set to allow the badge operator to manually adjust the crop window.

To prevent operators from manually performing crop adjustment, and thereby overriding the crop window, permissions are provided to lock the usage of the **Manual crop** function. The **Advanced** option of the Capture Cardholder Permission Groups may be used to control access to all settings of the General Settings tab. The automatic cropping feature options are placed on the same tab so that enabling or disabling of automatic cropping can be controlled via permissions.

WDM Video Settings Sub-tab

The WDM Video Settings sub-tab allows you to configure the main set of options for the “WDM Video” capture source. When the “WDM Video” capture source is selected, live video from the currently selected video input of the currently selected WDM video capture device will be displayed in the multimedia window. This sub-tab is displayed only when the “WDM Video” capture source is selected.



Device

Choose a specific WDM video capture device. Choices include all WDM video capture devices that are currently installed on this workstation. Live video from the currently selected video input will then be displayed in the multimedia window.

Select Video Input

Click this button to open the Select Video Input window from where you can select which video input to use.

Select Frame Format

Click this button to select a frame format. For some WDM devices, a window will open from where you can select the spatial resolution (number of pixels across and down) and the pixel format of captured video frames. For devices that do not allow you to adjust the frame format, the system automatically selects the frame format that has the largest spatial resolution and a pixel format with the most color information.

Adjust Picture

Click this button to adjust picture quality attributes such as hue, brightness and contrast. Depending on which WDM device you are configuring, a properties window will be displayed from where you can adjust these settings.

WDM Video Settings Sub-tab Procedures

The following procedures can be performed on this form.

Configure WDM Video Settings

You should first complete this procedure using a test subject (person). Once you have optimized the settings for your physical environment, you shouldn't need to modify them unless you change the surroundings. Adjustments for an individual's skin tone, hair color or clothing color can be made using the Image Processing window after the image has been captured.

Before you begin, make sure that your camera and flash unit are powered on and properly configured for use.

1. In Multimedia Capture, on the Photo, Signature or Graphic tab, select "WDM Video" from the **Capture Source** drop-down list.
2. Click the WDM Video Settings sub-tab. (The [Show Admin Settings] button must be depressed in order to view the WDM Video Settings sub-tab.)
3. From the **Device** drop-down list, select the WDM video capture device that you want to configure settings for.
4. Click [Select Video Input]. The Select Video Input window opens.
5. In the Select Video Input window, choose which video input you want to use.
6. Click [Select Frame Format]. For some WDM devices, a window will open from where you can select the spatial resolution (number of pixels across and down) and the pixel format of captured video frames. For devices that do not allow you to adjust the frame format, the system automatically selects the frame format that has the largest spatial resolution and a pixel format with the most color information.
7. Click [Adjust Picture]. Depending on which WDM device you are configuring, a properties window opens, from where you can adjust these settings. From this window, adjust picture quality attributes such as hue, brightness and contrast.
8. If you want to save your settings so that they will be automatically displayed each time you select the WDM Settings sub-tab, click [Save User Defaults].

Note: If you want to use the factory-set values for these fields, click [Load Hardware Defaults] button. The sliders will be repositioned accordingly.

Capture an Image Using Live Video

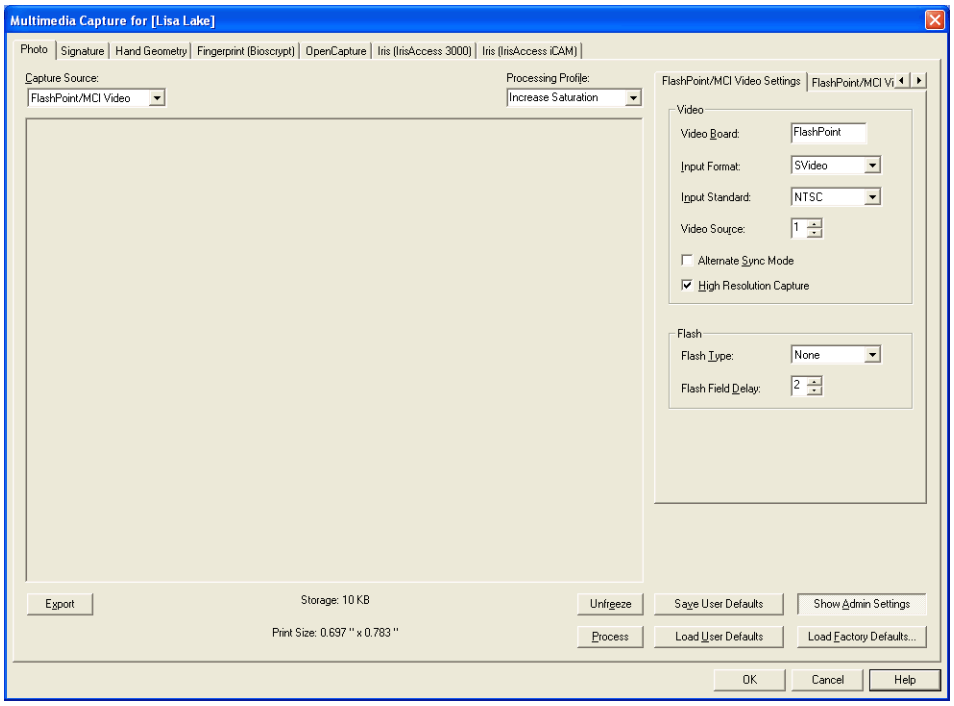
1. In Multimedia Capture, on the Photo or Graphic tab, select either "FlashPoint/MCI Video" or "WDM Video" from the **Capture Source** drop-down list.

Note: The [Show Admin Settings] button must be depressed in order to view the sub-tab.

2. Click the General Settings sub-tab.
3. If an image displays, click [Clear].
4. Physically position the test subject so their head and shoulders appear in the Multimedia Capture window. Click [Freeze].
5. Using your mouse, adjust the crop window to frame the subject. If the crop window is enabled, it displays as a rectangle over the image. For more information, refer to Enable Manual Cropping on page 142 and Resize the Crop Window on page 142.
6. If you want to retake the photo, click [Unfreeze] and repeat steps 4-5.
7. When you are satisfied with the image, click [OK].
8. If you want to adjust the photo quality, click [Process].

FlashPoint/MCI Video Settings Sub-tab

The FlashPoint/MCI Video Settings sub-tab allows you to configure the main set of options for the "FlashPoint/MCI Video" capture source. When the "FlashPoint/MCI Video" capture source is selected, live video from the FlashPoint/MCI video device will be displayed in the multimedia window. This sub-tab is displayed only when the "FlashPoint/MCI Video" capture source is selected.



Video Board

Enter the name of the driver for your video capture board. The default is "FlashPoint." Contact Technical Support for assistance if you have a video board that is not an Integral Technologies FlashPoint board.

Input Format

Select the format of the incoming video signal. Choices include:

- RGB - accepts separate inputs for the red, green and blue components.
- Composite - mixes the red, green and blue signals to produce a color image.
- SVideo - an analog video interface standard that separates the signal into two components, brightness and color.

Input Standard

Select the incoming video signal standard. Choices include:

- NTSC - the U.S. standard
- PAL - the European standard

Video Source

Select which video connector the incoming video signal is to be captured from. (Video connectors are numbered starting with zero.)

Alternate Sync Mode

When this check box is selected, incoming video is routed through special video stabilizer circuitry in the FlashPoint video capture board. This allows you to capture video from video sources emitting “messy” video signals.

For example, video that comes from a VCR may constantly jump around on the screen if the VCR has a dirty play head, poor tracking or a worn-out tape in it. If the **Alternate Sync Mode** check box is selected, the video will stop jumping around and settle down to a stable picture, although there is usually a band of static (snow) at the bottom because some rows of the incoming video frames are lost during the stabilization process.

High Resolution Capture

When this check box is selected, you can capture photos at the maximum resolution of 640 by 480 pixels instead of 320 by 240 pixels. (The high resolution photos will print on the cards at sizes larger than 0.6” by 0.8” with better quality, but at the price of a 300 to 400% increase in disk storage requirements.) To use high resolution capture you must:

- Use a Flashpoint board. Users with FlashPoint boards can now capture photos at a maximum resolution of 640 by 480 pixels instead of 320 by 240 pixels.
- Have a Desktop area that is at least 1024 by 768 pixels. Users who want to use high resolution capture must have a Windows desktop area that is at least 1024 by 768 pixels because a 640 by 480 pixel capture window and capture window user interface will not fit onto a 800 by 600 pixel desktop at the same time.
- Use a flash type other than “Universal.” To capture in high resolution, a flash type other than “Universal” must be used because Universal flash is capable of illuminating only one video field, i.e. every other row of pixels or 240 lines, within a high resolution video frame.

Flash Type

Select the type of flash unit connected. Your selection must match the jumper settings on the FlashPoint video capture board. For more information, refer to the your FlashPoint user guide for jumper information. Choices include:

- None - no flash unit connected. If you do not have a flash unit, you must make sure that the video capture environment contains sufficient light for the process. The maximum height is 480 when the capture is made in high resolution mode.
- Universal - triggers any standard photographic flash unit. The video capture board triggers the flash unit directly.
- CCD - flash trigger specifically for the Kodak CCD4000 camera. Instead of the flash being fired directly, the system triggers flash through the camera, a process called frame integrated flash. The maximum height is 480 when the capture is made in high resolution mode. If you choose this option, you must first configure your hardware for this capability.

When capturing with a universal flash or in low resolution capture mode, the maximum unscaled video frame height for the FlashPoint board is 240 lines of pixels.

Flash Field Delay

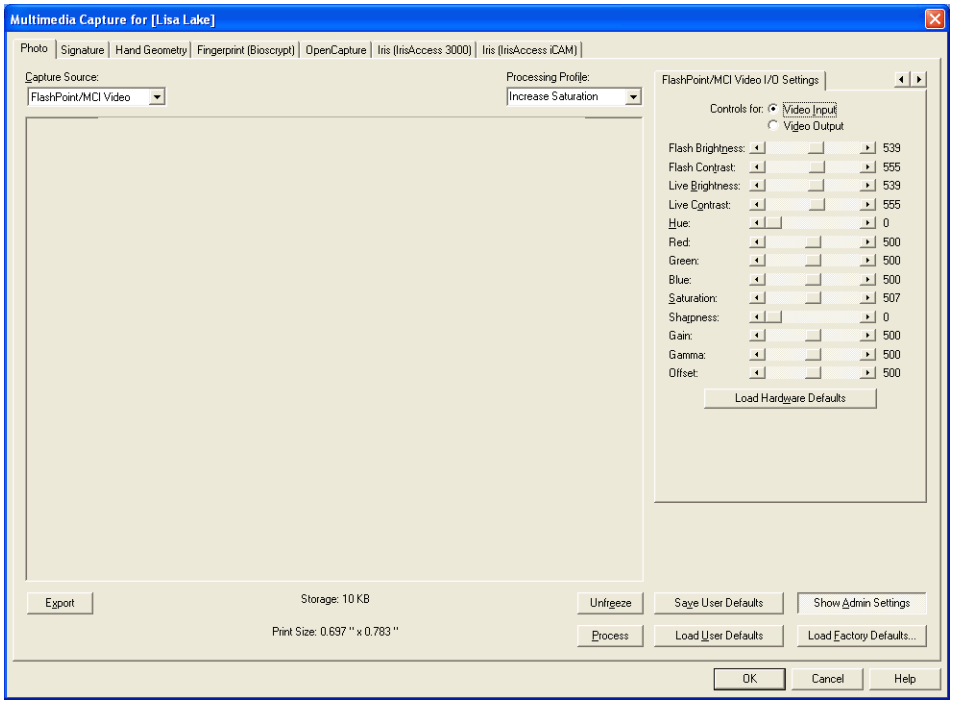
Enter the number of video fields you want the system to wait after it has fired the flash before it freezes (captures) video. This is used to synchronize a flash with the freeze-frame process so that frames will be captured while the light emitted from the flash is at its brightest.

Live video consists of pixels arranged in lines called fields. Each frame of video contains one even field and one odd field. The even field is composed of every odd numbered line of pixels, beginning with the first (top) line. The other lines in the frame constitute the odd field. Therefore, the incoming video signal alternates between the even and the odd fields at twice

the video frame rate (60 fields per second for the NTSC video standard, 50 fields per second for the PAL video standard).

FlashPoint/MCI Video I/O Settings Sub-tab

The FlashPoint/MCI Video I/O Settings sub-tab allows you to adjust the color, intensity and contrast of video captured with the “FlashPoint/MCIVideo” capture source. This sub-tab is displayed only when the “FlashPoint/MCI Video” capture source is selected.



Controls for Video Input

When this radio button is selected, the slider field settings adjust characteristics of the incoming video signal. These settings affect how the video is captured. The fields are board-dependent. A dimmed field means that your video capture board does not support the corresponding characteristic. Possible values for all slider fields are in the range of 0 through 1000.

Controls for Video Output

When this radio button is selected, the slider field settings adjust the output video display. These settings will affect only how the video is displayed. The fields are board-dependent. A dimmed field means that your video capture board does not support the corresponding characteristic. Possible values for all slider fields are in the range of 0 through 1000.

Flash Brightness

Increases or decrease the value of all color components for the flash.

Flash Contrast

Increases or decreases the differences in brightness between the image's brightest and darkest elements for the flash.

Live Brightness
Controls the brightness for live video. Live video is darker with flash due to the reduced iris setting needed to prevent the flash from overpowering the camera. When the image is captured (by clicking the [Freeze] button), the controls switch over to the **Flash Brightness** setting.

Live Contrast
Controls the contrast for live video. When the image is captured (by clicking the [Freeze] button), the controls switch over to the **Flash Contrast** setting.

Hue
Adjusts the aspect of a color that distinguishes it from other colors. This field is useful to achieve accurate skin tones in the image.

Red
Increases or decreases the global value of the image's red component

Green
Increases or decreases the global value of the image's green component

Blue
Increases or decreases the global value of the image's blue component.

Saturation
Adjusts the amount of color (intensity) to accommodate stronger and weaker input color signals.

Sharpness
Adjusts the image to be either more focused or more blurry.

Gain
Boosts the weak input signal or decreases noise coming from a strong but noisy source, helping to enhance details.

Gamma
Provides a nonlinear contrast adjustment. A higher gamma value produces a brighter image that has less contrast. A lower gamma value produces a darker image that has more contrast.

Offset
Moves the input signal level up or down without changing the signal size, helping to enhance details. This field is useful if your camera has a nonstandard output or has a direct current offset.

Load Hardware Defaults
Click this button to change the values of all slider fields to the factory defaults set by the video board manufacturer. (If you are using a FlashPoint board, this button loads the settings last saved with the FPG application that Integral ships with their boards.)

FlashPoint/MCI Video Settings Procedures

The following procedures can be used on this form.

Configure FlashPoint/MCI Video Capture Settings

Notes: You should first complete this procedure using a test subject (person). Once you have optimized the settings for your physical environment, you shouldn't need to modify them unless you change the surroundings. Adjustments for an individual's skin tone, hair color or clothing color can be made using the Image Processing window after the image has been captured.

Before you begin, make sure that your camera and flash unit are powered on and properly configured for use.

1. In Multimedia Capture, on the Photo, Signature or Graphic tab, select “FlashPoint/MCI Video” from the **Capture Source** drop-down list.
2. Click the FlashPoint/MCI Video Settings sub-tab.

Note: The [Show Admin Settings] button must be depressed in order to view the FlashPoint/MCI Video Settings sub-tab.

3. In the Video section, choose the settings for your video source. For more information, refer to FlashPoint/MCI Video Settings Sub-tab on page 146.
4. In the Flash section, choose flash settings. For more information, refer to FlashPoint/MCI Video Settings Sub-tab on page 146.
5. If you want to save your settings so that they will be automatically displayed each time you select the FlashPoint/MCI Video Settings sub-tab, click [Save User Defaults].
6. Click the FlashPoint/MCI Video I/O Settings tab to display the FlashPoint/MCI Video I/O Settings sub-tab. (The [Show Admin Settings] button must be depressed in order to view the FlashPoint/MCI Video I/O Settings sub-tab.)
7. Select the **Video Input** radio button, then adjust the slider controls to optimize the incoming video signal. You can also do the same for video output (by selecting the **Video Output** radio button and adjusting the slider controls) to optimize the video display, although these settings are typically not adjusted.

Note: If you want to use the factory-set values for these fields, click [Load Hardware Defaults] button. The sliders will be repositioned accordingly.

8. If you want to save your settings so that they will be automatically displayed each time you select the FlashPoint/MCI Video I/O Settings sub-tab, click [Save User Defaults].

Use High Resolution Analog Video Capture

To capture analog video in high resolution, you must:

- Use a Flashpoint board. Users with FlashPoint boards can capture photos at a maximum resolution of 640 by 480 pixels instead of 320 by 240 pixels. (The high resolution photos will print on the cards at sizes larger than 0.6” by 0.8” with better quality, but at the price of a 300 to 400% increase in disk storage requirements.)
- Have a Desktop area that is at least 1024 by 768 pixels. Users who want to use high resolution capture must have a Windows desktop area that is at least 1024 by 768 pixels because a 640 by 480 pixel capture window and capture window user interface won’t fit onto a 800 by 600 pixel desktop at the same time.
- Use a flash type other than “Universal”. To capture in high resolution, a flash type other than “Universal” must be used because Universal flash is capable of illuminating only one video field (every other row of pixels or 240 lines) within a high resolution video frame.

The size of the image/video display in the multimedia window varies depending on the Windows desktop area. The following applies:

- Windows desktop areas smaller than 800 by 600 pixels are no longer supported by the capture window.
- When the Windows desktop area between 800 by 600 pixels and 1024 by 768 pixels (as with the case with many laptops running mobile badging) the multimedia window is at a smaller size so everything will fit onto the screen. In this situation the image display area is 320 by 240 pixels and thus the user is unable to set analog video capture to high resolution mode.

Note: Although high resolution analog video capture is not available when the desktop area is less than 1024 by 768 pixels, the **High Resolution Capture** check box remains visible. If an attempt to select high resolution capture is made, a message will be displayed that explains why it is not available.

- When the Windows desktop area is 1024 by 768 pixels or larger the capture window is now bigger so that the image display area (the area on the left hand side) and hence the multimedia window, can be 640 by 480 pixels, allowing for high resolution analog video capture. It will be 320 by 240 pixels if the **Flash Type** is "Universal."

Windows desktop area (pixels)	Image display description	High resolution analog video capture supported
Smaller than 800 by 600	No longer supported	No
Between 800 by 600 and 1024 by 768	320 by 240 image display (smaller)	No
1024 by 768 and larger	640 by 480 image/video display (larger)	Yes, if **Flash Type** is not "Universal"

To capture high resolution analog video:

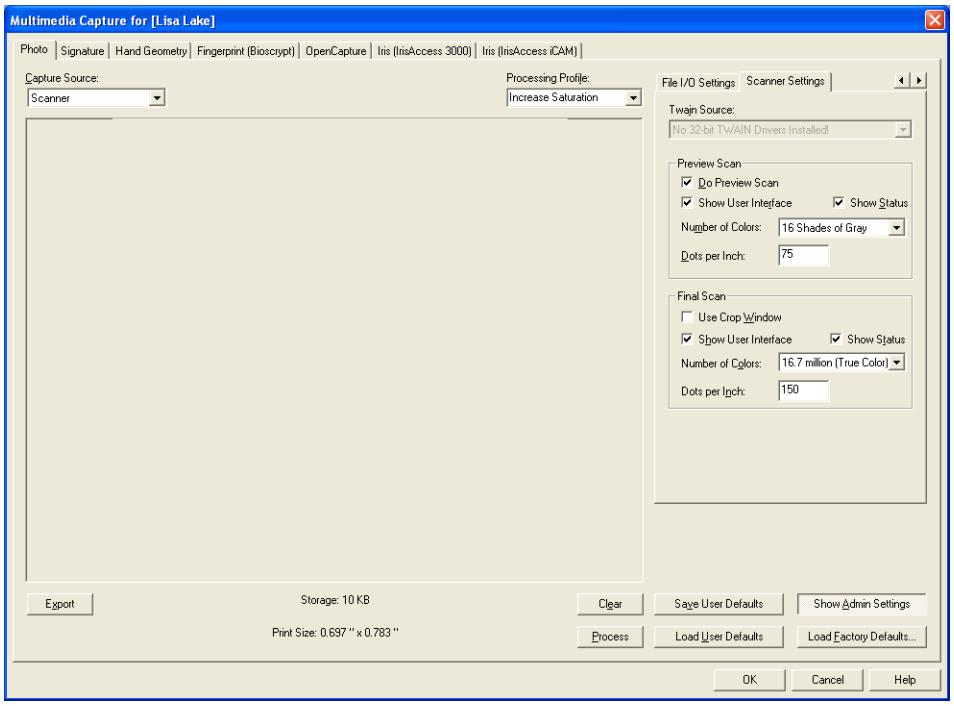
1. Make sure that the desktop area is at least 1024 pixels by 768 pixels.
2. In Multimedia Capture, on the Photo, Signature or Graphic tab, select "FlashPoint/MCI Video" from the **Capture Source** drop-down list.
3. Click the FlashPoint/MCI Video Settings sub-tab.

Note: The [Show Admin Settings] button must be depressed in order to view the FlashPoint/MCI Video Settings sub-tab.

4. Select the **High Resolution Capture** check box.
5. Make sure that "Universal" is not selected in the **Flash Type** field.

Scanner Settings Sub-tab

The Scanner Settings sub-tab allows you to configure how images are scanned. This sub-tab is displayed only when the "Scanner" capture source is selected.



Twain Source

Select the name of your scanner. In order for your scanner to be listed, you must have first attached the scanner to your computer, installed the device's Twain driver software and configured it for use. For more information, refer to your scanner's user guide. The **Twain Source** drop-down list will list the names of both scanners and digital cameras that are configured on your system.

Preview Scan

Includes the **Do Preview Scan** check box and the upper **Show User Interface**, **Show Status**, **Number of Colors** and **Dots per Inch** fields.

Do Preview Scan

When this check box is selected, you can scan the entire original page, then position the crop window and perform a final scan on only the area enclosed by the crop window. When this check box is not selected, you can bypass the preview scan and perform only a final scan. If you deselect this check box, you can ignore the other settings in the Preview Scan section.

Show User Interface

Select this check box to be allowed to utilize the Twain driver's default user interface instead of bypassing it.

Show Status

When this check box is selected and the Twain driver supports this option, a status bar is displayed showing the status of the scan. This does not apply if you are using your Twain driver's default user interface.

Dots per Inch

Specify the final scanning resolution, expressed in dots per inch.

Number of Colors
Specify the final pixel type of the image to be scanned.

Dots per Inch
Specify the resolution for preview scanning, expressed in dots per inch.

Final Scan
Includes the **Use Crop Window** check box and the lower **Show User Interface**, **Show Status**, **Number of Colors** and **Dots per Inch** fields.

Use Crop Window
When this check box is selected, you can perform a full (final) scan of the area enclosed by the specified crop window. When this check box is not selected, you can perform a scan using the default size set by the Twain driver. If the **Do Preview Scan** check box is selected, the crop window set there is used and this option has no effect.

Show User Interface
When this check box is selected, you can utilize your Twain driver's default user interface. When this check box is not selected, your Twain driver's default user interface is bypassed.

Show Status
When this check box is selected and your Twain driver supports this option, a status bar is displayed showing the status of the scan. This does not apply if you are using your Twain driver's default user interface.

Number of Colors
Specify the final pixel type of the image to be scanned.

Scanner Settings Sub-tab Procedures

The following procedures can be performed on this form.

Preview and Scan an Image

In most situations, this is the basic process for scanning an image. Before you proceed, make sure that your scanner hardware is attached to your computer and the scanner software is installed and configured for use.

1. In Multimedia Capture, click the Photo, Signature or Graphic tab.
2. Select "Scanner" from the **Capture Source** drop-down list.
3. Click the Scanner Settings sub-tab. (The [Show Admin Settings] button must be depressed in order to view the Scanner Settings sub-tab.)
4. Select the name of your scanner's drive from the **Twain Source** drop-down list.
5. In the Preview Scan section:
   a. Select the **Do Preview Scan** check box.
   b. Enter values in the **Number of Colors** and **Dots per Inch** fields. It is recommended that you choose low values such as "16 Shades of Gray" and "75" dots per inch because the preview scan records the entire flatbed surface, performing a preview scan at a high resolution. A large amount of color information would require a huge amount of memory and hard disk space.

6. Position the photograph on the scanner by placing the photo flush with the corner of the scanning surface. It the photograph is oriented incorrectly, the scanned image will appear crooked in the multimedia window. If this happens, to correct the problem, you'll need to either rescan the original image or manipulate the image using the Image Processing window.
7. Click [Preview]. The entire contents of the scanning surface will be scanned and displayed in the multimedia window (the image in the window will look mostly blank except for a small photo).
8. In the Final Scan section:
   a. Click the **Use Crop Window** check box.
   b. Enter values in the **Number of Colors** and **Dots per Inch** fields. It is recommended that you choose high values such as "16.7 million (True Color)" and "300" dots per inch, ensuring that the final captured image is of the highest possible quality.
9. Move and resize the crop window to frame the image. If the crop window is enabled, it displays as a rectangle on the image. For more information, refer to Enable Manual Cropping on page 142 and Resize the Crop Window on page 142.
10. Click [Scan]. The system scans the contents of the crop window.
11. To adjust the photo quality, click [Process]. For more information, refer to Image Processing Window on page 133.

Bypass the Preview Scan Step

The following procedure is useful if you have multiple hard copies that are the same size and you want to skip multiple preview scan steps. With this procedure, you preview the first hardcopy only.

1. In Multimedia Capture, click the Photo, Signature or Graphic tab.
2. Select "Scanner" from the **Capture Source** drop-down list.
3. Click the Scanner Settings sub-tab. (The [Show Admin Settings] button must be depressed in order to view the Scanner Settings sub-tab.)
4. Select the **Use Crop Window** check box.
5. Position a photograph on the scanner and click [Preview].
6. Move and resize the crop window to frame the photograph. If the crop window is enabled, it displays as a rectangle on the image. For more information, refer to Enable Manual Cropping on page 142 and Resize the Crop Window on page 142.
7. Deselect the **Do Preview Scan** check box.
8. Click [Save User Defaults].
9. Click [Scan]. The system scans the contents of the crop window.
10. To scan another hardcopy, place it on the scanner in the same position as the first hardcopy and click [Scan]. All subsequent scans use the crop window position you specified in step 6.

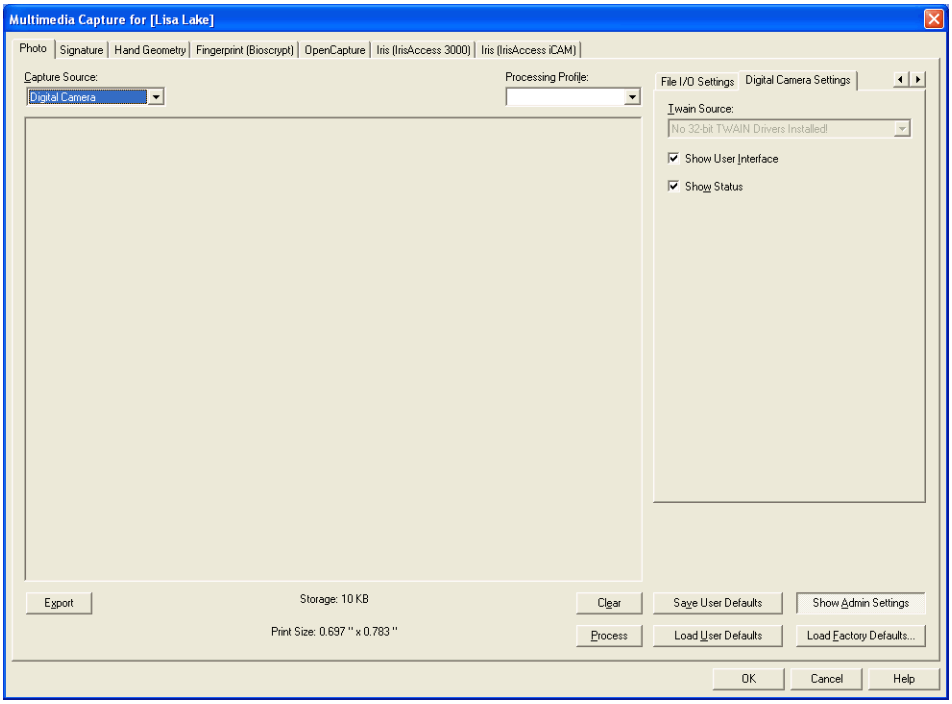
Notes:

If you have a batch of photos to scan and all but a few of them are the same size, you can deselect the **Use Crop Window** check box just prior to scanning an odd-sized photo. Then move and resize the crop window and do the scan. After scanning the odd-sized photo, reselect the **Use Crop Window** check box to return to using the crop window settings you saved as the default.

Many Twain drivers for scanners ignore dots per inch and number of color settings. For this reason, it is highly recommended that you select the **Show User Interface** check box.

Digital Camera Settings Sub-tab

The Digital Camera Settings sub-tab allows you to configure how images are downloaded from digital cameras with the “Digital Camera” capture source. This sub-tab is displayed only when the “Digital Camera” capture source is selected.



Twain Source

Select the name of your digital camera. In order for your digital camera to be listed, you must have first attached the camera to your computer, installed the device’s Twain driver software and configured it for use. For more information, refer to your digital camera’s user guide. The **Twain Source** drop-down list will list the names of both scanners and digital cameras that are configured on your system.

Show User Interface

When this check box is selected, you can utilize your Twain driver’s default user interface instead of bypassing it. It is highly recommended that you select this option.

Show Status

When you select this check box and the Twain driver supports this option, a status bar is displayed showing the status of the scan. This does not apply if you are using your Twain driver's default user interface.

Digital Camera Settings Sub-tab Procedures

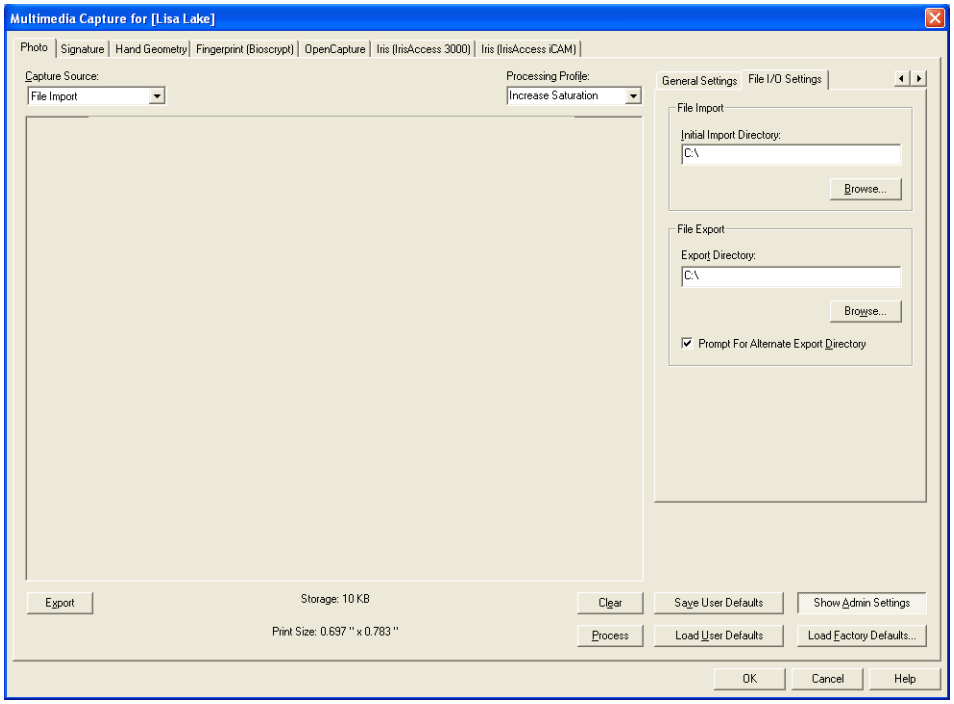
The following procedures can be performed on this form.

Capture Digital Images

1. In Multimedia Capture, click the Photo tab or Graphic tab.
2. Select “Digital Camera” from the **Capture Source** drop-down list.
3. Click the Digital Camera Settings sub-tab. (The [Show Admin Settings] button must be depressed in order to view the Digital Camera Settings sub-tab.)
4. On the Digital Camera Settings sub-tab:
   a. Select the name of your digital camera from the **Twain Source** drop-down list.
   b. It is recommended that you select the **Show User Interface** check box. Otherwise, you will just download the first photo that is in the camera.
5. Click [Get Photo]. If an image displays, you need to click [Clear] first.
6. If the user interface for the digital camera software opens, adjust any settings. Otherwise, continue with the next step.
7. Take a picture of the cardholder/visitor. The image displays in Multimedia Capture.
8. Move and resize the crop window to frame the image. If the crop window is enabled, it displays as a rectangle on the image. For more information, refer to Enable Manual Cropping on page 142 and Resize the Crop Window on page 142.
9. To adjust the image quality, click [Process].

File I/O Settings Sub-tab

The File I/O Settings sub-tab allows you to configure the default file import directory for the “File Import” capture source and the default file export directory for all of the capture sources.



Initial Import Directory

Enter the first place (drive and directory) in which to look when importing an image file into the database.

Browse
Opens the Browse for Folder window from where you can select an initial import directory.

Export Directory
Enter the drive and directory into which image and signature files are saved when you click [Export].

Browse
Opens the Browse for Folder window from where you can select an export directory.

Prompt for Alternate Export Directory
When this check box is selected, you will be prompted with the standard File Save window when you click [Export]. The window is initialized to point to the file export directory. When this check box is not selected, the image is exported without the user being prompted for the export filename and path unless the file already exists.

File I/O Settings Sub-tab Procedures

The following procedures can be performed on this form.

Configure Multimedia Capture for File Import

1. In Multimedia Capture, on the Photo, Signature or Graphic tab, select "File Import" from the **Capture Source** drop-down list.
2. Click the File I/O Settings sub-tab.

Note: The [Show Admin Settings] button must be depressed in order to view the File I/O Settings sub-tab.

3. Complete the File Import section.
4. If you want to save your settings so that they will be automatically display, click [Save User Defaults].

Import a Supported Image File

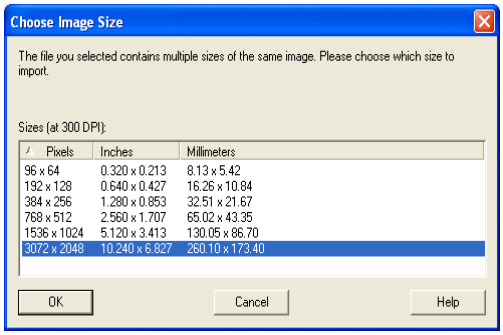
1. In Multimedia Capture, on the Photo, Signature or Graphic tab, select "File Import" from the **Capture Source** drop-down list.
2. Click the File I/O Settings sub-tab.

Note: The [Show Admin Settings] button must be depressed in order to view the File I/O Settings sub-tab.

3. If an image or signature displays in the multimedia window, click [Clear]. Click [Open].
4. Select the file you want to import and click [Open]. The image displays in Multimedia Capture.
5. If the image is bitmapped and the crop window is enabled, adjust the crop window to frame the portion of the image that you want to save. To adjust the crop window, refer to Resize the Crop Window on page 142.
6. Click [OK] twice.

Import a Multi-Resolution Image File

If the image file you are importing is a multi-resolution image the following dialog box will appear. Here you can choose what resolution you would like the image to be imported as.



Import a Non-Supported Image File

A large number of image file formats are supported. However, you may encounter a format that you wish to import that is not supported. Contact Technical Support for assistance if you would like support for a non-supported image file format to be added. This procedure details how to import an image that is in a file format that is not supported. For more information, refer to Supported Image Formats on page 159.

1. Save a temporary copy of the image in a supported format. Do this using a third party graphics editor/conversion application, preferably the one used to create the image.
   It is strongly suggested that you create the temporary file in a format that preserves original image quality. Here are a few guidelines to accomplish this:
   - If the image is non-photographic and doesn't look jagged when scaled larger (i.e., not a bitmap):
     - Use EMF if you can otherwise, use WMF or DXF.
     - Images created with CAD programs (like floor plans for buildings) and drawn images (like company logos) fall into this category.
   - If the image is photographic or is known to have more than 256 colors:
     - Use 16.7 million color BMP (i.e., 24-bits/pixel or true color BMP)
     - Use JPEG with a minimal amount compression if you have low disk space.
     - Scanned images and images captured from a video camera or digital camera fall into this category.
   - Otherwise, use 16 color or 256 color BMP (i.e., 4 or 8 bits/pixel BMP).
     - The number of BMP colors should be greater than or equal to the number of colors used in the image.
     - Hand-drawn bitmapped images and photographic GIF images fall into this category.
2. Import the temporary file. For more information, refer to Import a Supported Image File on page 157.
3. Delete the temporary file.

Supported Image Formats

The following table lists the image formats that you can import. If the file format you are working with is not identified by bits per pixel, refer to the Bits Per Pixel and Number of Colors Information on page 160 to determine color information.

Supported Image Formats

Format name	Common file extension(s)	Sub-formats supported (compression type/bits per pixel)
Adobe Photoshop	PSD	None/1, 8, 24
Auto CAD	DXF	
CALS Raster	CAL	CCITT Group 4/1
Delrina WinFax Group 3	FAX	CCITT Group 3/1
Delrina WinFax Group 4	FAX	CCITT Group 4/1
Encapsulated PostScript	EPS	• PostScript Raster images/1,8 • Embedded TIFF images/(See TIFF format) Raster image information only, vector image information is ignored
FAX Group 3	FAX	• 1-Dimensional Group 3 without header (raw)/1 • 2-Dimensional Group 3 without header (raw)/1
FAX Group 4	FAX	CCITT Group 4 without header (raw)/1
GEM Image	IMG	NONE/1
IOCA or IBM Image Object Content Architecture	ICA	• MO:DCA wrapper with embedded CCITT Group 3/1 • MO:DCA wrapper with embedded CCITT Group 4/1 • No MO:DCA wrapper/1
JFIF or JPEG File Interchange Format	JPG/JIF	• Progressive JPEG/8 (YUV 4:0:0 grayscale), 24 (YUV 4:4:4, 4:2:2, 4:1:1 color) • Non-progressive JPEG/8 (YUV 4:0:0 grayscale), 24 (YUV 4:4:4, 4:2:2, 4:1:1 color)
JPEG Tagged Interchange Format	JTIF	Non-progressive JPEG/8 (YUV 4:0:0 grayscale), 24 (YUV 4:4:4, 4:2:2, 4:1:1 color)
Kodak FlashPix	FPX	• NONE/8, 24 • JPEG
Kodak Photo CD	PCD	NONE/8, 24
LEAD CMP	CMP	• Progressive CMP/1,8,24 • Non-progressive CMP/1,8,24
Macintosh Pict Format	PCT	NONE/1, 4, 8, 24

Supported Image Formats (Continued)

Format name	Common file extension(s)	Sub-formats supported (compression type/bits per pixel)
MacPaint	MAC	NONE/1
Microsoft Paint	MSP	NONE/1
OS/2 Bitmap	BMP	1.x and 2.x formats/1, 4, 8, 24
Portable Network Graphics	PNG	PNG/1, 4, 8, 16, 24, 32
SUN Raster Format	RAS	NONE/1, 4, 8, 24, 32
TIFF or Tagged Interchange File Format/Multipage TIFF	TIF/MPT	• Uncompressed/1, 2, 3, 4, 5, 6, 7, 8, 16, 24, 32 • RLE/1, 2, 3, 4, 5, 6, 7, 8, 16, 24, 32 • CCITT/1 • 1-dimensional CCITT Group 3/1 • CCITT Group 4/1 • JTIF (Non-progressive JPEG)/8 (YUV 4:0:0 grayscale), 24 (YUV 4:4:4, 4:2:2 or 4:1:1 color)
Truevision TARGA	TGA	• Uncompressed/8, 16, 24, 32 • RLE/8, 16, 24, 32
Windows Bitmap	BMP/DIB	• Uncompressed/1, 4, 8, 16, 24, 32 • RLE/1, 4, 8
Windows Enhanced Metafile	EMF	• Uncompressed/1, 4, 8, 16, 24, 32 • RLE/1, 4, 8
Windows Metafile	WMF	• Uncompressed/1, 4, 8, 16, 24, 32 • RLE/1, 4, 8
WordPerfect Format	WPG	RLE/1, 4, 8 (Raster image information only, vector image information is ignored)
Zsoft PCX / Multipage PCX	PCX/DCX	RLE/1, 4, 8, 24

Bits Per Pixel and Number of Colors Information

Bits per pixel	Number of colors	Description
1	2	Monochrome
2	4	CGA
3	8	
4	16	EGA/VGA
5	32	

Bits Per Pixel and Number of Colors Information (Continued)

Bits per pixel	Number of colors	Description
6	64	
7	128	
8	256	256 color VGA/256 gray levels
16	65,536	High Color
24	16,777,216	True Color
32	16,777,216	True Color with 8 bits of alpha information. The alpha information is ignored.

Notes About Specific Image Formats

- EPS & WPG Image Formats

  OnGuard provides partial support for the EPS (Encapsulated PostScript) and WPG (WordPerfect Format) formats. While EPS and WPG files can contain raster (bitmap) and vector (text, line, and shape drawing commands) information, OnGuard applications can only read raster information.

  If you want to import EPS or WPG files that contain vector information you should convert the files to EMF (Windows Enhanced Metafile) or WMF (Windows Metafile) format and import those files instead.

- EMF, WMF, & DXF Image Formats

  EMF and WMF files contain raster (bitmaps) and/or vector (text, line, and shape drawing commands) data. DXF files contain vector data only.

  OnGuard supports EMF, WMF, and DXF file import. This means that:

  – Badge layout graphics, cardholder photos, and cardholder signatures can be imported as WMF, EMF, and DXF files.

  – Vector images can be imported and remain vector images instead of being converted to bitmaps. However, the signature settings, image processing, chromakey, and the crop window are disabled when a vector image is imported.

- GIF & LZW Image Formats (Not Supported)

  As the result of Unisys licensing the LZW compression technology, GIF (Graphics Interchange Format), and LZW compressed TIFF formats are not supported.

APPENDIX B

Keyboard Hot Keys and Shortcuts

This section lists the keyboard hot key (Alt+) and shortcut (Ctrl+) assignments for each menu item in BadgeDesigner.

Layout Menu (Alt+L)

Menu Item	Hot Key Combination	Keyboard Shortcut
New	Alt+L+N	Ctrl+N
New From Template	Alt+L+M	Ctrl+M
Open	Alt+L+O	Ctrl+O
Gallery	Alt+L+G	Ctrl+G
Close	Alt+L+E	Ctrl+F4
Save	Alt+L+S	Ctrl+S
Save As	Alt+L+A	Ctrl+A
Update Database Field List	Alt+L+U	Ctrl+U
Log On	Alt+L+L	Ctrl+L
Change Password	Alt+L+C	
Log Off	Alt+L+L	Ctrl+T
Exit	Alt+L+X	Alt+F4

Edit Menu (Alt+E)

Menu Item	Hot Key Combination	Keyboard Shortcut
Cut	Alt+E+U	Ctrl+X
Copy	Alt+E+C	Ctrl+C
Paste	Alt+E+P	Ctrl+V
Delete	Alt+E+D	Del
Insert	Alt+E+I	
Rename Object	Alt+E+R	F2
Object Text	Alt+E+T	F4
Select Graphic	Alt+E+G	
Select Previous	Alt+E+V	Shift+Tab
Select Next	Alt+E+X	Tab
Select All	Alt+E+S	Ctrl+Keypad 5
Deselect All	Alt+E+L	Shift+Esc
Move Forward	Alt+E+F	Ctrl+Minus
Move Back	Alt+E+B	Ctrl+Plus

Menu Item	Hot Key Combination	Keyboard Shortcut
Move to Front	Alt+E+N	Alt+Minus
Move to Back	Alt+E+K	Alt+Plus

Insert Menu (Alt+E+I)

Menu Item	Hot Key Combination	Keyboard Shortcut
Barcode Object	Alt+E+I+B	
Cardholder Photo Object	Alt+E+I+P	
Cardholder Signature Object	Alt+E+I+S	
Circle Object	Alt+E+I+C	
Ellipse Object	Alt+E+I+E	
Graphic Object	Alt+E+I+G	
Magnetic Stripe Object	Alt+E+I+M	
Rectangle Object	Alt+E+I+R	
Round Rectangle Object	Alt+E+I+D	
Smart Chip Contacts Object	Alt+E+I+H	
Text Object	Alt+E+I+T	

View Menu (Alt+V)

Menu Item	Hot Key Combination	Keyboard Shortcut
Toolbars	Alt+V+L	
Status Bar	Alt+V+S	
Layout Properties	Alt+V+P	
Object Properties	Alt+V+O	
Options		

Toolbars Menu (Alt+V+T)

Menu Item	Hot Key Combination	Keyboard Shortcut
Layout	Alt+V+T+L	F7
Drawing	Alt+V+T+D	F8
General Formatting	Alt+V+T+G	F9
Graphic Formatting	Alt+V+T+R	F10
Text Formatting	Alt+V+T+T	F11
Barcode Formatting	Alt+V+T+B	F12

Window Menu (Alt+W)

Menu Item	Hot Key Combination	Keyboard Shortcut
Cascade	Alt+W+C	
Tile Horizontally	Alt+W+H	
Tile Vertically	Alt+W+T	
Close All	Alt+W+L	
Switch Panes	Alt+W+S	F6

Help Menu (Alt+H)

Menu Item	Hot Key Combination	Keyboard Shortcut
Contents	Alt+H+C	
Search	Alt+H+S	
Send Feedback	Alt+H+F	
About BadgeDesigner	Alt+H+A	

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