



What's New in BarTender 2016

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Introduction

BarTender® software by Seagull Scientific enables organizations around the world to improve safety, security, efficiency and compliance by creating and automating the printing of labels, barcodes, RFID tags, plastic cards and more. Thousands of companies in manufacturing, chemicals, healthcare, food and beverage, aerospace, pharmaceuticals, supply chain/logistics and other industries trust BarTender with the labeling and marking processes that keep their businesses running.

With the release of BarTender 2016, Seagull Scientific continues to enhance your design and printing experience, and provide easier ways to manage and administer your operation. This document describes the most significant features added to BarTender 2016.

64-bit BarTender Installation

In previous versions of BarTender, the software was only available in a 32-bit version. In BarTender 2016, all editions of BarTender are available in a 64-bit version as well.

Data Entry Forms

Improvements include the ability to place data entry prompts, query prompts, and record selectors on the same form, the ability to create and use multiple forms in a single document, new controls, and much more.

BarTender Integration Builder

Commander has been replaced by BarTender Integration Builder. This new application has an intuitive, straightforward interface that you can use to create highly customizable integrations (formerly Commander Tasks), and seamlessly connect BarTender's printing capabilities with virtually any enterprise business operation.

BarTender Print Portal

BarTender Web Print Server is now called BarTender Print Portal, and it includes improvements such as a more intuitive interface, support for all modern browsers, support for tablets and smart phones, the ability to print using the cloud, and more.

Other Upgrades

Other aspects of BarTender have been upgraded to improve usability and performance.

Improved Database Connectivity

BarTender 2016 introduces improved database support using ADO.NET drivers to natively connect to your database. The updated **Database Setup** dialog (formally known as the Database Connection Setup dialog) is more intuitive, and allows for many more database options.

New Visual Basic Scripting Editor

With the new Script Editor, you can easily navigate between different scripts in your document, access supported code snippets to help you when writing custom code, access application-specific VB Script objects, properties, and functions for use specifically with BarTender, and more.

More Support for RFID and Barcode Encoding

BarTender 2016 greatly expands its support for RFID and barcode encoding. This includes added support for EPC URI syntax, and the ability to specify RFID security settings per document.

Administration

BarTender Security Center has been moved to Administration Console, with many additions and improvements. From here, administrators can manage integrations, control security, monitor BarTender-related services, and administer the BarTender System Database.

64-bit BarTender Installation

In previous versions of BarTender, the software was only available in a 32-bit version. In BarTender 2016, all editions of BarTender are available in a 64-bit version as well.

If you have a 32-bit operating system (OS), you must install the 32-bit version of BarTender.

If you have a 64-bit version of Windows, you may install either the 64-bit or 32-bit version of BarTender. The 64-bit version is recommended, but you may need to install the 32-bit edition if you are using certain OLE DB or ODBC database drivers, or if you need to develop a 32-bit application using the SDK.

With BarTender, the difference in performance between the 32-bit and 64-bit versions is minimal, but a 64-bit installation can be slightly faster and more stable. Seagull Scientific recommends that you install the 64-bit version of BarTender whenever possible.

For more information, refer to the **32-bit and 64-bit BarTender** white paper:

<http://www.seagullscientific.com/support/white-papers>

Data Entry Forms

In BarTender 2016, we have made significant design improvements to our data entry forms.

Multiple Prompts on the Same Form

Now you can include data entry prompts, query prompts, and record selectors on the same form, allowing a user to enter information into objects on your template, query your database, and filter database records from the same location.

Multiple Forms Used in the Same Document

Additionally, it is now possible to design multiple forms for a single template. At print-time, you can choose to show all of the forms, or display forms conditionally based on user-defined criteria (in essence, create your own wizard).

Data entry forms are now *dynamic*, meaning that controls can be displayed on your form based on conditional criteria that you define.

New Data Entry Controls

We have added a number of new controls to our forms, including:

- Line and shape controls previously available only on the template.
- A group divider line and a group box to provide visual groupings of related controls.
- A word processor control that lets you format your text with mixed fonts, styles or colors at print-time.
- Text input boxes that can be used as password entries.
- A slider control that lets you select numeric values using a slider with configurable orientation and tick marks.
- A dropdown text input control where you can enter multi-line text while taking up only a small amount of space on the form.

Record Picker

The Record Picker and Dropdown Record Picker controls display records from a connected database and let you choose which records to print directly from your form.



	ID	Product	Type
1	356306	Oranges	Perishable
2	937584	Flower Pot	Breakable
3	254790	Apples	Perishable
4	452087	Bananas	Perishable
5	687324	Glass Globe	Breakable

Additional Improvements

We have added a number of general upgrades to improve your ability to design and create forms that best suit your needs.

New design options include form backgrounds can be set to a gradient, pattern, texture, or picture, and styles can be copied between objects and controls. Controls are easy to add to your form using the dropdown menus on the Object Toolbar, or by dragging a data source from the Toolbox pane onto the form. You can now set the data entry object for any control to display at different frequencies, including once per job, every record, every serial number, or every copy. Function key shortcuts for data entry controls can be configured for easier navigation, and an **Autocomplete** option provides suggestions from various sources.

For more information, refer to the [Using Data at Print-Time](#) book in the BarTender help system.

BarTender Integration Builder

In the past, BarTender used the Commander companion application to create "tasks" that would automate printing and other actions. BarTender 2016 has replaced Commander with BarTender Integration Builder.

The term *Integration*, as used in BarTender, simply refers to the process of integrating BarTender with other software or other sources of data, which in turn can be used to automate processes in BarTender. The most commonly automated process is printing; however, there are a number of other processes you can automate with integrations.

Using the new Integration Builder application, you can create highly customizable integrations to seamlessly connect BarTender's printing capabilities with virtually any enterprise business operation. This powerful service lets you perform enterprise-level tasks, including:

- Initiate printing automatically at "trigger" events, such as the arrival of an e-mail, a saved file or a modified database.
- Connect to and communicate with clients via TCP/IP, UDP or HTTP.
- Perform basic file operations, such as move, rename, delete or copy.
- Integrate directly with ERP systems with direct support for SAP, Oracle or IBM WebSphere connectivity.

All print jobs resulting from an integration are sent to the printers via a new Print Scheduler Service. This Windows service intelligently assigns jobs to print engines to maximize performance while maintaining print order.

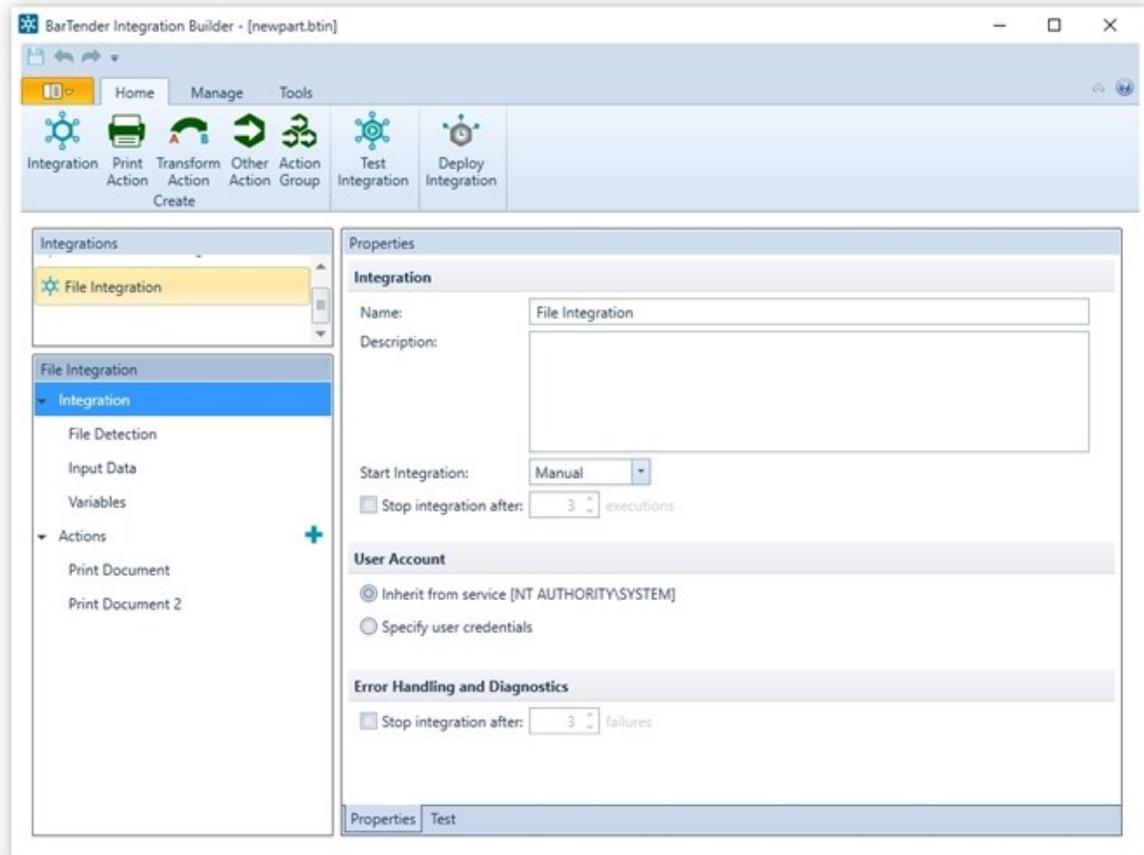
Each integration file created with Integration Builder is stored as an XML file on your computer. This application can also be used to test your integrations prior to deployment. You can simulate file, socket and serial port trigger events with sample data, or debug transforms and other actions.

Using Integration Builder

Integration Builder is much more intuitive than Commander, and allows you to easily select an integration method from a much larger selection than Commander supported.



When you choose the integration type (trigger), you can start to configure your integration.

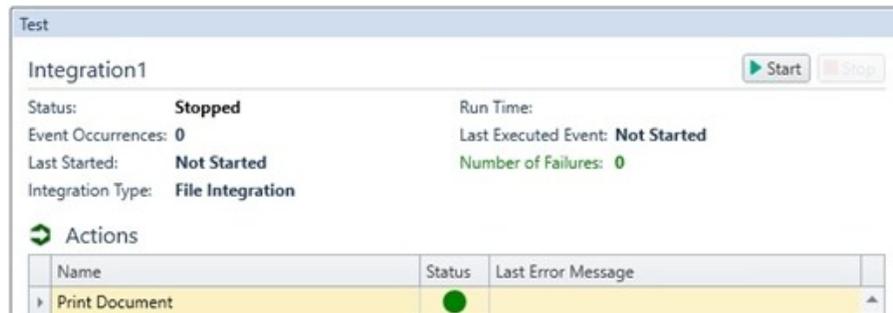


Use Integration Builder's straightforward interface to walk through basic configuration, and select the *action* for your trigger.

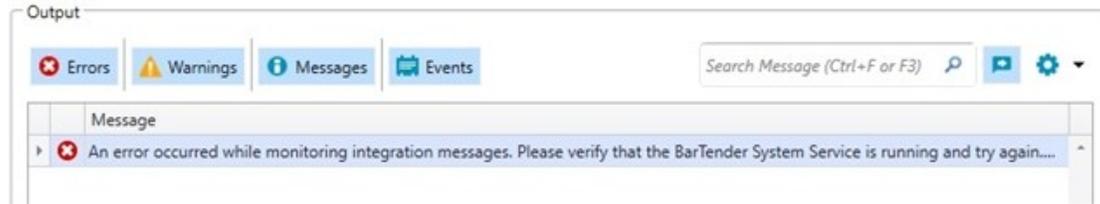
While an integration defines only a single event (or trigger), it can specify multiple actions to be performed in response to the trigger. Many more actions are available in Integration Builder than were available in Commander.

Testing Integrations

Integration Builder gives you the chance to test your integration before you deploy it. You will be notified in the **Test** pane and the **Actions** pane whether the integration passed testing or not.



If the integration fails, check the **Output** pane for errors, warnings, and messages that will tell you what went wrong.



Once your integration has passed testing, you are ready to deploy it.

Deploying and Managing Integrations

When you deploy an integration, it is sent to the selected server. Deployed integrations are displayed in Administration Console, where you can manage and monitor them.

Other Integration Platform Features

Additional features were introduced with Integration Builder, including the ability to:

- Connect to variety of file systems, including the local file system, network share, FTP site or Dropbox (other cloud storage coming soon).
- Use SSL/TLS security for e-mail accounts.
- Process e-mail attachments.
- Group actions together to execute in sequence or in parallel.
- Conditionally execute action groups or individual actions.
- Guarantee print order for serialized items.

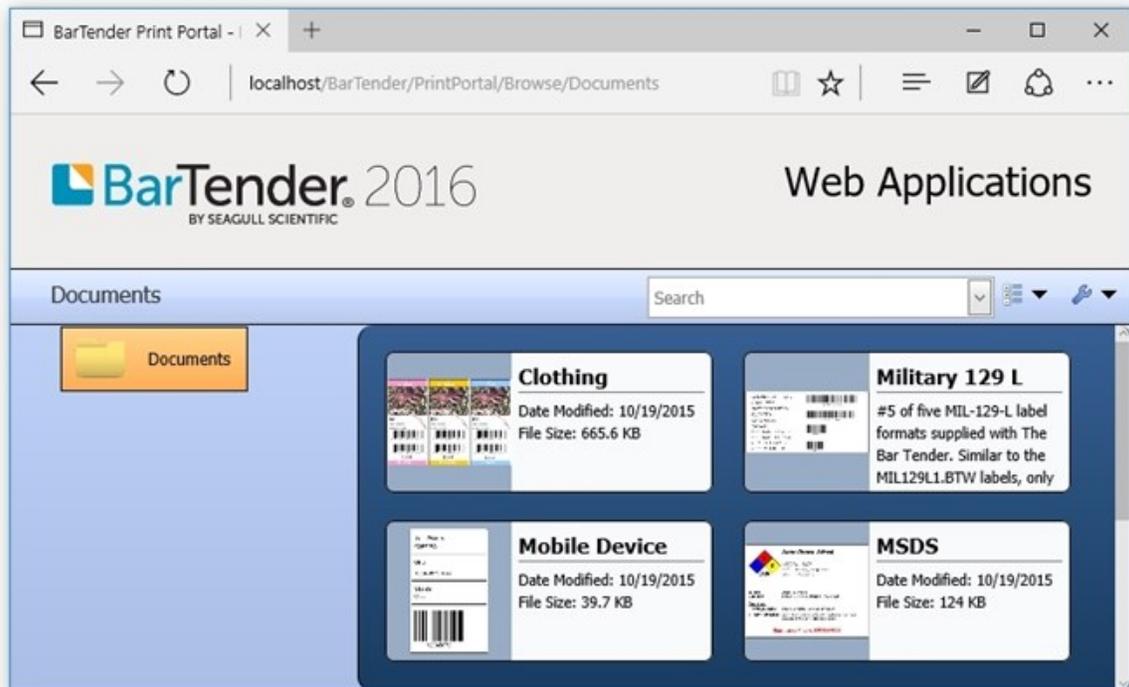
For more information, refer to the **Integration with BarTender Integration Builder, Transitioning from Commander to Integration Builder**, and **Administration Console** white papers:

<http://www.seagullscientific.com/support/white-papers>

BarTender Print Portal

In BarTender 2016, BarTender Web Print Server is replaced with a new web application, BarTender Print Portal. Print Portal, which is available with the Enterprise Automation edition of BarTender, provides an interface for selecting and printing BarTender documents.

The brand-new user interface includes folder navigation, customizable security settings and one-click printing. Print Portal can do everything that Print Station can, but Print Portal operates entirely over the web.



All modern browsers on Windows, Mac, Linux and Android operating systems are fully supported for user-based printing, including Microsoft Edge, Internet Explorer, Chrome, Firefox and Safari.

Our new web applications are designed using technologies that are widely supported on mobile devices. Print Portal has been tested with a variety of tablets and smart phones, ensuring that you can seamlessly access your documents from any device.

Features for Print Operators

Using the new Print Portal interface, print operators can customize how documents are displayed on the screen, view all documents on a single screen, browse through multiple directories, and search with autocomplete and dropdown list functionality. They can print documents with a single mouse click, or preview them first. They can print to printers connected to their computer, a web server, or the cloud using Zatar printing technology, and enter data into documents at print-time.

Features for Administrators

Administrators have control over security settings and print operator permissions, available printers and print options, the folders and documents that are visible to print operators, and display options.

For more information, refer to the **BarTender Print Portal** white paper:

<http://www.seagullscientific.com/support/white-papers>

Other Upgrades

Improved Database Connectivity

BarTender 2016 introduces improved database support using ADO.NET drivers to natively connect to your database, and a brand-new database setup engine.

The old Database Connection Setup Wizard has been replaced with the new **Database Setup** dialog to make connecting to your database easier and more intuitive. **Database Setup** features include the ability to select which tables in a database you want to use, configure database joins using conditional statements, set up custom filters and query prompts from the **Database Setup** dialog, autocomplete features for easier searching and browsing, a searchable Record Browser and more.

Throughout the **Database Setup** wizard, you can view your file and verify that you are making the correct selections for each option. You always have the option to configure an existing database connection or save it as a named database connection.

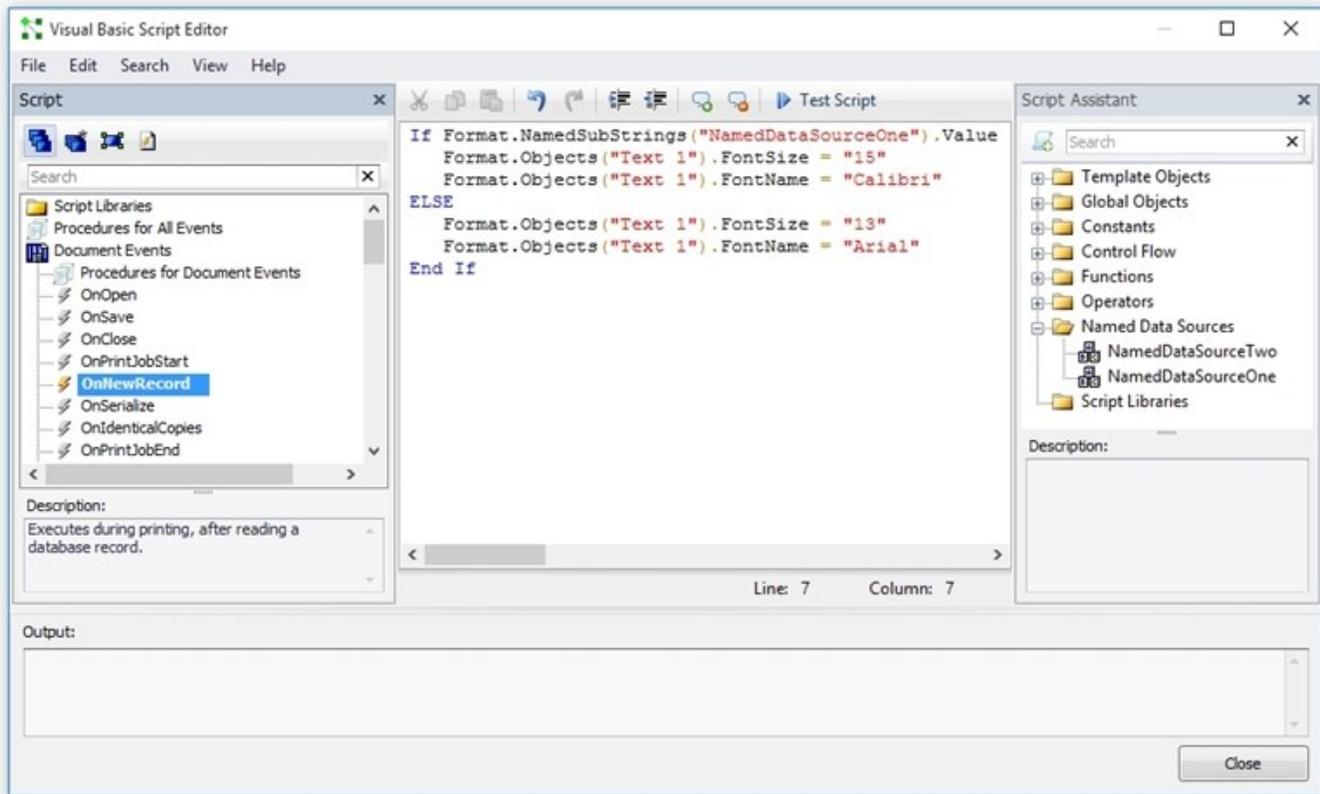
For more information, refer to the [Reading Data from Databases](#) book in the BarTender help system.

New Visual Basic Script Editor

BarTender 2016 comes with a brand new Script Editor, which includes:

- Syntax highlighting
- Line numbers
- Find/Replace support
- Ability to import and export scripts to file
- Ability to print scripts
- Shared script libraries

With the new Script Editor, you can easily navigate between different scripts in your document without closing the Script Editor, and access supported code snippets to help you when writing custom code. The Script Assistant pane also makes it easy to access application-specific VB Script objects, properties, and functions for use specifically with BarTender.



Shared Script Libraries

In addition to the new Script Editor, BarTender 2016 lets you share scripts between events in your document, and externally between multiple documents. You can define functions and subroutines that are accessible to all events in the document, including document events, data source events, control events and transform events. This node is also used to create global variables that are accessed by multiple scripts in your document.

BarTender's shared script library stores the common functions and subroutines by storing them in an external file. Once you have added a script library to the Script Editor, all scripts defined in your document will have access to the library's functions, subroutines and global declarations. The contents of a script library is merged into a script at run-time. Script libraries are saved as .btvbs files, and can be stored locally, on your network, or in Librarian.

For more information, refer to the [Script Editor](#) book in the BarTender help system.

More Support for RFID Encoding

BarTender 2016 greatly expands its support for RFID encoding:

- Updated support for EPC Tag Data Standard 1.9 to include:
 - ADI-VAR
 - CPI-96

- CPI-VAR
- GDTI-174
- GSRNP-96
- SGCN-96
- Added support for EPC URI syntax
 - You can supply EPC URI as input to an RFID object or use the RFID Object Value to display EPC pure identity URI, tag URI, or raw URI in a text or barcode field
- Improved validation and error messages for EPC input data
- Added support for GS1 application identifiers, so that EPC data can be encoded directly into barcodes using the "GS1 Barcode Data" object value of the RFID object
- Updated to GS1 General Specifications v14, which includes AI 8010, 8011 and 713

With BarTender 2016, you can also specify RFID security settings per document, such as locking tags after encoding or establishing kill passwords (requires Drivers by Seagull v.7.4.0 or higher).

Administration

In the past, BarTender used the Security Center companion application to allow administrators to control security within the BarTender Suite. Security Center has been moved to an easy-to-use application called Administration Console. This application not only allows administrators to control and customize BarTender security, but it can be used to handle other important aspects of BarTender such as the BarTender System Database, integrations and Windows services.

For more information, refer to the **Administrative Console** white paper:

<http://www.seagullscientific.com/support/white-papers>

Related Documentation

White Papers and Manuals

- Getting Started with BarTender
- 32-bit and 64-bit BarTender
- Administration Console
- BarTender Print Portal
- Integrating with BarTender Integration Builder
- Transitioning from Commander to Integration Builder

For downloadable versions, visit:

<http://www.seagullscientific.com/support/white-papers>

