

Bluespring BPM Designer 5 Activity Reference Guide

This document is intended to inform users of the capabilities of activities provided by Bluespring BPM Designer 5.

January 2012

Legal Notice

Proprietary Rights Notice

This document was prepared by Bluespring Software, Inc. This copy is being provided to recipient solely in connection with recipient's work with or for Bluespring Software, Inc. The contents of this document and any accompanying systems, software, prototypes or other materials presented along with this document are confidential and proprietary and have been provided to the recipient with the specific understanding that neither the document, nor the information, concepts, ideas, materials and/or specifications presented herein, or in any accompanying systems, software, prototypes or other materials presented along with this document will be used for any other purpose. Any duplication, distribution, disclosure or other use except as expressly authorized in writing by Bluespring Software, Inc. is strictly prohibited. Bluespring Software, Inc., may have patents, or pending patent applications, trademarks, copyrights or other intellectual property rights covering the subject matter in this document. In no way does the presentation of this document convey any ownership, license, or rights in or to the intellectual property contained in this document or contained in any systems, software, prototypes, or other materials presented along with this document. Recipient acknowledges that presentation of this document conveys no ownership, license, or rights in or to the intellectual property contained herein or contained in any systems, software, prototypes or other materials presented along with this document. Bluespring Software, Inc., makes no warranties, either express or implied in this document or in any systems, software, prototypes or other materials presented within this document, and Bluespring Software, Inc. assumes no liability for any errors, omissions or inaccuracies included within this document, or in any accompanying systems, software, prototypes or any other accompanying materials. Information in this document is subject to change without notice. Examples, names, companies, data and all other entities iden

Limit of Liability/Disclaimer of Warranty

The Publisher and Author(s) have used their best efforts in preparing this document. The Publisher and Author(s) make no representations and warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. There are no warranties which extend beyond the descriptions contained in this paragraph. No warranty may be created or extended by a sales representative or written sales materials. The accuracy and completeness of the information provided herein and the opinions stated herein are not guaranteed or warranted to produce any particular results, and the advice and strategies contained herein may not be suitable for every individual. Neither the Publisher nor the Author(s) shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages.

Trademarks

Bluespring Software, Inc. the Bluespring logos, BPM5, BPM Designer, BPM Administration Tool, BPM Notification Service, BPM Scheduling Service, BPM Process Engine Service, BPM Task Service, and BPM Monitors are trademarks and/or servicemarks of Bluespring Software, Inc. and may be registered in the United States or in other jurisdictions including internationally. Other product names, logos, designs, titles, words, or phrases mentioned within this publication may be trademarks, servicemarks, or tradenames of Bluespring Software, Inc. or other entities and may be registered in certain jurisdictions including internationally. Other product and company names mentioned herein are the trademarks of their respective owners and no affiliation, connection, or sponsorship should be implied or assumed based upon the use of such trademarks in this document or in any accompanying materials.

Third-Party Information

This guide may contain references or links to third-party information or Web sites that are not under the control of Bluespring Software, Inc., and Bluespring Software, Inc. is not responsible for the content of any referenced or linked third-party material. If the recipient accesses a third-party Web site mentioned in this guide, then the recipient does so at his/her own risk. Bluespring Software, Inc. provides these links only as a convenience, and the inclusion of the reference or link does not imply that Bluespring Software, Inc. endorses or accepts any responsibility for the content of or on those third-party sites.

Copyright © 2011 Bluespring Software, Inc. All rights reserved. This manual may not be copied, photocopied, reproduced, translated, or converted to any electronic or machine-readable form in whole or in part without the prior written approval of Bluespring Software, Inc.

First Edition: 2011

Bluespring Software, Inc. 200 West Fourth Street, Sixth Floor Cincinnati, Ohio 45202



Table of Contents

BPM Activities	2
Communication Activities	2
Database Activities	3
Document Activities	3
Enterprise Application Activities	4
Integration Standards Activities	5
Microsoft Office Activities	6
Microsoft SharePoint Activities	7
Process Initiation	8
Remote File Activities	9
Task Assignment	10



BPM Activities

Delay Process



The Delay Process activity can postpone a process for an interval of time or until a specified date and time. If you choose the delay process for a specific interval of time option, the amount of months, days, hours, and minutes can be set.

Join Path



The Join Path activity allows you to connect two or more paths in a process and controls when the process will complete the Join Path activity. You can choose the option to wait on all predecessor activities to complete or wait on any (or the first) predecessor activity to complete before the Join Path activity is marked as complete and the process continues. This activity is required when two or more paths try to connect to an activity.

Null Activity



The Null Activity allows you to create a placeholder within a process. This activity does not have any executable functions.

Start Subprocess



The Start Subprocess activity can synchronously initiate and manage one or more child processes within a parent process. You can map solution and process data items in the main process to process data items in the Subprocess. When you want to reuse common functionality, like a programming method, and when your process has more than ten activities, you can use this activity. Your process can have more than ten activities, but ten activities is considered a guideline for when to split one process into multiple processes.

Communication Activities

Send E-mail



The Send E-mail activity can send emails to internal or external recipients. Emails contain data item values in the message body, subject, and recipient fields. Additionally, the email can include attachments and custom headers.





Database Activities

Create Database Records



The Create Database Records activity can permit the addition of one or more database records to an ODBC-compliant database like SQL Server, Oracle, or Access. Optionally, the activity can also support rolling back a transaction if one of the insert statements encounters an error.

Delete Database Records



The Delete Database Records activity can remove records from a database. With this activity a specific deletion criteria option can be chosen. Records that meet all of the criteria, one or more of the criteria, none of the criteria, or do not meet all of the criteria can be deleted. Optionally, the activity supports rolling back a transaction if one of the delete statements encounters and error.

Execute SQL



The Execute SQL activity can generate and run a SQL statement, using multiple tables or by calling a stored procedure. You can map the values returned in your SQL statement to Data Items or store the return values in an XML document.

Retrieve Database Records



The Retrieve Database Records activity can access records in a database and store them in data items. Retrieval criteria can be set for this activity. The retrieval criteria options include retrieving records that meet all, one or more, do not meet all, or do not meet one or more of the criteria.

Update Database Records



The Update Database Records activity can change existing records in a database. Update criteria can be set with this activity. The options include either updating all of the records or records that meet specified criteria. If you choose to delete records that meet specified criteria, there are four options that are presented. You can update records that meet all, one or more, do not meet all, or do not meet one or more of the criteria.

Document Activities

Populate PDF Form



The Populate PDF Form activity can enter data items, literal values, and expression results into PDF forms and save the PDF to a network share or SharePoint document library. Permissions and passwords can be placed on the form.





Read PDF Form



The Read PDF Form activity can save information in PDF forms to data items. Permissions and passwords can be specified on this activity for PDFs that are password protected.

Write Text File



The Write Text File activity can output process and solution data into a text file. The output file name and location can be selected with this activity.

Enterprise Application Activities

Assign CRM Activity



The Assign CRM Activity can create a CRM activity that is assigned to a CRM user. The CRM System Resource and entity are selected with this activity.

Create CRM Records



The Create CRM Records activity can add new records to Microsoft Dynamics CRM 4 instance.

Delete CRM Records



The Delete CRM Records activity can delete records from the Microsoft Dynamics CRM 4 instance.

Fetch CRM Records



The Fetch CRM activity can retrieve records from a Microsoft Dynamics CRM 4 instance using the CRM Fetch XML expression.

Retrieve CRM Records



The Retrieve CRM Records activity can retrieve records from a Microsoft Dynamics CRM 4 instance. Retrieval criteria can be set for this activity. The retrieval criteria options allow you to either retrieve all records or records that meet specific criteria. If you choose to retrieve records that meet specific criteria, you can choose to retrieve records that meet all, one or more, do not meet all, or do not meet one or more of the criteria.





Update CRM Records



The Update CRM Records activity can update CRM records from a Microsoft Dynamics CRM 4 instance. Update criteria can be chosen, in order to specify which records are updated. The options include either updating all of the records or records that meet specified criteria. If you choose to delete records that meet specified criteria, there are four options that are presented. You can update records that meet all, one or more, do not meet all, or do not meet one or more of the criteria.

Create LDAP Entries

The Create LDAP Entries activity can add new entries to a Lightweight Directory Access Protocol (LDAP).



Delete LDAP Entries



The Delete LDAP Entries activity can delete entries from an LDAP directory. This activity also allows you to specify the deletion criteria. There is also an option to include entries in subtrees.

Retrieve LDAP Entries



The Retrieve LDAP Entries activity can retrieve records from an LDAP directory and store their attributes in data items. Retrieval criteria can be set for this activity. The retrieval criteria options include retrieving records that meet all, one or more, do not meet all, or do not meet one or more of the criteria.

Update LDAP Entries



The Update LDAP Entries activity can update entries from an LDAP directory. Update criteria can be chosen, in order to specify which entries are updated. The options include updating records that meet all, one or more, do not meet all, or do not meet one or more of the criteria.

Integration Standards Activities

Invoke Web Service



The Invoke Web Service activity can call a web service method. This activity also allows you to specify the information that you would like to send to and receive from the web service.

Read XML Document

The Read XML Document can read an XML document or fragments of an XML document and save the information in data items.







Submit HTTP Request



Submit HTTP Request allows you to submit a request to any hypertext protocol location. You may choose to Delete, Get, Head, Post or Put within your request.

Microsoft Office Activities

Populate InfoPath Form



The Populate InfoPath Form activity can generate an InfoPath form by populating InfoPath 2007 template. You can define how the InfoPath form controls are populated. You can either manually or automatically map data items to form controls. The Populate InfoPath Form activity allows you to specify the location of the InfoPath 2007 template that will be used to create a new InfoPath form and, define the output file name and location.

Read InfoPath Form



The Read InfoPath Form activity can read the contents of an InfoPath form into data items. You can map the InfoPath form's control values automatically, manually, or based off of a template location.

Read Excel Workbook



The Read Excel Workbook activity can read the contents of an Excel file into data items. This activity allows you to specify the location of the workbook that you would like to be read. The workbook properties that should be read into data items can also be specified. If there is a password required to open the workbook, you can indicate the passwords needed to open the workbook and access the worksheets.

Write Excel Workbook



The Write Excel Workbook activity can create and/or update an Excel Workbook. Protection options can be set to this activity. Workbook properties that are written in data items can be specified. This activity allows you to specify the input file that you would like to use and, the location and file name of the output file. By assigning a password, you can protect your input and output files.

Read Word Document

The Read Word Document activity can store the contents of a Word document's fields, form controls, and/or bookmark values into data items.



Write Word Document

The Write Word Document activity can create or update a Word document. The file name and the destination of the Word document can be specified.







Microsoft SharePoint Activities

Assign SharePoint Task



The Assign SharePoint Task activity can assign a SharePoint task to a user, group, or queue based on the selected assignment profile. Assignment profiles are used to task a user, a user group, or a queue in a solution. This activity can configure task name, importance, and assignment profile to assign the work.

Create SharePoint Group



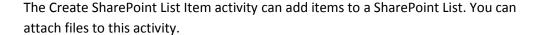
The Create SharePoint Group can create a new SharePoint group. With this activity you can customize group settings, permissions level, and group members.

Create SharePoint List



The Create SharePoint List activity can create a new list in the SharePoint site. You can specify the site settings with this activity.

Create SharePoint List Item





Create SharePoint Site



The Create SharePoint Site activity can create new SharePoint site. You can increase work efficiency and productivity by automating the task in Designer, eliminating the need for time-consuming procedures in SharePoint.

Delete SharePoint Group

The Delete SharePoint Group activity can delete a SharePoint group from a SharePoint site.



Delete SharePoint List

The Delete SharePoint List activity can delete the list from a SharePoint site.



Delete SharePoint List



The Delete SharePoint List Items activity can delete list items from a SharePoint list.





Retrieve SharePoint Group



The Retrieve SharePoint Group activity can retrieve users or permissions of a SharePoint group. You can specify the information retrieved from the SharePoint group.

Retrieve SharePoint List Items



The Retrieve SharePoint List Items activity can retrieve one or more list items from a SharePoint list and save it in data items. You can specify retrieval criteria, in order to determine which items will be retrieved. With this activity you can add attachments.

Update SharePoint Group



The Update SharePoint Group activity can update an existing SharePoint group. This activity allows you to specify group settings, permissions level, and the addition or removal of group members.

Update SharePoint List Items



The Update SharePoint List Items activity can update the list item information stored in a SharePoint list. You can update criteria with this activity. With the update criteria option all of the items or specific items can be updated. You can add attachments this activity.

Process Initiation

Receive CRM Event



The Receive CRM Event activity can start a process when a CRM event is initiated. This activity allows you to configure the File Monitor Initiator to monitor a folder for file changes. This activity can add, edit, or remove CRM Server and Entity Types.

Receive Email Monitor Event



The Receive Email Monitor Event activity can start a process when a defined email is received. This activity allows you to configure the Email Initiator to monitor an email resource for defined email. This activity can add, edit, or remove Email Resources and criteria.

Receive File Monitor Event



The Receive File Monitor Event activity can start a process when a monitored file event is initiated. The path to monitor should be local to the server hosting the File Monitor Service. The monitor watches for any file adds, updates, deletes, or renames or any combination in the folder you typed.





Receive **SharePoint Event**



The Receive SharePoint Event activity can start when a SharePoint event is initiated. The monitor will watch for any site, list, or list item events. Events can include sites being deleted, list schemas being modified, list items being added, etc. The event options you can select are to the type.

Scheduled Start



The Scheduled Start activity can start a process at a scheduled date and time or recurring interval of time.

Start



The Start activity acts as the default initiator. Your process can have multiple Start activities and the system calling the process can select which Start activity to use.

Remote File Activities

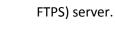
FTP Get File



The FTP Get File activity allows you to download files using the File Transfer Protocol to FTP (or FTPS) servers. You may specify file names or criteria to determine which files to download. Files are saved to directories denoted in the activity configuration.

Use the FTP Put File activity to send one or more files to a location on an FTP (or

FTP Put File



WebDAV Copy or **Move File**



The WebDAV Copy or Move File activity can copy or move files stored on a WebDAV repository, such as SharePoint. You can use a combination of data items and literal values to build the WebDAV URL.

WebDAV Delete





The WebDAV Delete File activity can delete a file or a directory of files from a WebDAV repository, such as SharePoint. This activity also retrieves the file properties and stores them in a data item. You can use a combination of data items to build the WebDAV URL.

WebDAV Get File



The WebDAV Get File activity can retrieve a file or a directory of files in a WebDAV repository, such as SharePoint. The WebDAV URL can be built by using a combination of data items. You can also use this activity to check out and lock a file when retrieving the file via WebDAV.





WebDAV Put File



The WebDAV Put File can save one or more files to a WebDAV repository, such as SharePoint. This activity also uploads the properties for a file separately. The WebDAV URL can be built using a combination of data items. You can also use this activity to check in and unlock a file when uploading the file via WebDAV.

Task Assignment

Assign Task



The Assign Task activity can assign a task to a user in your domain. In order to assign work, the task name, importance, and assignment profile are configured. The user can also, choose the data item that is applied. The access level of that particular data item can be changed to ReadOnly, Editable, or Required. To complete this type of task, you will have to develop a custom interface for the user. Bluespring provides an API for working with tasks. The API includes functions for getting tasks and updating tasks to completed, for example.

