Making Your Business Run Better

bxp API

Documentation

Author: Philip Lacey

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48 / 49 Western Parkway Business Park, Lower Ballymount Road, Dublin 12, Ireland
t: +353 1 429 4000 (Dublin) +44 207 692 0705 (London) e: info@bxpsoftware.com w: www.bxpsoftware.com

1 Introduction

1.1 Executive Summary

This document provides an overview on how to integrate bxp with external systems or websites.

The Application Programming Interface (API) also provides a number of tools to allow for automation of aspects of bxp.

The latest version of this document can be obtained from
http://www.bxpsoftware.com/wixi/index.php?title=bxp_API

1.2 Key Project Variables

Status Summary:	Documentation
Primary Project Manager:	PL

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t: +353 1 429 4000 (Dublin) +44 207 692 0705 (London) e: info@bxpsoftware.com w: www.bxpsoftware.com

Directors: Nick Wheeler · Chris Thomson · Philip Lacey
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1.3 Contents

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1.4 Key Stakeholders

The Document is aimed at developers and system integrators who are designing solutions for integrating bxp into their own solutions.

The bxp API represents a technical specification and is primarily managed by PL and DC with the rest of the team providing quality assurance.

1.4.1 All n One

Initial	*Name*	*Company Role*		*Email Address*
NW	Nick Wheeler	All n One Ltd	CEO	nick.wheeler@allnone.ie
CT	Chris Thomson	All n One Ltd	COO	chris.thomson@allnone.ie
PL	Philip Lacey	All n One Ltd	CTO	philip.lacey@allnone.ie
CD	Carolann Diskin	All n One Ltd	Technical Ops Manager	carolann.diskin@allnone.ie
DC	Daniel Coughlan	All n One Ltd	Snr. Framework Developer	daniel.coughlan@allnone.ie
PJ	Patrick Jenkins	All n One Ltd	Snr. Content Developer	patrick.jenkins@allnone.ie
ML	Meabh Landers	All n One Ltd	Content Developer	meabh.landers@allnone.ie
AF	Andrew Forde	All n One Ltd	Technical Contact Admin	andrew.forde@allnone.ie
TG	Thomas Glennon	All n One Ltd	Security Administrator	thomas.glennon@allnone.ie
RC	Robert Carson	All n One Ltd	BDM & Infrastructure Admin	robert.carson@allnone.ie

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1.5 Acronyms and Abbreviations

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Acronym	Description
API	Application Programming Interface
BDM	Business Development Manager
BE	bxp, the old name for bxp
bxp	Business eXpress Platform
CCL	Campaign Call, a contact record associated with a CDA
CDA	Campaign Data, the table holding the customer info
CEO	Chief Executive Officer
COO	Chief Operating Officer
CTI	Computer Telephony Integration
CTO	Chief Technical Officer
HTTP	HyperText Transfer Protocol
N/A	Not applicable
Ops	Operations
PBX	Public Branch Exchange
Snr	Senior
URL	Universal Resource Locator (e.g. http://www.google.ie)

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1.5.2 Lexicon

‘bxp System’ is a single instance of the bxp system which is uniquely identified by the client part of its URL e.g.
https://ww3.allnone.ie/client/client_demo/main/login.asp

‘bxp Client’ refers to the company who is renting the bxp System

A ‘bxp Log in’, refers to an individual user for the bxp Client

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1.6 Revision History

Version	**6-0-2**
Date	2015-12-30
Author	Philip Lacey
Modifications	Font change to Arial. Addition of section 7.5, dbUpdateRecord functions

Version	**6-0-1**
Date	2015-10-09
Author	Philip Lacey
Modifications	Corrections for new website i.e. allnone.ie examples exchanged for bxp examples. 7.4.3 and 7.4.4 live demos repaired. 7.3.12 also updated and documented to reflect enhancements.

Version	**6-0-0**
Date	2015-07-06
Author	Philip Lacey
Modifications	Transferred documentation to bxp document format Replace BE, Business Express, BeX with bxp universally Minor spelling corrections

For the purposes of space, all revisions for documents prior to 6-0-0 are available in prior document versions only.

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2 System Overview

2.1 Overview

The bxp API can be used to integrate with any number of external solutions. It is currently optimised to be used in one of three ways.

- As the secure database solution for numerous solutions including web sites / web surveys / membership websites (Website Integration)
- As an enhanced way of logging a user in, e.g. integration with a phone system (System Integration)
- As a method of automated file loading and report generation using manual means or Windows Scheduled tasks

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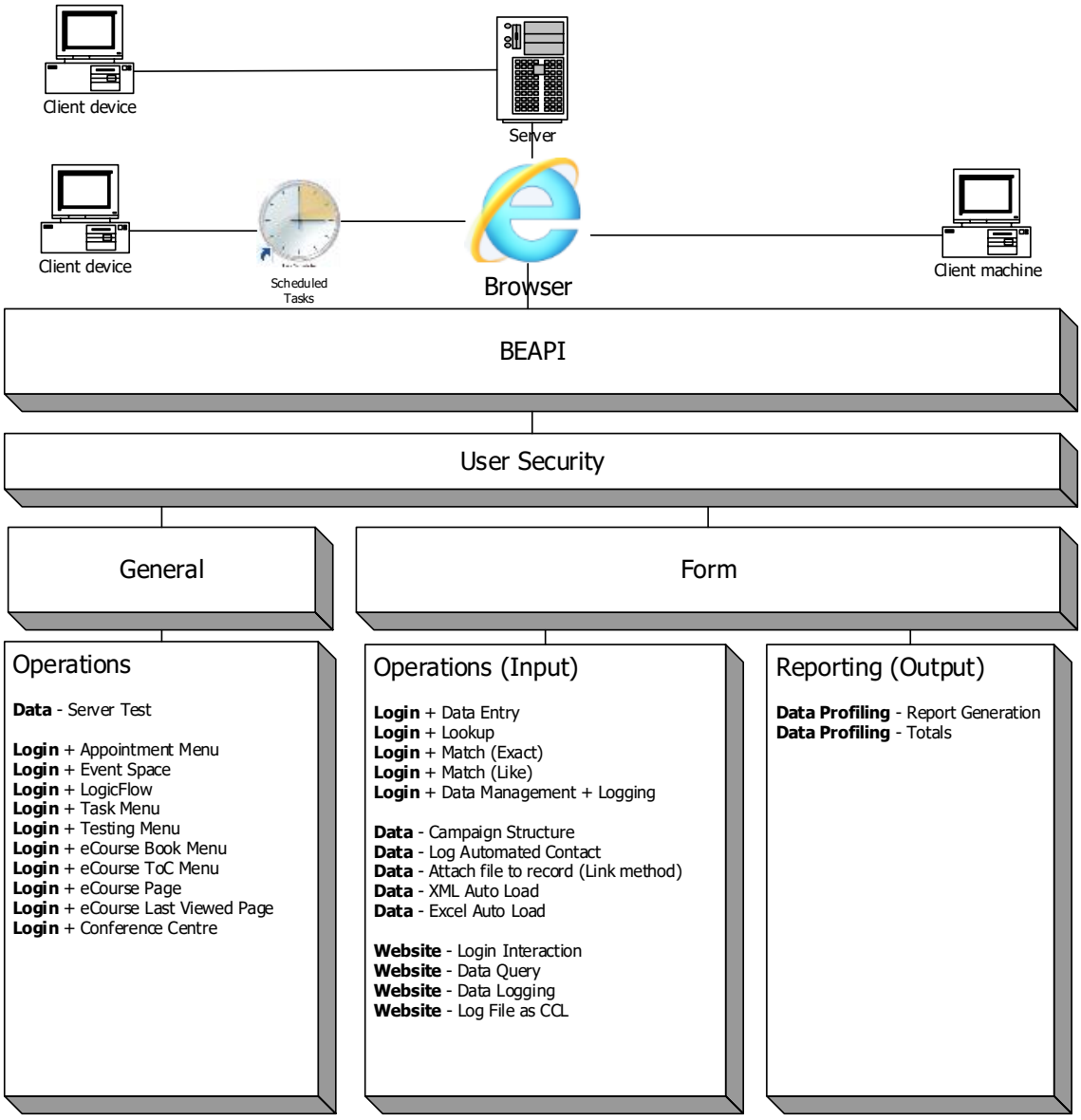
2.2 Element Diagram of the bxp API



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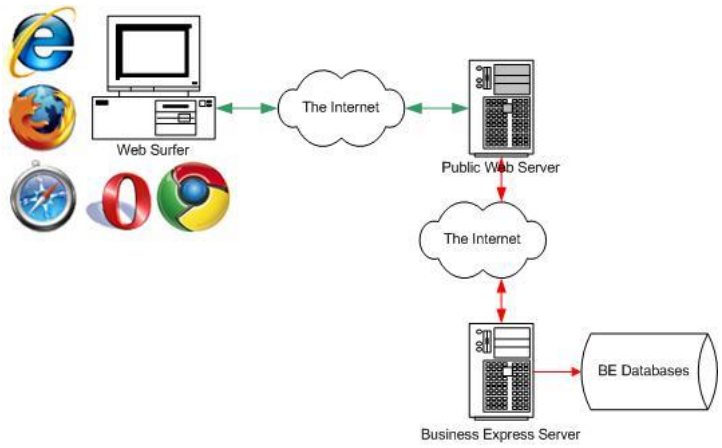
2.3 bxp API for Website Integration

2.3.1 Overview



bxp can act as the database management engine for any public / external facing website. For example, information captured in a form can be securely redirected to bxp and stored in a form. bxp can also *supply* data in the form of XML documents, which can be displayed as lists. Forms can also be used to provide simple logon verification.

Data is pushed to bxp as a HTTPS POST. Data is retrieved as an XML or HTML document.

2.3.2 Process Flow for Website Integration

1. Data is collected from the user and submitted to a processing page
2. The processing page reads the submission and appends key processing data
3. The new data is packaged and submitted to bxp
4. bxp processes the data and returns a data package (XML or HTML)
5. The processing page interprets the return data package and informs the user as appropriate

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2.4 bxp API for Computer Telephony Integration

2.4.1 Overview

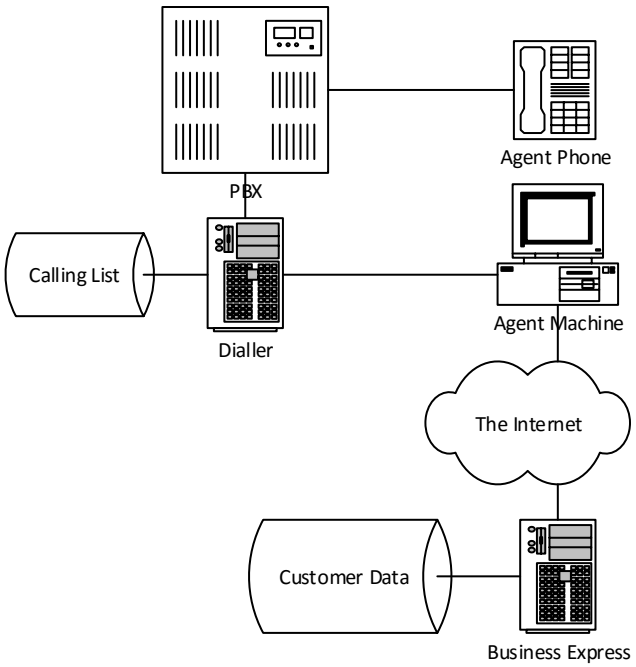

Diagram 1 : Generic Dialler Interface.

When used as part of systems integration, bxp is accessed through a URL call. Any system capable of generating a URL call can, through a 'HTTP POST', integrate with bxp. bxp provides a completely self-contained, web based interface for testing and to aid understanding of the functions and features available to users.

The following example of a real world setup demonstrates the implementation of bxp.

For phone system based processes, the Dialler processes a 'Calling List'. When the call is connected or picked up, two things happen simultaneously. The phone call is 'pushed' to an agent and a data command is sent to an agent's machine.

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There is a listening application on the agent's machine, waiting to receive this instruction. When the listener picks up the instruction, it opens a URL. The URL is a page on the bxp server. Param.
in the URL allow the dialler to pass record specific information which opens the appropriate Customer Data Record.

Process Flow for Computer Telephony Integration

Phone Dialler Integration

1. Dialler takes a record from the calling list
2. Call is answered by an agent
3. Call is pushed to the agent's phone
4. Id / Phone Number is pushed to the listening application on the agent's machine
5. Agent's machine opens a URL similar to https://ww3.allnone.ie/client/client_demo/cti/userCTI_Record.asp?intCampaign_Id=1&intCDA_1_Id=1
6. bxp builds the page and returns it to the agent's machine.

Application / Intranet Integration

1. Application / Intranet provides a formatted clickable link
2. Agent / User clicks the link, which has auto log in to the bxp System
3. Destination is determined by keyword in provided Parameters

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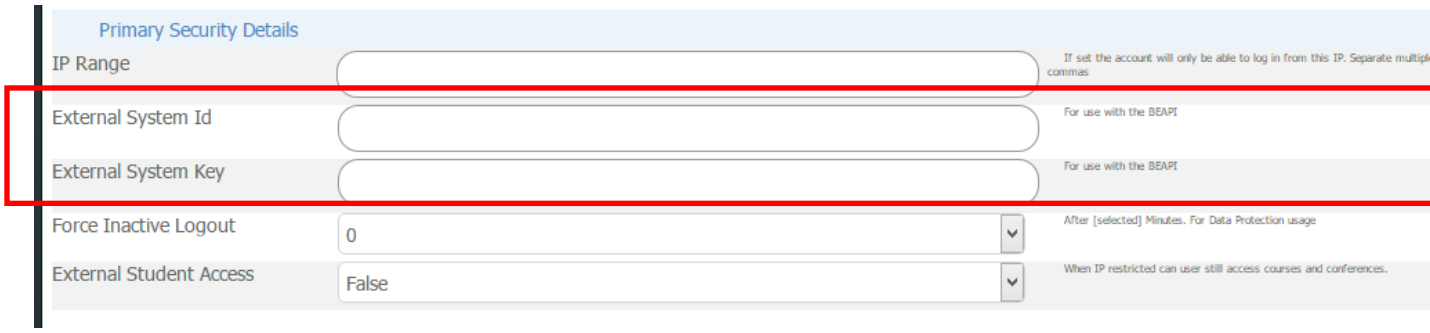
3 System Clarifications

3.1 General - User Setup

Each user account that will be automatically logged in must have their External Id and External Key fields set. For Website Integration a user account is selected, as there is no differentiation between unique users when used on an external website.

A user must be selected against whom to log the records and perform searches. This is done using the System Access Management module inside bxp. On every users account is an External System Id and External System Key field. Here the username and password used for external logging in is entered.

Main Menu > System Access Management > User Administration > Add User - Security Details Only > Primary Security Details



The IP address that the user / automated server may access from must also be set. This allocation can be done individually or as a group.

Individually, can be seen as above by placing the IP address in the IP Range box as a single IP or separated by commas.

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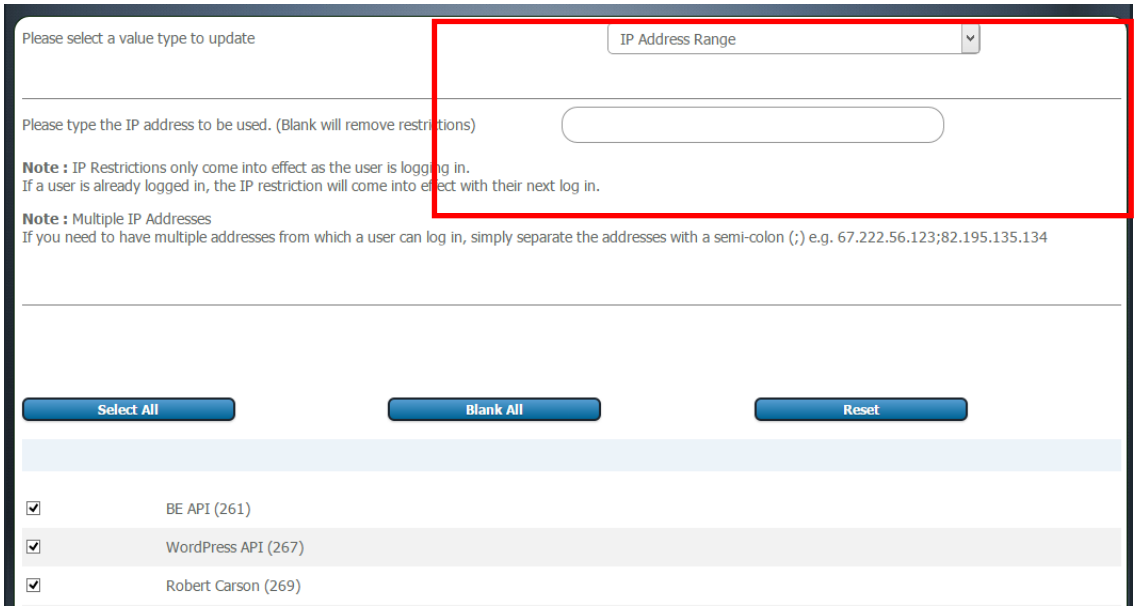
Alternately as a group

Main Menu > System Access Management > System Management > Group User - Modify Details > Click "Lookup User" to include all users >

Select all the users you want to change, scroll to the bottom and click "Continue"



The user will also need appropriate permission to access the form. This is done using *Main Menu > System Access Management > Security - Contact Access > Form - Single Add User by Form*

There are other functions available in this section to speed up group allocation of access.

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3.2 Understanding bxp Form Database Structures

Some understanding of bxp form structures is required in order to use the interface correctly when working with Forms.

Forms can only be created using the bxp interface and each form has an id number, incrementally starting from 1, for each client system. Each form in bxp uses a number of tables to record data and the key table is the *data table*. Table field names are created automatically and cannot be changed.

In the bxp interface, 'Field Mapping' is the process of creating user friendly field names, e.g. Firstname instead of strCDA_1_field_1_1, which make the system easier to use. The API requires a programmer to use the actual table names.

Please use
https://ww3.allnone.ie/client/client_demo/main/login.asp
To login to the bxp Demo system

When a form is built, a table called CDA_X (where X is the id of the form) is also created. Using the function calls detailed in section 3 of this document, each of the fields in the table can be seen. The demo form used in all these examples has the following layout

'intCDA_X_Id' is the internal id record for every data record added to the system. This id number is created by bxp.

'strCDA_X_' is a non displayed field that can be used for storing numeric or alphanumeric ids from other systems.

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Since each form is different, the phone number field could have any name. However in the example used, strCDA_1_field_1_5 is the work phone number field. The system will perform a lookup on a field or a combination of fields, and convert the passed parameters to the CDA_Id. If more than one field is matched the system defaults to the lowest Id. With this in mind it is important that unique field combinations are used in the lookup.

Table 1 : Form 1 Sample Structure

Field	Type	Null	Key	Default	Field
intCDA_1_Id	int(10) unsigned zerofill	NO	PRI		Id
strCDA_1_field_0_0	text	YES			Section Header - Customer Info
strCDA_1_field_0_1	text	YES			Title
strCDA_1_field_1_1	text	YES			Firstname
strCDA_1_field_2_1	text	YES			Initial
strCDA_1_field_3_1	text	YES			Surname
strCDA_1_field_0_5	text	YES			Home Phone
strCDA_1_field_1_5	text	YES			Work Phone
strCDA_1_field_2_5	text	YES			Mobile Phone
strCDA_1_field_0_8	text	YES			Address 1
strCDA_1_field_1_8	text	YES			Address 2
strCDA_1_field_2_8	text	YES			Address 3
strCDA_1_field_3_8	text	YES			Post Code
strCDA_1_field_4_8	text	YES			Country
strCDA_1_field_0_13	text	YES			Section Header – Questions
strCDA_1_field_0_14	text	YES			Favourite Colour
strCDA_1_field_0_15	text	YES			Satisfied with life
strCDA_1_field_0_16	text	YES			Favourite Things
strCDA_1_field_0_17	text	YES			Favourite transport
strCDA_1_field_0_18	text	YES			Other info
strCDA_1_	text	YES			Future expansion
strCDA_1_Status	text	YES	MUL		Status
strCDA_1_Comments	text	YES	MUL		Comments
intCDA_1_NoOfAttempts	int(10)	YES		0	Number of Attempts
intCDA_1_StaffId	int(10)	YES		0	Staff Id
strCDA_1_LastDateTime	datetime	YES			Last contact date and time

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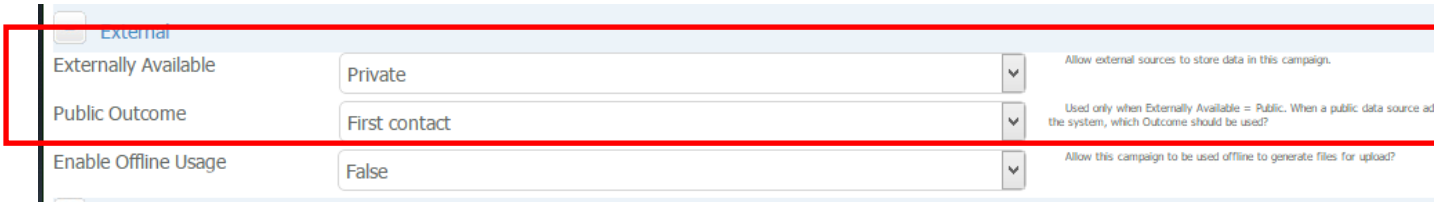
3.3 Form setup for Website Integration

For a form to be accessible externally it must be made *available* externally as well as being in-date and active. These options are available in Form Management. The 'Externally Available' option only applies for functionality where bxp is used with external website integration.

If bxp is being used for systems integration this option does not need to be set since, as the user is logged into the bxp System, data does not leave bxp.

For the form to be externally available:
Main Menu > Form Management > Forn - Primary Management > Form - Advanced Settings> Select your form > External



The 'Externally Available' must be set to 'Public', as it will default to 'Private'.

The default 'Public Outcome' must also be set.

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3.4 Form Search Display Fields

Since a form usually requires the field to match on to be specified, Generic Start Point will drop the user to form selection. At this point it's still not possible to tell which field to search on. Each form must therefore have a specified field on which to search. This is done in the form details screen when editing a form. E.g.
Main Menu > Form Management > Form - Primary Management > Form – Search Display Fields > Select your Form

3.5 SFTP Account Settings Setup

bxp supports the retrieval and depositing of files via SFTP to client SFTP servers. The management and availability of external SFTP services is not part of the bxp service.

An SFTP server's details are logged using
Main Menu > System Access Management > System Management > FTP Settings Add and Edit functions.

These SFTP settings are then available for the pulling of data files for use in auto loading of data, or in pushing generated outputs for client retrieval. There is a dedicated SFTP testing system to ensure the username, password and other SFTP settings entered are correct and working.

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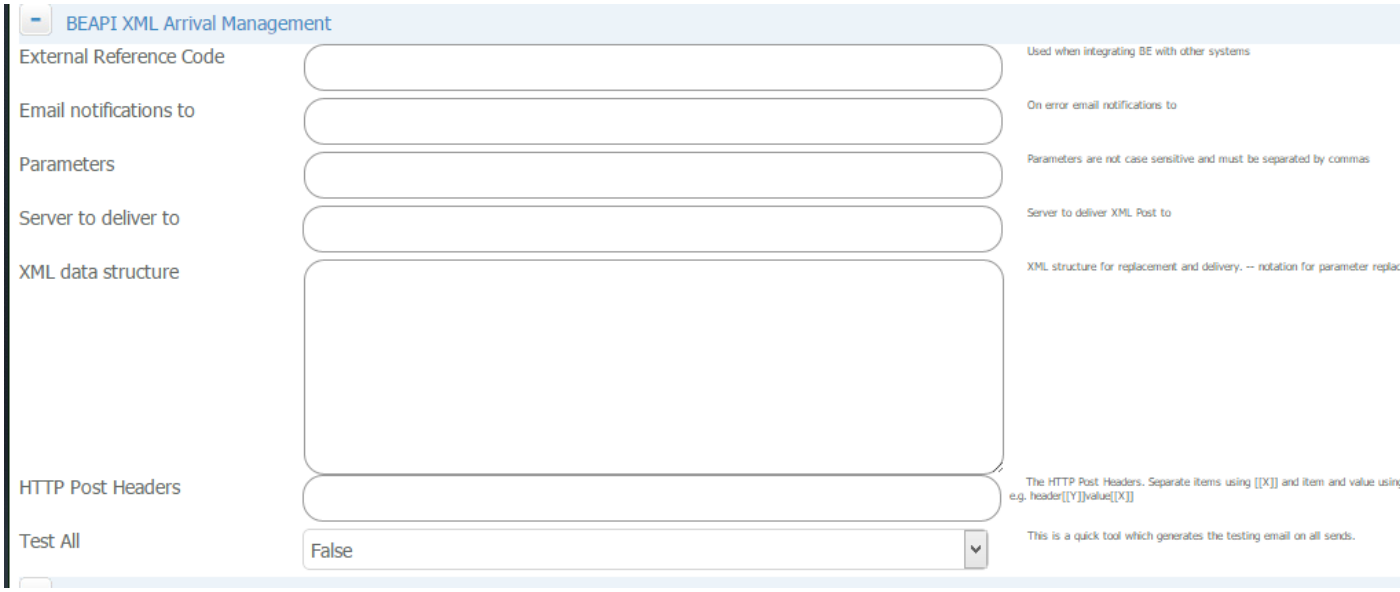
3.6 Form bxp API XML AutoLoad Options

The setting to utilise this function will only appear after a form has been built. When editing all settings for a form the following section will appear.

Main Menu > Form Management > Form - Primary Management > Form - Advanced Settings > Choose your Form >

3.6.1 bxp API XML Arrival Management



External Reference Code

As discussed in 3.7

Email notifications to

As part of the XML response process if delivery fails for any reason to whom should the emails be sent.

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Parameters

Extra Parameters to be found and extracted. As used in 7.3.3.1

Server to deliver to

For XML notification structure, the server to deliver the POST to

XML data structure

The structure of the XML to send which supports the -- field replacement notation. As used in 7.3.5

HTTP Post Headers

When the XML is being posted, explicit Post Headers.

Test All

Testing mechanism to display on screen what was posted for debugging purposes.

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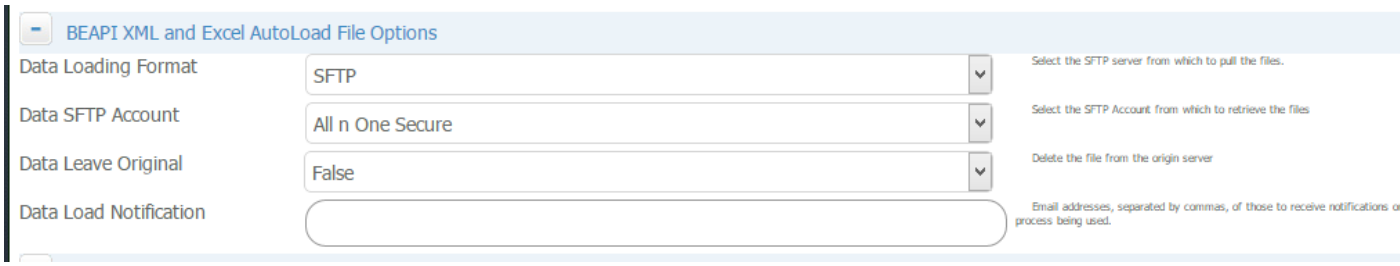
3.6.2 bxp API XML and Excel AutoLoad File Options



Data Loading Format

Select the SFTP server from which to pull the files

Data SFTP Account

The Data Account from 3.5 to use

Data Leave Original

Delete the file from the origin server

Data Load Notification

As part of the XML response process if delivery fails for any reason to whom should the emails be sent?

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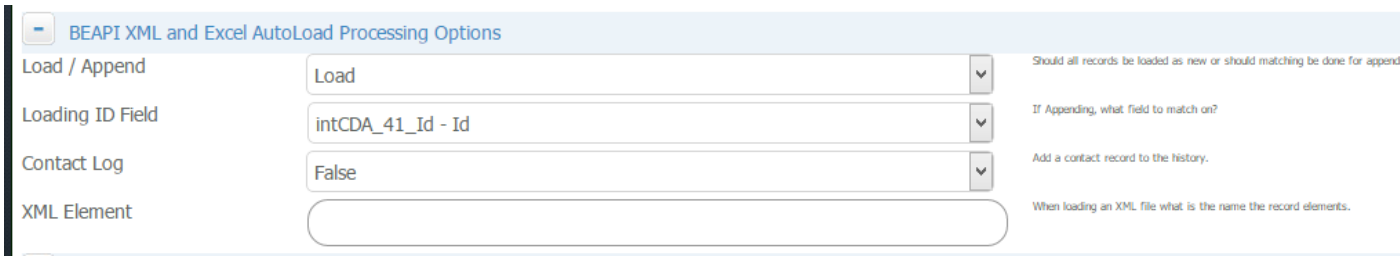
3.6.3 bxp API XML and Excel AutoLoad Processing Options



Load / Append

Should all records be loaded as new or should matching be done for appending. If 'Load' is chosen, all records will be added as new records. Append will try to match using details from the subsequent fields

Loading ID Field

If Appending, what field to match on? If no match found, new record assumed. If match found details updated where field matching occurs.

Contact Log

Add a contact record to the history

XML Element

When loading an XML file what is the name the record elements. This will be the name of each data element, e.g. record or row

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3.7 Campaign Code

When integrating solutions with the phone system it is not always possible to specify a BeX Form Id. For this reason it can be easier to use a phone system reference instead.

As a worked example, the phone system has an outbound dialling campaign. The outbound campaign is called "acmeenterprises"

As part of the URL for a lookup, instead of specifying the explicit form Id we can replace the Id with something like

https://ww3.allnone.ie/client/client_demo/cti/userCTI_Record.asp?user_id=abc123&user_key=passkey&campaign_code=acmeenterprises&strCDA_1_field_1_5=014294000

Within BeX we need to let the API know that the ID has to be translated.

Main Menu > Form Management > Form - Primary Management > Form - Advanced Settings > Choose your form > Advanced Settings > External Reference Code

Putting "acmeenterprises" into this box, then allows the API to do a translation of this code back into the ID.

There is no specific sense checking to ensure that two Forms within BeX have the same External Reference Code.

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This code can be populated with the CDN or DNIS, meaning that generic integration URLs for programs can be designed.

e.g.
https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp?system=datalogging&user_id=%userid&user_key=%userpassword&campaign_code=%DNIS

Control Directory Numbers (CDNs)

A Control DN (CDN) is a special Directory Number not associated with any physical telephone or equipment. The CDN specifies a destination ACD queue to which incoming calls are directed.

DNIS

Dialled Number Identification Service. Indicates what number the customer called from.

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4 Risks and Assumptions

There are a number of considerations associated with integrating bxp with a custom external system, based on the information available to date.

4.1 Data Delivery

The method of communication in this project is via HTTP & HTTPS. Due to the inability of the protocol to guarantee delivery, systems have been put in place to allow for validation and re-request of documents.

Note: All ASP page names defined in this document are case-sensitive, as are all parameters associated with the calls.

4.2 Content

bxp System Date and Time parameters must be in Universal Time Format (UTF) which is YYYY-MM-DD HH:MM:SS

Records which are loaded via the Form Management module will be loaded exactly as per their data file. No attempt at type conversion will be made. Date and numeric fields will be treated as text.

Where possible, bxp applies 'Trimming' to fields, to help improve matching We assume that all non-system specific database fields will be alphanumeric with no set size limit.

When passing data via parameters for diagnostic purposes, it is advisable that all details be URL encoded; for example a space would be coded to %20. bxp will translate these parameters back during processing. Generally, bxp will work without URL encoding.

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t: +353 1 429 4000 (Dublin) +44 207 692 0705 (London) e: info@bxpsoftware.com w: www.bxpsoftware.com

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5 Architectural Goals and Constraints

5.1 Goals

The solution will be

- Easily accessed and intuitive
- Designed with open architecture for end-to-end integration
- Flexible but rule based
- Secure
- Standards-based
- Scalable
- Robust
- Processor and memory efficient
- Compliant with all Data Protection legislation

The design will be standards-based to enable any developer to extend the functionality and systems integration should future development be required.

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5.2 Considerations & Constraints

5.2.1 Internet Security

Where required IP security can be added to limit requests to specified IP addresses only. Adding or changing is carried out within the System Access Management Module.

5.2.2 Flexible & Modular

To meet the requirement of flexibility, this solution will be developed in as component-based and modular a fashion as possible. If possible each component of the system should be developed separately and almost completely decoupled from the components on which it is dependent. Of course, this describes the classic n-tier development process.

5.2.3 Reliability & Performance

Performance is key. The proposed architecture will deliver the performance and scalability required for enterprise-class deployments including load balancing, connection pooling and results caching.

5.2.4 Implementation Language

bxp implementation language is VBScript with ASP pages. Output is HTML with Javascript, where necessary, for validation. Pure systems integration will use XML or pure text responses. In all cases full documentation will be provided.

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6 Quality

6.1 Overview

Testing outlined in this document is high-level. Separate testing plans are implemented when All n One and a third party developer work together on a project.

The activities outlined here represent just a few of the spectrum of tests performed to ensure that bxp has the expected levels of stability and quality.

All tests are clearly defined and have an agreed objective based on a mutual understanding of the system and the clients' requirements. Reviews and checkpoints may be re-visited during a project life, depending on the number of project phases

All activities and processes are controlled by the Project Manager who defines procedures, provides templates and guidelines for the project and will also incorporate, design and implement project specific activities.

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6.2 System Testing (Functional)

System testing should not only be used to testing the functionality of the system, but must also prove that the product meets the clients' requirements.

Function testing identifies any discrepancies between specified and actual performance and begins as soon as there is sufficient functionality for some (or all) of the identified tests to be executed. This is usually after unit and integration (development) testing have been completed.

System testing, undertaken prior to client release, should also prove that the product has an acceptable level of stability. Additional tests may be added, depending on the product and its intended use.

6.3 User Acceptance Testing

This is the final testing phase and acceptance criteria need to be agreed and documented in advance as part of the project definition.

An appropriate third party will often perform acceptance testing and evaluate the end product against the client's requirements. It is therefore important that time is allowed for detailed feedback and response. The tester should be familiar with the intended purpose of the product.

Time scales for acceptance will vary depending on the product and individual agreements will need to be put in place regarding this process. Where other support processes are required they will be implemented depending on the type of project and contract agreements.

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6.4 Programming Standards

The source in the system will be developed in accordance with the SDLC (Software Development Life Cycle) and All n One's internal software standards which are based on industry best practice.

6.5 Unit Testing

Testing is built in to the development process, with each program element being unit-tested. This means that components are individually functional according to specification, before being amalgamated with the overall system.

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7 Function Reference

7.1 User Security

7.1.1 General Notes

A demonstration system has been built on the bxp server to demonstrate the use and actual returns of function calls.

All URL function calls are made through an SSL certificate and using HTTPS. Functions will work without using HTTPS but it is *vital* that developers use the HTTPS for data security on their own systems.

Where bxp is used as the external website database engine, the external website will need an SSL secured form page. Data transfer to bxp will be secure but to ensure continuity of security the public site should also encrypt the form taking data.

When passing data to bxp, specifically data in the Query String of the request, is a security risk, so as little data as possible should be passed via the QueryString.

Some integration may require automated log in to bxp and to facilitate this a separate security ID and matching key system has been developed. The bxp Client will add this extra information to the bxp Log in the System Access Management module which will allow Client Dialler Desktop Agent systems to log the user into bxp without the need for bxp User input.

In the interests of security, IP restrictions are applied on a user by user basis, thus limiting where an automated log in can be accessed from. After each automated log in, the bxp user's security cookies are reset, causing multiple log outs if the user tries to use the system manually whilst also using the automated dialler feature.

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Upcoming security measures will accommodate encrypted POST or XML contents. Putting information in the Query String is a weakness but may be the only technology available to the Client Dialler Desktop Agent, and so has been retained. Where this is the case, information should be predominantly kept in bxp with key data only being passed via the Query String.

7.1.2 Field Key

Desc.	Description of what the function does
Param.	The parameters used by the function
Gen. Fun.	Generic Function page
Example	Sample demonstration URL
Notes	Further details about the function

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7.2 General

7.2.1 Data – Server Test

Desc.	This function allows a calling server to check that the bxp server is available over the net and is responding to CTI commands. It can also be used for speed testing.
Param.	
Gen. Fun.	userCTI_Alive.asp
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_Alive.asp
Notes	See Appendix A for status codes.

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7.2.2 Login + Appointment menu

Desc.	Logs the user in and redirects the user to the Appointment Menu. If the value parameter is used the system will further redirect to the logging screen, of the Id of the calendar specified, in the “Availability / Appointment Management” section.
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) system = The menu to redirect to *Optional* ID = The appointment to go to day view
Gen. Fun.	userCTI_GenericEntry.asp?user_id=X&user_key=Y&system=appointment&ID=Z
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp?user_id=abc123&user_key=passkey&system=appointment
Notes	The user must be granted specific permission to access the calendar and module section.

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7.2.3 Login + Event Space

Desc.	Logs the user in and redirects the user to the Appointment Menu. If the ID parameter is used the system will further redirect to the day view of the Id of the calendar specified in the “Appointment Management” section. The other parameters allow details to be set immediately saving time on user data entry.
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) system = The menu to redirect to *Optional* ID = The appointment to go to day view duration = A number in minutes subject = URL encoded title of appointment body = URL encoded details for appointment body colour = Web Hex calendar background colour
Gen. Fun.	userCTI_GenericEntry.asp?user_id=X&user_key=Y&system=appointment&ID=Z&duration=Z&subject=Z&body=Z&colour=Z
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp?user_id=abc123&user_key=passkey&system=eventspace&ID=Z&duration=30&subject=Test%20Subject&body=Test%20body&colour=FF0000
Notes	The user must be granted specific permission to access the calendar and module section.

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7.2.4 Login + LogicFlow

Desc.	Logs the user in and redirects the user to the LogicFlow Menu. If the ID parameter is used, the system will further redirect to the start page, of the Id of the flow specified.
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) system = The menu to redirect to *Optional* ID = The LogicFlow to go to
Gen. Fun.	userCTI_GenericEntry.asp?user_id=X&user_key=Y&system=logicflow&ID=Z
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp?user_id=abc123&user_key=passkey&system=logicflow&ID=1
Notes	The user must be granted specific permission to access the Logic Flow and module section.

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7.2.5 Login + Task menu

Desc.	Logs the user in and redirects the user to the Task Management Menu. If the ID parameter is used the system will further redirect to logging a new task in the specified project.
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) system = The menu to redirect to *Optional* ID = The project to go to
Gen. Fun.	userCTI_GenericEntry.asp?user_id=X&user_key=Y&system=task&ID=Z
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp?user_id=abc123&user_key=passkey&system=task&ID=1
Notes	The user must be granted specific permission to access the project and module section.

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7.2.6 Login + Testing menu

Desc.	Logs the user in and redirects the user to the Testing Centre Menu. If the ID parameter is used the system will further redirect to taking the test of the specified ID.
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) system = The menu to redirect to *Optional* ID = The project to go to
Gen. Fun.	userCTI_GenericEntry.asp?user_id=X&user_key=Y&system=testing&ID=Z
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp?user_id=abc123&user_key=passkey&system=testing&ID=1
Notes	The user must be granted specific permission to access the test and module section.

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7.2.7 Login + eCourse Book menu

Desc.	Logs the user in and redirects the user to the eCourse Book listing for the user.
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) system = The menu to redirect to
Gen. Fun.	userCTI_GenericEntry.asp?user_id=X&user_key=Y&system=ecoursebook
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp?user_id=abc123&user_key=passkey&system=ecoursebook
Notes	The user must be granted specific permission to access the eCourse menu. Only books the user has been given read or edit permission to will be displayed.

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7.2.8 Login + eCourse Table of Contents menu

Desc.	Logs the user in and redirects the user to the Table of Contents for the supplied Book Id.
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) system = The menu to redirect to *Optional* ID = The book to go to
Gen. Fun.	userCTI_GenericEntry.asp?user_id=X&user_key=Y&system=ecoursetoc&ID=Z
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp?user_id=abc123&user_key=passkey&system=ecoursetoc&ID=1
Notes	The user must be granted specific permission to access the eCourse menu and the specified Book

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7.2.9 Login + eCourse Page

Desc.	Logs the user in and redirects the user to the specified eCourse page.
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) system = The menu to redirect to *Optional* ID = This is the reference code supplied on the eCourse page.
Gen. Fun.	userCTI_GenericEntry.asp?user_id=X&user_key=Y&system=ecoursepage&value=X-Y-Z
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp?user_id=abc123&user_key=passkey&system=ecoursepage&value=1-1-1
Notes	The user must be granted specific permission to access the eCourse menu and to the specified Page.

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7.2.10 Login + eCourse Last Viewed Page

Desc.	Logs the user in and redirects the user to the last viewed eCourse page or the Book menu if no previous history is found.
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) system = The menu to redirect to
Gen. Fun.	userCTI_GenericEntry.asp?user_id=X&user_key=Y&system=ecourselastview
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp?user_id=abc123&user_key=passkey&system=ecourselastview
Notes	The user must be granted specific permission to access the eCourse menu.

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7.2.11 Login + Conference Centre

Desc.	Logs the user in and redirects the user to the specified Conference.
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) system = The menu to redirect to *Optional* ID = This is the ID of the Conference Room
Gen. Fun.	userCTI_GenericEntry.asp?user_id=X&user_key=Y&system=confcentre&ID=Z
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp?user_id=abc123&user_key=passkey&system=confcentre&ID=1
Notes	The user must be granted specific permission to access the Conference Centre - Conversations menu and to the specified Conference.

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7.3 Form

7.3.1 Login + Data Entry

Desc.	This function is specifically to allow unattended log-ins. It also accommodates the situation where either no form has been selected or the phone system is unable to determine which form the data is to be passed to. The page will perform an unattended login with security permissions set appropriately. The passed key data will be appended to a form selection screen, from which the user can select the form to process on.
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) ID = The form to go to
Gen. Fun.	userCTI_GenericStart.asp?user_id=X&user_key=Y&ID=Z
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericStart.asp?user_id=abc123&user_key=passkey&ID=1
Notes	The user must be granted specific permission to access the form and inbound module section.

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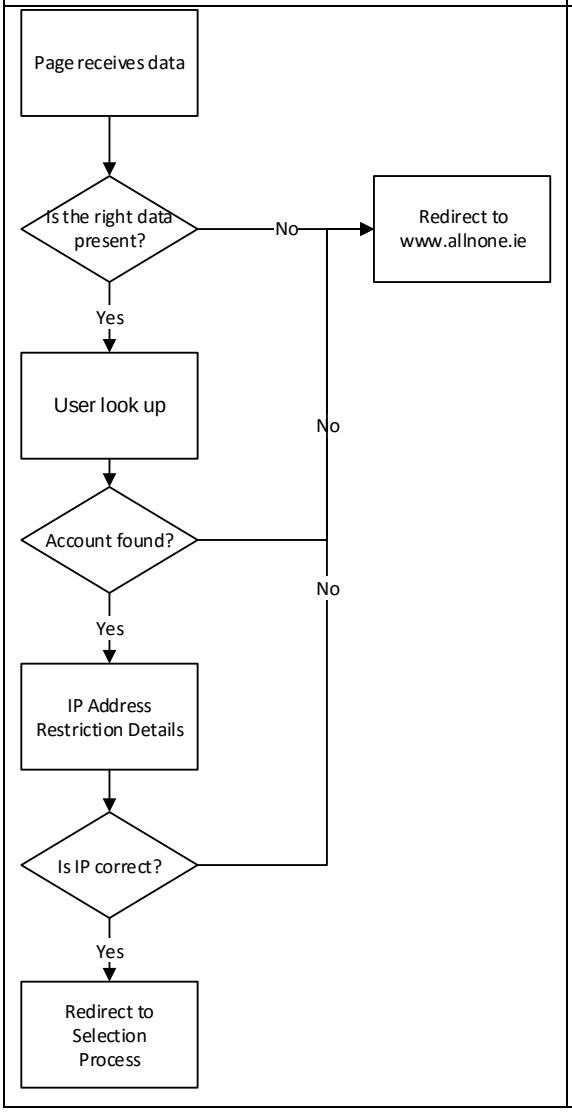
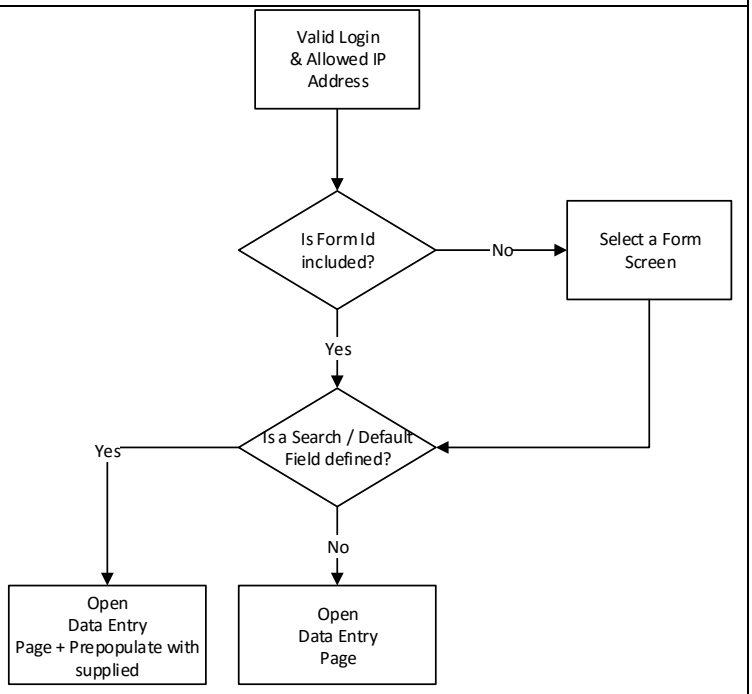
The Data Entry Start Point process works as follows	Form Selection process
	

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7.3.2 Login + Lookup

Desc.	This function facilitates unattended log ins. It also accommodates the situation where either no form has been selected or the phone system is unable to determine which form the data is to be passed to. The page will perform an unattended login with security permissions set appropriately. The passed key data will be appended to a form selection screen, from which the user can select the form to process on.
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) ID = The form to go to
Gen. Fun.	userCTI_Lookup.asp?user_id=X&user_key=Y&ID=Z
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_Lookup.asp?user_id=abc123&user_key=passkey&ID=1
Notes	The user must be granted specific permission to access the form and inbound module section.

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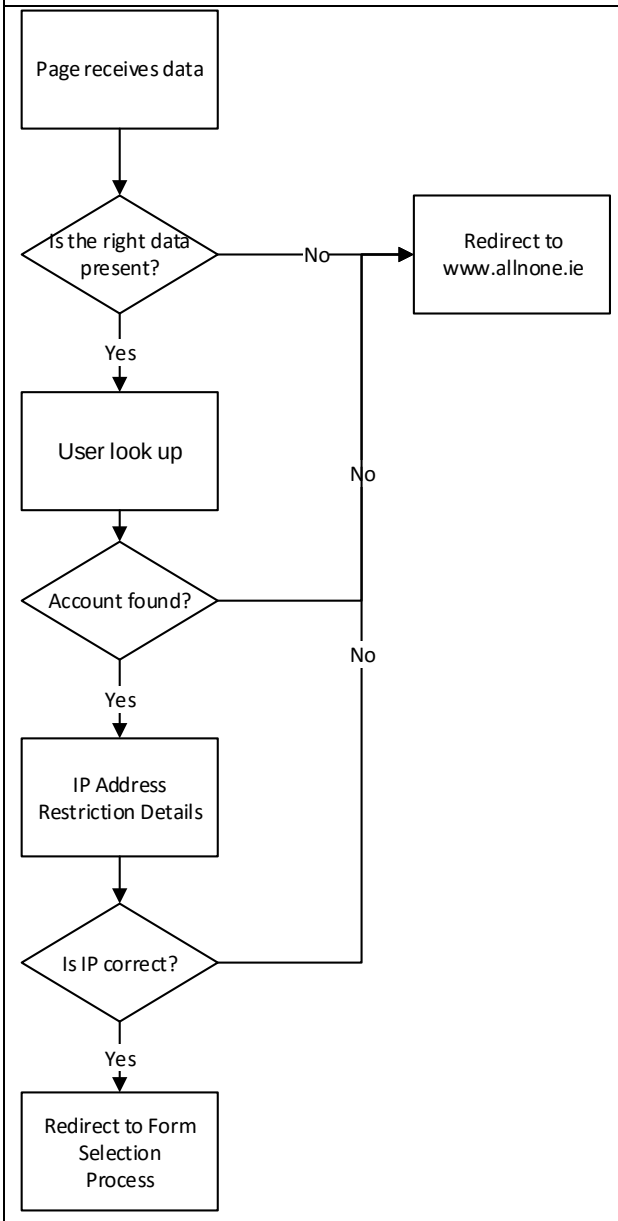
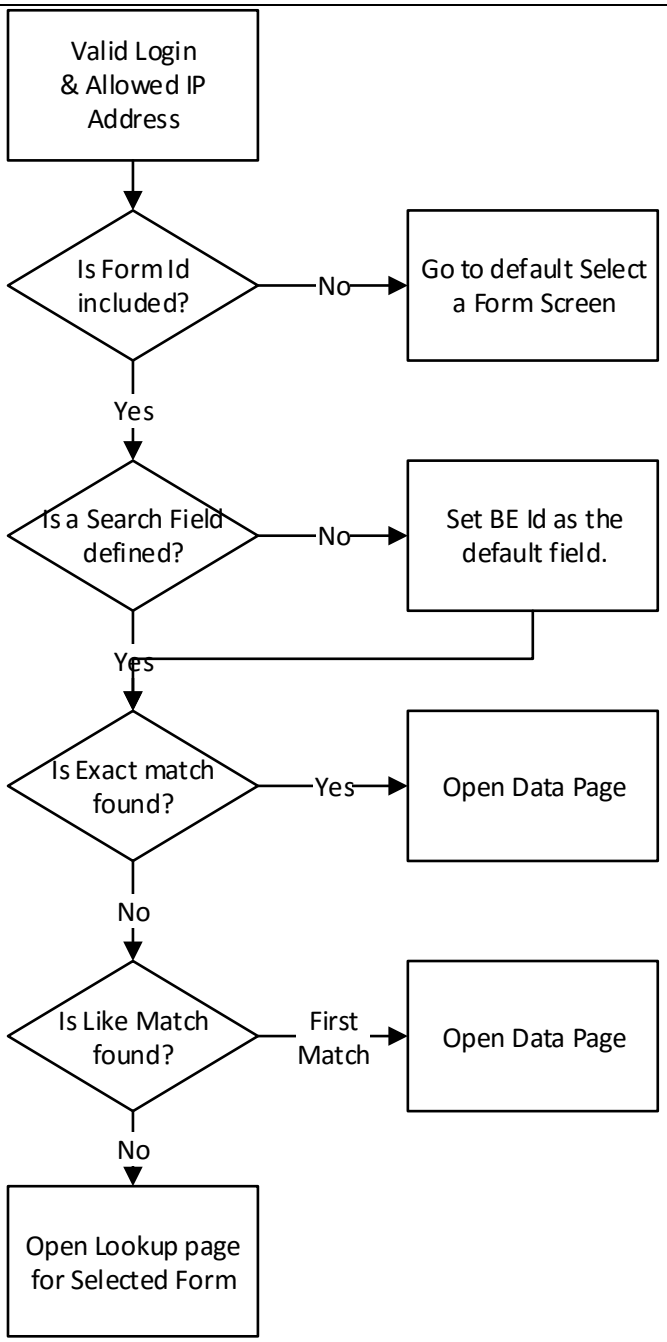
The Lookup Start Point process works as follows	Form Selection process
	

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7.3.3 Login + Match (Exact)

Desc.	This is the primary function of CTI. By passing a unique Id or, for example, a unique phone number, the system will look up the record and display all the details on the agents PC. There are a number of extra parameters that can be used to accelerate the process because the more information provided by parameter, the fewer database look-ups needed. The system will automatically bounce the user's browser to the right page in the system, either inbound or outbound section.
Param.	user_id : The user id (See section3.1) user_key : The user key (See section3.1) ID : The form to go to campaign_code : Alternative to ID (See 3.7) strField_Name : The form field name to match to, multiple possible. *Optional* blValidation : Enable/Disable validation blOutbound : Direct to the outbound module to force record locking with Diallers.
Gen. Fun.	userCTI_Record.asp?user_id=X&user_key=Y&ID=Z&strField_Name=Value
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_Record.asp?user_id=abc123&user_key=passkey&ID=1&strCDA_1_field_1_5=014294000
Notes	The user must be granted specific permission to access the form and inbound and / or outbound module section. More notes available in the following sections.

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7.3.3.1 Extra Param.

In order to add further parameters for pass through, use non system named parameters , e.g. strAgent_Id, strAgent_Name, strAgent_Extension, etc.

In order for the system to append these Parameters for security reasons, they must be explicitly declared in the Form's advanced settings.

Main Menu > Form Management > Form - Primary Management > Form - Advanced Settings > Choose your Form > bxp API XML Arrival Management > Parameters

For the form itself when it opens to read the Parameters the JavaScript onLoad of the form needs to read the pass through Parameters and apply them to the page.

Worked example

The form id is 1, we pass through an agent name in strAgent_Name, we want to log this passed name into a text field called strCDA_1_field_0_8.

Firstly the URL must contain the passed parameter:
https://ww3.allnone.ie/client/client_demo/cti/userCTI_Record.asp?user_id=abc123&user_key=passkey&ID=1&strCDA_1_field_1_5=014294000&strAgent_Name=Joe Bloggs

Next we add the parameter name to the bxp API XML Arrival Management > Parameters

strAgent_Name

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Then in the JavaScript onLoad

Main Menu > Form Management > Form - Primary Management > Form - Advanced Settings > Choose your Form > JavaScript onLoad > Opening Code execution

We don't want to override the value on lookup so we add a small check that if the field is filled in or not.

```
var objAgent_Name = document.getElementById('strCDA_1_field_0_8');
var strAgent_Name = fn_Gen_getParameterByName('strAgent_Name');
if (objAgent_Name){
        if (objAgent_Name.value == ''){
                objAgent_Name.value = strAgent_Name;
        }
}
```

Line one creates a JavaScript object into which the value will be put
Line two uses the BeX fn_javascript_general.js library function fn_Gen_getParameterByName to retrieve the parameter value
Line three checks to ensure the object is available on the page
Line four checks if object is empty, then we do something
Line five then assigns the value of the parameter into the object.
Line six closes the check in line four
Line seven closes the check in line three

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7.3.4 Login + Match (Like)

Desc.	This function is predominantly used for inbound call record lookups. Passing parameter data of any sort, the system will look up all matching records and display a record choice system on the agents PC. There are a number of extra parameters that can be used for speed reasons. The more information provided by parameter, the fewer database look ups need to be performed. The system will automatically bounce the users browser to the right page in the system, either inbound, outbound questionnaire or outbound sales.
Param.	user_id : The user id (See section3.1) user_key : The user key (See section3.1) ID : The form to go to campaign_code : Alternate way of specifying the ID (See 3.7) strField_Name : The form field name to match to *Optional* blValidation : Enable/Disable validation blOutbound : Direct to the outbound module to force record locking with Diallers.
Gen. Fun.	userCTI_Lookup.asp?user_id=X&user_key=Y&ID=Z&strField_Name=Value
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_Lookup.asp?user_id=abc123&user_key=passkey&ID=1&strCDA_1_field_1_5=014294000
Notes	The user must be granted specific permission to access the form and inbound and / or outbound module section. Further parameters can be append and passed through as per 7.3.3.1

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7.3.5 Login + Data Management + Data Logging

Desc.	This function is specifically to allow unattended log ins, with redirect immediately into a specified form, whilst supporting a numerous parameter pass through. As part of the direct log in facility of this function, the system also allows for XML document posting to facilitate integration with phone systems and other automated contact management systems. The process flow below shows the key elements of the process.
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) system = The menu to redirect to *Optional* ID = The form to go to campaign_code = Alternative to ID (See 3.7) Various = Can be specified on a form by form basis
Gen. Fun.	userCTI_GenericEntry.asp?user_id=X&user_key=Y&system=datalogging&ID=Z
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp?system=datalogging&user_id=abc123&user_key=passkey&campaign_code=CODE_001&parameterA=passedDataA&parameterB=passedDataB
Notes	The user must be granted specific permission to access the specified form and module section.

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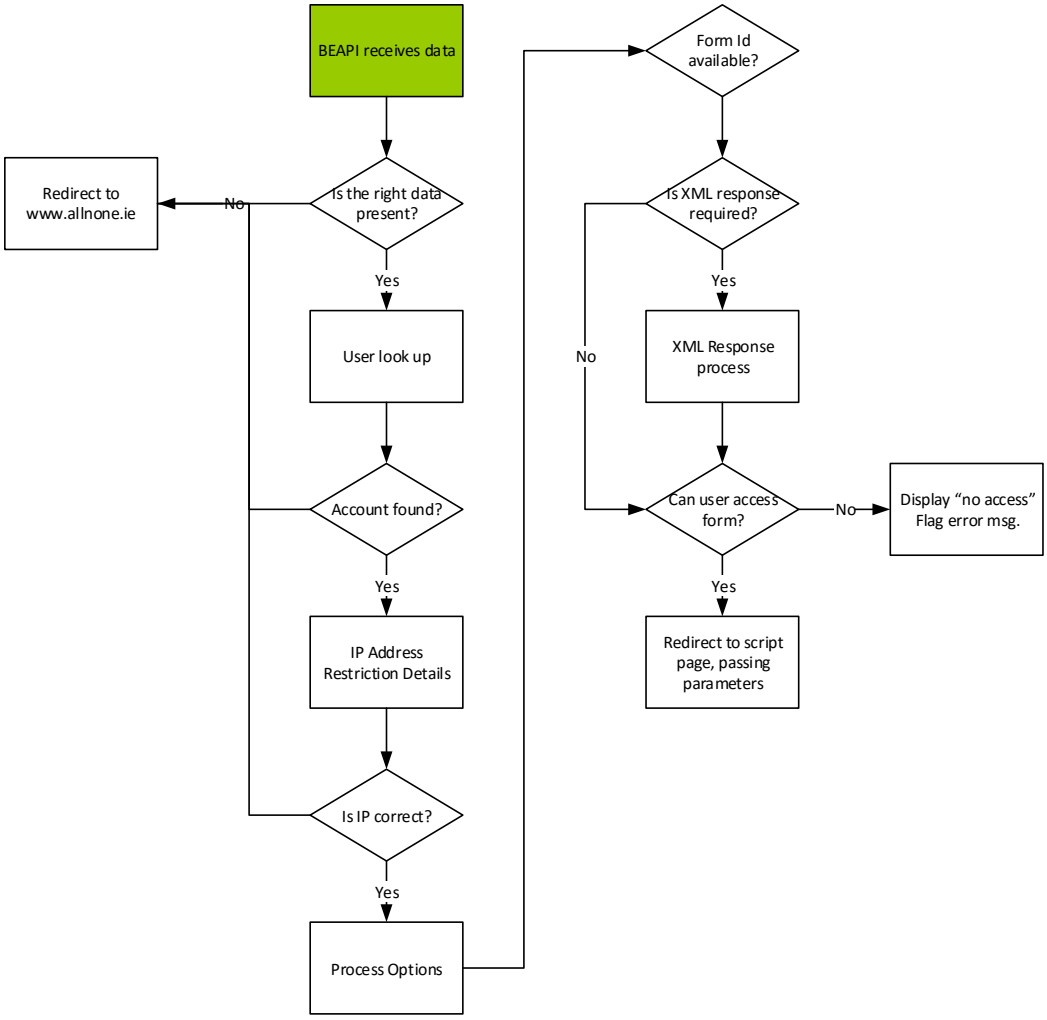

The user account management is performed as per section 2.7

Each user must be granted access to the form as well. Setup of form access is dealt with in bxp using:

The XML response management is available when editing an existing form only.

Please see 3.6.1 for the XML response options available.

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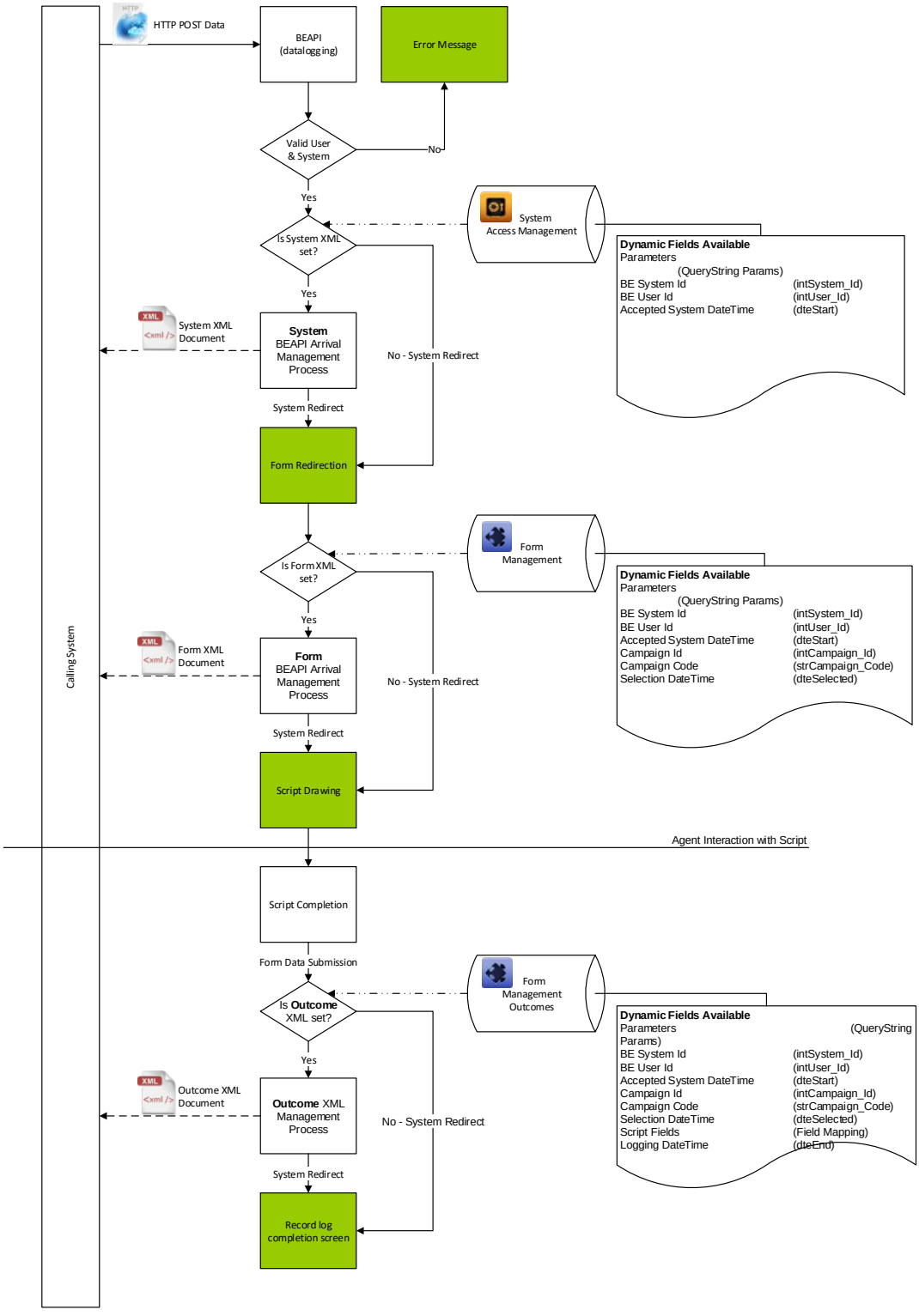
Sample Usage Process



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Creating a full sample test of:

Field	Values	Translated Id
System:	client_demo	102
User:	Test User	10
External user name:	abc123	
Password:	passkey	
Form:	Testing Form	23
Form Code:	CODE_001	
Parameters::	parameterA,parameterB	

A sample XML structure with the following XML set in the form details:

```
<data>
   <record>
      <strField1>--intSystem_Id--</strField1>
      <strField2>--intUser_Id--</strField2>
      <strField3>--dteStart--</strField3>
      <strField4>--intCampaign_Id--</strField4>
      <strField5>--strCampaign_Code--</strField5>
      <strField6>--dteSelected--</strField6>
      <strField7>--parameterA--</strField7>
      <strField8>--parameterB--</strField8>
   </record>
</data>
```


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Using the URL as follows:

https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp?system=datalogging&user_id=abc123&user_key=passkey&campaign_code=CODE_001&parameterA=passedDataA&parameterB=passedDataB

Returns sample data to the specified server of:

```
<?xml version="1.0" encoding="utf-8"?>
<data>
   <record>
      <strField1>102</strField1>
      <strField2>10</strField2>
      <strField3>2010-10-11 14:30:00</strField3>
      <strField4>23</strField4>
      <strField5>CODE_001</strField5>
      <strField6>2010-10-11 14:30:00</strField6>
      <strField7>passedDataA</strField7>
      <strField8>passedDataB</strField8>
   </record>
</data>
```


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7.3.6 Data – Form Structure

Desc.	This function returns the database structure of the form data table, enabling the developer to view the list of fields for the main lookup functions in the API. See Appendix A for status codes.
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) ID = The form to display
Gen. Fun.	userCTI_CampaignStructure.asp? user_id=X&user_key=Y&ID=Z
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_CampaignStructure.asp?user_id=abc123&user_key=passkey&ID=1
Notes	The user must be granted specific permission to access the form.

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7.3.7 Data – Log Automated Contact

Desc.	This function allows a dialler application to add contact history to the database, thus allowing agents see exactly how many times contact has been made in a user friendly fashion. Date / time stamp logs are in real time to prevent tampering.
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) ID = The form to display intCDA_Id = The record Id to add to
Gen. Fun.	userCTI_LogContact.asp?user_id=X&user_key=Y&ID=Z
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_LogContact.asp?user_id=abc123&user_key=passkey&ID=1&intCDA_Id=1&strOutcome=Failed%20Contact
Notes	The user must be granted specific permission to access the form. Whilst the function will accommodate the identification of a record using any combination of fields, great care must be taken to ensure limitation of matching records since all matching records will have a contact log against them.

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7.3.8 Data – Attach file to record (Link method)

Desc.	This function allows a dialler application to add a record, the filename and the location of a recorded call. Depending on implementation, recorded calls will be stored either via a web accessible link or a local file link. The format should conform to a standard that network users should be able to access. If you need to store the file in bxp please refer to 7.3.18 Web links must be preformatted with http://, https://, ftp:// or ftps://. Files that stored locally should be in the format \\Server_Name\. Date / time stamp logs are in real time to prevent tampering. The function will accommodate the identification of a record using any combination of fields; however, great care must be paid to ensure limitation of matching records since all matching records will have a contact log against them.
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) ID = The form to display intCDA_Id = The record Id to add to strFilename = The URL to link to
Gen. Fun.	userCTI_LogRecording.asp?user_id=X&user_key=Y&ID=Z&strField_Name=Value&strFilename=Outcome

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Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_LogRecording.asp?user_id=abc123&user_key=passkey&ID=1&intCDA_1_Id=1&intCDA_1_Id=1&strFilename=http://ww3.allnone.ie/images/recording1.wav
Notes	The user must be granted specific permission to access the form. Whilst the function will accommodate the identification of a record using any combination of fields, great care must be taken to ensure limitation of matching records since all matching records will have a contact log against them.

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7.3.9 Data – XML Auto Load

Desc.	Where a form has been set up to process an XML data file with pre-mapped fields, the loading / appending of the data can be automated. This function allows the data to be automatically processed. An SFTP setup must be configured, so a download can be performed and the resulting download automatically processed. See section 3.5 for SFTP setup. Options for this setup are covered in section 3.6
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) ID = The form to process
Gen. Fun.	userCTI_XMLAutoLoad.asp?user_id=X&user_key=Y&ID=Z
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_XMLAutoLoad.asp?user_id=abc123&user_key=passkey&ID=1
Notes	The user must be granted specific permission to access the form. Whilst the function will accommodate the identification of a record using any combination of fields, great care must be taken to ensure limitation of matching records since all matching records will have a contact log against them.

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7.3.10 Data – Excel Auto Load

Desc.	Where a form has been set up to process an Excel data file with pre-mapped fields, the loading / appending of the data can be automated. This function allows the data to be automatically processed. An SFTP setup must be configured, so a download can be performed and the resulting download automatically processed. See section 3.5 for SFTP setup. Options for this setup are covered in section 3.6
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) ID = The form to process
Gen. Fun.	userCTI_XMLAutoLoad.asp?user_id=X&user_key=Y&ID=Z
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_XMLAutoLoad.asp?user_id=abc123&user_key=passkey&ID=1
Notes	The user must be granted specific permission to access the form. Whilst the function will accommodate the identification of a record using any combination of fields, great care must be taken to ensure limitation of matching records since all matching records will have a contact log against them.

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7.3.11 Data Profiling – Report Generation

Desc.	Data Profiling allows for more extensive custom reports to be generated from form data. To facilitate scheduled reporting and the running of large reports out of hours, reports can be initiated through this API. Calling the report requires a user with permission to access the Data Profiling module, with permission to the “Form Data Reports – Using Groups” section. The user will also need to be able to access the form that the report is being generated against as well. Report dates and times are relative to when the report is started. The word of which dates to use is set as part of the details of the Group. SFTP transfer of reports is possible. See section 3.5 for SFTP setup. An SFTP setting can be applied to a Data Profiling group by editing the “FTP To Push To” setting details of the desired Form Group report. This can be found in Data Profiling > Manage Groups > Edit a Group –> Primary Details and selecting the appropriate Group report. By manually setting up the report and confirming the details and data first and then applying the server to push to, after, the correct data and details can be established. Then using the FTP settings, the file delivery can be tested.

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Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) ID = The form of the report reportId = The Id of the report to be processed
Gen. Fun.	userCTI_DataProfiling.asp?user_id=abc123&user_key=passkey&ID=123&reportId=123
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_DataProfiling.asp?user_id=abc123&user_key=passkey&ID=123&reportId=123
Notes	The user must be granted specific permission to access the form.

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7.3.12 Data Profiling – Totals

Desc.	This function supplies raw data to various functions. These functions include: totals dashboards quota management data input to external monitoring systems
Param.	user_id = The user id (See section3.1) user_key = The user key (See section3.1) system = totals campaignid = The form to process fields = what fields to perform the operation on operation = the type of operation criteria = limiting the data period = time scope of the query testing = true will give testing info back for troubleshooting **Fields** More than one field can be returned per query. Fields are separated by commas. **Operation** sum the total summation of a field count the instance count average the summation / count max the maximum value min the minimum value continued… *Optional* **Criteria**

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	This is used to limit the data included in the query. Format: function[--XX--] field[--XX--]value[--ZZ—] *Function: equals, lessthan, morethan, like* **Period** Keyword for the time frame. Keywords: Yesterday,Today,Tomorrow,LastWeek,ThisWeek,NextWeek,LastMonth,ThisMonth, NextMonth,LastQuarter,ThisQuarter,NextQuarter
Gen. Fun.	userCTI_Totals.asp?user_id=X&user_key=Y&campaignid=Z&fields=A&operation=B &criteria=C&period=D
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_Totals.asp?user_id=abc123&user_key=passkey&campaignid=1&fields=strCDA_1_field_0_0&operation=count&criteria=equals[--X--]strCDA_1_Status[--XX--]Sale[--ZZ--]&period=Today
Notes	The user must be granted specific permission to access the form.

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7.4 Website

7.4.1 Website – Integration Overview

When using the functions in section 4.2.7 a dedicated User Account and Form settings must be set prior to the form being available externally.

7.4.2 Website – Login Interaction

The login function requires a submitted form in order to validate the details. Passing the details using the query string would mean no encryption at all on the username and password of users correctly logging in.

A working example of this is available at
http://www.allnone.ie/demo_login.php

This demo is linked to the Demo form system of bxp available at
http://ww3.allnone.ie/client/client_demo/

The form it is linked to is Form 56

There are three stages to the login process.

1. User fills in the form
2. Form is submitted to a processing page on your server
3. Processing page will add information and submit to the bxp server
4. bxp will redirect the user to the specified landing page with a generated session id key, which is stored in the future use field of the data record.

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7.4.2.1 Step 1: The form page

The lines are numbered for reference only.

Do not include the leading bullet numbers in the HTML.

1. <form name='form1' action='X' method='post'>
2. Username : <input type='text' name='username' />

3. Password : <input type='password' name='passkey' />

4. <button name='Button' type='submit'>Log In</button>

At Line 1, X should be aimed at your processing page e.g. process.php which lives on your server. We use the name passkey to deflect password sniffers from looking for 'password' as a field.

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7.4.2.2 Step 2: The processing page

PHP Example

The lines are numbered for reference only.

Do not include the leading bullet numbers in the HTML.

```
1.  <?php
2.  //=========================================================
3.  //Data Setup
4.  //=========================================================
5.  //extract data from the post
6.  extract($_POST);
7.  //set POST variables
8.  $url = 'https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp;
9.  $fields = array(
10. 'user_id' => urlencode('testing'),
11. 'user_key' => urlencode('testing'),
12. 'system' => urlencode('loginvalidate'),
13. 'campaignid' => urlencode('56'),
14. 'username' => urlencode($username),
15. 'passkey' => urlencode($passkey),
16. 'usernamefield' => urlencode('strCDA_56_field_0_1'),
17. 'passkeyfield' => urlencode('strCDA_56_field_0_2'),
18. 'successurl' => urlencode('http://www.allnone.ie/demo_loginsuccessful.php'),
19. 'failureurl' => urlencode('http://www.allnone.ie/demo_loginfailed.php')
20. );
21. //url-ify the data for the POST
22. foreach($fields as $key=>$value) { $fields_string .= $key.'='.$value.'&'; }
23. rtrim($fields_string,'&');
24. //=========================================================
25. //Process Data
26. //=========================================================
27. //create the object
28. $ch = curl_init();
29.
30. //set the url, number of POST vars, POST data
31. curl_setopt($ch, CURLOPT_URL, $url);
32. curl_setopt($ch, CURLOPT_POST, 1);
33. curl_setopt($ch, CURLOPT_POSTFIELDS, $fields_string);
34. curl_setopt($ch, CURLOPT_FOLLOWLOCATION,        1);
35. curl_setopt($ch, CURLOPT_RETURNTRANSFER,        1);
36.
37. //execute post
38. $result = curl_exec($ch);
39.
40. //close connection
41. curl_close($ch);
42. ?>
43. <?php echo $result; ?>
```


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ASP Example

The lines are numbered for reference only.

Do not include the leading bullet numbers in the HTML.

```
1.  <%
2.  '=========================================================
3.  'Data Setup
4.  '=========================================================
5.  'set POST variables
6.  Dim strURL
7.  strURL = "https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp"
8.
9.  Dim strData
10. strData = ""
11.
12. strData = strData & "user_id=" & Server.URLEncode("testing") & "&"
13. strData = strData & "user_key=" & Server.URLEncode("testing") & "&"
14. strData = strData & "system=" & Server.URLEncode("loginvalidate") & "&"
15. strData = strData & "campaignid=" & Server.URLEncode("56") & "&"
16. strData = strData & "username=" & Server.URLEncode(Request.Form("username")) & "&"
17. strData = strData & "passkey=" & Server.URLEncode(Request.Form("passkey")) & "&"
18. strData = strData & "usernamefield=" & Server.URLEncode("strCDA_56_field_0_1") & "&"
19. strData = strData & "passkeyfield=" & Server.URLEncode("strCDA_56_field_0_2") & "&"
20. strData = strData & "successurl=" & Server.URLEncode("http://www.allnone.ie/demo_loginsuccessful.php") & "&"
21. strData = strData & "failureurl=" & Server.URLEncode("http://www.allnone.ie/demo_loginfailed.php")
22.
23. '=========================================================
24. 'Process Data
25. '=========================================================
26. 'create the object
27. dim xmlhttp
28. set xmlhttp = server.Createobject("MSXML2.ServerXMLHTTP")
29.
30. 'set the url, number of POST vars, POST data
31. xmlhttp.Open "POST", strURL, false
32. xmlhttp.setRequestHeader "Content-Type", "application/x-www-form-urlencoded"
33.
34. 'execute post
35. xmlhttp.send strData
36.
37. Response.ContentType = "text/html"
38. Response.Write xmlhttp.ResponseText
39.
40. 'close connection
41. Set xmlhttp = nothing
42. %>
```


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Key Param.

Line 8: The bxp URL which will process the request. Client_demo should be replaced with the name of your system

Line 12: user_id is the username of the account with permission to access the form as set up in steps 2.7 and 2.8 of this document

Line 13: user_key is the password of the account with permission to access the form as set up in steps 2.7 and 2.8 of this document

Line 14: system is the function to be used, in this case loginvalidate

Line 15: campaignid is the Id of the form to be accessed. This Id is available from *Main Menu > Form Management >Form - Primary Management > Form - Edit > Choose your form > Top left corner of the console in square brackets [ ]*

Line 16: The username as pulled from the previous page

Line 17: The passkey as pulled from the previous page

Line 18: The field in the form which contains the username

Line 19: The field in the form which contains the password

Line 20: If the login is successful, which page the redirect will supply

Line 21: If the login is unsuccessful, which page the redirect will supply

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7.4.3 Website – Data Query

This function will return a properly formatted xml document based on provided criteria. The two aspects are the query Param.
and the field data returned. All data requested will return in a <record></record> pair of tags.

A working example of this is available at
http://www.bxpsoftware.com/demo_listing.php

This demo is linked to the demo form system of bxp available at
http://ww3.allnone.ie/client/client_demo/

In this demonstration, the form it is linked to is Form 801

demo_listing.php

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PHP Example

```
1.  <?php
2.  //=========================================================
3.  //Data Setup
4.  //=========================================================
5.  //set POST variables
6.  extract($_POST);
7.  $url = 'https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp';
8.  $fields = array(
9.          'user_id'           => urlencode('bxpapi'),
10.         'user_key'                  => urlencode('bxpapi'),
11.         'system'            => urlencode('datasearch'),
12.         'campaignid'                => urlencode('801'),
13.         'searchfield'               => urlencode('intCDA_801_Id'),
14.         'value'             => urlencode('1'),
15.         'responsefields'    => urlencode('strCDA_801_field_0_0,strCDA_801_field_0_0')
16. );
17.
18. //url-ify the data for the POST
19. foreach($fields as $key=>$value) { $fields_string .= $key.'='.$value.'&'; }
20. rtrim($fields_string,'&');
21. //=========================================================
22. //Process Data
23. //=========================================================
24. //open connection
25. $ch = curl_init();
26. //set the url, number of POST vars, POST data
27. curl_setopt($ch, CURLOPT_URL,                $url                    );
28. curl_setopt($ch, CURLOPT_POST,          1                       );
29. curl_setopt($ch, CURLOPT_POSTFIELDS,        $fields_string          );
30. curl_setopt($ch, CURLOPT_FOLLOWLOCATION,    1                       );
31. curl_setopt($ch, CURLOPT_RETURNTRANSFER,    1                       );
32. //execute post
33. $result = curl_exec($ch);
34. //close connection
35. curl_close($ch);
36. //=========================================================
37. //Handling xml data
38. //=========================================================
39. if (strpos($result,'data')) {
40.         $data = new SimpleXMLElement($result);
41.         echo $data->getName() . "<br />";
42.         foreach($data->children() as $child) {
43.                 foreach($child->children() as $grandchild) {
44.                   echo $grandchild->getName() . ": " . $grandchild . "<br />";
45.                 }
46.         }
47. }
48. else {
49.         echo $result;
50. }
51. ?>
```


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ASP Example

```
<%
'Data Setup
'=========================================================
'set POST variables
Dim strURL
strURL = "https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp"
Dim strData
strData = ""
strData = strData & "user_id=" & Server.URLEncode("bxpapi") & "&"
strData = strData & "user_key=" & Server.URLEncode("bxpapi") & "&"
strData = strData & "system=" & Server.URLEncode("datasearch") & "&"
strData = strData & "campaignid=" & Server.URLEncode("801") & "&"
strData = strData & "searchfield=" & Server.URLEncode("intCDA_801_Id") & "&"
strData = strData & "value=" & Server.URLEncode("1") & "&"
strData = strData & "responsefields=" & Server.URLEncode("strCDA_801_field_0_0,strCDA_801_field_0_1")
'Process Data
'=========================================================
'create the object
dim xmlhttp
set xmlhttp = server.Createobject("MSXML2.ServerXMLHTTP")
'set the url, number of POST vars, POST data
xmlhttp.Open "POST", strURL, false
xmlhttp.setRequestHeader "Content-Type", "application/x-www-form-urlencoded"
'execute post
xmlhttp.send strData
Dim strResult
strResult = xmlhttp.ResponseText
'close connection
Set xmlhttp = nothing
'Handling xml data
'=========================================================
Dim xmlDoc
Dim xmlNodes
Set xmlDoc = createObject("MSXML2.DOMDocument")
xmlDoc.async = False
xmlDoc.loadXML(strResult)
' Parse XML
if xmlDoc.parseError.errorcode = 0 then
    Set xmlNodes = xmlDoc.selectNodes("//data")
    For Each xmlNode In xmlNodes
                Response.write(xmlNode.nodeName & "<br />")
        If xmlNode.hasChildNodes Then
                For Each xmlChildNode In xmlNode.ChildNodes
                        Response.write(xmlChildNode.nodeName & ": " & xmlChildNode.text & "<br />")
                Next
        End If
    Next
else
        Response.write("Error code: " & xmlDoc.parseError.errorCode)
        Response.write("<br />Error reason: " & xmlDoc.parseError.reason)
        Response.write("<br />Error line: " & xmlDoc.parseError.line)
        Response.Write("<br />" & strResult)
end if
%>
```

Key Param.

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Line 7: The bxp URL which will process the request Client_demo should be replaced with the name of your system

Line 9: user_id is the username of the account with permission to access the form as set up in steps 2.7 and 2.8 of this document

Line 10: user_key is the password of the account with permission to access the form as set up in steps 2.7 and 2.8 of this document

Line 11: system is the function to be used, in this case datasearch

Line 12: campaignid is the Id of the form to be accessed. This Id is available from *Main Menu > Form Management >Form - Primary Management > Form - Edit > Choose your form > Top left corner of the console in square brackets [ ]*

Line 13: searchfield is the field to be listed against

Line 14: value is the value to be listed against.

Line 15: responsefields are the fields from the form that will be returned in the data file. The responsefields are separated by commas using fields from the Field Mapping list.

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Field data returned

Assuming the form Id is 56. That there is one record logged in the form with an Id of 1. The searchfield is the Id field. The responsefields are the first name and surname fields from the record. The query will appear as:

Returns:

```
<?xml version="1.0" encoding="UTF-8"?>
<record>
    <data>
        <strCDA_801_field_0_0>Nick</ strCDA_801_field_0_0>
        <strCDA_801_field_0_1>Wheeler</ strCDA_801_field_0_1>
    </data>
</record>
```

The output of the code will be

```
data
strCDA_801_field_0_0: Nick
strCDA_801_field_0_0: Wheeler
```


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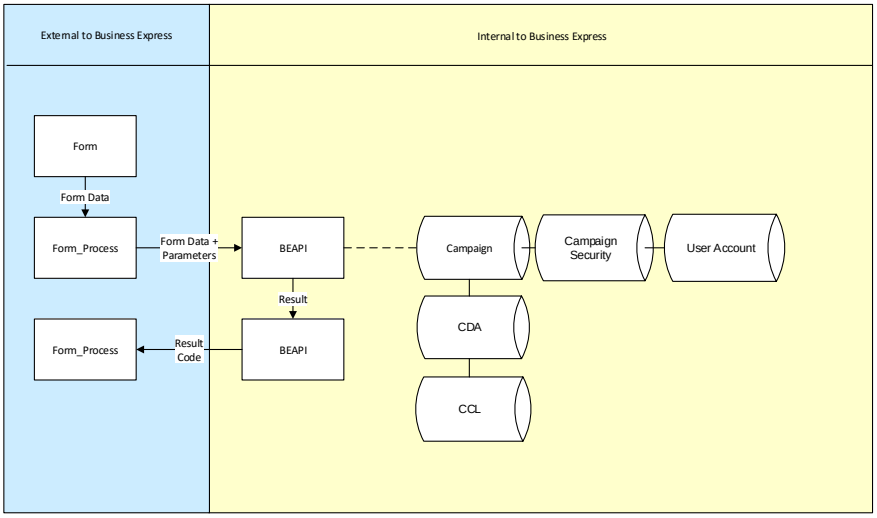
7.4.4 Website – Data Logging

When there is a requirement for data to be captured from a source outside bxp, for example on a public website, this function allows that information to be logged directly into a bxp form. There are, however, a number of considerations that must be taken into account:

- Every record logged externally will appear logged by the user that is used for external access i.e. the user_id and user_key
- There is no outcome management on external forms, only one outcome can be used, which is set whilst 'editing the form' (see section 2.8)
- Appointment and Callback features cannot be manipulated using an external form
- It is possible for a user to log more than one entry
- All validation must be coded directly into the form page

To help speed up development bxp can generate a blank form, based on the form, with all the key data capture fields. This is available through Main Menu > Form Management > Form – Primary Management > Form – Advanced Settings

There are a number of key web pages in the process:



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1. The external form captures the data.
2. The processing page takes the submitted data, adds key Param.
3. to the data and passes it to bxp for processing.
4. bxp receives the data and validates the security. If valid it logs the data.
5. bxp then generates an identifier code (Successful or Unsuccessful) and returns that to the processing page.
6. The processing page interprets the code and displays the result to the user

For step 1 a standard html page is sufficient, the contents of which can usually be generated using the Form – External Setup tool provided in bxp. Formatting and customisation can be applied as required. A sample of this form is available at http://www.bxpsoftware.com/demo_form.php

If the data you are capturing is of a sensitive nature, you will need to set up an SSL certificate on your webserver.

For step 2 a processing page is required. Sample code for the processing page is provided on the next two pages. A PHP and an ASP example have been provided and are used in the demo processing link above.

These two pages are all that is required to log data in a form from a source outside bxp.

demo_form.php

demo_formprocessing.php

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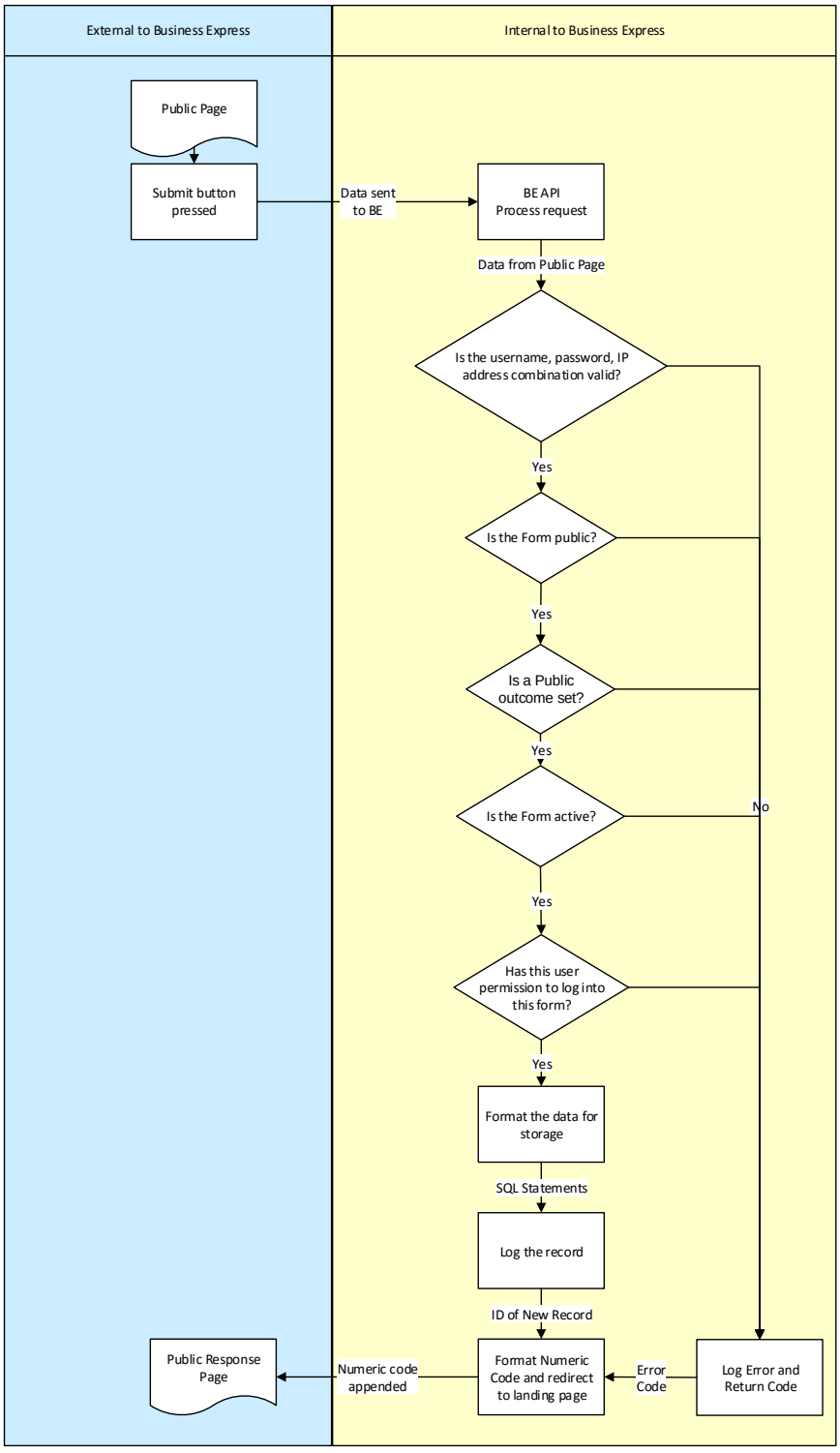
Data Logging process flow:



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PHP Example

```
1.  //=========================================================
2.  //Data Setup
3.  //=========================================================
4.  $url = 'https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp';
5.  //set the extrac POST variables required
6.  $fields = array(
7.          'user_id'                   => urlencode('bxpapi'),
8.          'user_key'                  => urlencode('bxpapi'),
9.          'system'                            => urlencode('formlogging'),
10.         'campaignid'                => urlencode('801')
11. );
12. //url-ify the data for the POST
13. foreach($fields as $key=>$value) { $fields_string .= $key.'='.$value.'&'; }
14.
15. //extract data from the post
16. foreach($_POST as $key => $value) {
17.         $fields_string .= $key.'='.urlencode($value).'&';
18. }
19. rtrim($fields_string,'&');
20. //=========================================================
21. //Process Data
22. //=========================================================
23. //open connection and set the url, number of POST vars, POST data, execute post
24. $ch = curl_init();
25. curl_setopt($ch, CURLOPT_URL,                $url                );
26. curl_setopt($ch, CURLOPT_POST,               1                   );
27. curl_setopt($ch, CURLOPT_POSTFIELDS,         $fields_string);
28. curl_setopt($ch, CURLOPT_FOLLOWLOCATION, 1                       );
29. curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1                       );
30. $result = curl_exec($ch);
31. curl_close($ch);
32. //=========================================================
33. //Result management
34. //=========================================================
35. if (strpos($result,'record>-1<')) {
36.         $strMessage = 'Sorry but that is an incorrect username or password for logging this record.<br />Please contact the site Administrator';
37. } elseif (strpos($result,'record>-2<')) {
38.         $strMessage = 'Sorry but that is an incorrect IP address to log from that account.<br />Please contact the site Administrator';
39. } elseif (strpos($result,'record>-3<')) {
40.         $strMessage = 'Sorry but that form is not available to the public for storing data in.<br />Please contact the site Administrator';
41. } elseif (strpos($result,'record>-4<')) {
42.         $strMessage = 'Sorry but that form has not been built properly.<br />Please contact the site Administrator';
43. } elseif (strpos($result,'record>-5<')) {
44.         $strMessage = 'Sorry but that form is not active.<br />Please contact the site Administrator';
45. } elseif (strpos($result,'record>-6<')) {
46.         $strMessage = 'Sorry but that user cannot log data in that form.<br />Please contact the site Administrator';
47. } elseif (strpos($result,'record>-7<')) {
48.         $strMessage = 'Sorry but no public outcome has been set to process that record.<br />Please contact the site Administrator';
49. } elseif (strpos($result,'record>0<')) {
50.         $strMessage = 'Sorry but no Id was returned.<br />Please contact the site Administrator';
51. } else {
52.         $result = str_replace("<?xml version=\"1.0\" encoding=\"UTF-8\"?>", "", $result);
53.         $result = str_replace("\n", "", $result);
54.         $result = str_replace("<record>", "", $result);
55.         $result = str_replace("</record>", "", $result);
56.         $strMessage = "The record has been logged with an Id of ".$result.".";
57. }
58. echo $strMessage;
```


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ASP Example

```
'=========================================================
'Data Setup
'=========================================================
Dim strURL, strData, strFieldName, strFieldValue
strURL = "https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp"
'set the extrac POST variables required
strData = ""
strData = strData & "user_id=" & Server.URLEncode("bxpapi") & "&"
strData = strData & "user_key=" & Server.URLEncode("bxpapi") & "&"
strData = strData & "system=" & Server.URLEncode("formlogging") & "&"
strData = strData & "campaignid=" & Server.URLEncode("801") & "&"
For Each objItem In Request.Form
        strFieldName = objItem
        strFieldValue = Request.Form(strFieldName)
        strData = strData & strFieldName & "=" & Server.URLEncode(strFieldValue) & "&"
Next
strData = left ( strData, len(strData) - 1 )
'=========================================================
'Process Data
'=========================================================
'open connection and set the url, number of POST vars, POST data
dim xmlhttp, strDataResult, strMessage
set xmlhttp = server.Createobject("MSXML2.ServerXMLHTTP")
xmlhttp.Open "POST", strURL, false
xmlhttp.setRequestHeader "Content-Type", "application/x-www-form-urlencoded"
xmlhttp.send strData
strDataResult = xmlhttp.ResponseText
Set xmlhttp = nothing
'=========================================================
'Result management
'=========================================================
if inStr ( strDataResult, "record>-1<") > 0 then
        strMessage = "Sorry but that is an incorrect username or password for logging this record.<br />Please contact the site Administrator"
elseif inStr ( strDataResult, "record>-2<") > 0 then
        strMessage = "Sorry but that is an incorrect IP address to log from that account.<br />Please contact the site Administrator"
elseif inStr ( strDataResult, "record>-3<") > 0 then
        strMessage = "Sorry but that form is not available to the public for storing data in.<br />Please contact the site Administrator"
elseif inStr ( strDataResult, "record>-4<") > 0 then
        strMessage = "Sorry but that form has not been built properly.<br />Please contact the site Administrator"
elseif inStr ( strDataResult, "record>-5<") > 0 then
        strMessage = "Sorry but that form is not active.<br />Please contact the site Administrator"
elseif inStr ( strDataResult, "record>-6<") > 0 then
        strMessage = "Sorry but that user cannot log data in that form.<br />Please contact the site Administrator"
elseif inStr ( strDataResult, "record>-7<") > 0 then
        strMessage = "Sorry but no public outcome has been set to process that record.<br />Please contact the site Administrator"
elseif inStr ( strDataResult, "record>0<") > 0 then
        strMessage = "Sorry but no Id was returned.<br />Please contact the site Administrator"
else
  strDataResult = replace ( strDataResult, "<?xml version=""1.0"" encoding=""UTF-8""?>", "" )
  strDataResult = replace ( strDataResult, vbCrLf, "" )
  strDataResult = replace ( strDataResult, "<record>", "" )
  strDataResult = replace ( strDataResult, "</record>", "" )
  strMessage = "The record has been logged with an Id of " & strDataResult & "."
end if
response.write ( strMessage )

```


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Key Param.

Line 5: The bxp URL which will process the request. Client_demo should be replaced with the name of your system

Line 8: user_id is the username of the account with permission to access the form as set up in steps 2.7 and 2.8 of this document

Line 9: user_key is the password of the account with permission to access the form as set up in steps 2.7 and 2.8 of this document

Line 10: system is the function to be used, in this case formlogging

Line 11: campaignid is the Id of the form to be accessed. This Id is available from *Main Menu > Form Management >Form - Primary Management > Form - Edit > Choose your form > Top left corner of the console in square brackets [ ]*

Line 38 through 61:

These lines can be customised as required as they are simply interpretations of the returned codes.

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7.4.5 Website – Log file as CCL

When there is a requirement for a file to be attached to an existing CDA record from a source outside bxp, for example on a public website, this function provides one potential process to this. A record is created in the contact history through the API and the actual file is SFTP'd directly into bxp's back end. Unlike the function 7.3.8, this process allows the files to be stored on the bxp server.

7.4.5.1 Step 1 - Create the Contact History entry

This process will provide a new filename back, to rename the file for SFTPing. It also creates a record in the contact history to allow system users to access the file from the back end. There are a number of key fields to transfer first, for to be provided with the replacement filename. The system uses filename extensions e.g. Demo.xls will get a filename with .xls at the end.

- Every record logged externally will appear logged by the user that is used for external access i.e. the user_id and user_key
- There is no outcome management on external forms. "External File Upload" is the set outcome wording that will be used. It will not cause work to happen like existing outcomes.
- The filename must be passed to the function
- Only one file can be logged at a time

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The key variables in the function are:

Param.	*Mandatory*	
	user_id	= The user id (See section 3.1)
	user_key	= The user key (See section 3.1)
	campaignid	= The form to process
	cdaid	= The record to attach the file to
	filename	= The original name of the file
	filesize	= The size of the file in bytes
	filetype	= The type of the file
	Optional	
	comments	= Any comments you would like to append to the upload

7.4.5.2 Step 2 - Upload the file via SFTP

The previous function returns a filename to be applied to your file. Change the filename and upload via SFTP to bxp. The SFTP server details available upon calling All n One on 01 429 4000

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PHP Example

```
1.  <?
2.  //=========================================================
3.  //Data Setup
4.  //=========================================================
5.  $url = 'https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp';
6.  //set the extrac POST variables required
7.  $fields = array(
8.          'user_id'                   => urlencode('testing'),
9.          'user_key'                          => urlencode('testing'),
10.         'system'                    => urlencode('docuploadtoccl'),
11.         'campaignid'                => urlencode('56'),
12.         'cdaid'                     => urlencode('123'),
13.         'filename'                  => urlencode('Sample File.xlsx'),
14.         'filesize'                  => urlencode('11826'),
15.         'filetype'                  => urlencode('application/vnd.openxmlformats-
    officedocument.spreadsheetml.sheet'),
16.         'comments'                          => urlencode('Demonstration Upload Audit Comment')
17. );
18. //url-ify the data for the POST
19. foreach($fields as $key=>$value) { $fields_string .= $key.'='.$value.'&'; }
20. rtrim($fields_string,'&');
21. //=========================================================
22. //Process Data
23. //=========================================================
24. //open connection and set the url, number of POST vars, POST data, execute post
25. $ch = curl_init();
26. curl_setopt($ch, CURLOPT_URL,                    $url                    );
27. curl_setopt($ch, CURLOPT_POST,                   1                               );
28. curl_setopt($ch, CURLOPT_POSTFIELDS,     $fields_string      );
29. curl_setopt($ch, CURLOPT_FOLLOWLOCATION, 1                               );
30. curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1                               );
31. $result = curl_exec($ch);
32. curl_close($ch);
33. //=========================================================
34. //Result management
35. //=========================================================
36. if (strpos($result,'record>-1<')) {
37.         $strMessage = 'Sorry but that is an incorrect username or password for logging this record.<br />Please
    contact the site Administrator';
38. } elseif (strpos($result,'record>-2<')) {
39.         $strMessage = 'Sorry but that is an incorrect IP address to log from that account.<br />Please contact the
    site Administrator';
40. } elseif (strpos($result,'record>-3<')) {
41.         $strMessage = 'Sorry but that form is not available to the public for storing data in.<br />Please contact the
    site Administrator';
42. } elseif (strpos($result,'record>-4<')) {
43.         $strMessage = 'Sorry but that form has not been built properly.<br />Please contact the site Administrator';
44. } elseif (strpos($result,'record>-5<')) {
45.         $strMessage = 'Sorry but that form is not active.<br />Please contact the site Administrator';
46. } elseif (strpos($result,'record>-6<')) {
47.         $strMessage = 'Sorry but that user cannot log data in that form.<br />Please contact the site Administrator';
48. } elseif (strpos($result,'record>-7<')) {
49.         $strMessage = 'Sorry but key data is missing from the Param.
50. .<br />Please contact the site Administrator';
```


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```
51.  } elseif (strpos($result,'record>0<')) {
52.          $strMessage = 'Sorry but no Id was returned.<br />Please contact the site Administrator';
53.  } else {
54.          $result = str_replace("<?xml version=\"1.0\" encoding=\"UTF-8\"?>", "", $result);
55.          $result = str_replace("\n", "", $result);
56.          $result = str_replace("<record>", "", $result);
57.          $result = str_replace("</record>", "", $result);
58.          $strMessage = "The file has been added.  Please change the filename to [".$result."] and upload via
     SFTP.";
59.  }
60.  echo $strMessage;
61.  ?>
```


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ASP Example

```
<%
'=========================================================
'Data Setup
'=========================================================
Dim strURL, strData, strFieldName, strFieldValue
strURL = "https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp"
'set the extrac POST variables required
strData = ""
strData = strData & "user_id=" & Server.URLEncode("testing") & "&"
strData = strData & "user_key=" & Server.URLEncode("testing") & "&"
strData = strData & "system=" & Server.URLEncode("docuploadtoccl") & "&"
strData = strData & "campaignid=" & Server.URLEncode("56") & "&"
strData = strData & "cdaid=" & Server.URLEncode("123") & "&"
strData = strData & "filename=" & Server.URLEncode("Sample File.xlsx") & "&"
strData = strData & "filesize=" & Server.URLEncode("11826") & "&"
strData = strData & "filetype=" & Server.URLEncode("application/vnd.openxmlformats-officedocument.spreadsheetml.sheet") & "&"
strData = strData & "comments=" & Server.URLEncode("Demonstration Upload Audit Comment") & "&"
strData = left ( strData, len(strData) - 1 )



'=========================================================
'Process Data
'=========================================================
'open connection and set the url, number of POST vars, POST data
dim xmlhttp, strDataResult, strMessage
set xmlhttp = server.Createobject("MSXML2.ServerXMLHTTP")
xmlhttp.Open "POST", strURL, false
xmlhttp.setRequestHeader "Content-Type", "application/x-www-form-urlencoded"
xmlhttp.send strData
strDataResult = xmlhttp.ResponseText
Set xmlhttp = nothing

'=========================================================
'Result management
'=========================================================
if inStr ( strDataResult, "record>-1<") > 0 then
        strMessage = "Sorry but that is an incorrect username or password for logging this record.<br />Please contact the site Administrator"
elseif inStr ( strDataResult, "record>-2<") > 0 then
        strMessage = "Sorry but that is an incorrect IP address to log from that account.<br />Please contact the site Administrator"
elseif inStr ( strDataResult, "record>-3<") > 0 then
        strMessage = "Sorry but that form is not available to the public for storing data in.<br />Please contact the site Administrator"
elseif inStr ( strDataResult, "record>-4<") > 0 then
        strMessage = "Sorry but that form has not been built properly.<br />Please contact the site Administrator"
elseif inStr ( strDataResult, "record>-5<") > 0 then
        strMessage = "Sorry but that form is not active.<br />Please contact the site Administrator"
elseif inStr ( strDataResult, "record>-6<") > 0 then
        strMessage = "Sorry but that user cannot log data in that form.<br />Please contact the site Administrator"
```


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```
51.  elseif inStr ( strDataResult, "record>-7<") > 0 then
52.                 strMessage = "Sorry but key data is missing from the Param.
53.  .<br />Please contact the site Administrator"
54.  elseif inStr ( strDataResult, "record>0<") > 0 then
55.                 strMessage = "Sorry but no Id was returned.<br />Please contact the site Administrator"
56.  else
57.    strDataResult = replace ( strDataResult, "<?xml version=""1.0"" encoding=""UTF-8""?>", "" )
58.    strDataResult = replace ( strDataResult, vbCrLf, "" )
59.    strDataResult = replace ( strDataResult, "<record>", "" )
60.    strDataResult = replace ( strDataResult, "</record>", "" )
61.    strMessage = "The file has been added.  Please change the filename to [" & strDataResult & "] and upload via
     SFTP."
62.  end if
63.  response.write ( strMessage )
64.  %>
```


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7.4.6 Website – Records as ICS file

When there is a requirement to output records in the form of an ICS file, as in where the contents of a Calendar require a record listing, bxp can output the content directly in ICS format. A sample of that format is:

```
BEGIN:VCALENDAR
VERSION:2.0
PRODID:bxp API(bxp API) for Form [XXX]:v5-0-3
        BEGIN:VEVENT
                UID:uid1@example.com
                DTSTAMP:20131126T170000Z
                ORGANIZER;CN=AllnOne:MAILTO:allnone@acoi.com
                CONTACT:Daniel Coughlan; 00353851234455; allnone@test.ie;
                http://www.allnone.ie
                DTSTART:20131126T170000Z
                DTEND:20131126T185959Z
                SUMMARY:Event 1
                DESC.
                : This is a Desc.
                 of event 1
                X-COST:150.00
                X-TICKETS-URL:http://www.acoi.ie/makepayment
                LOCATION:Tallaght Stadium @ Tallaght, Dublin
                GEO:53.28880;-6.35571
        END:VEVENT
END:VCALENDAR
```

In actual output there is no indent, this is used for clarity of description

The BEGIN:VEVENT to END:VEVENT indicate one record.

Fields will only be included where data is available

If all fields are blank, the record will not be included.

If no records are found, a dummy testing record will be added to ensure compliance to the format

Full reference information on iCal formatting can be found at

http://www.ietf.org/rfc/rfc2445.txt

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t: +353 1 429 4000 (Dublin) +44 207 692 0705 (London) e: info@bxpsoftware.com w: www.bxpsoftware.com

Directors: Nick Wheeler · Chris Thomson · Philip Lacey
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The key variables in the function are:

Param.	
	Mandatory
	user_id = The user id (See section 3.1)
	user_key = The user key (See section 3.1)
	campaignid = The form to process
	UID = The field containing the unique Id for the event
	DTSTART = The field containing the start date / time of the event
	DTEND = The field containing the end date / time of the event
	SUMMARY = The field containing the title of the event *
	allfrom = The date / time to include from (in universal date time format)
	alluntil = The date / time to include up to (in universal date time format)
	Optional
	ORGANIZER_CN = The field containing the organisers name
	ORGANIZER_MAILTO = The field containing the organisers email address
	CONTACT_NAME = The field containing the primary contacts name
	CONTACT_PHONE = The field containing the primary contacts phone number
	CONTACT_EMAIL = The field containing the primary contacts email address
	CONTACT_WEB = The field containing the primary contacts website address
	DESC. = The field containing the Desc. of the event *
	XCOST = The field containing the cost of the event
	XTICKETSURL = The field containing the URL to go to pay for the event *
	LOCATION = The field containing the physical address of the event *
	GEO_LAT = The field containing the latitude of the event
	GEO_LONG = The field containing the longitude of the event

* The contents of each fields marked with an asterisk at the end of the Desc. can contain replacement fields in the –strCDA_X_field_X_X—notation.

The contents of DTSTAMP, DTSTART and DTEND will be formatted to Zulu Time automatically. Return characters will be removed from the content of all fields. So descriptions will appear as on paragraph. Lat and Long require both fields to be present to be displayed.

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7.5 AJAX Supported Functionality

7.5.1 Introduction

bxp provides an AJAX support library to facilitate numerous requests from client side implementations.

These AJAX implementations are documented here:

http://www.bxpsoftware.com/wixi/index.php?title=AJAX_-_Start_Here

Supporting these implementations are API end points which are documented here.

- dbDeleteRecord
- dbInsertRecord
- dbUpdateRecord

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7.5.2 dbUpdateRecord

Desc.	This function is used to facilitate the direct data update of a record in a CDA table.
Param.	user_id : The user id (See section3.1) user_key : The user key (See section3.1) system : datasearch campaignid : The Id of the Campaign ruletoprocess : dbUpdateRecord fieldsToInsertTo : Fields, separated by commas, to be updated valuesToInsert : Values, separated by commas, to be updated fieldsToSearchOn : Field to match upon fieldsToSearchWith : Data to match on addACCL : True | False to automated adding to the CCL of the records Optional for the client side AJAX library responsefields : The field in the response containing how many records were updated countLimit : Limiter for mass record updates
Gen. Fun.	userCTI_GenericEntry.asp?user_id=X&user_key=Y&system=datasearch&campaignid=1&myrecords=false&ruletoprocess=dbUpdateRecord&fieldsToInsertTo=X&valuesToInsert=Y&fieldsToSearchOn=X&fieldsToSearchWith=Y&addACCL=True
Example.	https://ww3.allnone.ie/client/client_demo/cti/userCTI_GenericEntry.asp?user_id=abc123&user_key=passkey&system=datasearch&campaignid=838&myrecords=false&ruletoprocess=dbUpdateRecord&fieldsToInsertTo=strCDA_838_field_0_1,strCDA_838_field_0_2&valuesToInsert=Demo User,2015-12-29 18-30-05&fieldsToSearchOn=intCDA_838_Id&fieldsToSearchWith=1&addACCL=True
Notes	The user must be granted specific permission to access the form and inbound and / or outbound module section.

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8 WordPress API

8.1 Overview

http://wordpress.org/

WordPress as of 2013-11-22 is used by over 72 million websites. For this reason it is useful for bxp to be easily interact with WordPress. (http://en.wordpress.com/stats/)

All n One are working to create WordPress plugin which would reduce the configuration steps even further.

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8.2 Setup

There are a few simple steps.

The first part requires the latest version of the fn_BEAPI_WordPress.php library. This file is available from http://www.allnone.ie/XXXX/fn_BEAPI_WordPress.zip

The next sections details the configuration changes required.

This library has a number of configuration parameters which need to be customised to your instance.

Within your WordPress site:

1. Install “Allow PHP in Posts”
   http://wordpress.org/plugins/allow-php-in-posts-and-pages/
   http://www.hitreach.co.uk/wordpress-plugins/allow-php-in-posts-and-pages/

2. Put the configured fn_BEAPI_WordPress.php in root dir of website

3. In header.php file put <?php include 'fn_BEAPI_WordPress.php' ?> before any HTML is written

The functions of the library are now available to all pages in your WordPress site.

48 / 49 Western Parkway Business Park, Lower Ballymount Road, Dublin 12, Ireland
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8.3 fn_BEAPI_WordPress.php configuration

To save having to put in configuration information multiple times, the global variables on the page are set at the top.

```
//~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
//Global Param.
//~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
//It is important that the following six variables are not publicly shared as this would pose a potential security risk to your bxp security.
//The base user system 'client_' . 'demo' e.g. client_demo (all lower case)
define('strBEAPI_System','client_' . 'demo');
//The secure users user name
define('strBEAPI_Username','username');
//The secure users password
define('strBEAPI_Password','password');
//The campaign Id to be used
define('strBEAPI_CampaignId','1');
//Which field in the campaign contains the user name for the user.
define('strBEAPI_Field_Username','strCDA_1_field_0_1');
//Which field in the campaign contains the password for the user.
define('strBEAPI_Field_Password','strCDA_1_field_0_2');
//What field stores the session key in bxp.
define('strBEAPI_Field_SessionKey','strCDA_1_field_0_3');
//Is the user set to live in bxp.
define('strBEAPI_Field_UserLive','strCDA_1_field_0_4');

//Other global variables required
//The keyword to which private pages need to start with if you are locking dwn a page by keyword
define('strBEAPI_Global_Keyword','member');
//The template pages that can be used to lock down member areas locking by wordpress template
define('strBEAPI_Template_Listing','members-demo.php');

//Campaign search Param.

// The field to search on
define('strBEAPI_Campaign_SearchField','');
// The value of the search field to return the record
define('strBEAPI_Campaign_SearchValue','');
// The fields to pull back from the campaign
```


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```
define('strBEAPI_Campaign_ReturnValues','');

//Url and login process page
//On any kind of fail where to send the user
define('strBEAPI_Base_URL','https://ww3.allnone.ie/client/' . strBEAPI_System . '/cti/');
//
define('strBEAPI_Login_Process_Page','member-check-login');//
//
define('strBEAPI_Login_Failure_Page','http://www.yoursite.ie/login-fail/');//
//
define('strBEAPI_Login_Success_Page','http://www.yoursite.ie/members-area/');//
//The page where the update function will occur
define('strBEAPI_Update_Form_Page','');

//Cookie values
//Number of days before cookie expires
define('strBEAPI_Cookie_Expiry_Days',1);
//Name of the cookie
define('strBEAPI_Cookie_Name','be_wordpress_session_cookie');
//Name of the username cookie
define('strBEAPI_Cookie_Username_Name','be_wordpress_username_cookie');
//Name of the username cookie
define('strBEAPI_Cookie_Record_Name','be_wordpress_record_cookie');
//Name of the failure cookie
define('strBEAPI_Cookie_Fail_Name','be_wordpress_fail_cookie');
//After cookie create where to redirect to
define('strBEAPI_Cookie_LandPage','http://www.yoursite.ie/members-area/');
//Cookie not found page / invalid login
define('strBEAPI_Cookie_FailPage','http://www.yoursite.ie/login-fail/');

//Form Full listing
define('strBEAPI_GetFields_WithRecordId','strCDA_12_field_0_1,strCDA_12_field_0_1');
```


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9 Appendices

9.1 Appendix A – Response Codes

#000001 = System alive and form exists
#000002 = Form Id not found
#000002-XXX = Form Id not found, - XXX is the form id searched for
#000003 = Form no longer active – Active Field = False
#000004 = Form no longer active – Out of date
#000005 = Invalid Key Field Value
#000006 = Contact record logged successfully
#000007 = Contact record not logged – Id key not found
#000008 = No filename specified to be recorded

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