

Developer API Guide

WebLINK Developer API Guide

Version 1.1

Released April 28, 2015

Copyright © 2011-2015, BridgePay Network Solutions, Inc. All rights reserved.

The information contained herein is the confidential and proprietary property of BridgePay Network Solutions, Inc. and may not be used, distributed, modified, disclosed, or reproduced without express written permission.

Table of Contents

Chapter 1. Overview	5
Chapter 2. Input Fields	6
2.1. Examples	
2.1.1. Simple Integration (Interactive)	
2.1.2. WebLINK for Payment Information (Interactive)	
2.1.3. WebLINK for Payment Form (Interactive)	10
2.1.4. WebLINK for Processing Only (Non-Interactive)	
Chapter 3. Response Fields	12
Chapter 4. Templates and Settings	
4.1. Settings	
4.2. Templates	
4.2.1. Formatting Templates	
4.2.1.1. Placeholders	
4.2.1.1.1. Reserved Placeholders	17
4.2.1.1.2. Special Reserved Placeholders	17
4.2.1.1.3. Custom Placeholders	
4.2.1.2. Placeholder Location	18
4.2.1.2.1. Name Attribute	18
4.2.1.2.2. Value Attribute	
4.2.1.2.3. Other	
A. Appendix	20
A.1. Field Map	
I control of the cont	•

Changes and Modifications

The table below lists changes made to the WebLINK Developer API Guide:

Document launch. Added Security warning for Click jack vulnerability	All 5
Added Security warning for Click jack vulnerability	5

Chapter 1. Overview

BridgePay's WebLINK interface is a flexible, integrated payment solution for e-Commerce transaction processing. WebLINK is a single .aspx page that accepts transaction request data through a form post from the merchant website. You can customize WebLINK's default behavior with settings stored in the WebLINK database or use posted parameters to configure actions on the individual request level.

WebLINK offers two different integration methods for handling electronic transactions. By choosing **Interactive** or **Non-Interactive mode**, WebLINK gives you the flexibility to select the integration method which best suits your needs.

In **Interactive Mode**, WebLINK creates a payment page for you and hosts it on the BridgePay servers. You can customize the payment page to match your website's branding. You can also use the website to generate and display a receipt for the transaction within the WebLINK interface. After processing the transaction, WebLINK returns transaction details, customer information, and reference tokens for credits or refunds.

In **Non-Interactive Mode**, you are responsible for the payment and receipt pages. WebLINK's sole purpose is to serve as a conduit to the payment gateway. After processing the transaction, WebLINK returns transaction details, customer information, and reference tokens for credits or refunds.

In addition to Interactive Mode's payment and optional receipt pages, both modes can use WebLINK to send receipt emails to customers and transaction confirmation emails to merchants. BridgePay provides standard templates for all pages and emails, but you may create and save your own custom templates using the BridgePay Merchant Boarding Portal.

** Security Warning – WebLink does not support any iframe integration. Bridgepay has implemented anti-framing methods to ensure that security is in place to prevent vulnerabilities such as click jacking.



Chapter 2. Input Fields

WebLINK's standard input fields include customer information, payment information, formatting parameters, and fields that govern WebLINK's behavior.

✓ Input field values take precedence over the default Templates and Settings configured in the Merchant Boarding Portal.

The following table contains field descriptions. Unless otherwise stated, all fields are optional and apply to both modes.

(i) All required fields for **Non-Interactive Mode** are optional for **Interactive Mode**.

Field	Description
Mode	Required for Interactive Mode. Indicates if WebLINK is in Interactive mode. Valid values are: PaymentForm (Interactive mode). (i) If left blank, WebLINK defaults to Non-Interactive mode.
CardNumber	Required for credit transactions in Non-Interactive Mode . Credit card number.
CardExpMonth	Required for credit transactions in Non-Interactive Mode . Card expiration month in MM format.
CardExpYear	Required for credit transactions in Non-Interactive Mode . Card expiration year in YY format.
CVNum	Required for credit transactions in Non-Interactive Mode . CVV number.
InvoiceNum	Invoice number passed to the gateway.
BillToName	The customer's name.
Login	Required. Username assigned in the payment server.
Password	Required. Password for the username assigned in the payment server. 1 You only need to submit your password once. Complete this or the PasswordEncrypted field.



Field	Description
PasswordEncrypted	Required. Encrypted password for the username assigned in the payment server. (i) You only need to submit your password once. Complete this or the Password field.
PNRef	Reference number assigned by the payment server.
BillToStreet	Street of customer's billing address.
TotalAmt	Required for Non-Interactive Mode . The total transaction amount in DDDD.CC format.
Description	Description of goods or services in purchase.
BillToZip	ZIP code of customer's billing address.
TransitNum	Required for check transactions in Non-Interactive Mode . Check routing number.
AccountNum	Required for check transactions in Non-Interactive Mode . Check account number.
CheckType	Type of check. Valid values are: Personal, Business.
CheckNum	Required for check transactions in Non-Interactive Mode . Number of check.
AcctType	Type of bank account. Valid values are: Checking, Savings.
BillToEmail	Customer's email address. WebLINK sends a copy of the receipt to this address.
MerchantEmail	Merchant's email address. WebLINK sends a transaction confirmation to this address.
EmailFrom	Email address WebLINK specifies as the "from" address for customer and merchant emails.
PONum	Purchase order number.
CustomerID	Customer ID.
ReturnFields	Specifies a comma-delimited list of field names that post back to the SuccessURL following a transaction. If left blank, all fields post back.



Field	Description
ReceiptURL	Only applies to Interactive mode. If the transaction submits successfully, WebLINK posts to this URL for a receipt or transaction confirmation.
	BridgePay recommends you use SuccessURL, rather than ReceiptURL, if you need to perform any post-transaction processing.
SuccessURL	Required for Non-Interactive Mode . WebLINK posts to this URL if the payment form submission is successful. Use this page for any post-transaction processing.
	This is a blind post; WebLINK discards any output from this page.
ReceiptReturnURL	Only applies to Interactive Mode. If you choose to have WebLINK handle the receipt and do not complete ReceiptURL, WebLINK displays this URL as the return link in the receipt.
FailURL	Required for Non-Interactive Mode . WebLINK posts to this URL if the payment form submission is unsuccessful.
PaymentFormTID	Only applies to Interactive mode. ID for the desired payment form template.
ReceiptTID	Only applies to Interactive mode. ID for the desired receipt template.
CustomerEmailTID	ID for the desired customer email template.
MerchantEmailTID	ID for the desired merchant email template.
Style_Page_BackgroundImage	Only applies to Interactive mode. The URL for the payment form's background image.
Style_Page_BackgroundColor	Only applies to Interactive mode. Background color for the payment page. Default value is #FFFFFF .
Style_Form_BackgroundColor	Only applies to Interactive mode. Background color for the payment form. Default value is #FFFFFF .
Style_FontFamily	Only applies to Interactive mode. Font family of the payment form text. The default value is Verdana, Arial, Helvetica, sansserif .
	You can list one or more font families, separated by commas.
Style_Heading_FontColor	Only applies to Interactive mode. Color of the heading text on the payment form. Default value is #000000 .



Field	Description
Style_Heading_FontSize	Only applies to Interactive mode. Font size of the heading text on the payment form. Default value is 13 .
Style_Heading_BackgroundColor	Only applies to Interactive mode. Background color of the heading sections on the payment form. Default value is #9DB1D6 .
Style_Instruction_FontColor	Only applies to Interactive mode. Color of the instruction text on the payment form. Default value is #000000 .
Style_Instruction_FontSize	Only applies to Interactive mode. Font size of the instruction text on the payment form. Default value is 11 .
Style_Label_FontColor	Only applies to Interactive mode. Color of the field label text on the payment form. Default value is #000000 .
Style_Label_FontSize	Only applies to Interactive mode. Font size of the field label text on the payment form. Default value is 10 .
Style_Field_FontColor	Only applies to Interactive mode. Color of the field input text on the payment form. Default value is #000000 .
Style_Field_FontSize	Only applies to Interactive mode. Font size of the field input text on the payment form. Default value is 12 .

2.1. Examples

The following examples illustrate basic WebLINK configurations for some typical use cases.

2.1.1. Simple Integration (Interactive)

The following example configures WebLINK in the simplest format possible. WebLINK creates a hosted payment form, collects all customer and payment data, and handles the receipt.

2.1.2. WebLINK for Payment Information (Interactive)

The following example uses a custom payment form template created in the Merchant Boarding Portal. The integrator collects the customer information, leaving WebLINK to collect payment information and display the receipt.



2.1.3. WebLINK for Payment Form (Interactive)

The following example uses WebLINK to display the payment form, collect the customer and payment information, and generate a merchant confirmation email. The receipt, however, displays on the merchant's website.

2.1.4. WebLINK for Processing Only (Non-Interactive)

In the following example, the integrator creates the payment form, collects all customer and payment information, and displays the receipt on the merchant's website. WebLINK only handles the transaction processing.





Chapter 3. Response Fields

These fields are available for use in email and receipt templates, and when specified, these fields post to FailURL, SuccessURL, and ReceiptURL.

✓ Some fields are only available after initiating the transaction (e.g., AuthCode).

The following table contains field descriptions.

Field	Description
r_AuthCode	The transaction result code from the payment processor.
r_HostCode	A number that uniquely identifies the transaction in the payment processor.
	Not all payment processors return this value.
r_ExtData	Extended data describing the transaction in XML format.
r_AvsResult	The overall address verification result code from the payment processor.
	When programmatically validating an AVS result, you should always use this value instead of any formatted response message describing the result.
r_AvsResultText	The formatted response message describing the results of address verification.
	Never use this value when programmatically validating a transaction's AVS result; please see the r_AVSResult field.
r_CvResult	The card verification result code from the payment processor. This value only applies to credit card transactions.
	When programmatically validating a CV result, you should always use this value instead of any formatted response message describing the result.



Field	Description
r_CvResultText	The formatted response message describing the results of card verification. This value only applies to credit card transactions. Never use this value when programmatically validating a transaction's CV result; please see r_CVResult field.
r_GetCommercialCard	The payment processor's response indicator that specifies if the card is a commercial card.
r_StreetMatchText	The formatted response message describing the results of street number address verification.
r_ZipMatchText	The formatted response message describing the results of ZIP code address verification.
r_Message	A formatted response message concerning the processed transaction. This value is typically APPROVAL for approved transactions or an error message for declined transactions. Never use this value when programmatically validating a transaction's result; please see the r_Result.
r_Message1	Additional formatted response message to give more information about the processed transaction. The payment server only populates this field when there is applicable information from the payment processor to return.
r_Message2	Additional formatted response message to give more information about the processed transaction. The payment server only populates this field when there is applicable information from the payment processor to return.
r_RespMsg	Response message concerning the processed transaction. Never use this value when programmatically validating a transaction's result; please see the r_Result field.



Field	Description	
r_Result	Result code that signifies the result of the transaction.	
	When programmatically validating a transaction's result, always use this value instead of any response message describing the result.	
r_PNRef	Number that uniquely identifies the transaction in the payment gateway.	

Response Fields in Interactive Mode

In **Interactive** mode, WebLINK has the responsibility of displaying the payment form. In this mode, by default, errors display on the payment form with two reserved placeholder fields, **r_Message** and **ValidationErrors**. **r_Message** contains a formatted response message from the payment gateway, describing the status of the processed transaction. ValidationErrors contains a comma-delimited list of errors deriving from improper data entry on the initial post to WebLINK or from the end-user submitting the payment form. If you specify a **FailUrl**, errors post to the given URL instead of displaying on the payment form.

(i) Validation errors resulting from the end-user's form submission are rare as there is client-side validation in place to handle these types of errors.

Response Fields in Non-Interactive Mode

In Non-Interactive mode, WebLINK only handles the core transaction processing and returning a standard formatted response. As the developer, you must submit the appropriate data and properly handle the response WebLINK returns. Response data posts to **SuccessUrl** and **FailUrl**.

For testing purposes, use http://[your supplied gateway server].com/WebLink2/echo.aspx as the SuccessUrl and FailUrl and set the mode to DebugDCP. This echo.aspx page simply outputs whatever values post to it.



Chapter 4. Templates and Settings

The following sections discuss how to use the BridgePay Merchant Boarding Terminal at https://boarding.itstgate.com/ to configure templates and default settings.

4.1. Settings

The application settings available for configuration are:

- FailUrl
- MerchantEmail
- EmailFrom
- PaymentTypes
- ReceiptUrl
- SuccessUrl

For descriptions of these fields, see Input Fields on page 6.

Remember that you can also set the values for these fields on a case-by-case basis in the form post. Values in the form posts take precedence over values set in the boarding terminal.



4.2. Templates

WebLINK uses four types of templates:

- CustomerEmail Customizes the display of the transaction receipt email sent to customer.
- MerchantEmail Customizes the display of the transaction confirmation email sent to the merchant.

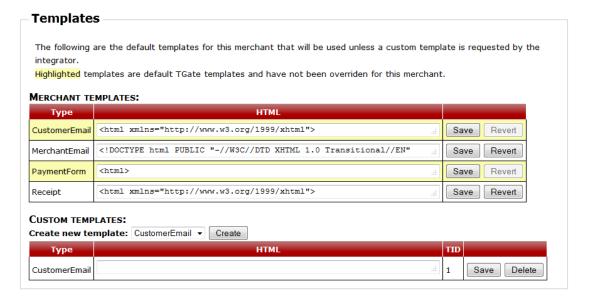


- PaymentForm Configures the settings and display of the payment form. Only applies to Interactive mode.
- Receipt Configures the settings and display of the transaction receipt. Only applies to Interactive mode.

There are two categories of templates: **merchant** and **custom**. WebLINK invokes merchant templates by default if you don't pass a custom template ID in the request data. You may also create a custom template and invoke it on-demand by passing the corresponding **Template ID (TID)** when posting to WebLINK.

To customize a merchant template, paste your formatted code into the **HTML** field for the specified template and click **Save**. To create a custom template, select the template type from the dropdown menu and click **Create**. A new template entry appears with a new TID. Paste your custom template code into the **HTML** field and click **Save**.

You are responsible for pasting in the proper HTML for the new template. Please refer to **Input** Fields on page 6 for a list of custom template ID fields and **Formatting Templates** on page 16 for information on formatting the template HTML properly.



4.2.1. Formatting Templates

4.2.1.1. Placeholders

WebLINK uses unique placeholders inside of templates to render the payment form, payment receipt, merchant transaction confirmation email, and customer transaction receipt email.

You structure these templates just like typical HTML documents, but you also include specific placeholders that WebLINK uses to assemble the form or email.



Placeholder Format

<!--[PlaceholderName]required-->

✓ The required keyword is optional. If specified, the customer must complete the field or WebLINK returns a validation error when submitting the form.

If the customer's browser supports JavaScript, there is client-side validation in addition to server-side validation after submitting the payment form. WebLINK automatically generates the necessary JavaScript code for you, but you must reference **JQuery** and the **scripts/payment_form.js** script in the <Head> section of the template.

4.2.1.1.1. Reserved Placeholders

All **Input Fields** are reserved placeholders. For example, if you put <!—[**InvoiceNum**]--> in the HTML template for the payment form and submitted a value of **123456** in the text box, the payment server would receive 123456 as the invoice number for the transaction.

4.2.1.1.2. Special Reserved Placeholders

The following table contains special reserved placeholders.

Field	Description
TotalAmt	Renders as an input tag for the TotalAmt field in the payment form and plaintext for emails and receipts.
BillToState	Renders a select tag for the BilltoState field.
CardTypeName	Renders a select tag for the card type.
PaymentTypeImages	Renders tags for the available payment types.
CardExpMonth	Renders a select tag for the CardExpMonth field.
CardExpYear	Renders a select tag for the CardExpYear field. Year range includes the current year + 9 years.
CheckType	Renders a select tag for the CheckType field.
AcctType	Renders a select tag for the AccType field.



Field	Description
ValidationErrors	Renders an unordered list tag and list elements for each server validation error WebLINK encounters.
GenericAcctNum	Displays the masked credit card or checking account number.
TransDate	Displays the date and time of transaction processing.

4.2.1.1.3. Custom Placeholders

You can also create custom placeholders to use in the payment form to gather and pass long to the receipt or SuccessURL. Format custom placeholders like WebLINK's reserved placeholders.

For example, if you wanted to give the customer a space to include an optional note concerning his/her order:

<input type="text" name="<!-[AdditionalNotes]-->">

4.2.1.2. Placeholder Location

The location of the placeholder within the template affects how the template engine interprets it. The three different locations are:

- Within the **name attribute** of an input control.
- Within the value attribute of an input control.
- Neither of the above (other).

4.2.1.2.1. Name Attribute

For placeholders located within the name attribute, the field name, not the actual value of the associated field, renders in the browser HTML.

Template

<input type="text" name="<!--[FullName]-->" size="30">

Rendered HTML

<input type="text" name="FullName" size="30">

4.2.1.2.2. Value Attribute

For placeholders located within the value attribute, the actual value of the associated field renders in the browser HTML.



① Use the value attribute placement when you want to post a value to prepopulate a value on the payment form.

Template

```
<input type="text" name="FullName" value="<!--[FullName]-->" size="30">
```

Rendered HTML

```
<input type="text" name="FullName" value="Jim Shoe" size="30">
```

✓ The name attribute must match the name of the placeholder.

4.2.1.2.3. Other

Placeholders located outside of the name and value attributes render just like value attributes. If you post a value to WebLINK that has the same name as a placeholder, the value of the associated field renders in the location of the placeholder.

Which placement should I use?

- Use **value attribute placement** when you want to post to WebLINK to prepopulate a value.
- Use name attribute placement when you do not want to prepopulate a value.
- Use name attribute placement when working with a <select> tag.
 - (i) At this time, WebLINK does not support prepopulating select dropdowns with posted values.
- Use other placement when you only need a label containing the posted value of the associated field.
 - (1) Though the other placement is more common in receipt and email templates, it is perfectly valid in payment form templates.



A. Appendix

A.1. Field Map

The following table describes how WebLINK fields map to PathwayLINK payment server fields.

WebLINK Field	PathwayLINK Payment Server Field
Cardnumber	CardNum
CardExpMonth + CardExpYear	ExpDate
CVNum	CVNum
InvoiceNum	InvNum
BillToName	NameOnCard/NameOnCheck
Login	UserName
Password	Password
PNRef	PNRef
BillToStreet	Sreet
TotalAmt	Amount
BillToZip	Zip
TransitNum	TransitNum
AccountNum	AccountNum
CheckType	CheckType
CheckNum	CheckNum
AcctType	ExtData.AccountType
BillToEmail	ExtData.Email
PONum	ExtData.PONum
CustomerID	ExtData.CustomerID
TransType	TransType

