Platform Update Release Notes

3.5

2014-05-13
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Overview

cleverbridge announces platform release 3.5, which introduces enhancements to the checkout process, Commerce Assistant, Business Intelligence, channel management, subscriptions, notifications, and APIs.

For more information about any of the new features and enhancements in release 3.5, contact your cleverbridge client manager.
Checkout Process
The following enhancements were made to the checkout process.

New Recommendation Position Options for Confirmation Page
Clients can recommend other products to customers in the checkout process. These recommendations can be positioned in various places, such as in a pop-up window in the cart, on an extra page before the cart, or on the confirmation page. Previously, the confirmation page positions were supported for recommendations for all orders, regardless of the purchase status.

With this release, cleverbridge now offers the functionality to differentiate whether the recommendation displays for all orders or only for paid orders and registrations. In the Recommendations portal in the Commerce Assistant, there are now new confirmation page positions for Always and Paid Only.

Brazilian States Added to Checkout Process
In order to make the Brazilian checkout process more user-friendly, a drop-down was added with the states.
Paynova and Paytrail Supported as Payment Types

cleverbridge is now integrating the payment providers Paynova and Paytrail, which are very popular in Sweden and Finland for online banking, into the checkout process. A more detailed communication about these payment types will soon be sent to clients. cleverbridge will first run a pilot with select clients, and if interested, clients should contact their cleverbridge client manager for more information.
Commerce Assistant
The following enhancements were made to the Commerce Assistant.

Improved View and Edit Mode
cleverbridge has reworked the view and edit mode to improve the user experience and reduce the number of clicks. In the previous version, when a user opened a record, the record was opened by default in view mode, and the record could be switched between view and edit, depending on the privileges of the user.

Now, if a user has view-only privileges, a record opens automatically in view mode. If a user has edit privileges, a record opens automatically in edit mode. Once a user starts to edit the record, the record then locks for editing until the record is saved or closed. If a record is already being edited by another user, then a message displays that the record is locked by another user.

Additionally, users with edit privileges can optionally decide to lock the record for editing before opening it. This is done with a new Lock and Open option in context menus. This feature is typically the most useful when performing a multi-edit on several records at once.

Note: The Lock and Open option is only visible to users with edit privileges.

To assist users in determining which records they are newly creating or have locked for editing, there are new icons throughout the application.
Action Bar Enhancements
The action bar is located on features throughout the workspace. It is used to perform functions such as saving or closing a record. Depending on the function and a user's privileges, the action bar contains different options. To improve a user's workflow and reduce the number of clicks, the action bar in portals throughout the application has been enhanced.

Following are all possible actions available in portals:

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Save</td>
<td>Stores the current settings of a record.</td>
</tr>
<tr>
<td>Save &amp; Close</td>
<td>Stores the current settings of a record and closes the record.</td>
</tr>
<tr>
<td>Save &amp; New</td>
<td>Option appears when a record has been added. Stores the current settings of a record and directly opens a new record for data entry. This makes creation of multiple records easier.</td>
</tr>
<tr>
<td>Save &amp; Copy Again</td>
<td>Option appears when a record has been copied through the Copy option in the context menu. Stores the current settings of a record and directly opens a new copy.</td>
</tr>
<tr>
<td>Close</td>
<td>Closes the record. If there are unsaved changes, the user is asked if they would like to save them first.</td>
</tr>
<tr>
<td>Delete</td>
<td>Deletes and closes the record.</td>
</tr>
</tbody>
</table>

Product Categorization Functionality
In order to gain a more thorough understanding of the types of products that cleverbridge clients sell to customers, cleverbridge, as the reseller of these products, now requires that clients categorize
new products in the Commerce Assistant. Clients do not need to change or categorize their existing products. The new product categorization functionality only applies to new products that are entered, as well as existing products that should be updated, in the Commerce Assistant.

The product categorization is entered in the Product Definition section of the product editor. Clients simply select the answer to some basic questions about the characteristics of the product. There are up to five category levels, depending on the selections.

**MVT Candidate IDs Visible**

The MVT Campaign portal has been enhanced to now display the ID number for each candidate included in a campaign. This is helpful when working with the Business Intelligence tool.
**New Keyboard Shortcuts**

Users can now quickly navigate through worksheets with three new keyboard shortcuts:

- CTRL + F4 closes the current worksheet.
- CTRL + TAB navigates to the next worksheet in the Navigation Bar.
- CTRL + SHIFT + TAB navigates to the previous worksheet in the Navigation Bar.

**Improved Readability in Lists**

Lists throughout the Commerce Assistant, such as in searches, have been enhanced with an alternating gray and white row background to improve readability.

<table>
<thead>
<tr>
<th>Name</th>
<th>Client ID</th>
<th>Client Name</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software of the Year - 25% off</td>
<td>864</td>
<td>Shieldware (Example)</td>
<td></td>
</tr>
<tr>
<td>Black Friday Promo - 50% off</td>
<td>864</td>
<td>Shieldware (Example)</td>
<td></td>
</tr>
<tr>
<td>Christmas Promo</td>
<td>864</td>
<td>Shieldware (Example)</td>
<td></td>
</tr>
<tr>
<td>Summer Special</td>
<td>864</td>
<td>Shieldware (Example)</td>
<td></td>
</tr>
<tr>
<td>First 50 Discount</td>
<td>864</td>
<td>Shieldware (Example)</td>
<td></td>
</tr>
<tr>
<td>Nakamura Promotion</td>
<td>864</td>
<td>Shieldware (Example)</td>
<td></td>
</tr>
<tr>
<td>Facebook Promo</td>
<td>864</td>
<td>Shieldware (Example)</td>
<td></td>
</tr>
<tr>
<td>Family License</td>
<td>864</td>
<td>Shieldware (Example)</td>
<td></td>
</tr>
<tr>
<td>Pro-Mobile Promotion</td>
<td>864</td>
<td>Shieldware (Example)</td>
<td></td>
</tr>
<tr>
<td>Product Anniversary - 30% off</td>
<td>864</td>
<td>Shieldware (Example)</td>
<td></td>
</tr>
<tr>
<td>Affiliates</td>
<td>864</td>
<td>Shieldware (Example)</td>
<td></td>
</tr>
</tbody>
</table>

The background can be turned on or off in the Setup, Options window.
Customer Subscription Agreement Viewable in Purchase Viewer

Clients may need to know the date and time when a customer agreed to the terms of a subscription. The Purchase Viewer now displays this information in the Subscription Billing tab for relevant subscriptions.

Minimum Number of Licenses in Applicable Price Configurator

With the powerful Applicable Price Configurator feature, cleverbridge offers clients the ability to set up price rules that control which prices can be used by customers according to factors such as region, language, and so on. Clients may need to also specify a price rule for applying a discount when a certain number of licenses in the cart has been reached. For example, a 25% discount is offered to customers when they buy three products.

Clients now have the option to specify a minimum number of licenses that must be in the shopping cart for the price rule to be applied. There is a new field for Minimum License Number.
Business Intelligence
The following enhancements were made to Business Intelligence.

New Purchase Order Dimension
Business Intelligence has been enhanced with a new dimension for reporting on purchase orders.

![Diagram of Business Intelligence enhancements](image)

New Business Category Dimension
Business Intelligence has been enhanced with a new dimension for reporting on business category, which allows clients to group or filter by B2B or B2C business.

Transactions that meet at least one of the following conditions are reported as B2B:

- Comes from a partner
- Customer is from the European Union (EU), excluding Germany, and has a VAT (Value-Added Tax) ID
- Customer is not from the EU, including Germany, and they have entered a company name

All other transactions are reported as B2C.
Channel Management
The following enhancements were made to channel management.

Partner Login on Quote Page
As of this release, partners can now log in during the quote process with a Partner Login button on the quote page. This feature makes it easier for partners to receive quotes directly without having to contact the client or cleverbridge.

If you are a registered partner, please use the following link to login:

[Partner login]

Affiliate Commission Possible for Reseller Purchases
Previously, paying affiliate commissions for reseller purchases wasn't possible with the cleverbridge platform. Even if an affiliate cookie was set in a customer’s browser, and the purchase was made by a registered reseller, the affiliate could not receive the commission. Now cleverbridge offers a configuration option on the client level for affiliates to be paid commissions for reseller purchases. The default behavior has not changed, and clients must request the new option.
Subscriptions
The following enhancements were made to subscriptions.

Change Billing Interval of Running Subscription
The Subscription API already supports many types of changes to running subscriptions without changing the Subscription ID; however, previously the Subscription API was unable to change a subscription’s billing interval from shorter to longer or vice versa. It is now possible to change the billing interval for single-item subscriptions, which will be effective at the time of the next billing date. For example, if a customer who has a monthly subscription receives an offer from the client to convert to an annual subscription, then the benefit is that the customer will pay less per month if they switch to an annually-billed (and often functionally identical) subscription.

Additional Search Parameters for GetSubscriptionsForCustomer
Previously, clients were unable to search for subscriptions by email. Using cleverbridge’s REST- and SOAP-based APIs, a client can now run an automated search for subscriptions of a given customer using the "GetSubscriptionsForCustomer" method, which includes the new parameter "Customer Email", which can be used to search for subscriptions. Either the subscription id, the customer id, or the customer email must be present.

Upgrade Subscription Item with Dynamic Initial Interval Length
Upgrading a subscription item to another product has only been allowed if interval lengths of both products were identical. Now this assumption is no longer valid for subscriptions with only one subscription item, because varying interval lengths are allowed. This is possible for both updates and alignments. A possible credit on the old product will be deducted from the price of the new product. There is now more flexibility with subscriptions; for example, if a test license is updated to a genuine license.
API/Integration
The following enhancements were made to API and integration functionality.

Namespace included in REST
In previous releases, cleverbridge did not provide a default namespace in responses. Now we offer the default namespace `xmlns="http://api.cleverbridge.com/datacontract"`. The advantage of having a default namespace is that it is more exact and explicit, as well as conforming with W3C standards.

ProcessCart API: Extra Parameters per Cart Item
Previously, it was only possible to receive extra parameters on the shopping cart level. Clients can now submit more information using extra parameters on the cart item level. The benefit to clients is that these new extra parameters will be received via Notifications, which will contain additional custom data, such as tracking and licensing information, for more detailed reporting.

ProcessCart API: PayPal Billing Agreement Supported
Previously, if a customer placed a subscription order using the PayPal billing agreement and, for the next rebilling, the client submitted a purchase for the same customer using cleverbridge’s ProcessCart API, the PayPal billing agreement was not supported. This required the customer to manually submit the payment. As of this release, the PayPal billing agreement is supported with ProcessCart API purchases.

ProcessCart API/Notifications: Payment Provider Errors
cleverbridge works with several Payment Providers in order to process all of the different payment types; however, the error messages that may be returned from all of these Payment Providers is inconsistent. In this release, cleverbridge added their own payment error codes to the ProcessCart API and Notifications, and cleverbridge maps all of the various Payment Provider error codes to cleverbridge-specific counterparts, so that error messages are now consistent, regardless of the Payment Provider. Some of these error messages include when a credit card has expired, the customer’s credit limit has been reached, or a credit card was rejected for fraud. This information is useful for clients, in that it provides greater data detail for metrics and business intelligence purposes.

The error codes that cleverbridge provides are outlined in the Reason for Decline section below.
Changes to XML-based Automated Notifications

cleverbridge enables you to automatically inform client systems for business events like a new purchase or a successful renewal. Most complete data is offered with XML-based approach. XML messages adhere to the cleverbridge API definition in form of an XSD. Our XML definition (XSD) has been extended to allow several enhancements.

You can already download the latest version of our XSD definitions using the following URLs:
http://xml.cleverbridge.com/3.500/cleverbridgeNotification.xsd
http://xml.cleverbridge.com/3.500/cleverbridgeTypes.xsd

cleverbridge also offers backward compatibility. Using the Commerce Assistant, clients can choose which version they would like to receive, so that they can upgrade to the latest version at their choosing.

Extended Payment Information

cleverbridge collects and securely stores customer credit card information. This is beneficial for clients, because it reduces their exposure risk, and it does not require them to adhere to strict and challenging standards like PCI DSS.

Nevertheless, some information about the credit card on file is potentially of interest to clients. In addition to the detailed payment type (e.g., MasterCard), cleverbridge now offers to include the last four digits of the respective credit card, as well as the card’s expiration date in the data feeds available after each transaction/subscription sign-up.

Using this information, especially in a Cloud/SaaS environment, a client can now implement advanced user portals or “MyAccounts” giving the customer clear and detail information about the payment method on file, as well as showing the customer an appropriate warning in case the card will expire soon. In the latter case, a client can now implement its own e-mail campaigns that request the customer to update the payment details using a pre-authenticated link.

Below is a sample XML with the new type of nodes in red:

```xml
<cbt:PaymentInfo>
  <cbt:Currency>US Dollar</cbt:Currency>
  <cbt:CurrencyId>USD</cbt:CurrencyId>
  <cbt:PaymentType>MasterCard</cbt:PaymentType>
  <cbt:PaymentTypeId>CCA_NAS</cbt:PaymentTypeId>
  <cbt:IsPurchaseOrder>false</cbt:IsPurchaseOrder>
  <cbt:CardLastFourDigits>1234</cbt:CardLastFourDigits>
  <cbt:CardExpirationDate>
    <cbt:Month>12</cbt:Month>
    <cbt:Year>2014</cbt:Year>
  </cbt:CardExpirationDate>
</cbt:PaymentInfo>
```

For more information, contact Client Management.

Provide Merchant of Record

This field refers to the business model with which cleverbridge is working for a given client. Usually, this field will only be showing “AG”, as cleverbridge AG is considered the merchant of record for the customer's transaction.

```
<cbt:MerchantOfRecord>AG</cbt:MerchantOfRecord>
```
Reason for Decline

In some cases, online payments cannot be processed. cleverbridge now offers additional information for the reason of a declined payment. Please note that depending on the issuing bank and the actual credit card processing partner of cleverbridge, this information is subject to availability.

Below is an extract of a sample XML:

```xml
<cbt:Error>
    <cbt:Code>PAY_CLE</cbt:Code>
    <cbt:Message>Credit card limit exceeded</cbt:Message>
</cbt:Error>
```

cleverbridge currently supports the following error codes:

<table>
<thead>
<tr>
<th>Message</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Card expired</td>
<td>PAY_CEX</td>
</tr>
<tr>
<td>Credit card limit exceeded</td>
<td>PAY_CLE</td>
</tr>
<tr>
<td>General decline</td>
<td>PAY_DEC</td>
</tr>
<tr>
<td>Rejected by issuing bank</td>
<td>PAY_REJ</td>
</tr>
<tr>
<td>Rejected for fraud</td>
<td>FRA_REJ</td>
</tr>
<tr>
<td>Security code validation failed</td>
<td>PAY_SCO</td>
</tr>
</tbody>
</table>

Brazilian States

cleverbridge now provides further details on the address of Brazilian customers, as you can receive the state in which the customer resides.

Below is the list of available states:

- BR_AC - Acre
- BR_AL - Alagoas
- BR_AM - Amazonas
- BR_AP - Amapá
- BR_BA - Bahia
- BR_CE - Ceará
- BR_DF - Distrito Federal do Brasil
- BR_ES - Espírito Santo
- BR_GO - Goiás
- BR_MA - Maranhão
- BR_MG - Minas Gerais
- BR_MS - Mato Grosso do Sul
- BR_MS - Mato Grosso
- BR_PA - Pará
- BR_PB - Paraíba
- BR_PE - Pernambuco
- BR_PI - Piauí
- BR_PR - Paraná
- BR_RJ - Rio de Janeiro
- BR_RN - Rio Grande do Norte
- BR_RO - Rondônia
- BR_RR - Roraima
- BR_RS - Rio Grande do Sul
- BR_SC - Santa Catarina
- BR_SE - Sergipe
- BR_SP - São Paulo
- BR_TO – Tocantins

**Locale in Contacts**
For some languages, like Portuguese (Brazil or Portugal), the two character ISO 639-1 notification is not sufficient to determine the exact language version that is applicable.

For this reason cleverbridge, extends the customer contact detail in the data notifications by a “Locale” token. Additionally, to the ISO 694-1 language code, it will include the best matching sub code, indicating the regional aspect of the language.

In this case, with the current set of available languages from which a customer can select, the locale can help a client to further determine the best matching language version when communicating with a customer.
<table>
<thead>
<tr>
<th>Message</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>zh-Hans</td>
<td>Chinese (Simplified)</td>
</tr>
<tr>
<td>zh-Hant</td>
<td>Chinese (Traditional)</td>
</tr>
<tr>
<td>pt-PT</td>
<td>Portuguese (Portugal)</td>
</tr>
<tr>
<td>pt-BR</td>
<td>Portuguese (Brazil)</td>
</tr>
</tbody>
</table>

For other languages, cleverbridge is currently not offering the customer the choice of a special version of the language (e.g., en-GB vs. en-US). Nevertheless, cleverbridge will include the best matching locale based on the combination of their selected language and country of origin.

Available locales are aligned with the Microsoft Windows Culture Info database.

Below is a sample XML:

```xml
<cbt:BillingContact>
  <cbt:Language>Portuguese</cbt:Language>
  <cbt:LanguageId>pt</cbt:LanguageId>
  <cbt:Locale>pt-BR</cbt:Locale>
  <cbt:Company>Cruz Cafe</cbt:Company>
  <cbt:Firstname>Jose</cbt:Firstname>
  <cbt:Lastname>Cruz</cbt:Lastname>
  <cbt:CompanyRomanized>Cruz Cafe</cbt:CompanyRomanized>
  <cbt:FirstnameRomanized>Jose</cbt:FirstnameRomanized>
  <cbt:LastnameRomanized>Cruz</cbt:LastnameRomanized>
  <cbt:Street1>Rua 1</cbt:Street1>
  <cbt:PostalCode>60601</cbt:PostalCode>
  <cbt:City>Sena Madureira</cbt:City>
  <cbt:State>Acre</cbt:State>
  <cbt:StateId>BR_AC</cbt:StateId>
  <cbt:Country>Brazil</cbt:Country>
  <cbt:CountryId>BR</cbt:CountryId>
  <cbt:Email>jose@cruz-cafe.br</cbt:Email>
</cbt:BillingContact>

New Notification Type CustomerProfileUpdateNotification

Especially in the case of subscription billing, it is very important to have updated customer data available. For subscriptions, cleverbridge monitors the validity of data and pro-actively informs respective customers to let them update.

When a customer updates his or her profile, cleverbridge now offers to send out “CustomerProfileUpdateNotification” to provide the updated payment data.

In order to match the notification, you must import the “InternalCustomer” value that cleverbridge provides in the purchase related notifications; for example, PaidOrderNotification.
The “InternalCustomer” value is either submitted to cleverbridge via a URL parameter or predefined in an API call; otherwise, cleverbridge will calculate a random string. Please refer to the 3.3 Release Notes for further details.

</cbt:InternalCustomer>YkOygUktpvPxTnP9IdVoxrW3zpJ261</cbt:InternalCustomer>

This feature is very interesting for all SaaS clients.

Note: This notification type is currently only supported in XML. CSV and TXT are and will not be supported.