AddonSoftware® Amps Up Productivity

Plug Into New Electronic Processes

by Christine Hawkins

Introduction

As BASIS' customizable ERP business solution, AddonSoftware sits atop the technology stack, in a perfect position to benefit from improvements in the underlying BBj language and Barista Application Framework, while also continuing to extend and enhance its application features.
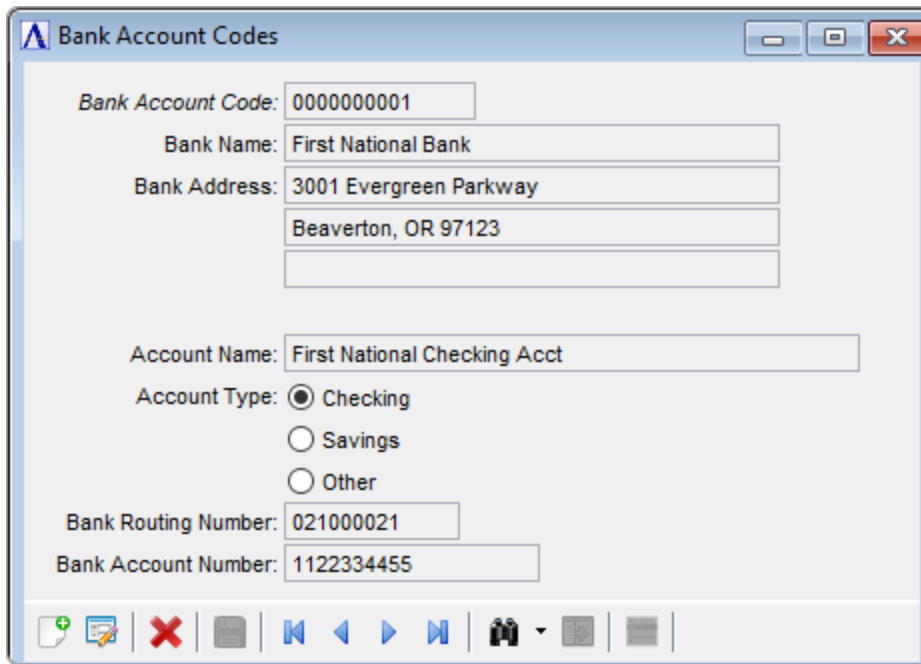
Recent versions implement electronic processing in a number of areas to add speed, convenience, reliability, and security to daily operations to deliver on AddonSoftware's goal of enhancing the productivity of your personnel. Read on for more!

Accounts Payable

Streamline your payables processing with the option to pay your vendors electronically. This Automated Clearing House (ACH) enhancement includes non-negotiable check images of ACH payments, an ACH Payment Report to email to vendors, and the creation of a text file with all necessary National Automated Clearing House Association (NACHA) information for transmission to the financial institution.

ACH Setup

Setting up for ACH processing is easy. Begin by creating one or more Bank Account records that contain the account and routing numbers (see **Figure 1**).

Figure 1: Bank Account Codes

Next, reference the bank account you want to use for ACH processing in the AP Parameters. Set the "Total Record Required" flag if your bank requires a total record in the NACHA file, and supply a firm name that matches what your bank has on file. Finally, specify the directories where the NACHA export file and the ACH Payment Report files should be saved (see **Figure 2**).

Figure 2: AP Parameters

Finally, call up the APR_CHECKS document record in Addon's Report Control Documents form (**Figure 3**) and fill in the email account for sending email via the Document Queue, a logo file if applicable, and the default subject and message. This document information is used for emailing/faxing the ACH Payment Report to designated vendors.

Figure 3: Report Control

The remaining setup is done on a vendor-by-vendor basis. For each vendor that wants an email copy of the ACH Payment Report, set up a Report Control Recipients record for the APR_CHECKS document, as shown in **Figure 4**.
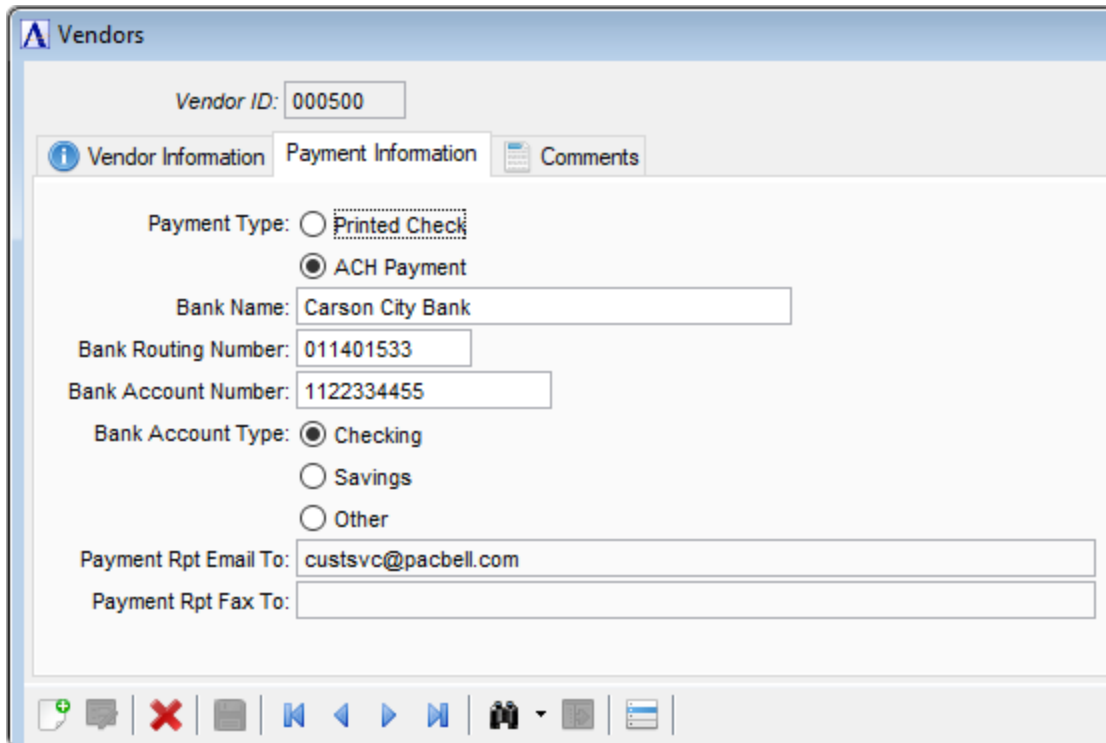
Figure 4: Report Control Recipients

Fill in the Payment Information tab on the Vendor form with the vendor's banking information, specifying "ACH Payment" as the Payment Type, as shown in **Figure 5**.

Figure 5: Vendors - Payment Information

Payment Cycle

The payment processing cycle begins by selecting invoices for payment. The Payment Selection grid includes a new column to identify ACH vendors and also has a new filter that allows you to view invoices for just ACH vendors, paper check vendors, or both. These new features are highlighted in **Figure 6** below.

Figure 6: Payment Selection Entry

The Payment Selection Report is also enhanced to flag ACH vendors and provide a breakdown of total payments by ACH and paper checks. This is highlighted in **Figure 7**.

Figure 7: Payment Selection Report

The Check Printing process separates the checks to be printed/mailed from the non-negotiable check images for ACH payments (see **Figure 8**). This makes it easy to review each document for accuracy and doesn't waste paper printing non-negotiable checks.

Figure 8: Check Printing

The check register/update process creates the ACH Payment Reports, puts the reports in the Document Queue for designated vendors (**Figure 9**), and finally creates the NACHA text file for transmission to the bank (**Figure 10**).

Figure 9: ACH Payment Report

Figure 10: NACHA Export File

That's it! Within a single payment cycle, you can seamlessly integrate normal check processing with ACH payments – a real convenience for you and your vendors.

Accounts Receivable

Add flexibility, security, and convenience to Accounts Receivable with the new credit card interface. Credit card payments for Addon customer invoices can be accepted either by AR staff

via a new option on the Customer form, or made *directly online* by authorized customer-users through a web-browser Customer Payment Portal. Approved transactions automatically generate Cash Receipts entries, and all responses from third-party secure payment gateways, whether approved or declined, are saved for historical inquiry.
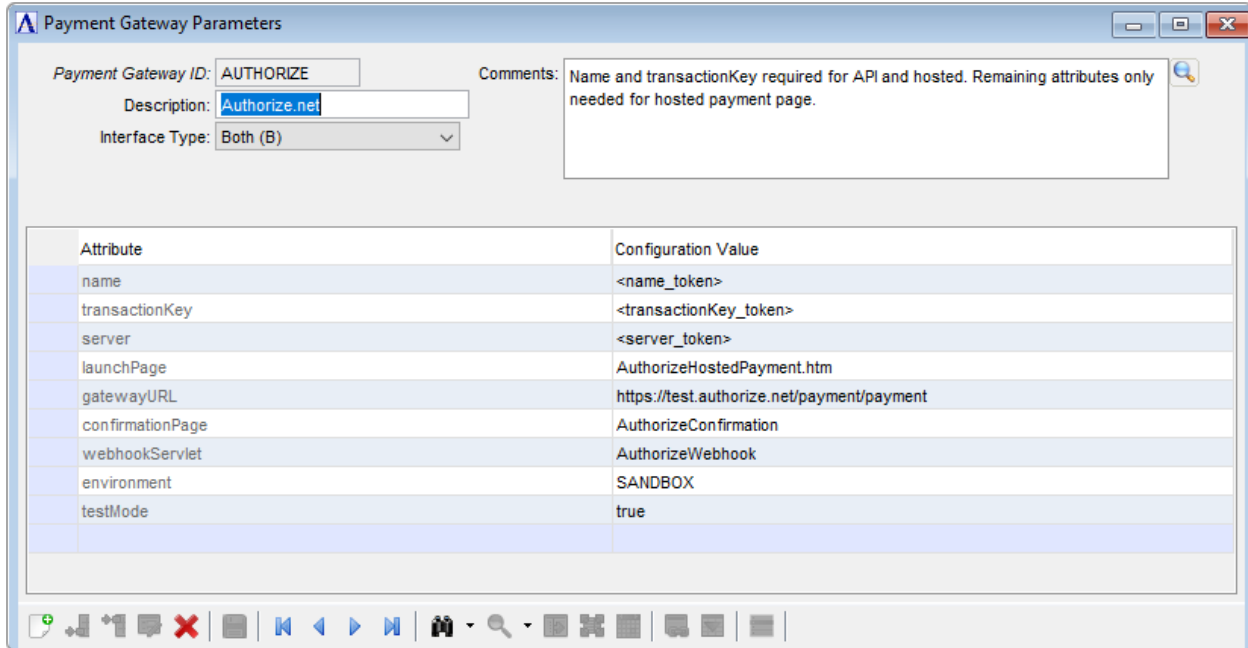
The Basics

- AR Staff has two interface options for processing a credit card payment from a customer. The Cash Receipt code used for the transaction determines which mechanism is employed.
    - J2Pay is an open-source, multi-gateway payment processing library for Java that is included with Addon. With J2Pay, AR staff collects data for credit card payments in a local Addon form, then the API sends the credit card data directly to the designated gateway and an immediate response is received. In accordance with PCI guidelines, none of the credit card data is stored locally.
    - Rather than collecting sensitive data in a local form, AR staff can also access a secure hosted payment page from two other payment gateways; Authorize.net or PayFlow Pro. With the hosted pages, users are redirected to the gateway's secure site for entering credit card data, reducing the PCI burden. Responses are transmitted back to the server via PayFlow Pro's Silent Post or an Authorize.net webhook.
- Authorized customer-users can register and pay their own invoices quickly and conveniently using a URL provided as a link in emailed invoices, or printed at the bottom of conventionally printed and mailed invoices. Online customer payments use only the PayFlow Pro or Authorize.net hosted pages.

The Gory Details

Setup

Whether using J2Pay or a hosted page, you will need a merchant account that interfaces with one of the supported payment gateways, and an account with the gateway provider. If using hosted pages, you'll also have some configuration to do with PayFlow Pro or Authorize.net to configure the hosted pages and return responses. The return responses require that your server be accessible on the internet with a public DNS name and that you have an SSL certificate configured on ports 443 and 8443.

Within Addon, the configuration begins by entering the credentials for your gateway account in the Payment Gateway Parameters form, shown in **Figure 11**. Replace <_token> entries with your login credentials and server name (matching the server name on the SSL certificate).
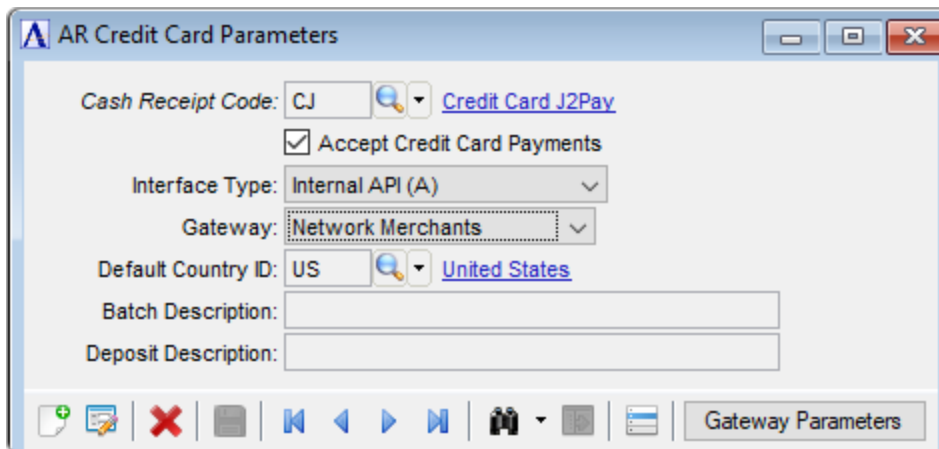
Figure 11: Payment Gateway Parameters

Next, set up one or more cash receipt codes to use for credit card payments, and reference those codes in the corresponding AR Credit Card Parameters (**Figure 12**) or Online Customer Credit Card Parameters (**Figure 13**) forms.

Figure 12: AR Credit Card Parameters
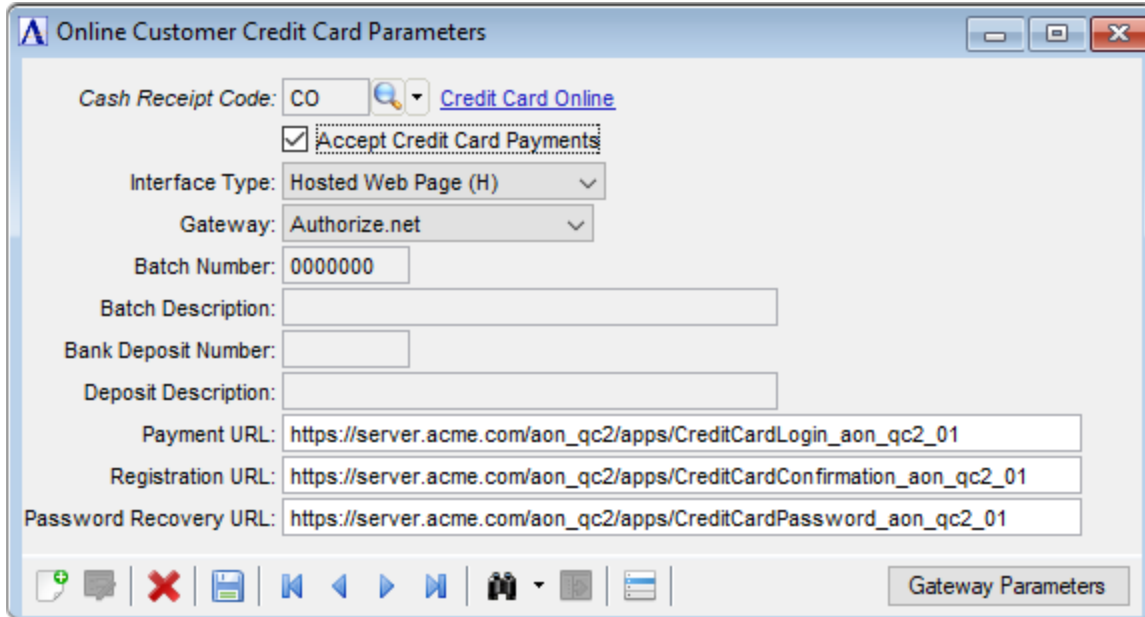
Figure 13: Online Customer Credit Card Parameters

For the J2Pay interface, no other configuration is needed. To use hosted pages for AR staff or online customer payments, there's a bit more to do. You'll need a web context to handle the incoming responses from PayFlow Pro and/or Authorize.net, as well as online payment registration/logins. Fortunately, when you launch a new instance of Addon, the context is automatically created for you, so all you need to do is access it in Enterprise Manager (EM) and click the "Start" button (see **Figures 14-15**).
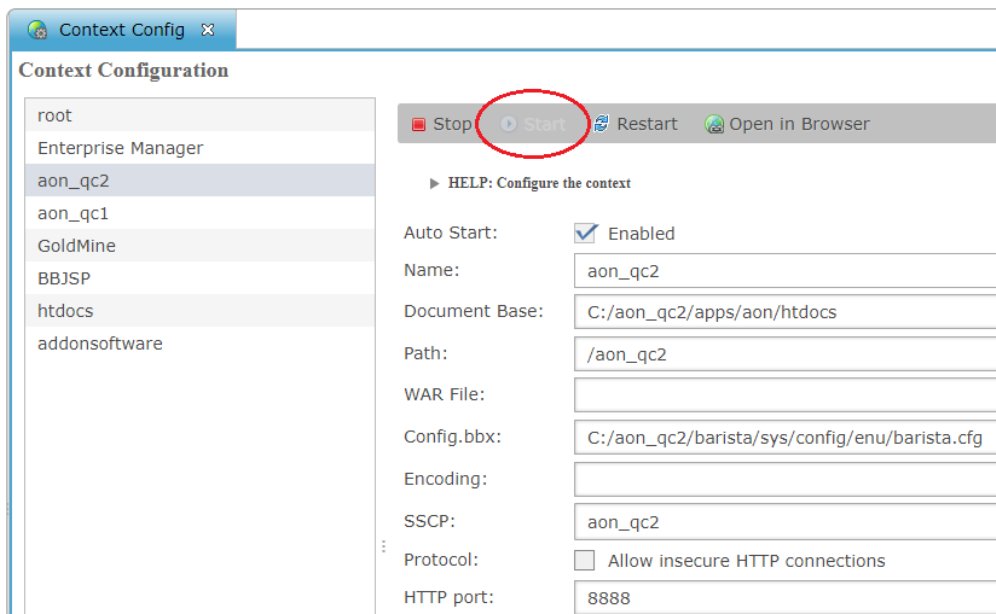
Figure 14: Enterprise Manager - Context Configuration

Figure 15: Enterprise Manager - Context Servlets

That's all there is to do for AR staff payments using hosted pages. To finish setting up online customer payments, you need to create Web Applications in EM to facilitate customer-user login/registration, confirmation by an authorizing agent, and password recovery. (**Figure 16** shows the login configuration). The Online Customer Credit Card Parameters form has a handy "Configure Web App" option (**Figure 17**) to create these for you and return the URLs to the form. See Appendix B in the Addon Accounts Receivable documentation for details.

CreditCardLogin_aon_qc2_01 ✕

* Desktop App creation property

Optionally Filter List of Properties

▼ General

Application Name:	CreditCardLogin_aon_qc2_01
Program File:	sys/prog/bax_launch_task.bbj
Config File:	C:/aon_qc2/barista/sys/config/enu/barista.cfg
Working Directory:	C:/aon_qc2/barista/
Interpreter User (-u):	
Host Override:	
Classpath:	aon_qc2
Program Arguments:	-yA
	-tDDM_TABLES
	-aC:\aon_qc2\apps\aon\web\CCLoginManager.aon -f01
*Shortcut Name:	
*Shortcut Description:	
*Shortcut Image:	
*Load Image:	
Quiet:	✔
Web App (BUI) Enabled:	✔
Desktop App Enabled:	

Figure 16: Configuration in EM

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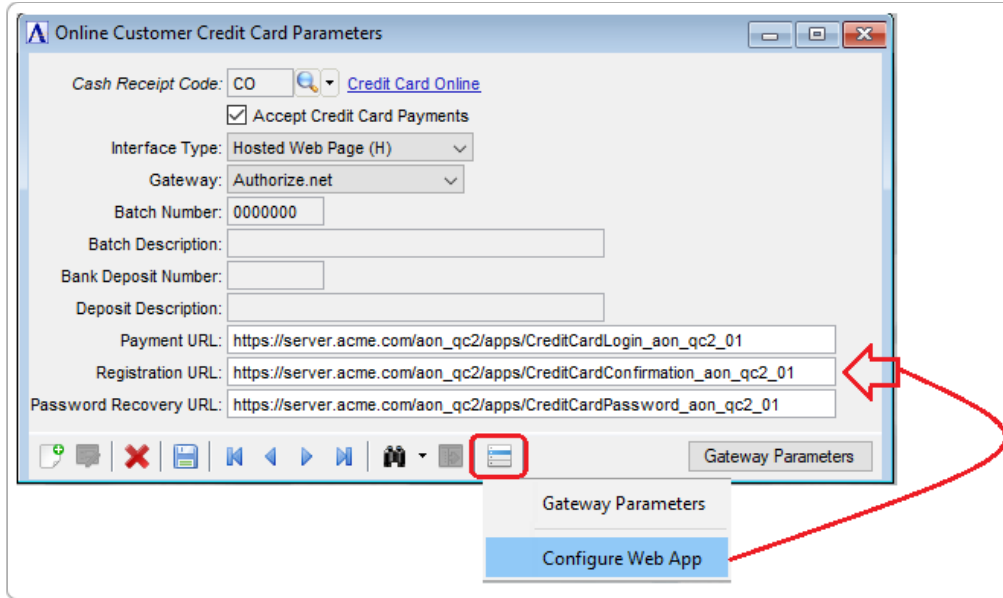
Figure 17: Online Customer Credit Card Parameters - Configure Web App

Payments by AR Staff

Now let's take some payments. When a customer calls and would like to pay one or more invoices using a credit card, AR staff can access the new Credit Card Payments form via the Customer master. How the form behaves in terms of data collection depends on the interface type (J2Pay API or hosted page) as specified by the cash receipts code.

If using the J2Pay API, AR staff collects the necessary credit card and billing address information locally, then selects which invoices and what amounts are being paid. Because this form is collecting sensitive information, it will automatically close if left idle for more than 60 seconds. Clicking the green "run process" arrow brings up a confirmation, and given the go-ahead, sends off the purchase transaction (a.k.a. authorize/capture in credit card lingo). The returned response gets written to history, a cash receipt is created for approved transactions, and the user is presented with a final status message (**Figure 18**).

Figure 18: Credit Card Payment - Transaction Approved

When using one of the hosted pages, AR staff won't collect any billing information in the Credit Card Payments form, so those fields are disabled. Instead, once the desired invoices and payment amounts are entered and confirmed, the user is taken to the gateway's secure hosted page using a BBjHtmlView control, and all credit card information is recorded directly on the payment gateway server.

Figure 19: Order Summary - Hosted Page

With hosted pages, you don't have a direct two-way connection to the gateway as you do with J2Pay. Instead, the gateway provider detects payments coming in through their hosted pages, and sends responses independently to a URL that you've supplied. So when the hosted payment page is dismissed, the Credit Card Payments form waits to be notified about the incoming response, which typically arrives within a few seconds. The remaining processing is the same – the response is recorded in history and a cash receipt entry is created.

Regardless of the interface type, AR staff can enter comments that flow into cash receipts entry for any payment. The Credit Card Payments form can also be used to collect a payment applied on an account, such as a deposit.

Online Customer Payments

The Customer Payment Portal gives your customers a quick, convenient, and secure way to pay invoices online instead of mailing in a check or calling the AR department.

Setup

Any customer for which you want to accept online payments must have the "Allow Online Payments?" box checked in the Customer form, and a valid email address for an authorizing agent in the "Online Pay Auth Email" field, as shown in **Figure 20**.

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Figure 20: Customers

Customer-user Registration

A customer-user who wants to pay online starts by simply clicking the link in an emailed invoice (**Figure 21**), or typing the URL shown on the bottom of a paper invoice into a browser, and then clicking the Register button (**Figure 22**).

Figure 21: Emailed Invoice
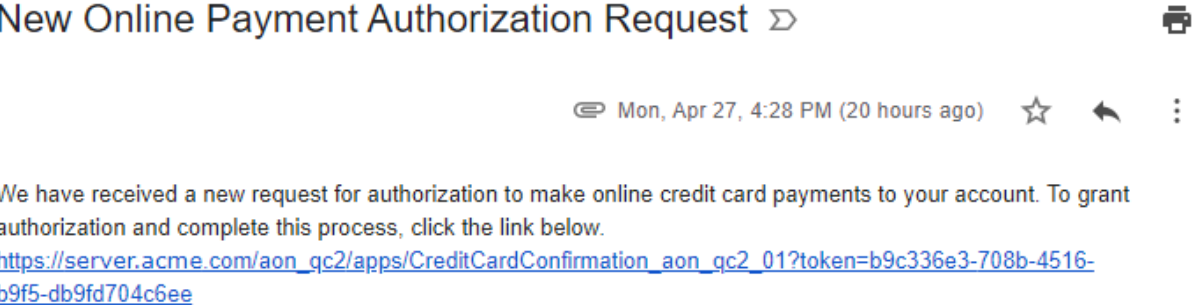
Figure 22: Customer Portal - New User Registration

When the registration is submitted, the customer's authorizing agent receives a notification email with a link to confirm the new user registration request (**Figure 23**).

Figure 23: New Online Payment Authorization Request

Once confirmed, the customer-user receives an email containing an initial password and the link to log in (**Figure 24**). The user will be prompted to change this password on the first login.
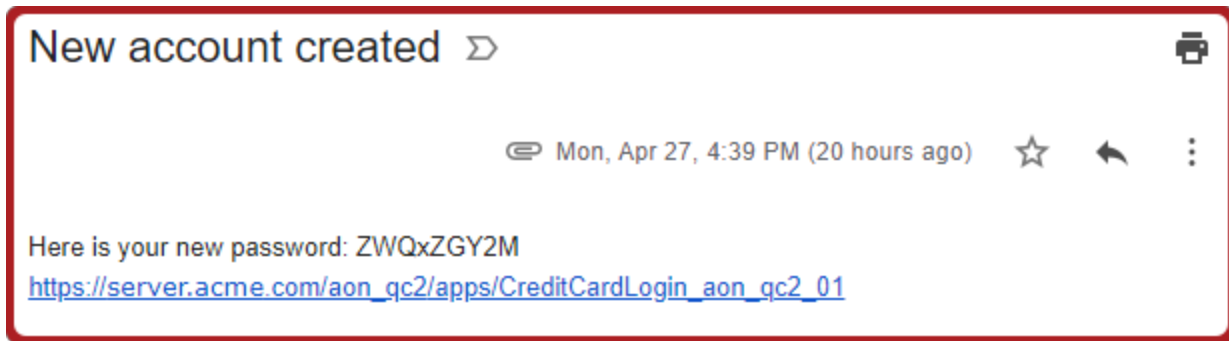
Figure 24: New Account Created

Once logged in, customer-users can select invoices to pay and edit payment amounts in the web-browser Customer Online Credit Card Payment form (**Figure 25**). After confirming the total payment amount, information about the customer, invoices, and amounts is stored in a namespace, and the user is redirected to the hosted page. When they have completed the payment, they close the browser and/or tab and go on about their business.

Figure 25: Customer Online Credit Card Payment

Meanwhile, back on the Addon server, the response triggered by the customer-user's payment will arrive, and the servlet configured in the web context will retrieve the necessary information from the namespace, write the response history, and create the cash receipt entry (**Figure 26**). Since these transactions are happening in the background, it may be possible that a credit card payment will be successfully processed, but for some reason, the Authorize.net webhook or PayPay Silent Post servlets cannot update the response history and/or create the cash receipt. The servlets will attempt to trap and log problems and email the log entries to designated Addon users.

Figure 26: Cash Receipts Entry

Responses

Transaction responses can be viewed at any time for a specific customer as an option on the Customer form, or by launching Credit Card Response Messages from the menu. This header/detail form summarizes transaction details on the main tab (**Figure 27**), and also carries the full response text on its own tab (**Figure 28**). The invoice(s) and amounts associated with the transaction are listed in the detail grid.

Figure 27: Credit Card Response Messages - Transaction Summary

Figure 28: Credit Card Response Messages - Full Response

These credit card payment enhancements have it all – convenience, speed, and security for both you and your customers.

Sales Order Processing

Addon's Shipment Tracking enhancement enables your team to know the location and status of outbound packages. The new Shipment Tracking table records tracking numbers, weight, freight costs, etc., and can be manually maintained or automatically populated if interfacing with shipping software.

Setup

Setup begins by building a trio of tables (shown in **Figure 29**) to maintain shipping company information.

- Ship Via codes are user-defined and contain optional fields to reference the corresponding Carrier Service Code and Standard Carrier Alpha Code (SCAC).
- The Carrier Service Codes are defined by the carriers, and this table also contains a field where you can enter the carrier's URL for launching their tracking website.
- The most widely used Standard Carrier Alpha Codes (SCAC) ship with Addon (see https://en.wikipedia.org/wiki/Standard_Carrier_Alpha_Code). Your reseller can update your SCAC table from this tab-separated list, or you can maintain them individually as desired.

Figure 29: Shipping Information Tables

For each customer, the Customer master and Customer Ship-to Address forms (see **Figure 30**) carry the preferred Ship Via Code for the customer/address, along with the customer's 3rd-Party Shipping ID (i.e., how the carrier identifies that customer), and a Shipping Email Address to use in the event of any shipping issues.

Figure 30: Customers

To set up an interface with shipping software, your reseller will typically need to collaborate with the shipper's interface technician. Run the Create Shipment Tracking View utility to create a SQL View that allows the shipping software to pull selected order information from the Addon database (your reseller can change the view in Enterprise Manager as needed). With that information, the shipping software can then push the corresponding tracking numbers, freight cost, etc., back to the Shipment Tracking table.

Order/Invoice Processing

During ordering, the shipping data is populated according to the selected customer/ship-to record, but can be changed if needed (see **Figure 31**). The Ship Via Code and 3rd-party shipping ID are included on the Picking List.

Figure 31: Order Entry - Shipping Data

If a shipping interface is in place, then once the order is pulled up in the shipping system and finalized, the shipping software writes back tracking numbers, charges, etc. to the Shipment Tracking table. If no interface is set up, or if shipping with a different carrier, the shipping information can also be entered manually.

Once the tracking data is in place, it can be viewed and maintained from the Shipment Tracking form, accessible directly from the Sales Order Processing menu, and also from the Order and Invoice Entry forms. From the Shipment Tracking form, select a detail line and click the Shipment Tracking button (highlighted in **Figure 32**) to go directly to the shipper's tracking site to get up-to-date information about the package.

Figure 32: Shipment Tracking Maintenance

Finally, when invoicing an order, the freight amount automatically populates from the Shipment Tracking table, if available, saving time and reducing the possibility of input errors (**Figure 33**).

Figure 33: Invoice Entry - Freight Amount

Addon's Shipment Tracking enhancement, combined with an interface to your shippers, quickly and reliably updates information for improved accuracy and customer service.

Summary

BASIS' AddonSoftware ERP solution continues to receive the benefits of the ever-expanding features of its core BBj language and the Barista Application Framework. The solution is uniquely positioned in the market where BASIS controls both the development of the core components **and** its implementation in a modern, full-featured ERP system. Such is the case with the three new features highlighted in this article.

Pay Vendors Electronically

AddonSoftware's payables processing receives a boost in efficiency with the option to pay vendors electronically as well as preserving business control using stored check images and integrated reporting. Paperless check images can be quickly searched and retrieved electronically eliminating the time required to manually search storage areas for historical receipts.

Secure Online and Back Office Electronic Credit Card Processing

The new credit card interface allows customers to pay their invoices online 24x7 improving customer convenience and eliminating some of the processing duties of the AR staff. This web-browser payment portal generates Cash Receipt entries automatically, saving still more processing steps. Control is retained through payment reporting for both approved and declined transactions that can be queried. In addition, AR staff can securely process customer credit card payments.

Shipment Tracking

Lastly, AddonSoftware's shipment tracking enhancement improves customer satisfaction and brings productivity improvements to Sales Order Processing with real-time status of the location and status of outbound shipments. This flexible enhancement can be interfaced with third-party shipping software and provides quick access to weights, shipping costs, tracking numbers and more.

Explore the AddonSoftware ERP solution for yourself and amp up *your* productivity.