EMC CAPTIVA + APXCELERATOR ACCOUNTS PAYABLE SOLUTION
State-of-the-art accounts payable automation solution

ABSTRACT
This white paper explains how to achieve state-of-the-art accounts payable automation, optimize your accounts payable processes, and reduce time to pay with EMC Captiva + ApxCelerator Accounts Payable Solution.

August, 2014
TABLE OF CONTENTS

EXECUTIVE SUMMARY ................................................................. 4
STRENGTHS OF THE ACCOUNTS PAYABLE SOLUTION .................. 4
PROCESSES .................................................................................. 4

SUMMARY OF APXCELERATOR FUNCTIONAL CAPABILITIES ........... 5
  Image Capture System – EMC Captiva Invoice Capture .................. 5
  Business Process Automation ......................................................... 6
  Enterprise ERP Integration ............................................................ 8
  Metrics Collection, Operations Dashboard and History Reporting ...... 9

EMC FOUNDATION ........................................................................ 10
  Image Capture Subsystem ............................................................ 10
  Archive and Business Process ....................................................... 10
  Application Server: xCP application. ............................................. 10
EXECUTIVE SUMMARY
This document is designed to provide a high level summary of the features of EMC’s Captiva Invoice Capture + ApxCelerator Accounts Payable Solution and provides some compatibility information. The functionally rich and proven accounts payable automation solution is built on EMC Captiva and Documentum xCP.

STRENGTHS OF THE ACCOUNTS PAYABLE SOLUTION
• Built on a highly scalable and stable capture and enterprise content management platform from EMC, whose viability and stability are unquestioned in the Enterprise Content Management (ECM) systems landscape
• Accelerates accounts payable processes and enhances the user experience utilizing established enterprise level accounts payable business processes for validation and exception handling, PO matching, and non-PO GL coding and approval
• Offers rich out-of-the-box accounts payable capabilities, is highly configurable, and provides comprehensive content and transaction management capabilities allowing risk free expansion and easy integration with any enterprise system
• Has proven ability to integrate with multiple ERP systems (Oracle, SAP, PeopleSoft, JDE, and others) utilizing a flexible ERP integration approach
• Highly functional right out of the box, and is technically scalable to meet any company’s domestic and global accounts payable process requirements
• Supports complete dashboard and reporting capabilities -- giving valuable insight into all aspects of accounts payable processes including detailed invoice tracking, process exception/hold bottlenecks, and payment cycle time metrics
• Optionally includes an integrated Supplier Portal offering vendor self-service for invoice creation and payment status inquiries – allows supplier/vendor invoice status inquiry without having to call/email an accounts payable specialist. Vendor inquiries typically disrupt the accounts payable workday and lead to low productivity

PROCESSES
APxCelerator consists of four primary process flows:
• Image capture (Captiva): the focus of this step is strictly on image and index value quality: make sure it matches what is on the invoice. APx does not expect the mail room or scan room operators to understand and fix accounts payable exceptions
• Invoice Validation and Exception Processing (Documentum xCP): the focus of this step is on accounts payable exceptions. The step proceeds by finding them, logging them to the reporting database, and feeding them to an accounts payable specialist to resolve. Determining and resolving exceptions is perhaps the most powerful function in the solution. (Note: If EMC Captiva Invoice Capture is sold only as a capture component offering, then the invoice validation process is handled within EMC Captiva Invoice Capture. Otherwise, the invoice validation and exception processing offered by the end-to-end solution with EMC Captiva Invoice Capture + ApxCelerator is handled via Documentum xCP). Example exceptions are:
  o Invalid PO number
  o Invalid or missing vendor information
  o Duplicate invoice
  o Missing receiver data when we need to perform a 3-way match
  o Missing key invoice data (total, date, etc.)
  o Other (APx includes over 15 pre-defined exception checks and corresponding exception queues)
• PO Matching (Documentum xCP): the focus of this step is matching invoice detail lines to purchase order detail lines (2-way match) or to purchase order detail and receiver detail (3-way match). The solution offers an automatic line matching (ALM) process that will attempt to match all lines on an invoice automatically. If one or more lines are not matched by ALM, the invoice will route to our manual line matcher queue (MLM) where an accounts payable specialist may complete the matching process
• Invoice Approval Routing (Documentum xCP): the focus of this step is to present invoices that are not pre-approved to one or more approvers so that they may a) approve the invoice for payment and/or b) provide general ledger codes for cost accounting the goods or services received (G/L coding). The solution offers a robust routing engine that can determine a hierarchy of
PROPOSAL

approvers based on any invoice metadata (i.e. vendor ID or ship-to postal code.) G/L coding is supported by a connection to the client’s ERP chart of accounts. Using this, only valid combinations of G/L segments may be selected. The solution will also use a type-ahead feature to help an approver select a valid code to enter.

SUMMARY OF APXCELERATOR FUNCTIONAL CAPABILITIES

This section describes key business functions that are available as part of the standard accounts payable solution delivery.

IMAGE CAPTURE SYSTEM – EMC CAPTIVA INVOICE CAPTURE

The image capture component of the Capture solution is provided by EMC Captiva Invoice Capture. This includes the creation of custom document recognition templates and installation of a prescribed set of functional workstations and capture servers. Advanced document recognition capabilities are also enabled by creating custom invoice templates for the "Client".

- The Image Capture will attempt to determine the following header, footer, and detail line information automatically from single and multi-page invoices or be obtained from manual input.
- Invoice header / footer information includes:
  - Priority
  - Document Type
  - Business Unit
- Currency
- Invoice Number
- Invoice Date
- Vendor Name
- Vendor Postal Code/Remit Zip
- Net/Subtotal Amount
- Packing Slip
- Tax Amount
- Shipping/Freight Amount
- Discount Amount
- Misc Amount
- Total Amount

- Invoice Detail lines include:
  - Item/Product Code
  - Item/Product Description
  - Item UOM
  - Quantity
  - Unit Price
  - Extended Price
  - Tax Amount

- Invoice Information derived by the solution are:
  - Scan Date
  - Ingestion Source (Scan, E-mail, Fax, etc.)
  - Process/Workflow Status

Note: The data elements outlined above are a subset sampling of data the solution derives.

The success rate of the automatic capture of invoice data for templated and non-templated invoices depends on the quality of the invoice and the format/layout of the data on the invoice. The solution also supports entering header/footer data manually. For line detail, data can be extracted using EMC Table Extraction Mode and detailed lines can be created manually at Validation.

The APxCelerator Image Capture System enables advanced document classification of invoice (PO, Non-PO) and non-invoice documents. Highest reliability is achieved by using APxCelerator standard bar-coded separator sheets for the 3 pre-defined non-invoice document types supported by the APxCelerator:
- Misc. Correspondence
- Statements
- Other

BUSINESS PROCESS AUTOMATION

The solution provides business process automation (BPM) of accounts payable processes. The accounts payable solution automation consists of four (4) related process workflows:

Other Correspondences

Non-Invoice documents are routed to a queue where accounts payable specialists may view these 3 types of documents: Statements, Miscellaneous accounts payable correspondence, and other accounts payable documents. In this queue, accounts payable specialists may add index data manually, and documents are then stored in the content management system for future use. The solution supports the following exception queue for manual resolution purposes.
• Review Non-Invoice Documents

**Accounts Payable Document Validation**

All invoice documents are routed through a validation process where invoice data is validated according to business logic and pre-defined data elements from the ERP system. Any invoices with missing or inconsistent data are routed to data exception queues for review and correction as required by an accounts payable specialist. The solution supports the following exception queues for manual resolution purposes.

- Missing Invoice Number/Date
- Invalid PO
- Missing PO
- Vendor Name Mismatch
- PO Match Type Selection (2/3 way)
- Invalid Vendor
- Missing Vendor
- Invalid Vendor Pay Site
- Duplicate Invoice
- Evaluated Receipt Settlement (ERS)
- Missing Packing Slip
- Invalid Packing Slip
- Invalid PO Invoice Data
- Invalid Non-PO Invoice Data
- Validation Escalation
- Invoice Hold

Once invoices are validated and exceptions are corrected the documents are dispatched to one of the standard business process flows based on the whether the document is, as follows:

**Non-Purchase Order Invoice**

Non-purchase order-based invoices are evaluated to identify if a pre-determined approval route and table of authority combination has been configured in the solution and whether pre-approved Header/Footer / Subtotal GL coding is required. The solution supports the following exception queues for manual processing and resolution purposes.

- Header/Footer/Subtotal GL Coding
- No Pre-Determined Approval Route (provides optional ad-hoc route creation capability)
- Non-purchase order Escalation

The following capabilities are supported for the solution’s Non-purchase order routing

- Each invoice may be automatically routed based on configuring the route/table of authorities combination to a given index data element value that is associated with an invoice.
- Several routes may be defined, with priority. If the highest priority route is not available, the next will be attempted.
- If no approval route can be automatically determined, an operator may assign a route manually, or an optional ad-hoc manual route creation capability is available.
- Approval routing may be configured to key on the metadata (i.e. Department, Cost Center, Project etc.) obtained as one of the segments during Header/Footer/Subtotal GL coding.

Once an appropriate route/table of authority combination has been determined the invoice is presented to the appropriate individual(s) for approval and general ledger coding of the subtotal or of the individual detail lines. The solution supports the following for manual processing and approval purposes and exception processing.
• Approve/Reject and GL Coding
• Automatic approval and coding with optional tolerance checking by vendor.
• Approve/Reject via Email
• Non-purchase order Escalation

General Ledger Account Coding – GL Coding of the header/footer charges, subtotal, or line items can be distributed to multiple GL accounts. The solution supports up to 9 sub-levels/segments of GL accounts.

**Purchase Order Invoice**

Purchase order invoices with detail lines are first processed by the solution’s Automatic Line Matcher engine for 2 or 3 way matching depending on the Purchase order type. Invoices that do not have detail lines or didn’t completely match automatically based on configurable thresholds are then routed to the solution Manual Line Matcher queue.

**Purchase Order Invoice Enterprise Automatic Line Matcher**

The Purchase Order Invoice Automatic Line Matcher attempts to match line item data from the invoice with Purchase order line item data in the ERP. The Automatic Line Matcher can perform checks at one of the following levels:

• Two-way: Invoice Lines to PO Lines
• Three way: Invoice to PO/Receipt Lines

The Purchase Order Invoice Enterprise Automatic Line Matcher will attempt to automatically match all line items on the invoice. If this automated process fails to confidently match all the items the invoice is sent to the Manual Line Matcher (MLM) for review by an accounts payable specialist. This confidence check is performed based on a configurable minimum confidence setting.

**Purchase Order Invoice Enterprise Manual Line Matcher**

The Purchase Order Invoice Enterprise Manual Line Matcher is a step in the solution workflow that allows an accounts payable specialist to manually match line items from the invoice to line items associated with the Purchase order or purchase order/receipt. The Manual Line Matcher has the following capabilities:

• Color-coding of automatically matched Invoice and Purchase Order line items according to auto-match confidence level.
• Show/Hide previously matched line items to provide a simplified user interface
• Editing of Invoice Line data values.
• Replacement of a designated invoice line with line data copied from the Purchase Order.
• Association of additional POs if the invoice is a multi-PO invoice.

The solution supports the following exception queues associated with Manual Line Matcher for manual processing and resolution purposes.

• PO Price Exceptions
• PO Qty Exceptions
• PO Approval by Buyer
• PO Escalation
• Wait for Receiver
• Key From Image

**ENTERPRISE ERP INTEGRATION**

The accounts payable solution is delivered to integrate with the client’s choice of one (1) ERP system. The accounts payable solution may be optionally configured to connect/validate with multiple ERP systems.

As an invoice moves through the solution process, the system validates data with the ERP. Once and invoice has been fully validated, approved and/or matched, the invoice is exported to a standard format (XML, EDI810, Data Table, API, Web Service, etc.) for further processing and induction by an ERP controlled process.

For validation purposes, the solution provides standard pre-defined data elements to be accessed for each of the following ERP/LOB data entities:
- Vendor Master data view
- Purchase Order Master data view
- Purchase Order Detail Line View
- Purchase Order Receipt Transaction data view
- Processed Invoice data view (used for duplicate invoice check)
- Invoice Remittance data view (use for payment status)
- GL Code View(s) supporting up to 6 Segments
- Tax Code View
- Routing /Table of authority view

Note: The accounts payable solution is delivered with the ability to leverage a built in/locally maintained routing/table of authority or table of authority from the “Client” enterprise application.

Invoice data is exported from the solution to a standard, formatted XML transaction file. The solution standard formatted XML transaction file contains the pre-defined set of data elements. Viewing of invoices and related documents from within the Client’s enterprise applications can be accomplished via the Client’s utilization of EMC’s APxCelerator Web Services.

**METRICS COLLECTION, OPERATIONS DASHBOARD AND HISTORY REPORTING**

The accounts payable solution includes a collection of statistics and metrics associated with all documents and transactions processed in the system. Key information about each invoice and activity is collected at each step in the process. The solution statistics data is stored in a highly efficient data mart schema that can be utilized for real-time or historical reporting using key data elements such as vendor data, purchase order data, invoice data, queue, and user.

The solution statistics and metrics information is maintained in a relational database which is open to reading by the customer. The solution statistics database structure is fully documented, and additional reports and queries can readily be created by “Client” using any preferred database reporting/query tool.

The accounts payable solution provides a baseline set of searches and Business Activity Monitor (BAM) reports. The following are the categories and standard reports provided with the APxCelerator solution.

- **DASHBOARD: IN PROCESS MONITORING**
  - Open Tasks by Queue
  - Open Tasks by Vendor
  - Invoices In Process Longer Than N Days

- **DASHBOARD: HISTORICAL PROCESS MONITORING**
  - Historic Queue Count
  - Cycle Time by Queue
  - Cycle Time by Queue (last 12 months)

- **DASHBOARD: ACCRUALS**
  - Accrual Summary by Vendor
  - Accrual Summary by Queue
  - Accrual Detail

- **DASHBOARD: PROCESSOR PERFORMANCE**
  - Tasks Processed Count by Processor
  - Tasks Processed Count by Processor (current month)

- **DASHBOARD: VENDOR ANALYSIS**
  - Average Days WIP by Vendor
  - Invoice Count by Vendor
Exception Count by Vendor
Exception Count by Vendor (current year)
Top 5 Problem Vendors (last 90 days)

EMC FOUNDATION
The accounts payable solution is built upon an EMC foundation consisting of:

IMAGE CAPTURE SUBSYSTEM
This is the accounts payable solution’s specific capture process provided by EMC Captiva Invoice Capture combined with the Advanced Recognition and production Auto-learning (PAL) capabilities of the platform. This image capture process is optimized for the solution’s business processes in EMC Documentum xCP. It includes a friendly capture validation user interface via Captiva Desktop. The capture process utilizes Captiva Production Auto Learning (PAL) to learn vendor invoice layouts by “watching” operators key invoice data. The image capture process step is compatible with the following:

- EMC Captiva 6.5
- EMC Captiva 7.1

ARCHIVE AND BUSINESS PROCESS
This portion of the solution incorporates EMC Documentum xCP business processes together with EMC Documentum ECM. The archive and business process portion is compatible with the following:

- EMC Documentum xCP 1.6
- EMC Documentum xCP 2.0
- EMC Documentum 6.7 SP1 P09
- EMC Documentum 6.7 SP2

APPLICATION SERVER: XCP APPLICATION.
This portion of the solution requires an application server to support the EMC Documentum xCP application. The application server EMC Documentum xCP application is compatible with the following:

- Apache Tomcat 6.x
- Apache Tomcat 7.x