# Administration

|  |  |  |
| --- | --- | --- |
| **Role** | **Name** | **Contact** |
| Customer | LLA | -- |
| Product Owner |  |  |
| Project Manager | I'da Weathers-Hamilton | iweathershamilton@ariasystems.com |
| Solution Architect | Dave Schreiner | dschreiner@ariasystems.com |
| Workflow Architect |  |  |

Development Phase: 1

Planned UAT and/or [Go live dates (if available):](#_Admin)

## Revision and Approval History

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** | **Estimate Link** |
| Kwong Yee Cheng | 5/19/2022 | Initial requirements drafted. | 0.1 |  |
| Kwong Yee Cheng | 9/9/2022 | Detailed Design added. | 1.01 |  |
| Kwong Yee Cheng | 9/23/2022 | Adding confirmed portion (Payment) of section “Account Activity” (as in LCPR Invoice Work Plan: Phase 1) | 1.02 |  |
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# Requirements

## Requirements

**What is the requirement from the BRD? Include ERs if necessary.**

|  |  |  |
| --- | --- | --- |
| **Req ID** | **Business Requirement** | **ERs** |
| [PEIN-12](https://prodapt-lla.atlassian.net/browse/PEIN-12) | Invoice printing & distribution (physical mail) – Evertec: Aria will send to XML files to Evertec which takes care of Digital and Physical distribution. | n/a |
|  |  |  |

## [Solution Summary](#_Solution_Summary)

Aria will be generating XML statements, with XML Master File as the notification method. Before XML Master File being processed by Evertec, further enhancement by Workflow is required, as LLA Invoice template contains information not readily available by Aria’s replacement string.

XML Master File will be generated and sent to a LLA file server/path (TBD). Workflow picks up the file, enhances XML statements by adding XML elements with more data. The resulting XML Master File would be sent to the LLA file server, under a different path (TBD).

There is a known issue with XML Master File generation (as documented in <https://ariasystems.atlassian.net/browse/BUG-18913>)

While waiting on this issue to be resolved, one workaround is to make use of events for ***1042 - Account Message Type “Invoice/Statement” Requires Sending***, to obtain both acct\_no and statement\_no. With those 2 parameters, make the API call get\_statement\_content\_m to obtain the XML statement.

1. Diagram: Logo, company name

   Description automatically generated
   1. Overall Inputs:
      1. XML Master File, generated by Aria Core, in LLA SFTP (server/path TBD). Please check with ticket <https://ariasystems.atlassian.net/browse/APP-7216> for status of SFTP access for Core Aria env.
   2. Overall Outputs
      1. Enhanced XML Master File, sent to LLA SFTP (server/path TBD). Please check with ticket <https://ariasystems.atlassian.net/browse/WFOPS-569> for status of SFTP access for WF env.

## Criteria for Success Checklist

1. As a LLA User, I can…
   1. In workflow, view a report of all XML statements read, processed, and sent back to LLA SFTP
2. As an XML Master File handler…
   1. I can retrieve an XML Master File from LLA SFTP server.
   2. All XML statements from the XML Master File will be read and enhanced, ready to be uploaded to LLA SFTP server.
   3. XML Statement generated by Aria Core can be expected to have the following high-level elements (for Core XML template check ticket <https://ariasystems.atlassian.net/browse/CRPT-1280> ): Graphical user interface, text, application, email

      Description automatically generated
   4. Enhanced XML statement would allow Evertec to generate statement as specified by LLA in following documents:

|  |  |
| --- | --- |
| Attachment | Screenshot of first page |
|  |  |
|  |  |
|  |  |

## Criticality

***Define the criticality / importance of this process to the customer’s day-to-day operations.***

1. *Very High – failure of this process will cause the dissolution or end of the customer’s ability to function as a company.*
2. *High – failure of this process will result in serious brand damage and business/financial loss and could lead to a long-term business impact to the customer.*
3. *Medium – failure of this process will result in material business impacts resulting in some financial loss, brand damage or business liability to the customer.*
4. *Low – failure of this process will result in minor levels of inconvenience, distress or technical disruption to the customer.*
5. *Very low – failure of this process will result in no material business impacts to the customer.*
6. **High – failure of this process will result in serious brand damage and business/financial loss and could lead to a long-term business impact to the customer.**

## Overall Performance and Load Expectations

For B2C, we can expect an average of 8000+ statements generated each day; maximum of 22000+ statements for one day (first day of the month). Within these statements, we can also expect an average 28000+ SPIs processed each day; maximum of 78000+ SPIs processed for one day (first day of the month).

For B2B, we can expect an average of 500+ statements generated each day; maximum of 2000+ statements for one day. Within these statements, we can also expect an average 6000+ SPIs processed each day; maximum of 40000+ SPIs processed for one day.

## Out of Scope

**This section defines clearly any considerations which are explicitly out of scope for this development.**

To be determined.

# Roles

**Define the roles who can view the data produced by these processes, or call the services, or take actions.**

1. LLA Users
2. XML Master File Handler

# Integrated 3rd Party Systems

## **SFTP Server**

More information to be determined

# File Formats or Data Structures

## XML Statement – Flow Structure

This is the structure of enhanced XML statement, based on a XML statement in XML Master File

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Req | Type | Definition | Contains PII/PCI |
| XML Statement No | Y | Int32 | /statement/statement\_info/internal\_statement\_no | None |
| Statement Date | Y | Date | /statement/statement\_info/statement\_date | None |
| Account ID | Y | String | /statement/statement\_info/acct\_no | None |
| Client Account ID | Y | String | /statement/account/client\_acct\_id | None |
| Invoice No | Y | String | /statement/invoices/invoice[0]/invoice\_no | None |
| Status | Y | String | WF assigned:  Read, Processed, Uploaded, Error | None |
| Date Downloaded | Y | Date Time | WF assigned | None |
| Date Uploaded | N | Date Time | WF assigned | None |
|  |  |  |  |  |

While we expect only one invoice generated for each statement, it is possible to have multiple invoices. If such scenario is encountered, have all invoice numbers included for the field “Invoice No”

Also for all other custom fields in this XML that is related to invoice, combine all invoice lines as if there is only one invoice.

## Custom XML Section – Paystub

All custom tags below are to be added under the element <statement/>.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Req | Type | Definition | Contains PII/PCI |
| ps\_auto\_flag\_hd | Y | Boolean | True if {/statement/payment\_method/primary\_pay\_method\_id} = 13 (Tokenized CC) | None |
| ps\_att\_name\_vrb | N | String | TBD – Blank by default | PII |
| ps\_cust\_typ\_vrb | Y | String | “B2C” by default | None |
| ps\_cust\_class\_vrb | Y | String | Blank by default | None |
| ps\_lang\_flag\_vrb | Y | String | “English” if {/statement/template\_name} = “LLA XML Template English”  “Spanish” if {/statement/template\_name} = “LLA XML Template Spanish” | None |
| ps\_print\_vrb | Y | Boolean | True if {/statement/acct\_supp\_fields/supp\_field3} contains “Paper Billing” | None |
|  |  |  |  |  |

## Custom XML Section – Account Summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Req | Type | Definition | Contains PII/PCI |
| sum\_name\_vrb | Y | String | Under {/statement/statement\_contact}:  [stmt\_first\_name} {stmt\_middle\_init} {stmt\_last\_name} | PII |
| sum\_bil\_dte\_vrb | Y | Date | {/statement /statement\_info /statement\_date} | None |
| sum\_acct\_num\_vrb | Y | String | {/statement /account /client\_acct\_id} | None |
| sum\_acct\_due\_vrb | Y | Decimal | {/statement /statement\_info /balance\_due } | None |
| sum\_auto\_flag\_hd | Y | String | True if {/statement/payment\_method /primary\_pay\_method\_id} = 13 (Tokenized CC) | None |
| sum\_autopay\_due\_dte\_vrb | Y | Date | {/statement /statement\_info /due\_date} | None |
| sum\_pay\_due\_dte\_vrb | Y | Date | {/statement /statement\_info /due\_date} | None |
| sum\_previous\_bal\_vrb | Y | Decimal | {/statement /statement\_info /balance\_forward} | None |
| sum\_payment\_vrb | Y | Decimal | {/statement /statement\_info /curr\_stmt\_mapped\_pmt\_total} | None |
| sum\_non\_recurr\_chrg\_vrb | Y | Decimal | TBD |  |
| sum\_adj\_vrb | Y | Decimal | Under {/statement /statement\_info}:  = {current\_stmt\_total\_pymts}  - {curr\_stmt\_mapped\_pmt\_total} | None |
| sum\_remaining\_bal\_vrb | Y | Decimal | = sum\_previous\_bal\_vrb - sum\_payment\_vrb + sum\_non\_recurr\_chrg\_vrb - sum\_adj\_vrb | None |
| sum\_serv\_month\_chrg\_vrb | Y | Decimal | Sum of {net\_price} of {line\_item} array {/statement/invoices/invoice /invoice\_line\_item\_charges} **where** {line\_item} has {service\_supp1value} = "**MonthlyCharges**" | None |
| sum\_serv\_equip\_chrg\_vrb | Y | Decimal | TBD | None |
| sum\_serv\_usage\_chrg\_vrb | Y | Decimal | Sum of {net\_price} of {line\_item} array {/statement/invoices/invoice /invoice\_line\_item\_charges} **where** {line\_item} has {service\_supp1value} = "**UsageCharges**" | None |
| sum\_serv\_non\_recurring\_chrg\_vrb | Y | Decimal | Sum of {net\_price} of {line\_item} array {/statement/invoices/invoice /invoice\_line\_item\_charges} **where** {line\_item} has {service\_supp1value} = "**AcctNonRecurr**" | None |
| sum\_serv\_adj\_vrb | Y | Decimal | Sum of Service Credits | None |
| sum\_serv\_disc\_vrb | Y | Decimal | Sum of Discounts | None |
| sum\_serv\_tax\_vrb | Y | Decimal | Sum of Taxes | None |
|  |  |  |  |  |

## Custom XML Section – Account Activity Payments

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Req | Type | Definition | Contains PII/PCI |
| det\_yourlt\_chrg\_vrb | Y | Decimal | {/statement /statement\_info /balance\_forward} | None |
| *<det\_cred\_pay\_array>* |  |  |  |  |
| \det\_cred\_pay  \det\_inst\_info\_vrb | N | String | TBD | None |
| \det\_cred\_pay \det\_cred\_pay\_dte\_vrb | Y | Date | {acct\_txn\_dt} of {account\_transaction} array {/statement /account\_transactions} **where**  {acct\_txn\_type\_desc} = **"Electronic Payment"** and  {primary\_pay\_method\_id} = **"13" (Tokenized CC)** | None |
| \det\_cred\_pay \det\_cred\_pay\_chrg\_vrb | Y | Decimal | {acct\_txn\_amt} of {account\_transaction} array {/statement /account\_transactions} **where**  {acct\_txn\_type\_desc} = **"Electronic Payment"** and  {primary\_pay\_method\_id} = **"13" (Tokenized CC)** | None |
| *</det\_cred\_pay\_array>* |  |  |  |  |
| *<det\_cash\_pay\_array>* |  |  |  |  |
| \det\_cash\_pay  \det\_cash\_pay\_dte\_vrb | Y | Date | {acct\_txn\_dt} of {account\_transaction} array {/statement /account\_transactions} **where**  {acct\_txn\_type\_desc} = **"Check"** | None |
| \det\_cash\_pay  \det\_cash\_pay\_chrg\_vrb | Y | Decimal | {acct\_txn\_amt} of {account\_transaction} array {/statement /account\_transactions} **where**  {acct\_txn\_type\_desc} = **"Check"** | None |
| *</det\_cash\_pay\_array>* |  |  |  |  |
| *<det\_ach\_pay\_array>* |  |  |  |  |
| \det\_ach\_pay  \det\_ach\_pay\_dte\_vrb | Y | Date | {acct\_txn\_dt} of {account\_transaction} array {/statement /account\_transactions} **where**  {acct\_txn\_type\_desc} = **"Electronic Payment"** and  {primary\_pay\_method\_id} = **"2" (ACH)** | None |
| \det\_ach\_pay  \det\_ach\_pay\_chrg\_vrb | Y | Decimal | {acct\_txn\_amt} of {account\_transaction} array {/statement /account\_transactions} **where**  {acct\_txn\_type\_desc} = **"Electronic Payment"** and  {primary\_pay\_method\_id} = **"2" (ACH)** | None |
| *</det\_ach\_pay\_array>* |  |  |  |  |
| det\_pay\_tot\_vrb |  |  |  |  |
|  |  |  |  |  |

## Custom XML Section – Usage Summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Req | Type | Definition | Contains PII/PCI |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## Custom XML Section – Line Charges

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Req | Type | Definition | Contains PII/PCI |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## Custom XML Section – Roaming Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Req | Type | Definition | Contains PII/PCI |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## Custom XML Section – Cruise Roaming Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Req | Type | Definition | Contains PII/PCI |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## Custom XML Section – Call, Data, Text Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Req | Type | Definition | Contains PII/PCI |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

# Reports and Dashboards

***For each report, indicate the data source (the workflow data structure or some other data source) and any filters (hard-coded or run-time editable) and any actions. Actions appear when right-clicking a report line. If an action is very simple (edit object or delete object), then describe it briefly in this section. If an action has additional steps or complex requirements, describe it as a process below. Actions are permissioned.***

***For each dashboard, indicate the dashboard elements to be included and which Roles have permission to view the Dashboard***

### XML Master Files Report

A report of XML Master Files read into the system including status of “Received, Processed, Uploaded or Error”. The report would be available in both online form (WF dashboard) and email.

1. File Name
2. File Download Date
3. Number of XML Statements Input
4. Number of XML Statements Output
5. Status

### XML Statements Report

A report of XML Statements that were processed and uploaded to LLA SFTP, including the following fields

1. XML Statement No
2. Statement Date
3. Account ID
4. Client Account ID
5. Invoice No
6. Status
7. Date downloaded
8. Date uploaded
9. Time to Process – Calculated column (Date Uploaded – Date Downloaded)

# Processes

***Define the “flows” or processes in this section. A process is a sequence of steps with a singing beginning (or entry point) and one or more defined ends. When a process appears to have two or more entry points, this means that there are at least two processes with some reused functionality between them. Scheduled jobs run autonomously according to a schedule.***

## XML Master File download from LLA SMTP

1. Workflow is to check for new file in LLA SMTP
2. Whenever there is a new file, Workflow is to download it and process all statements in it

## Process XML Statements

* 1. Failures to be captured, with information such as XML Master file name, Account ID, and XML Statement No, etc.
  2. In processing XML statements in an XML Master File, a new file is created including enhanced XML statements.

### Detailed Performance and Load Expectations

***What is the expected volume of data handled by the process, and what is its velocity (how is that volume distributed over time)? (10k CSV file rows per hour? 200 API calls per second?)***

TBD

### Aria APIs

***Recap the APIs defined in the steps above. API inputs can be mapped here, OR in the steps above, but they must be mapped. Precise naming of API inputs and outputs are VERY important, since some similarly named properties may be confused.***

1. TBD

### Process Success Criteria

***Use this section to outline any success criteria specific to this process.***

1. As a LLA User, I can…
   1. In workflow, view a report of all XML statements read, processed, and sent back to LLA SFTP

# Errors, Emails and Troubleshooting (Overall)

1. [Are errors and issues logged or specially handled anywhere OTHER than the Decisions logs files, such as in a custom data table? If so, where are they?](#_Errors,_Emails_and)

TBD

1. [In the event of a failure, list important notifications (emails, task assignments, pop-ups, etc…) that the process sends, who the recipients are and where the recipients are identified / configured in the flow (on the step itself? In a system constant? [name the constant]).](#_Errors,_Emails_and" \o "Does the flow proactively tell us that something is wrong? If so, how?)
2. No Tasks are created
3. No Pop-ups are shown
4. Only emails are sent in case of failures (besides logs)
   1. Error notification emails are sent to [wfsupport@ariasystems.com](mailto:wfsupport@ariasystems.com) and clients email address at [client@clientcompany.com](mailto:client@clientcompany.com)
   2. The email address is defined in a system constant named “EMAIL\_TO”

# Other Considerations

***Note any other development considerations or constraints that are not defined elsewhere.***

# Impacts on Existing Implementation

***Use this section to call out impacts on existing workflows already in use. These could be processes that will have to change, or be protected from changing when this is implemented. Provide as much detail as possible.***

# To Be Determined

***Use this section to track any design questions which are not answered above. Anything left undefined in this section will be assumed to add significant risk to the project estimate. Reduce as much as possible.***