

3.0 Appendix B – Project Aspire Enhancement Functional Design

ADML ID	1729
ADML Description	Interfaced Asset Addition Approval
ADML Tech#	

3.1 Background

3.1.1 Functional Requirement

The state requires that assets tracked in the AM system use only one tracking number (Asset ID) and that that tracking number be the asset's tag number (which is typically printed on a label or tag which is physically affixed to most assets). In other words, the state does not want the system to assign a system-generated tracking number and also to track an asset's tag number. Since most asset-related functions and reports are driven by the Asset ID field, the state wants the Tag Number in that field so that users in the field can utilize these functions and reports by referencing a Tag Number with which they are familiar and not a serially-numbered, system-generated number that means nothing "in the real world."

Tag Numbers are at most eight characters long including a 2-character prefix. Each agency uses different prefixes to classify the type, location, etc. of the assets. The remaining six positions are numeric.

Also, the state requires that assets procured in My Florida Market Place (MFMP) and the Aspire Purchasing-to-Payables (P2P) module be sent to AM automatically using interfaces and that pertinent asset data be recorded in the source systems and passed to AM.

3.1.2 Delivered Functionality

As delivered, the AM module provides an Asset ID field and a Tag Number field for every asset. The Asset ID field utilizes the "NEXT" functionality whereby a user can enter the word "NEXT" in the Asset ID field during an Asset Addition transaction and the system will serially assign the next available Asset ID.

When adding an asset to AM using online AM pages, users can use this NEXT functionality or can key in a specific Asset ID. However, in the P2P module, users cannot key in a specific new Asset ID number. They are restricted to specifying the Asset ID as NEXT or specifying an Asset ID that already exists in the AM module.

As delivered, PeopleSoft also provides integration between the P2P and AM modules. Asset-related information can be recorded in P2P and automatically sent to AM.

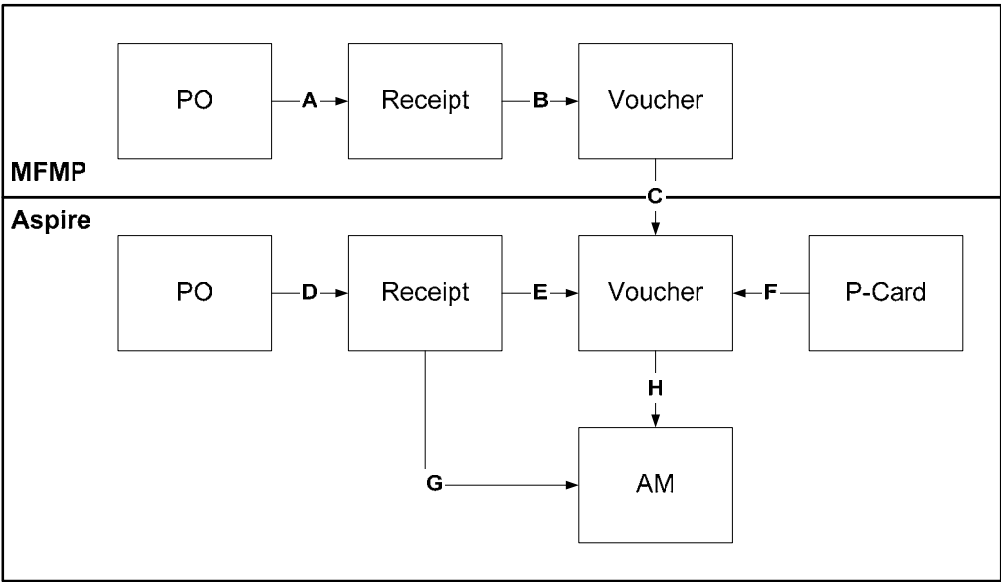
3.1.3 Gap Description

There are two primary methods to add an asset to AM.

1. Manually using AM pages
2. Via the Accounts Payable (AP) to AM Interface

There is no gap for method #1 above. When using this method, users would simply need to key in the new asset’s tag number into the Asset ID field.

However, there are two gaps for method #2 above. The following diagram depicts the relationship between MFMP, Aspire P2P, P-Card, and AM relative to asset purchases.



As the diagram shows, all asset purchases that are not keyed into an AM pages directly are funneled through Aspire AP (Voucher). This includes asset purchases made in MFMP, Aspire P2P, and P-Card purchases.

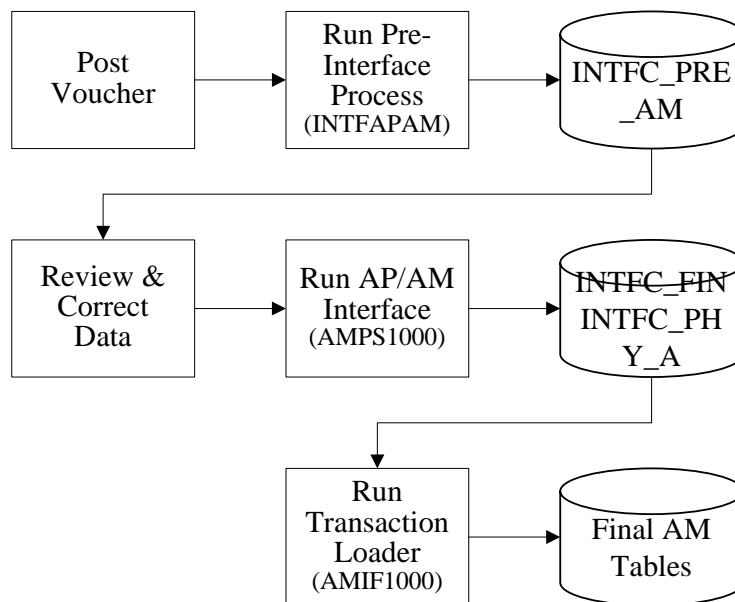
The first gap related to method #2 above is that MFMP does not provide a field where users can specify a Tag Number or Asset ID. Therefore, MFMP asset purchases would flow through Aspire Voucher (AP) and into AM using the NEXT functionality. This is a problem because it would not store the Tag Number in the Asset ID field. (AM users could perform an InterAsset Transfer to change the serially-generated Asset ID to a specific Tag Number

value. But this would be infeasible to do for all assets procured in MFMP. The volume is too great.)

The second gap related to method #2 above is that Aspire Voucher (AP) cannot send specific, new Asset IDs to AM. In other words, Aspire vouchers can only populate the Asset ID field with NEXT or an Asset ID that already exists in AM. Using NEXT presents the feasibility problem discussed in the first gap above. Relying on specifying a pre-existing Asset ID on Aspire vouchers is also infeasible because users would need to go into AM to create the Asset IDs every time they keyed a tag number into the Asset ID during the procurement process in MFMP, Aspire P2P, or P-Card.

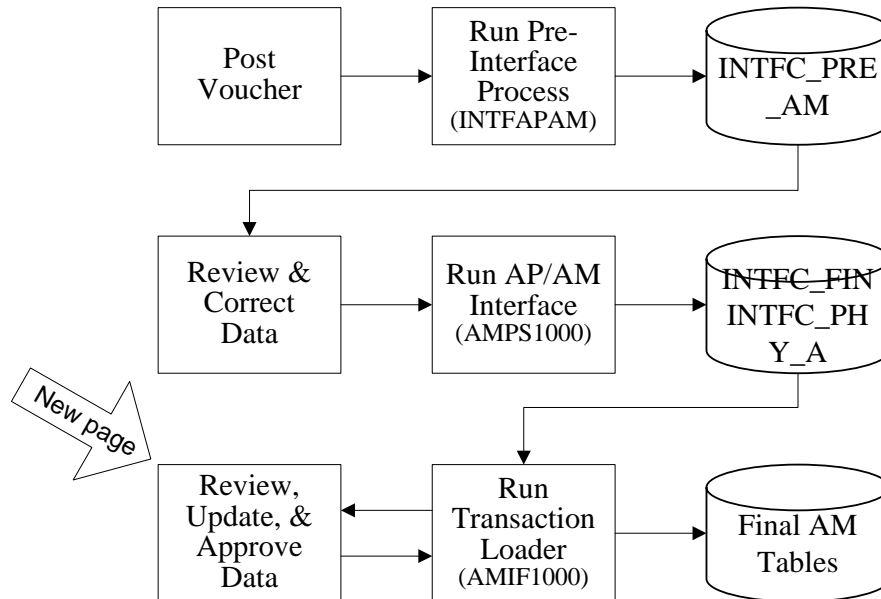
3.2 Description of New Functionality

In order to meet the functionality requirements and to avoid the debilitating inefficiencies described above, a new system modification seems to be needed. The approach is to allow MFMP, Aspire P2P, and P-Card to use the NEXT functionality on the Asset ID. Then, before the assets are brought into AM, a user must review the assets and replace the NEXT with the Tag Number that should have already been applied to the asset. This modification, then, affects interface H depicted in the diagram above. A detailed diagram of that interface is included below.



This new system modification would provide a new page to be used to view, update, and approve records in the INTFC_FIN and INTFC_PHY_A tables before the Transaction

Loader program is run to send the data into the final AM tables. So the new diagram of the interface would look like this.



This new page would be used to approve assets ready to be sent into AM and replace the NEXT Asset ID with the actual Tag Number value that should have already been affixed to the asset. In addition, users will also be given the ability to add or update the following asset details:

- Description, Short Description
- Asset Class
- Physical Location
- Profile
- Manufacturer, Model, Serial Number
- Finance Code
- Statewide Custodian Name & Employee ID, Local Custodian Name & Employee ID, Asset Assignee Name & Employee ID.
- Parent Asset ID
- Quantity

In addition, users should be able to “unitize” assets on this page. To unitize is to take one row and and replace it with at least two rows. This is typically done when multiple quantities of assets are purchased as one line item, but need to be broken-up into individual assets in AM. For example, 10 computers may be purchased at one time. Typically, all ten computers will be on one line on the voucher, so they will appear as one line on the Asset Approval page. The quantity on this one row will be “10.” In AM, each individual computer needs to be tracked as a separate Asset ID. So, on the Asset Approval page, the user will unitize this one row into ten rows. Then, on each of the ten rows, the user will provide a tag number and any other information they may have. It is important that the sum of the costs on the ten rows **MUST** equal the cost on the original one row. (Rounding errors must be corrected.) Also, the user should be able to enter new quantities for each of the ten rows. (The sum of the quantities on the ten new rows does **NOT** need to match the quantity on the one original row.)

Finally, certain users who have been assigned to a special role, must be able to delete rows from the Asset Approval page. These rows should not really be deleted from the tables behind the page, but simply be flagged to not appear on the page again and to **NOT** be sent to AM.

3.3 Navigation path

The navigation to the new page should be: Asset Management | Send/Receive Information. The name of the page should be “Approve AP Asset Additions.”

3.4 Set Up/Control Data

None.

3.5 Application Changes (e.g., Pages, Components, Menus, Records, App Engines, SQRs, etc.)

A. New Page

The new page must SELECT unapproved INTFC_PHY_A records to be reviewed and approved by users. The standard SELECT statement should be:

```

SELECT  A.APPROVAL_SW,
        A.BUSINESS_UNIT, (displayed at the top of the page)
        A.ASSET_ID,
        A.VOUCHER_ID, (to be greyed-out on the page)
        A.PARENT_ID,
        A.DESCR,
        A.DESCRSHORT,
        A.FINANCING_CD,
        A.PROFILE_ID,
        A.ASSET_CLASS,
        A.MANUFACTURER,
        A.MODEL,
        A.SERIAL_ID,
        A.VENDOR_ID, (to be greyed-out on the page)
        A.VENDOR_NAME, (to be greyed-out on the page)
        A.CUSTODIAN,
        A.LOCATION,
        B.QUANTITY

FROM    PS_INTFC_PHY_A A,
        PS_INTFC_FIN B

```

The standard WHERE clause should be:

```

WHERE  A.LOAD_STATUS = 'NEW' and
        A.APPROVAL_SW <> 'Y' and
        A.INTFC_TYPE in ('FAD','AAD','ADQ') and
        A.BUSINESS_UNIT = [user-supplied value to enter page] and
        [join A and B]

```

Additionally, users should be able to narrow the list of records presented on the page by providing additional search criteria at the top of the page and clicking a search button. These additional criteria are:

```

and    A.VOUCHER_ID = [user-supplied value] and
        A.VENDOR_ID = [user-supplied value] and

```

A.VENDOR_NAME like [user-supplied value] and
A.ACQUISITION_DT = [user-supplied value] and
A.PROFILE_ID = [user-supplied value] and
A.MANUFACTURER = [user-supplied value] and
A.MODEL = [user-supplied value] and
A.PO_ID = [user-supplied value] and
A.OPERATING_UNIT = [user-supplied value] and
A.DEPTID = [user-supplied value]

Each additional criteria above should only be included in the SELECT statement if the user provides a value in that field.

The selected data should be displayed in a grid to increase the ease of data entry and navigation. The rows in the grid should be able to be sorted and re-sorted by clicking column-headers.

Upon save, only two types of changes should be written back to the INTFC_PHY_A table using an UPDATE statement:

- 1: changes to those records where APPROVAL_SW = 'Y'
- 2: rows previously saved as "Approved" but which have now been "Unapproved" (i.e., had the "Approve" checkbox cleared).

Additionally, updates to the following fields should also be made to corresponding records on the child table INTFC_FIN:

- APPROVAL_SW
- ASSET_ID
- INTFC_TYPE

For every row updated on INTFC_PHY_A, update records in INTFC_FIN that share the same INTFC_ID and BUSINESS_UNIT.

The following edits must be performed on all rows where APPROVAL_SW = 'Y':

1. The length of the Asset ID value should be ≤ 8 .
2. When saving rows to the INTERFACE_FIN and INTFC_PHY_A tables, the page must look to other rows existing on those tables and on the ASSET table in the AM system. If a row exists on any of those tables with the same Business Unit & Asset ID, then the page should set INTFC_FIN = 'ADQ'. Otherwise, it should be set to 'FAD'.

3. In order to avoid unique constraint problems when saving on Asset ID with multiple ChartField combinations or saving new rows to an existing asset, the page must set several Sequence and DateTime Stamp fields correctly. The new and existing rows for any given asset being saved should be sorted by Date-Time Stamp and the following Sequence and DateTime Stamp fields incremented for each row:

SEQUENCE_NBR_6
EFFSEQ
LOCATION_EFFSEQ
CF_SEQNO
INTFC_LINE_NUM
DTTM_STAMP

(Rows created by the unitize feature (see below) should be included in this process as well and be treated as all other rows.)

If any of these edits fail for even one record on the page, save should not be allowed at all. (Therefore, even rows that did pass the edits will not be updated.)

The unitize feature should operate as follows:

When rows are displayed, there should be a “Unitize” button on each row. When the unitize button is clicked, a pop-up box should ask the users how many rows they want to create and what the quantity for each row should be. Then, when the “OK” button is clicked, the system should insert the number of rows requested (less one because the original row already exists).

The quantity on each new row and the original row should be set to the default quantity provided by the user. If no quantity was provided by the user, each row should get a quantity of one.

The new rows should be identical to the original row (except where the rounding errors have been compensated for by increasing or decreasing the cost on one or more rows by a penny.)

Users should then treat the ten total rows as usual. They can approve them, provide additional physical information, change quantities, etc.

Certain users who have been assigned to a specific role, should have the ability to delete rows from the page. Do NOT delete the rows from the INTFC_FIN and INTFC_PHY_A tables however, we want to keep those records in order to maintain an audit trail of who deleted what. However, these rows need to be marked such that these rows never get sent to

the AM module. A new column of checkboxes should be added to the page next to the “Approve” column of checkboxes. Upon “Save” the following actions should take place:

The “Save” should fail for the whole page if any row has BOTH the Approval and Delete checkboxes checked.

For those rows with the Delete checkbox checked, the system should make the following updates to the INTFC_FIN and INTFC_PHY_A tables:

Set INTFC_FIN.LOAD_STATUS = ‘DEL’ *

Set INTFC_PHY_A.LOAD_STATUS = ‘DEL’ *

Set INTFC_FIN.OPRID = [OPRID of user]

Set INTFC_FIN.AM_BK_UD_DATE1 = [date-time of DELETE save]

Set INTFC_PHY_A.AM_AST_UD_DATE1 = [date-time of DELETE save]

When users who are assigned to the special “Delete” role use this page, the page SHOULD select and display rows that have previously been “deleted.” This will enable them to “undelete” or review previous deletes. Once the deleted rows are displayed, all fields should be editable as usual including the Delete checkbox.

* The “DEL” value must be added to the XLAT table for the LOAD_STATUS field.

B. Modify Batch Processes

A new batch process was created as part of ADML #147. This batch process is detailed in sections 3.2.E and 3.5.E of the Functional Specification for that ADML item. The batch process is commonly referred to as “the scrubbing program.” It scrubs data written to the INTFC_FIN and INTFC_PHY_A tables to prepare it for processing by the Transaction Loader batch job that interfaces the records to the final AM tables. This scrubbing program needs to be modified to accommodate this new system modification.

When P2P and the Project Costing (PC) system write Asset Addition records to the INTFC_FIN and INTFC_PHY_A tables, they are marked as pre-approved (i.e., APPROVAL_SW = ‘Y’). If these records are left alone, the Asset Addition transactions will automatically be sent to AM by the Transaction Loader before any users have a chance to approve them using the page described above.

Therefore, a new section should be added to the scrubbing program to set APPROVAL_SW = ‘N’ for records newly-written by P2P and PC. The update statement is:

```
UPDATE PS_INTFC_FIN
SET APPROVAL_SW = 'N'
WHERE LENGTH(ASSET_ID) > 8 and
LOAD_STATUS = 'NEW' and
INTFC_TYPE in ('FAD','AAD','ADQ')
```

```
UPDATE PS_INTFC_PHY_A
SET APPROVAL_SW = 'N'
WHERE LENGTH(ASSET_ID) > 8 and
LOAD_STATUS = 'NEW' and
INTFC_TYPE in ('FAD','AAD','ADQ')
```

Additionally, the delivered Transaction Loader batch process (AMIF1000) needs to be modified to send the four custom fields added to the approval page (and therefore to the INTFC_PHY_A table) to the AM tables. These four fields are: FL_LOCAL_CUST, FL_LOC_CUST_EMPLID, FL_ASSIGNEE, and FL_ASSIGNEE_EMPLID.

C. Modify Projects/Grants Page

A save-edit needs to be added to the PC_AM_DEFN and PC_AM_EXPRESS2 pages to require that the value entered in the ASSET_ID field (if any) is not longer than eight characters.

3.6 Unit Test Considerations

Test Asset Additions from P2P and PC. For P2P, test assets procured using PO/Receipt/Voucher as well as Voucher only. The Voucher only test can stand-in for testing MFMP and P-Card transactions.

Test making updates to several lines with errors on only a few. Verify that no updates are saved.

Verify that updates are made to the INTFC_FIN table as well as to the INTFC_PHY_A table. When an asset has multiple ChartField combinations, there will be more than one INTFC_FIN records related to one INTFC_PHY_A record. This scenario should be tested.

Test trying to save an Asset ID with more than eight characters. The edit should not allow any updates to be saved from that page.

Test using additional SELECT criteria provided by the user at the top of the page.

Test unitizing one row into five rows.

Test unitizing one row with quantity = 1 into five rows with quantities 1, 1, 2, 1, 2.

Test unitizing one row into two where one of the rows creates a new Asset ID and the other points to a pre-existing Asset ID.

3.7 Miscellaneous

A query should be built to allow users to get a list of asset addition transactions that have not yet been approved. The SQL for the query should be:

```
SELECT BUSINESS_UNIT,
        SYSTEM_SOURCE,
        ASSET_ID,
        APPROVAL_SW,
        ACQUISITION_DT,
        VOUCHER_ID,
        PARENT_ID,
        DESCR,
        DESCRSHORT,
        FINANCING_CD,
        PROFILE_ID,
        ASSET_CLASS,
        MANUFACTURER,
        MODEL,
        SERIAL_ID,
        VENDOR_ID,
        VENDOR_NAME,
        CUSTODIAN,
        LOCATION

FROM PS_INTFC_PHY_A

WHERE LOAD_STATUS = 'NEW' and
       APPROVAL_SW <> 'Y' and
       INTFC_TYPE in ('FAD','AAD','ADQ') and
       BUSINESS_UNIT = [prompt]
```

3.8 Assumptions

The PO/AM Push process will not be run in order to avoid creating multiple assets when only one asset should be created. (The Receipt does not pass the newly created Asset ID to AP.)

MFMP does not provide a means to record an Asset ID or Tag Number.

Aspire AP requires that the Asset IDs on the voucher be either NEXT or a pre-existing Asset ID.

The process of manually-approving all asset addition transactions coming from MFMP, P-Card, and Aspire P2P has been accepted by the State of Florida.