Introduction

The Buy A&M System offers many options for approval routing. We have configured Buy A&M to incorporate the Auto Cascading routing feature, which means that you will see the paths that have been selected automatically. However, you cannot change them in the submission process. We have also enabled NIGP Code Approval which allows paths to be built for routing based on the item(s) being purchased. This is not mandatory in your approval design but can be utilized when needed. These are the basic Approval Settings that have already been configured for System Offices and which we recommend for all participating pilot members.

Routing is accomplished through a combination of user limits by document, Approval Type Sequences and Approval Paths, Roles, and other controls. Departmental Access users must have the Approval Role to enable them to send documents on to other users for approval. Approval Paths are determined upon submission for approval. Documents must be rejected and rerouted if changes in the routing paths are needed. Approvals are configured separately for each organization in the system. Cross-org routing is available for all Organizations except TEEX and WTAMU. Because these two Organizations have interfaces with other accounting systems, they are set up differently in Buy A&M and routing cannot be shared with them.

This is a one-time setting completed by FAMIS Services – these options have been pre-selected and should not be changed:

- Use Auto-Cascading feature to ensure routing
- Allow NIGP Routing
  - Determine NIGP codes and Subcode crosswalk
- Department / Location Tab (Approval Path) will not be used at this time

Approval Path Decisions

- Determine Approval Types and Levels – these determine the ORDER in which approval paths occur
- Approval Path IDs for departmental routing are recommended to be set as the Department/Sub-Department combinations:
  - Example: INRE-FAMIS – Departmental Routing
    - We accomplish departmental routing by use of the Department in the account segment on the Account Segment Tab
- Other Approval Paths should be named very succintly according to the Type of Approval. For example:
  - EXEC1-EXEC4 – dollar range routing to Executive Approvals
  - NIGP – Commodity Code routing
  - MSDS – Hazardous Material routing
  - PILOT – Pilot routing for final approval during the pilot
    - Pilot routing is highly suggested during the initial period of the pilot and can easily be disabled by a single-checkbox setting
- Decide whether NIGP Routing will be used
3 Step Setup Overview

- Configure Organization Approval Settings
- Maintain Approval Type Sequences
- Add Approval Paths
  - Approval Paths are “linked” to Approval Type Sequences

Organization IDs

In Buy A&M, the Organization IDs will be as follows:

- AM01 – The Texas A&M University System
- AM02 – Texas A&M University
- AM04 – Tarleton State University
- AM05 – Prairie View A&M University
- AM06 – Texas A&M AgriLife Research
- AM07 – Texas A&M AgriLife Extension Service
- AM09 – Texas A&M Engineering Extension Service - ** Cannot utilize Cross-Org Routing
- AM10 – Texas A&M University at Galveston
- AM11 – Texas A&M Forest Service
- AM12 – Texas A&M Transportation Institute
- AM15 – Texas A&M University Corpus Christi
- AM16 – Texas A&M International University
- AM17 – Texas A&M University - Kingsville
- AM18 – West Texas A&M University - ** Cannot utilize Cross-Org Routing
- AM20 – Texas A&M Veterinary Medical Diagnostic Laboratory
- AM21 – Texas A&M University Commerce
- AM22 – Texas A&M University – Texarkana
- AM23 – Texas A&M Health Science Center
- AM24 – Texas A&M University – Central Texas
- AM25 – Texas A&M University – San Antonio
- AM26 – Texas A&M System Sponsored Research Services
- AM27 – Texas A&M Technology Commercialization
- AM28 – Texas A&M Engineering Experiment Station
- AM29 – Texas A&M Research Foundation

When configuring cross-organizational routing in the system, these are the identifying IDs for members you may choose to share routing paths with. Because TEEX and WTAMU utilize a separate accounting structure, routing cannot be shared with them across the system.
Configuring Approval Settings

The following settings have been pre-configured for all A&M System parts:

Organization Administrators may Configure Approval Settings for their individual organizations by clicking on the Organization Administrator Tab, then selecting Configure Approval Settings. As a group, we have determined the default settings for each organization. Care should be taken when changing these settings. This must be set up before routing paths can be configured.

Click Configure Approval Settings to view the setting controls for your organization.

Click Configure System Approval Settings to view the setting controls for your organization.

Displayed here are the default settings we have chosen for the Buy A&M System. This is a one-time setup and should never be changed.
Maintain Organization Approval Type Sequences

Approval Type Sequences allow you to establish the types of approval paths you’ll be setting up and to give each approval type a priority for use with the Cascading feature. When setting up your specific approval paths, you will link them to one of the types established here. The order in which approval paths are completed is determined by the priority given to the Approval Type Sequence to which they are linked.

You must setup at least one approval type, even if “No Cascading” was selected.

For each Approval Path you establish, you must supply an Approval Type ID, a Description (e.g. Department, Budget, IT), and a Priority. The priority will determine the sort order for the approval paths of this type and will be ordered from the lowest (first) to the highest (last). Approval Type IDs cannot be modified once they are established.

- Approval Type ID – 10 digit Type ID
- Priority – determines the order in which this Approval Type will occur in routing
  - Approval Types are ordered from lowest to highest
  - Leave some room between the priority stops so that you can add additional stops later
- Status – Active / Inactive
  - You may set new Approval Types to Inactive until they are ready for deployment

An example of Approval Types would be:
- Department - 20
- NIGP Routing - 53
- Executive Level Approvers - 60
- Review – 99

Click Maintain Approval Type Sequences to view the Approval Types for your organization.
Buy A&M Approval Flow
Think of the sequences as floors in a building from floor 1 through floor 99. As the elevator progresses floor by floor, the document is evaluated to determine if approvals are needed on that floor. When the document reaches the 99th floor and is approved, it is ready for purchasing.

![Buy A&M Approval Flow Diagram](image-url)
Approvals flow from the lowest priority to the highest. Click the “Priority” column header to sort your Approval Types for a quick view of how they will flow.

As part of our implementation of the system, we have worked with user groups and established a list of Approval Type standard Priority groupings. Using this standard to assign your priorities will ensure that routing occurs within and across Organizations in a uniform manner.

### Buy A&M Standard Approval Types

<table>
<thead>
<tr>
<th>Range</th>
<th>Description</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-9</td>
<td>Not Assigned</td>
<td>Unassigned for Member use</td>
</tr>
<tr>
<td>10-19</td>
<td>Special</td>
<td>Any Route Paths that need to occur prior to Departmental Paths</td>
</tr>
<tr>
<td>20-29</td>
<td>Departmental Group 1</td>
<td>Dept Group 1 – Paths that occur early in the routing progression</td>
</tr>
<tr>
<td>30-34</td>
<td>SRS – Reserved</td>
<td>Reserved for SRS use</td>
</tr>
<tr>
<td>35-39</td>
<td>SRS – Reserved Group 2</td>
<td>Reserved for SRS use</td>
</tr>
<tr>
<td>40-49</td>
<td>Departmental Group 2</td>
<td>Dept Group 2 – Paths that occur later in the routing progression</td>
</tr>
<tr>
<td>50-59</td>
<td>NIGP Paths</td>
<td>Any Route Paths related to NIGP / Commodity Code routing</td>
</tr>
<tr>
<td>60-69</td>
<td>EXEC Paths</td>
<td>Executive Level routing paths</td>
</tr>
<tr>
<td>70-89</td>
<td>Not Assigned</td>
<td>Unassigned for Member use</td>
</tr>
<tr>
<td>90-00</td>
<td>Review</td>
<td>Any Route Paths required for implementation or final review</td>
</tr>
</tbody>
</table>
Following is an example of the Approval Types configured for System Offices. We have configured a DEPT Type for Departmental Routing, and since it has a Priority of 10, it will occur first. Minimally, you should also configure a PILOT or REVIEW Approval type. We determined as a group that the PILOT or REVIEW stop would be used for oversight of all document routing during the Buy A&M pilot or initial roll-out. At System Offices, we also configured four types of Executive Routing: EXEC1 through EXEC4.

- **DEPT** - The purpose for the DEPT Approval Type is to define a path for departmental approval. This path will ensure departmental approval for all purchases charged to accounts in this Department. For those documents under $5000 which only require the approval of the department head, this and the PILOT path may be the only approval needed. **NOTE: The $5000 limit is invoked by document type.** Users are defined with a $5000 limit for the Direct Open Market PO document. The DEPT Path is triggered by the department defined for the account segments. See more information about this routing in the section covering Account Segment Tab settings later in this document.

- **Review** – The purpose of the REVIEW Approval Type is to provide overview of all documents routed in Buy A&M. This path has been used extensively in the pilot program and during go-live for implementation. Once all paths have been established, this may be inactivated.

Other possible Approval Types to be considered:
- Grant / SRS Routing
- Commodity Routing (NIGP)

Do NOT use special characters when establishing your Approval Type IDs.

**NOTE:** Increment your approval types leaving gaps between the Priority to fill in other potential types in the future.
Maintain Agency Approval Paths

Once you have configured your Approval Types, you are ready to define your approval paths. Multiple approval paths may be linked to individual Approval Type Sequences. Approval Paths are linked to Approval Type Sequences and are triggered based on that Approval Type Priority. Further definition of the criteria for each Approval Path will be established during this step.

Click Maintain Agency Approval Paths to view or create the Approval Paths for your organization.
Routing Example

An order for a $50,000 piece of lab equipment is created in the Chemistry Department. Purchases of this nature require the Dean’s signature as well as Departmental. Due to the order amount, Executive approval is also required. During the pilot period, all orders are currently routing through the PILOT Approval Path. Paths CHEM, CHEMDEAN, CHEMEXEC1, and PILOT, which are linked to the coordinating approval types, have been established.

In the example below, the Approval Type Sequences are highlighted. The Approval Paths that are linked to the types are listed, and the stars indicate the order these approvals would occur for the document described above. The CHEM Path would occur before the CHEMEXEC1 Path simply because of alphabetical ordering when the Priority setting is the same. The PILOT Path would be last, as recommended during the pilot period. Remember that all paths linked to this Approval Type can be deactivated easily by changing the Status of the Type.
Active Paths for System Offices

Tips for the search panel:
- Click **Status** and choose **Active** to view only Active Paths
- You may search by any of the available fields on the search panel

The screen above displays the paths which have been created for System Offices. The EXEC1 through EXEC4 paths route based on increasing dollar limits on the documents. We defined sub-departments for FAPC to facilitate routing to Area Managers. Other paths listed are simple Departmental paths. For example: INREFAMIS, SOBA, and FAPC. Routing Paths are sorted by Priority, then alphabetically.

Do NOT use special characters when establishing your Approval Path IDs.
Sample Routing Path – EXEC1

- Does not approve Change Orders
- Dollar range is a trigger that determines additional paths
Sample Routing Path – EXEC2

- Approves Change Orders over $100K
- Approves dollar amounts over $50K
- Dollar range is a trigger that determines additional paths
Sample Routing Path – PILOT/Review

- Established for the pilot, this path has final review and approval on all documents
- Only the CAMPUS Account Segment is entered

Recommended Approval Path: during the pilot, it is recommended that all documents go through a PILOT stop to ensure that they receive the necessary approvals. Employing this in the pilot provides an opportunity to ensure that approvals are being applied as expected and to assist with any post-pilot fine tuning of the approvals process.
SAMPLE – FAMIS Routing Screens

Current Departmental Approvers can be found on FAMIS Routing Screens. FAMIS can provide reports and downloads of existing routing information which will aid in establishing your initial routing in Buy A&M.

Remember:

Approvers must be given authority to review the electronic documents by the person who is responsible for the account (which is usually the department head). This is only an interim step. There must also be a signer, who gives the final approval. It is up to the department to decide whether it wants an additional step, unless the account is a grant account. Then, it is generally required to add the oversight of those familiar with the grants rules.

Signature cards must be signed by each approver and signer, whether it be the primary or the substitute/alternate. The department head also signs the form and initials beside any changes.
Cross-Org Routing Paths

Approval Paths in Buy A&M can be flagged as Cross Organizational paths. What this means is that the HOME Org that the path resides on, can choose to have this path triggered by other Orgs who may be utilizing funds from the HOME Org. They may also be used to implement NIGP approval for items like “Large Computer Purchases” which might be monitored by System Offices, for example.

Cross-Org paths can only be established *new* by the Internal Admin group. For this reason we have created a MULTIORG Path template on every Org that can be CLONED by the Org Admins for that Org. The MULTIORG path is Inactive, and should not be changed. It should be used solely for the purpose of creating new Cross-Org paths via cloning.

Here is the Cross-Org Approval Path established for San Antonio:

On the MULTIORG Path we have not included TEEX or WTAMU in the list of Orgs that the path is valid for. This is due to the fact that TEEX and WTAMU have implemented Buy A&M with an interface to another accounting system, therefore the Account String is not the same for them. This feature makes Cross Org routing invalid with these two Orgs.

Cross-Org paths can be identified by the selection of Cross Organizational on the General Tab and by the existence of the list of Orgs to share with on this tab.

Both selections are required to share an Approval Path.
When cloning Cross-Org Approval Paths, keep in mind that many of the settings you might require for your path will not be defaulted. You will need to work through the entire setup of the Cloned Path. We highly recommend keeping the “Inactive” Status on the path until you have completely established the routing criteria. The last step should be changing the Status from Inactive to Active.

You should not make any changes to the Cross Organizational flag, removing the checkmark on this will also remove the Additional Organizations. Doing so will invalidate the path as a Cross-Org path, and you will have to create a new path by Cloning the original template.
Creating a new Approval Path

When your Agency’s approval settings have been established and Approval Types have been setup, you are ready to create Approval Paths. Return to the Organization Administrator home screen and select the Maintain Agency Approval Paths link.

Agency approval paths can be created and maintained in Buy A&M by users with the role of Organization Administrator. Users with the Organization Administrator role in more than one organization will select the organization to maintain by clicking the eyeglass lookup icon at the top of the screen.

The Approval Path Maintenance screen will display all previously created approval paths and provide the ability to edit them. You may sort by the column headers on this screen. To create a new approval path, click the Add New Approval Path button.

From the Approval Path list, click the Add New Approval Path button to view or create the Approval Paths for your organization.
Approval Paths allow you to define the criteria for routing and require a link to an existing Approval Type Sequence to set the priority for the path to route. To set up your new approval path, you must first complete the following fields on the General tab:

- **Approval Path ID** - 10 character Path ID
- **Description** - Path description
- **Approval Type** - Choose from the drop-down – only Approval Types established may be assigned
- **Dollar Range** - Enter the dollar range for the path or accept the default for all dollar amounts
- **Roles** - Choose the user roles that will be affected by this path
  - Basic Purchasing
  - Department Access
  - Accounts Payable – you might choose this role only for Invoice Documents
- **Status** - Set this to INACTIVE until your path is completely configured and ready for use
- **Approval Doc/Doc Sub Types** - Choose the documents to which this path applies
- **Cross Organizational** – Flags this path for Cross-Org routing
  - **Additional Organizations** – The list of organizations that the path is valid for

You can treat approvals differently based on the user’s role.

- Ongoing Purchasing
- Department Access
- Accounts Payable – you might choose this role only for Invoice Documents
- **Status** - Set the status to INACTIVE until the path is configured and ready for use
- **Approval Doc/Doc Sub Types** - Choose the documents to which this path applies
- **Cross Organizational** – Flags this path for Cross-Org routing
  - **Additional Organizations** – The list of organizations that the path is valid for

You will designate the actual approvers for the path and set the alternates. Approvers may be set for different levels and will receive the document for approval when their level is reached in the approval path route.

**NOTE:** Alternates should be created for all approvers. If a person is on an approval path for a document that they created, the alternate would need to complete the approval. In the Buy A&M System, users are able to, but should not approve their own documents. Currently, only one alternate is allowed per level in the approver list.

You can further configure the approval path and narrow the documents that will trigger this approval path by adding additional criteria from the tabs along the top of the approval path setup screen.

These tabs include:

- **Change Order Tab** – Set either the dollar total or percentage change to a purchase order that will trigger the approval path (this tab is only selectable if PO Change Order document is selected for the path)
- **Department/Location Tab** – Set the approval path to trigger only for documents created by specific departments and/or locations – routing will occur on this path for documents created by the person in the department or location listed on this tab. This does not cause departmental approval to occur based on the accounts and departments being charged on the document.
- **Email Tab** – Configure whether email notifications will be sent to approvers, and, if so, the format of the emails and any additional recipients
- **NIGP Code Tab** – Set the approval path to trigger only for documents with specific commodities
- **Accounting Tab** – Set the approval path to trigger only for documents with items charged to specific account segments
- **Summary Tab** – View all of the criteria entered for this path

In some cases the tabs are optional. When the Document or Document Sub Type of Change Order has not been selected on the General Tab, the Change Order tab will not be available for editing. The Vendor Tab is only available for editing when Credit Memo is selected on the General Tab.
When the required fields are complete, click the **Save & Continue** button. **NOTE:** If the Status of the approval path is set to **ACTIVE** it can immediately be triggered by documents being submitted that match the criteria entered thus far. It is highly recommended that you set the Status to **INACTIVE** until you have configured all tabs of the **Approval Path**. Once completely configured, then return to the **General Tab** and set the path to **ACTIVE**.

Configure all fields on the **General Tab**, and click the **Save & Continue** button.

When multiple approvers/alternates are required, you must click the **Save & Continue** button after adding the first two entries. The system will then give you two more lines to add approvers/alternates.

Because of our configuration – if we do check the RPA and Release we actually have to check it also on the PO and Requisition (RPA and Release) because the requisitions auto create the PO. This will only trigger the routing one time. If we don’t select it on both then it will not route the PO at all because it assumes that the routing has already happened with the Requisition.
**Change Order Tab** – only available if **Change Order** is selected

Routing is triggered when the Change Order increases the dollar amount by specified dollars or by a certain percentage. When selecting **Cumulative**, the Approval Path will be triggered based on the sum of all Change Orders created against a single Purchase Order.

![Change Order Tab Diagram](image)

**Misc/Freight Tab**

Routing is triggered when the Miscellaneous/Freight charges increases the dollar amount by specified dollars or by a certain percentage.

![Misc/Freight Tab Diagram](image)

**Department/Location** – Buy A&M will not currently incorporate this type of routing. This type of routing causes documents to route based on the department or location to which the document belongs. This field is located on the **General Tab** of purchasing documents.
Buy A&M Approval Types and Paths (cont’d)

Email Tab

Click the **Email Tab** to configure email settings for the path.

Approvers will receive a default email notification requesting approval of documents regardless of entry on the Email Tab.
Buy A&M Approval Types and Paths (cont’d)

**NIGP Code Tab**

Click the **NIGP Code Tab** to configure commodity code routing settings for the path.

Utilize the search feature to locate NIGP codes to be considered for the path.

- Search by **Class Description**, **Class Item Description** or other criteria to locate the NIGP code(s) for the path
Account Segment Tab

Click the **Account Segment Tab** to configure routing by settings for the path.

- Routing may be configured by any segment of the account stream in Buy A&M
- In Buy A&M, you could trigger routing on one fiscal year since fiscal year is included in the Account Code. This is more inclusive than recommended because you would potentially have to change the routing path every year.
- Currently there is no provision for wild cards. If you wanted to include all object codes in the 4000 series, you would have to enter every possible code separately into the list.
- When using the Account Stream for routing, minimally the CAMPUS should be filled in.
- If accounts which are in the Buy A&M system are deactivated in FAMIS, they will remain in the Buy A&M system but will be flagged as an inactive account during the nightly account update process.

Vendor Tab

- This tab only applies to Credit Memo routing and will notify approvers of credit memos that are created for the specified vendors.
- When no vendors are selected, the path is associated with ALL vendors. The approvers would receive approval routing for all credit memos.
Summary Tab

The Summary Tab shows all settings configured for the path.

- The system will allow users to approve their own documents. Procedures should be put in place to allow for alternates to approve purchases of this nature.
Approval Maintenance Tips and Tricks:

You can use the Approval Path Maintenance Search panel to search for all paths tied to a specific Approval Type.

Click in the Approval Type drop down to view all Path's for a specific Approval Type, i.e. DEPT - Departmental.

Search for all DEPT Approval Types that are currently ACTIVE returns the list.
Renaming Approval Path

The ID of Approval Paths may not be changed; however, the path can be cloned creating a new name. When necessary, the following steps would be required:

- The Approval Path would have to be cloned to a new name
- The old Approval Path would need to be inactivated
- Care should be taken when doing this to ensure there are no documents currently routing for the Approval Path being changed.

Clone Feature

You can easily copy existing paths with the Clone Approval Path feature. Simply go to the Summary Tab for any path you would like to copy and click Clone Approval Path.
You will then be prompted to enter the *New Approval Path ID*.

- The system will then take you to the **General Tab** for the new path and allow you to modify as needed.
- This is a quick method to create multiple paths that are similar to each other.