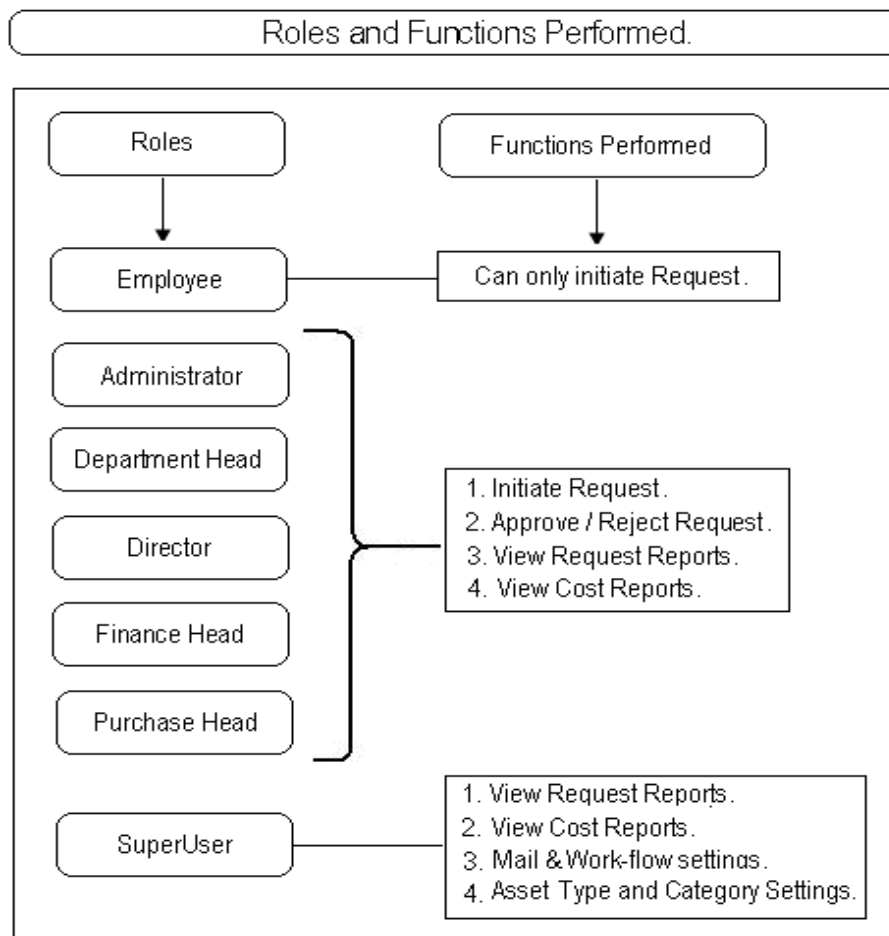# Purchase Management System

Purchase Management System aims at the management of the asset purchase in the organization. The application focuses on creating well defined purchase reports for individuals as well as cost reports categorized yearly / monthly. When an employee creates an asset request, he may then submit it. The next approval authority can view the request with the asset details categorized according to the request id. He may then have to then either approve the request or reject it with his comments. The requestor, at every stage will be intimated by mail regarding the current status of his request or may view it in the "My Request" option in the left Navigator. The person with the SuperUser access can make various configuration settings for the application.
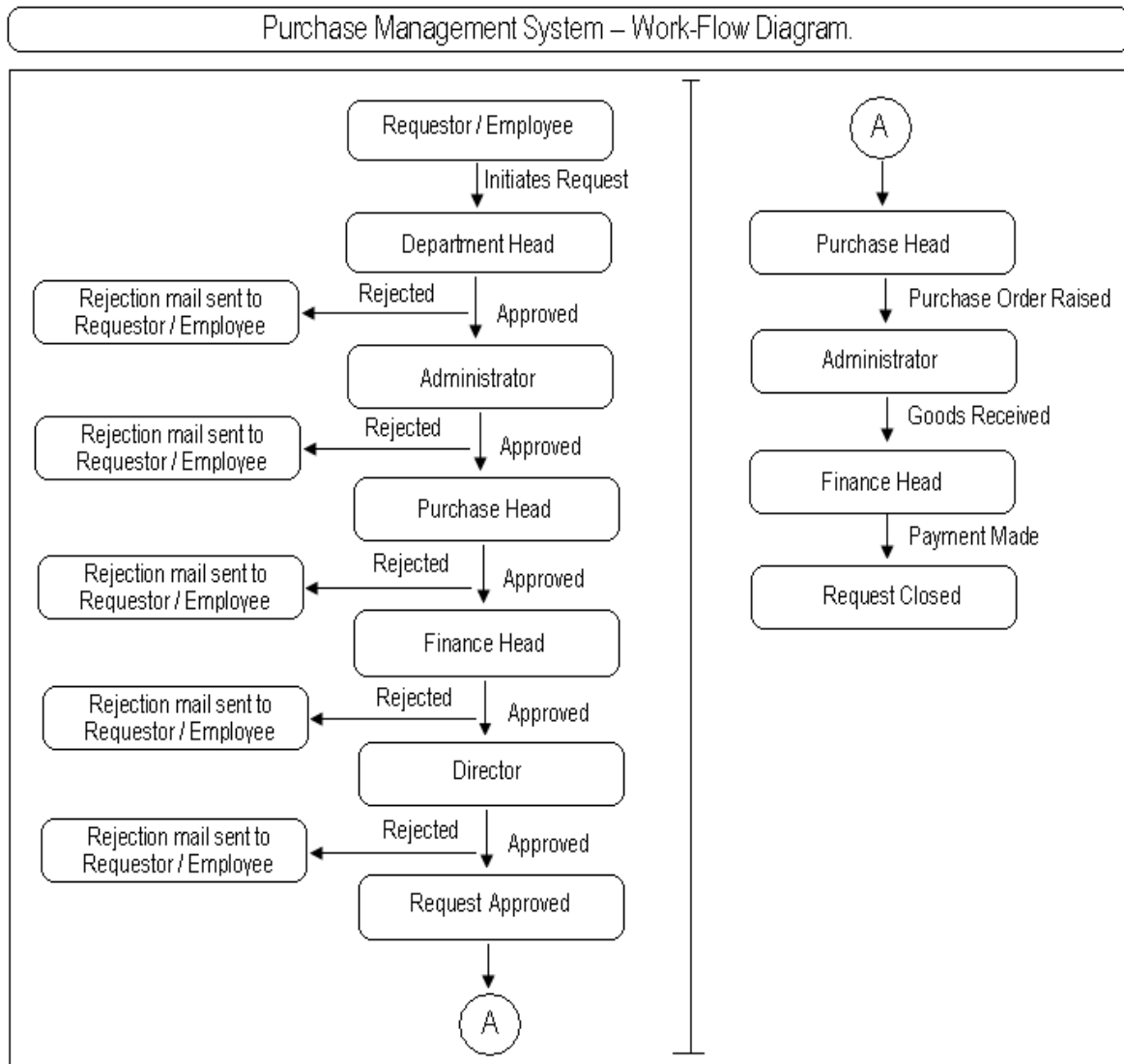
The application comprises a strong mailing functionality to intimate the employees of the request   details during every stage of the approval process. The application simplifies, and completely automates the Travel Expense Management system in the organization.

The Roles and their Functionalities look like shown below -

Roles and Functions Performed.

Roles	Functions Performed
Employee	Can only initiate Request.
Administrator Department Head Director Finance Head Purchase Head	1. Initiate Request. 2. Approve / Reject Request. 3. View Request Reports. 4. View Cost Reports.
SuperUser	1. View Request Reports. 2. View Cost Reports. 3. Mail & Work-flow settings. 4. Asset Type and Category Settings.

As seen in the diagram above, everyone except the SuperUser can initiate the asset purchase request.

The Purchase Management System workflow looks like below -

Purchase Management System – Work-Flow Diagram.

```
                    Requestor / Employee                          ( A )
                           │                                        │
                           │ Initiates Request                      ▼
                           ▼                                  ┌──────────────┐
                    ┌──────────────┐                          │ Purchase Head│
                    │Department Head│                          └──────────────┘
                    └──────────────┘                                 │
  Rejection mail sent to   Rejected │ Approved          Purchase Order Raised
  Requestor / Employee ◄───          ▼                              ▼
                                ┌──────────────┐            ┌──────────────┐
                                │ Administrator│            │ Administrator│
                                └──────────────┘            └──────────────┘
  Rejection mail sent to   Rejected │ Approved                  Goods Received
  Requestor / Employee ◄───          ▼                              ▼
                                ┌──────────────┐            ┌──────────────┐
                                │ Purchase Head│            │ Finance Head │
                                └──────────────┘            └──────────────┘
  Rejection mail sent to   Rejected │ Approved                  Payment Made
  Requestor / Employee ◄───          ▼                              ▼
                                ┌──────────────┐            ┌──────────────┐
                                │ Finance Head │            │Request Closed│
                                └──────────────┘            └──────────────┘
  Rejection mail sent to   Rejected │ Approved
  Requestor / Employee ◄───          ▼
                                ┌──────────────┐
                                │   Director    │
                                └──────────────┘
  Rejection mail sent to   Rejected │ Approved
  Requestor / Employee ◄───          ▼
                                ┌──────────────┐
                                │Request Approved│
                                └──────────────┘
                                       │
                                       ▼
                                     ( A )
```

The above flow can be explained as below –

1. Employee / Requestor initiates request and sends it to the Department Head for approval. When the department head approves, it is sent for further approval to Administrator. From Administrator the approval request goes to the Purchase Head then to the Finance head.
2. After all these approvals, the request goes for the Director's approval. In all of the above mentioned levels, the request may be rejected at any of the stages.
3. After the Director approves, the request is taken to the purchase head for raising the Purchase Order.
4. Then the request is taken to the Administrator and when the requested asset is received it goes at the final level where the Finance Head makes the payment.
5. After the payment the request is closed.

Basic Flow of the Purchase Management System can be explained as below-

1. Configuration Document :

The configuration settings or the application settings can be done only by the SuperUser.
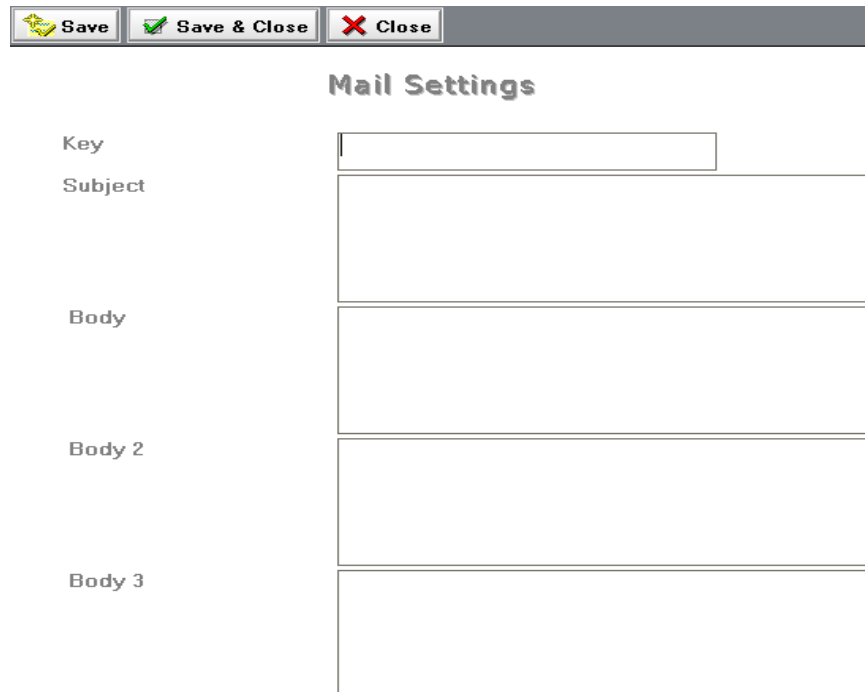
1.1 Mail configuration settings :

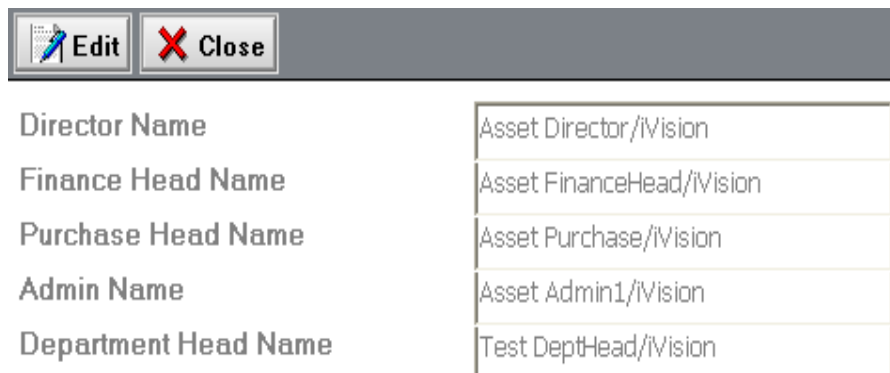The Mail Configuration Form is accessible only to the "SuperUser". All others will not be able to access this form. The SuperUser will be able to create the Mail Configuration Document by selecting the "Configuration Settings" -> "Email" sub-option in the left navigator. He will also be able to edit already existing documents used for mailing.

He can edit any of the already existing mail documents from the view that looks like below -

New Entry			
Key	Subject	Body	Body 2
EMailForApproverAdmin	Asset purchase request pending for approval.	This mail is to inform	
EMailForApproverAdminPO	Asset purchase request for collecting new asset.	This mail is to inform	
EMailForApproverApprovedByAdmin	Asset purchase request pending for approval.	This mail is to inform	

Click on the "New Entry" button will open a new form as shown below -

As can be seen from the image above, the user can add text (Subject or Body) to the mail configuration document he wants to see in the mails.

1.2 Workflow Settings :

The Workflow Settings Form is accessible only to the "SuperUser". All others will not be able to access this form. The SuperUser will be able to create / edit the Workflow Settings Document by selecting the "Configuration Settings" -> "Workflow Settings" sub-option in the left navigator.
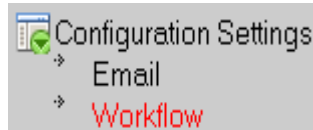
He can edit the already existing workflow document from the view that looks like below -
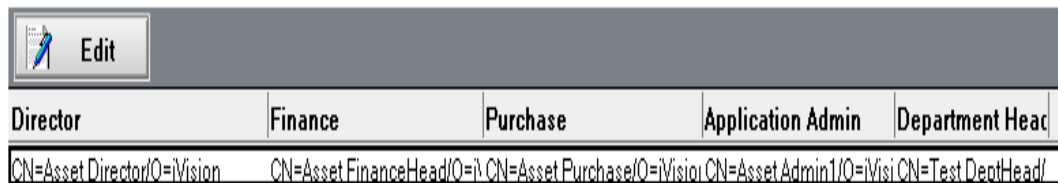
He may edit the document by clicking on the "Edit" button as shown above. The form looks like shown below -

The intimation mails go to the selected approving authorities in the form above. It is compulsory to set approving authority for the proper Workflow. After making the changes the user may save the form.

1.3 Asset Category :

The Asset category can be added to the Asset Master by selecting "Assets Masters" -> "Category" sub-option. This will open the list all the categories. It looks as shown below –
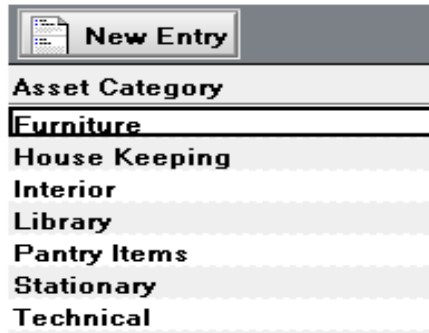
The user can edit any of the asset category entries by opening the respective category document.
The user can add a category to the list by clicking on the "New Entry" button. The form looks like below

After adding the category, he may save and close the form. After saving the user shall see the new category in the view. He may edit it later on if required.

1.4 Asset Type :

The Asset category can be added to the Asset Master by selecting "Assets Masters" -> "Assets Type" sub-option. This will open the list all the Asset types. It looks as shown below –

Assets Masters
  Category
  Assets Type

New Entry		
Asset Category	Asset Name	Asset Type
▼ Furniture		
	Chair	Plastic
	Table	Plastic
▶ House Keeping		
▶ Interior		
▶ Library		
▶ Other		
▶ Pantry Items		
▶ Stationary		
▶ Technical		

The user can edit any of the asset type entries by opening the respective asset type document.

Save   Save & Close   Close

Asset Master

Asset Category	
Asset Name	
Asset Type	
Brand Name	
Model Number	
Warranty/Guarantee	
Request Date	03/21/2011
Purchase Date	
Asset Size	
Memory – Recommended	
Memory – Min acceptable	
Capacity	
Color	
Quantity	
Operating Temperature Range	
Operating Voltage	
Dimensions	
Weight	

The user can add an asset type to the list by clicking on the "New Entry" button. The form looks like shown above. He has to fill in the required and applicable fields to define the Asset type further. After adding the asset type, he may save and close the form. After saving the user shall see the new asset type in the view. He may edit it later on if required.

1.5 Vendor Master :

The SuperUser may fill in the Vendor details for the respective Asset Category by selecting the "Vendor Masters" option in the left navigator.

He may edit the already existing vendor details by opening the respective vendor document. He may also add a new vendor details by clicking on the "New Entry" button as shown above. The vendor details form looks like shown below -

He has to fill in the required and applicable fields to define the Vendor further. After adding the vendor details, he may save and close the form. After saving the user shall see the new vendor in the view. He may edit it later on if required.

2. **To initiate Asset Purchase Request :**

Everyone except the SuperUser can create a new Asset Request. To initiate the request the user should select "New Request" in the left navigator. It will open the request form. The asset request form looks like shown below –

As can be seen, the request form is divided into 3 sections –

2.1. Request and Requestor details – It is auto populated.
2.2. Asset Details – needs to be filled in by the requestor.
2.3. Asset type details – It is auto populated but is editable to the requestor.

After selecting the Asset category, the Asset name varies and according to that the Asset type varies. The requestor may fill in the other details about the asset. After filling in the necessary details, the requestor may submit the request. On submitting, the request ID gets generated for the asset request. In case the requestor does not want to submit the request he might save it as draft or close it. He can view all his initiated requests in the "My Requests" option in the left navigator. He will be able to view the request with the current status for e.g. "Purchase Approved" or "Finance Approved" or "Director Approved" or "Purchase Ordered" or "Rejected" or "Closed". If the Request is saved a s draft, the status is "Saved as Draft" and this request is not visible to anybody except the requestor himself. He may submit the saved request at any point of time later on.

3. **To Approve the request :**

There are various levels of approval. Refer the flowchart at the second page. To view the request for approval by the particular user, he must select the "Request for Approval" option in the left navigator. The level of approvals change on the basis of who is initiating the request for e.g. an Employee with employee role or no role at all will have all the 5 levels of approval while the Director initiated request will not need any approval. To approve the request, the approver clicks on the "Approve" button on the request form. There may be some mandatory fields for some stages which will be filled in by the particular approval authority. The approver may also fill in the "Comments" section on the request form if required. On approving, the approval intimation mail goes to the Requestor and also to the further approving authority if any with the required details. At every stage the comments History will be appended to the request form. However a point to remember that the request needs no approval after the Director approves it.

4. **To Reject the request :**

To reject the asset request, the approving authority needs to click on the "Reject" button on the main / request form. The request may be rejected at any stage of the process before Director approves it for any valid reason. However, after the director approves the asset request, the request cannot be rejected. Before rejecting any request the reason for rejection is mandatory and is to be filled in the "Comments" section of the request form. After rejection the intimation mail goes to the requestor along with the reason.

[Note: SuperUser does not play any role in the Approval process of the Purchase Management System.**]**