Workflow Definition

Overview

You may set up your system to route certain transactions through a workflow approval process. By doing so, the new information that is requested can be sent to one or more approvers. You have the ability to set up approval processes for these Manager Services functions:

- **Account Distribution**
- **Address**
- **Disciplinary Actions**
- **Employment Status**
- **Job Review**
- **Salary Change** (Standard compensation method)
- **Transfer Employee**

You may attach up to 10 files to the transaction (except for the **Address** function, which currently does not provide file upload capability). The files can be viewed from the individual functions (with the exception of the **Transfer Employee** function; files uploaded when processing a transfer can be viewed in the **Employee Files** function).

While the transaction is in the approval process, it will be held in a pending state. When members of the workflow have approved the transaction, the transaction is completed and the information is added to the iCON database.

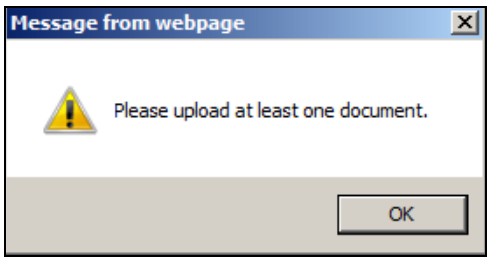
The **To Do List** is used to approve or reject workflow transactions; it includes the details and statuses of these transactions, along with any associated files, and any comments that have been made by the requestor or approvers.

The **Workflow Statistics** function may be used to see how many workflows are in process, approved or rejected. If you were a member of any of these workflows, you may view the details for the transaction.

Each user who is part of a workflow can set up their notification elections in **My Account**. Users may choose to be notified of workflows via email messages, text messages or both. If no election is made, an email message will be sent.

When defining a workflow, you will set up information in several areas, and then create the approval path. These are the set up steps:

- Define the main workflow information: this includes the workflow name, the sequence in which it will be used, whether or not a document is required when the transaction is requested, and the status (active/inactive).
    - You may use sequencing to determine the order in which the system will find the workflow to be used when a transaction is requested. For example, if you want Department ABC to use Workflow 1 (this is accomplished by setting up a filter; see the next bullet point for more details), and Department DEF to use Workflow 2, and all other Departments to use Workflow 3, you would use the numerical Sequence field to process Workflow 3 last. That way, if an employee was not in Department ABC (sequenced first) or Department DEF (sequenced second), the system would use the workflow for all Departments.
    - If you want the person requesting the workflow to attach a document, set the Documentation Required field to Yes. All approvers will then be able to view the document(s). The system will require that at least one document be attached to the transaction in order for it to be saved. If the user tries to save the transaction and no files have been uploaded, the following message will appear:

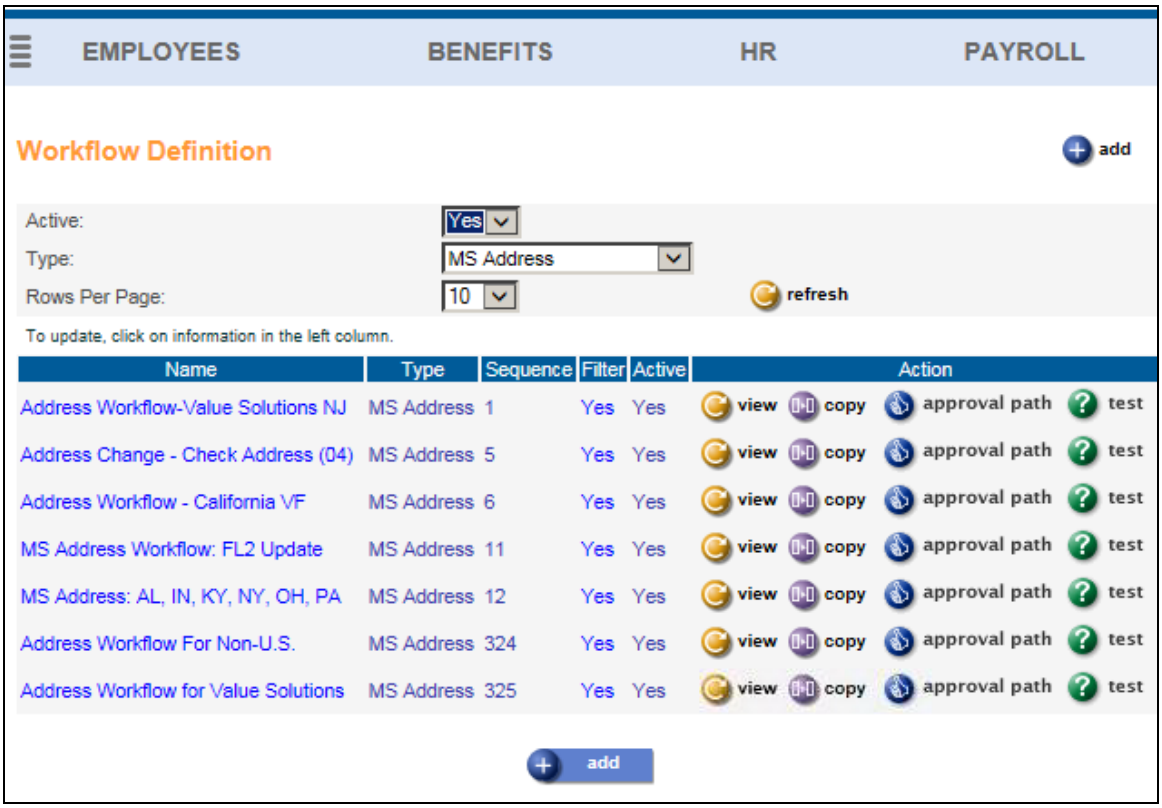


- While adding a workflow, the status is automatically set to Inactive, so that it will not be used until all setup steps have been completed. When you are ready to put the workflow into place, change the status to Active.

- Define the filter: if you want the workflow to apply only under certain circumstances, add a filter such as Organization Level 4 = 'ABC'. In this example, the workflow would only to apply to employees in the ABC organization. Each workflow will display the available fields that may be used as filters.
- Define the requestors: a requestor is the user who adds or updates information in the workflow-enabled function. You may define different workflows for different requestors, or set up workflow to be used when any requestor enters information. For example, you may set up workflow to run for all requestors except the HR Director. When a workflow is created, the requestor defaults to All Users; you may change this if needed.
- Define the members: a member is someone who is involved in the workflow. For example, the employee's Reports To 1 (direct supervisor) and Reports to 2 (direct supervisor's manager) may need to approve the workflow, as well as the HR Director. These relationships need to be defined as Members prior to setting up the Approval Path. When a workflow is created, the system will automatically create members for several levels of the employee's Reports To and the requestor's Reports To; you may add more members if needed.
- Define the messages: e-mail and/or text messages may be sent at various stages of the workflow being processed. Before setting up the Approval Path, the messages are defined. When a workflow is created, default messages will be created; if you want to change the Subject or Text of the default messages, or add more messages, you may do so.
- Define the statuses: as the workflow progresses, you may have the system change the status. The status appears with the workflow in the **To Do List**. Examples would be Requested, Approved by `User`, Rejected by `User` or Complete. When a Workflow Definition is added to the system, default statuses will be created; you may change these or add new statuses.

Once the above areas are defined, you will set up the Approval Path. This tells the system things such as who to notify when a workflow transaction is requested, who gives the first approval, second approval, etc., whether to send reminder messages if an approver does not take action, whether to escalate the workflow to another user if an approver does not take action, who to notify as the workflow progresses and who will give the final approval.

When the setup is complete, you may use the "Test" feature to make sure the workflow will be processed correctly.



Prerequisites

Before adding a Workflow Definition to your system, required values in the following common objects must exist:

- Workflow Member Type
- Workflow Step Type
- Workflow Type

Before you add data that will go through the workflow process, make sure that your employees have a Reports To in the **Work Profile** function. You may use the **Reports To** and **Report To By Organization** functions also. Email addresses must be entered in **User Administration**. Each user must be associated with an Employee Number in **User Security.**

If you will be including members who represent various work relationships, such as Human Resources Manager, Payroll Manager, Vice President, etc., set up information in the following:

- Business Relationships common object
- **Work Relationships**

Files that are associated with a workflow are stored in the function where the data was entered, with the exception of **Transfer Employee**. Files uploaded in **Transfer Employee** can only be seen in the **Employee Files** function. To grant access to these types of files, set up the authorized users in **File Type Security** for Transfer Employee files.

Field Descriptions

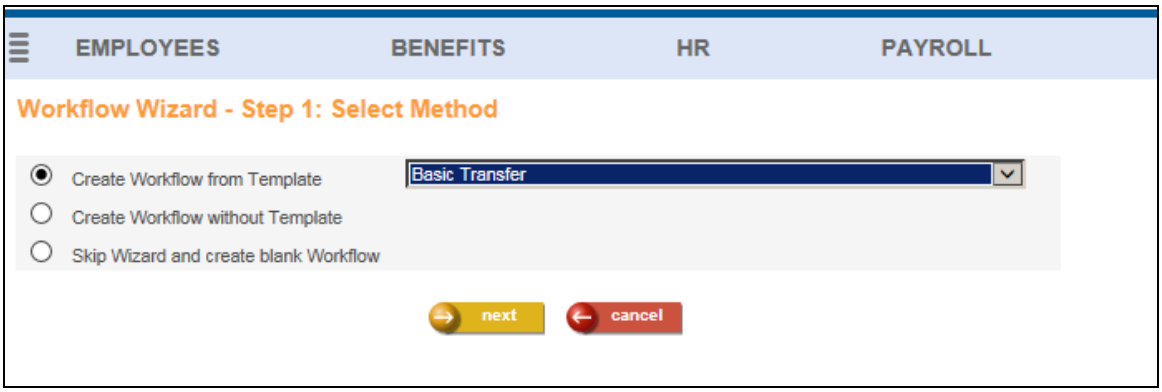
You may copy an existing workflow by clicking on the Copy button. A new workflow will be created where the Name is "Copy of <existing Workflow>", and the Sequence is the same as the original workflow. Update the new workflow as needed.

To add a new workflow, click Add on the main Workflow Definition page; the Workflow Wizard – Step 1 page appears. Select from the following options:

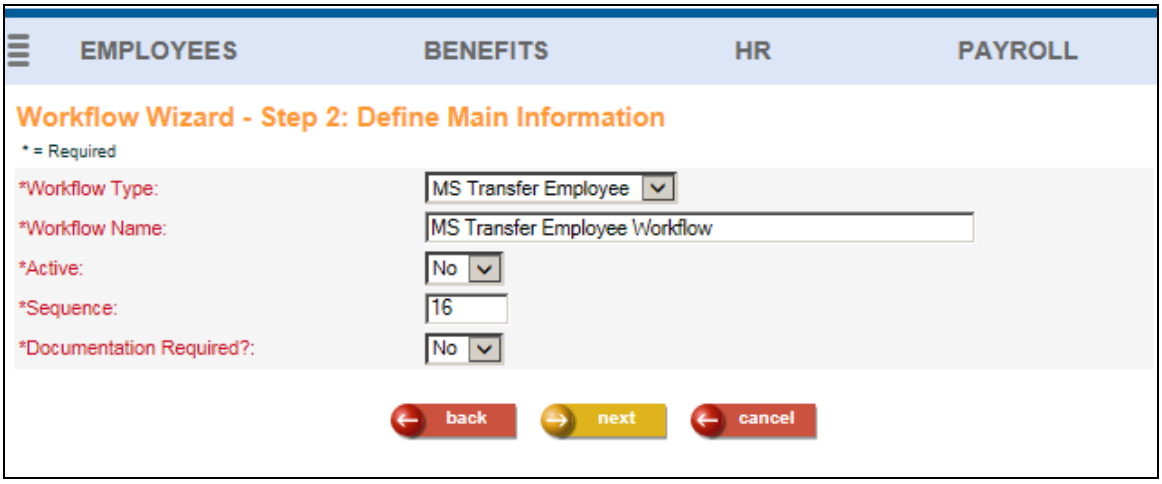
Field	Description
Create Workflow from Template	By selecting this option, you may choose from several pre-defined templates. You may make changes to the workflow as the system steps you through the wizard.
Create Workflow without Template	By selecting this option, the system will step you through the wizard to create a workflow. No pre-defined data will be entered.
Skip Wizard and create blank Workflow	The workflow wizard will not be used with this option. Instead, you will access each tab to set up workflow information. Using this option, you will have full access to all aspects of the workflow set up. Note that no approval path will be automatically generated if you skip the wizard; you must enter each step manually. For that reason, it is recommended that you use a wizard whenever applicable. The setup tabs that appear in this option (such as Members, Statuses, etc.) are also used when you update a Workflow Definition.

Create Workflow from Template

If you select the first radio button to Create Workflow from Template, click on the drop-down list in Step 1 and select the template that you wish to work with. In this example, the Basic Transfer workflow will be used.



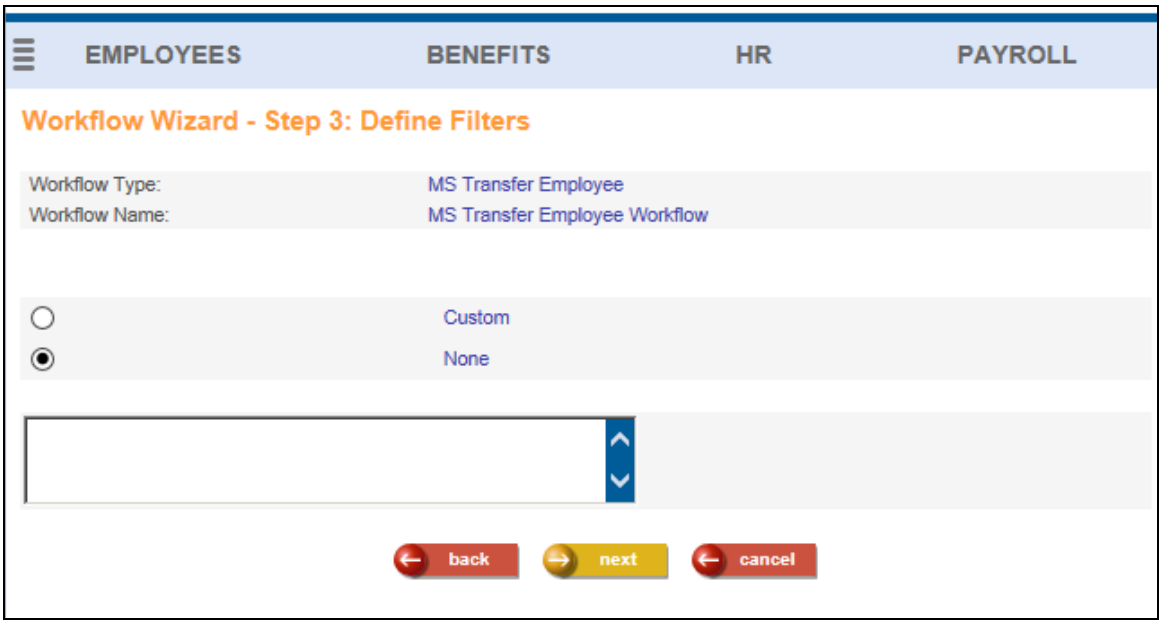
Click Next to continue. The Workflow Wizard – Step 2 page will appear.



The system will populate the fields as follows. Make any needed changes.

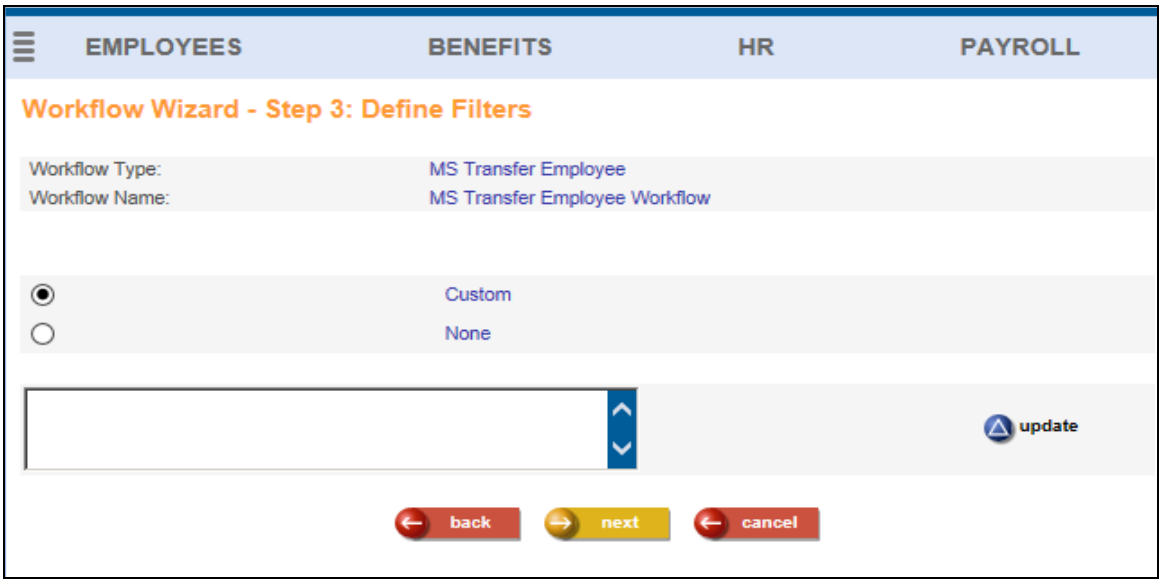
Field	Description
Workflow Type	This field will be populated based on the template you selected; in this example, the MS Transfer Employee type is populated. MS represents transactions initiated in Manager Services.
Workflow Name	A default name will be populated based on the Workflow Type you selected. Workflow Names must be unique
Active	This field will default to No. Only change this to Yes after all set up has been completed and you want the workflow to be used when a user enters data in this function.
Sequence	This field will be populated with the number after the last sequence number for the selected workflow type. The Sequence determines the order in which workflows will be used when an entry is made in a workflow-enabled function. When data is entered, the system will get all Active workflows for the Workflow Type. It will look at the first workflow with the lowest Sequence number; if the Filter applies to the data, and the Requestor is in the list of Included Users, that workflow will be used. If the Filter and/or Requestor does not apply, the system will use the next highest sequence until it finds a workflow where the Filter and Requestor apply. If no Filters apply, workflow will not be used.
Documentation Required?	This field will default to No. You may change it to Yes if you require that at least one document be uploaded by the user requesting the workflow. Note that this field appears for all workflows except for MS Address.

Click Next to continue. The Workflow Wizard – Step 3 page will appear:

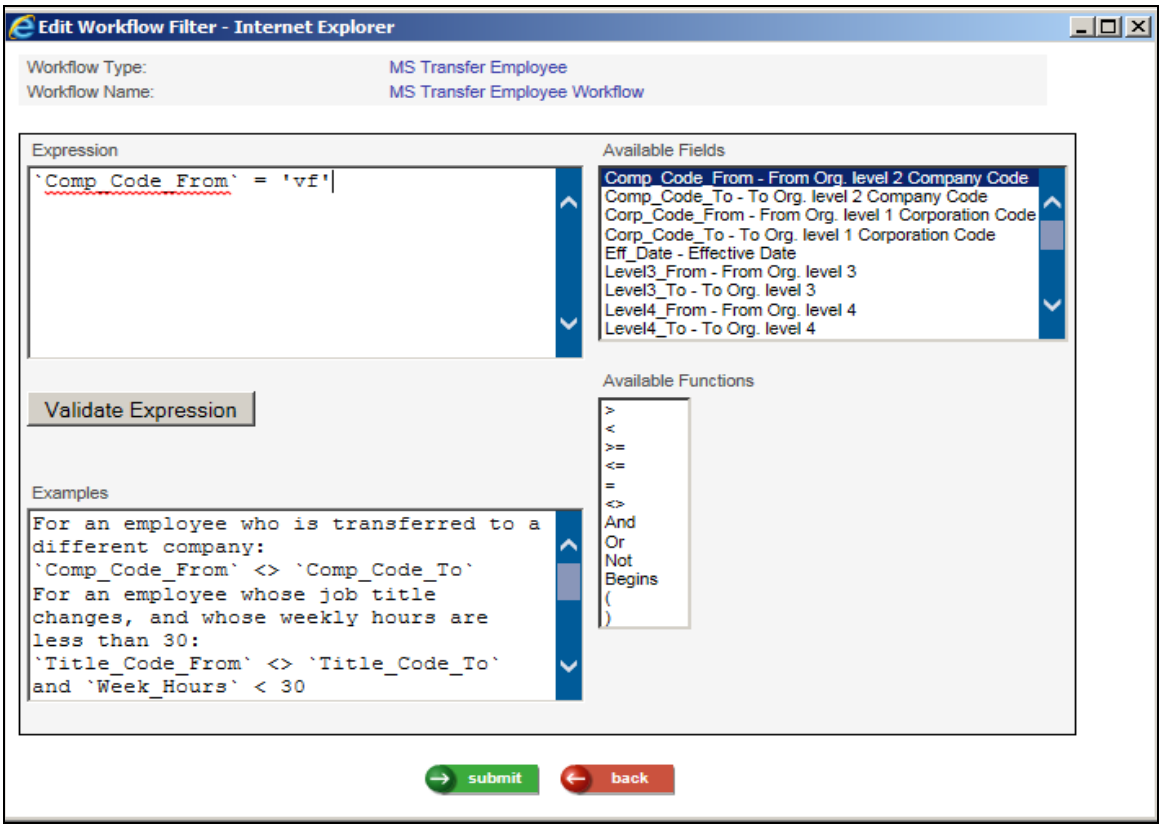


This is where you may define filters that determine under which circumstances this workflow will be used. If you want this workflow to always be used, regardless of the data, leave the radio button for the None option selected.

If you want to define a filter for when to use this workflow, select the Custom radio button. An Update button will then appear; click on this button to display the filter page.



A separate window called Edit Workflow Filter will appear. Enter the filter in the Expression box by clicking on the Available Fields and Available Functions that you wish to use. In the example shown below, a filter has been entered that will apply this workflow only for employees whose `Comp_Code_To` is equal to 'vf'. This means that when an employee is being transferred to organization level 2 "vf" (the code that is stored in the **Organization Setup** function), this workflow will be used. The Available Fields box shows the data fields that can be used when constructing a filter. The first part of the Available Field shows the field name that must be used in the Expression box, followed by a dash, followed by a further description of the field that will help you identify what the field is. When you click on one of these fields, the system will populate the field name surrounded by back ticks into the Expression box, where you can either type an equal sign or other sign, or you may click on one of the Available Functions; by so doing, the system will populate that Function into the Expression box. Examples are provided that will assist you with the syntax that must be followed in the Expression box.



The Available Fields may be typed into the Expression box manually, but you must include them in back ticks.

For alphanumeric field values such as 'vf', you must include them in single or double quotes. For numeric field values, do not include quotes. For date fields, enter the dates with slashes and no quotes, such as `Eff_Date` >= 1/1/2016.

When you are defining a filter to apply to employees in a particular organization, you may use only the lowest level in the filter, as long as it is unique. For example, if you define divisions at level 3 and departments at level 4, and you want this workflow to apply to the Administrative department whose code is 'ADMIN' for only divisions A and B, and not divisions C and D, you would need to enter a filter for both levels, such as:

(`Level3_From` = 'A' and `Level4_From` = 'ADMIN') or (`Level3_From` = 'B' and `Level4_From` = 'ADMIN')

If you enter the following filter, it would apply to Level 4 ADMIN for all divisions:

`Level4_From` = 'ADMIN'

Here is an example of the "Not" function: to initiate workflow only for a transfer where the Reason doesn't begin with "Z":

Not(`Reason` begins 'Z')

Pay special attention to the use of parentheses. Consider the following example, where the Status Change workflow should be used if an employee is going from Status ACT, AFT or APT, and is going to one of the following Statuses: INA, TER, RES, DS:

(`Ee_Status_From` = "ACT" or `Ee_Status_From` = "AFT" or `Ee_Status_From` = "APT") and
(`Ee_Status_To` = "INA" or `Ee_Status_To` = "TER" or `Ee_Status_To` = "RES" or `Ee_Status_To` = "DS")

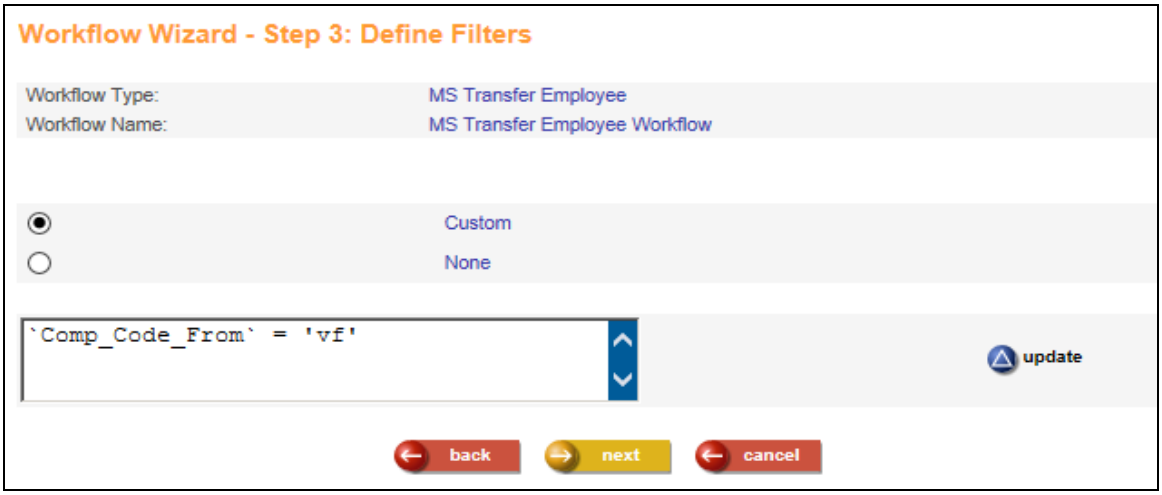
For some Workflow Types such as MS Address, an Available Field called AddUpd can be used. You can set up different filters for whether a record is added or updated. If you wish to use this field, use either 'ADD' or 'UPD' as the field value:

`AddUpd` = 'ADD' to have this workflow apply when a record is added, or
`AddUpd` = 'UPD' to have this workflow apply when a record is updated

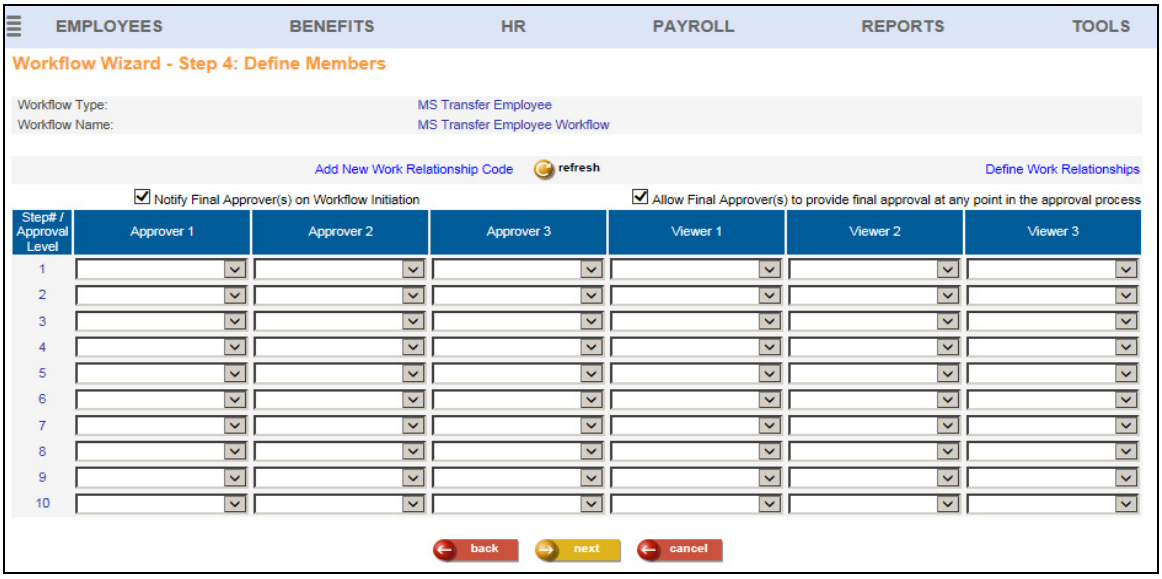
If you want the workflow to be used when information is added or updated, do not enter a filter for this field.

If you want the workflow to apply only to employees who report to a certain supervisor, use the `Reports_To` filter. Enter the employee number in single quotes, since it is an alphanumeric field, such as: `Reports_To` = '123456'.

Click on Validate Expression to see if your filter is valid; a message will let you know if the expression is valid or not. Make any needed changes. Click on the Submit button when you have finished entering the filter expression. If any syntax errors exist, a message will appear. After the filter has been saved, it will be displayed on the Workflow Wizard – Step 3 page:

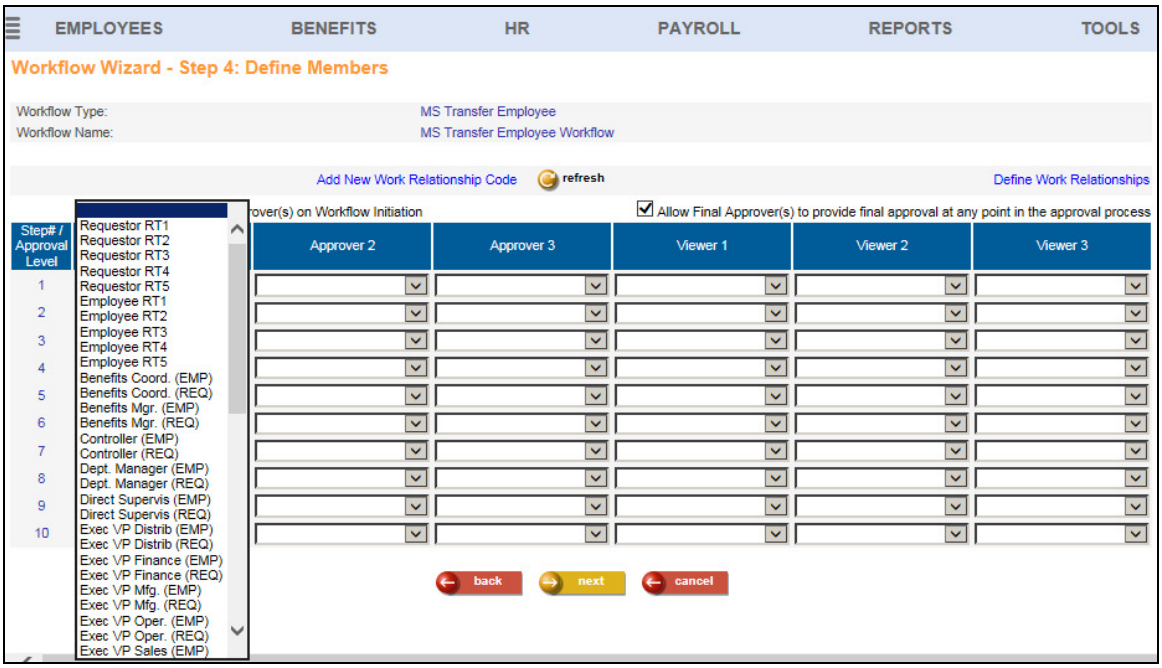


Click Next to continue. The Workflow Wizard – Step 4 page will be displayed.

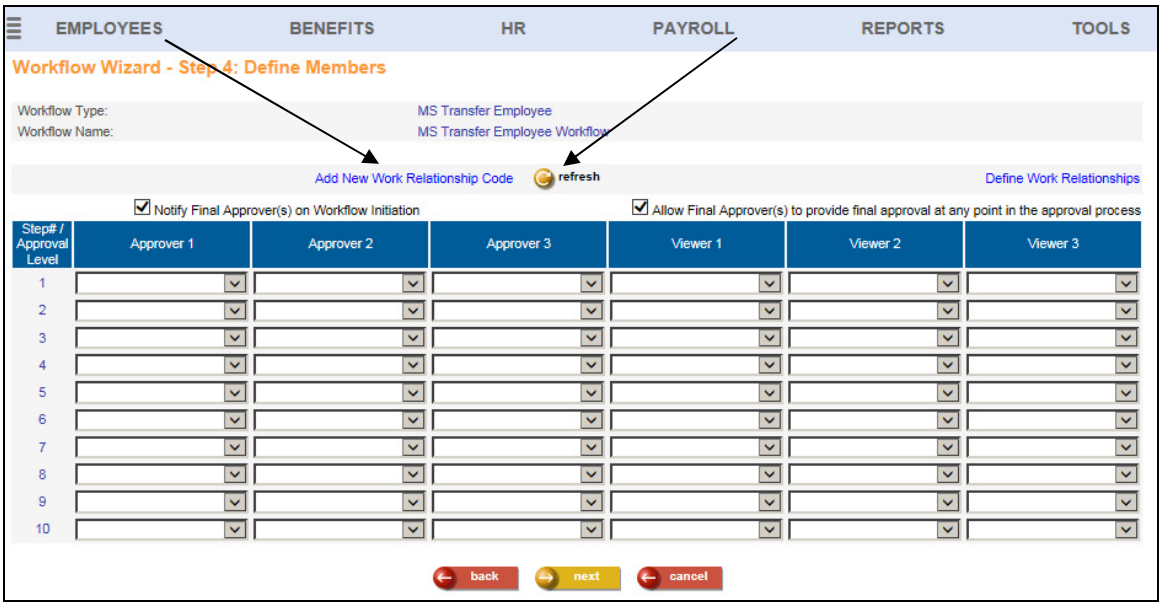


On this page, define the work relationships that will either approve/reject the workflow (Approvers), or who will be notified but do not have an approval role (Viewers). You must define these relationships in the proper order of how the workflow will progress once data has been entered in one of the workflow-enabled functions.

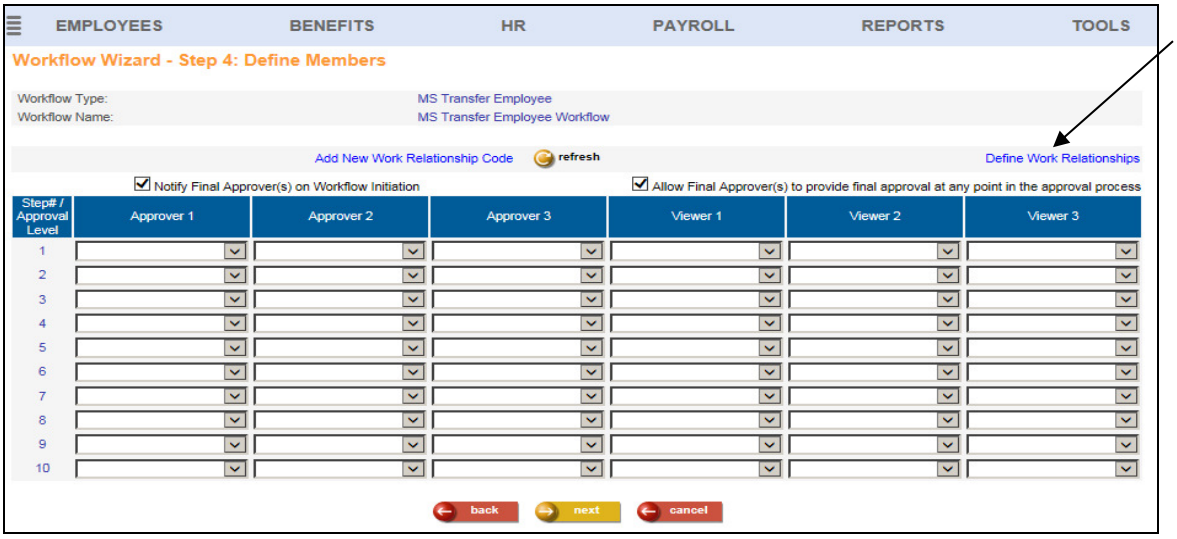
In each drop down list on this page, the list of available Members will appear. These include five levels of the requestor's Reports To (RT) and five levels of the employee's Reports To. In addition, all of the entries in the Business Relationships common object will appear, such as those shown in this example: Benefits Coordinator, Benefits Manager, Controller, etc. Each Business Relationship will appear twice: once to represent the person associated with the employee (EMP), and once to represent the person associated with the requestor (REQ).



If you wish to add a Work Relationship value to this list, click on Add New Work Relationship Code. This will bring up a separate window with the Business Relationships common object, where you can add or update values. When you have finished, close the Business Relationships window and click on the Refresh button. This will cause your new entries to appear in the drop-down lists in the Approver and Viewer columns.



If you need to define the employees who are in those Work Relationships, click on Define Work Relationships. This will open a separate window where you can enter information in the Work Relationships function. For example, this is where you would define the employee numbers who represent the Benefits Coordinator, Benefits Manager and Controller for each organization level.

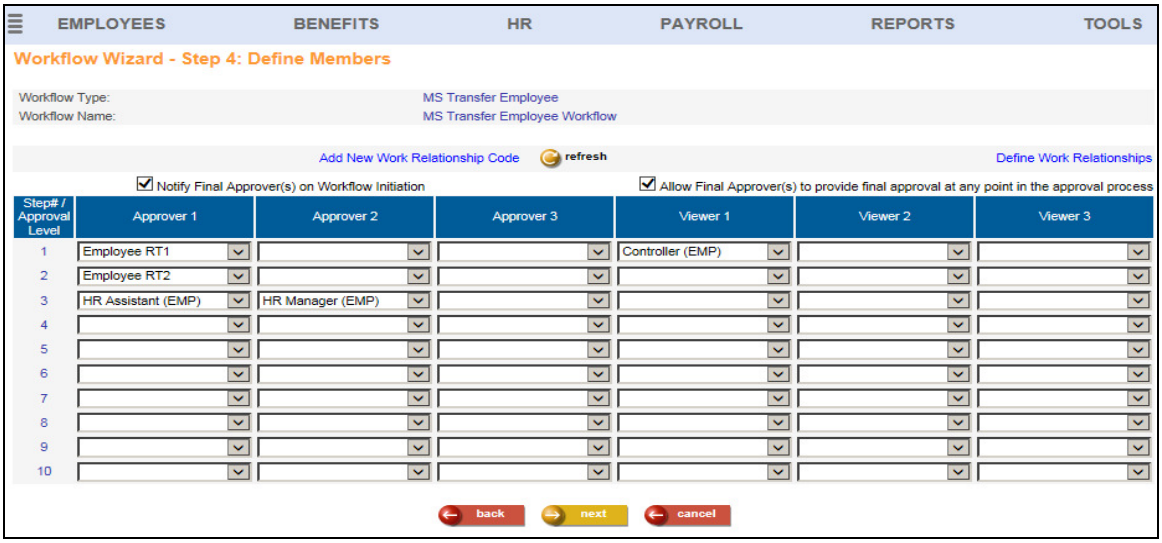


Warning: If you select a Work Relationship value (one that is not an Employee RT or Requestor RT) in any of the Approver or Viewer columns on Step 4 of the Workflow, the employees must first be defined in the **Work Relationships** function before you set the Workflow to Active = Yes. It does not have to be done while you are adding the Workflow Definition; you can access the **Work Relationships** function after you have completed the Workflow Definition, but it must be done *before* activating the workflow. Otherwise, any transactions that are entered will not be able to be completed, because the system won't know who the approvers are.

Select the first Approver on Step 1, the second Approver on Step 2, etc. If you wish to notify someone that the workflow has been submitted, you may select up to three Viewers on Step 1.

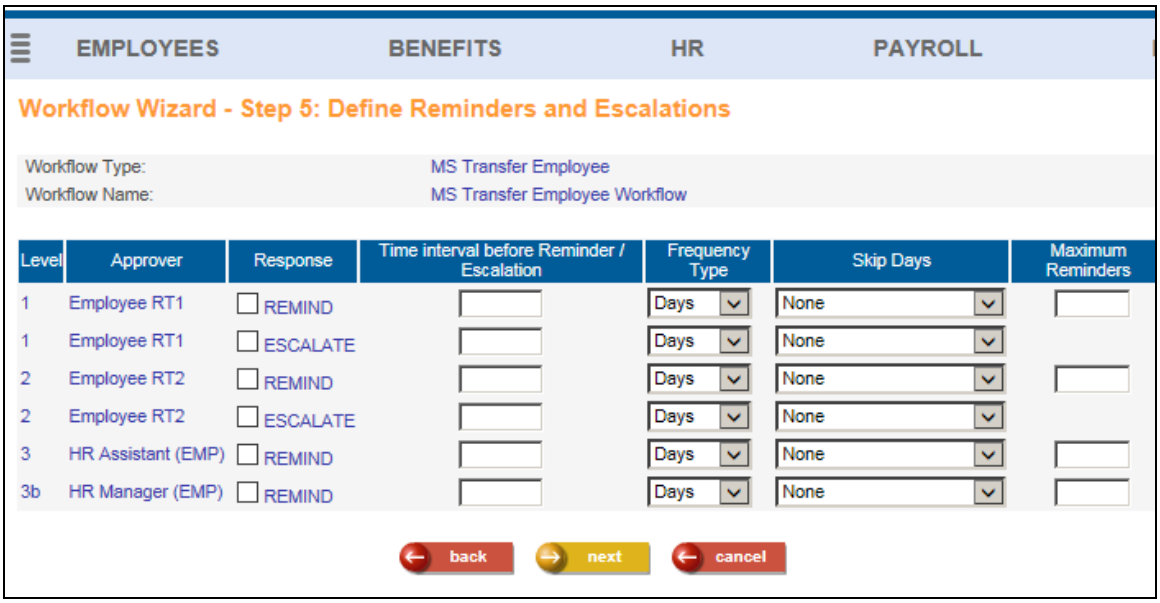
You may select up to 10 steps of approval. Regardless of the number of steps that you define, the last step that you define will be considered the final approval. If you want to allow more than one person to do the final approval, enter up to three Approvers on your final Step.

Consider the following example. You want the Employee's Reports To 1 to do the first approval, the Employee's Reports To 2 to do the second approval, and then have the final approval done by *either* the HR Assistant or HR Manager of the employee. When the transaction is requested, you want the Controller to receive notification, but no action is required by this person. The Steps would be set up as follows:



If you want the final approvers to receive a message when the requestor enters the transaction, make sure the checkbox for “Notify Final Approver(s) on Workflow Initiation” is selected. If you want the final approvers to be able to approve the transaction at any time, make sure the checkbox for “Allow Final Approver(s) to provide final approval at any point in the approval process” is selected. These checkboxes are selected by default.

Click Next when you have finished defining the approvers and viewers. The Workflow Wizard – Step 5 page will appear. The system will populate the approvers that you entered on Step 4, as shown in this example:



In Step 5, set up timing for any reminders or escalations that you wish to occur. If you enter data on the REMIND row, the REMINDER message will be sent as an e-mail and/or text message to the approver when he or she does not respond in a certain amount of time, depending on that person’s Workflow Notification Election in **My Account**. If the user has made no election, an email message will be sent. In the Skip Days drop-down list, you may leave the default of None, which will send reminders on each calendar day, including weekends and holidays. Or, you may select a value from the drop-down list to Skip Days for: Holidays, Weekends or Weekends and Holidays.

If you wish to escalate the workflow to the next approver when someone does not take action within a certain amount of time, enter that information on the ESCALATE row.

In the following example, a reminder will be sent in 1 day (skipping weekends and holidays) to Employee RT1 if he or she does not approve or reject the workflow. Another reminder will be sent on the second next day (maximum reminders = 2). If Employee RT1 still has not taken action, the workflow will be escalated to Employee RT2 in 3 days. Once it is on the **To Do List** for Employee RT2, a reminder will be sent if he or she has not taken action in 1 day. Another reminder will be sent on the 2nd day. If after 3 days no action has been taken, the workflow will be escalated to both final approvers: the HR Assistant and the HR Manager. These reminders and escalations will not occur on weekends or holidays.

In this example, no reminders or escalations are defined for the final approvers.

EMPLOYEES BENEFITS HR PAYROLL

Workflow Wizard - Step 5: Define Reminders and Escalations

Workflow Type: MS Transfer Employee
Workflow Name: MS Transfer Employee Workflow

Level	Approver	Response	Time interval before Reminder / Escalation	Frequency Type	Skip Days	Maximum Reminders
1	Employee RT1	☑ REMIND	1	Days	Weekends and Holidays	2
1	Employee RT1	☑ ESCALATE	3	Days	Weekends and Holidays	
2	Employee RT2	☑ REMIND	1	Days	Weekends and Holidays	2
2	Employee RT2	☑ ESCALATE	3	Days	Weekends and Holidays	
3	HR Assistant (EMP)	☐ REMIND		Days	None	
3b	HR Manager (EMP)	☐ REMIND		Days	None	

back next cancel

Click Next when you have finished defining reminders and escalations. The Workflow Wizard – Step 6 will appear. The system creates the following default messages.

EMPLOYEES BENEFITS HR PAYROLL

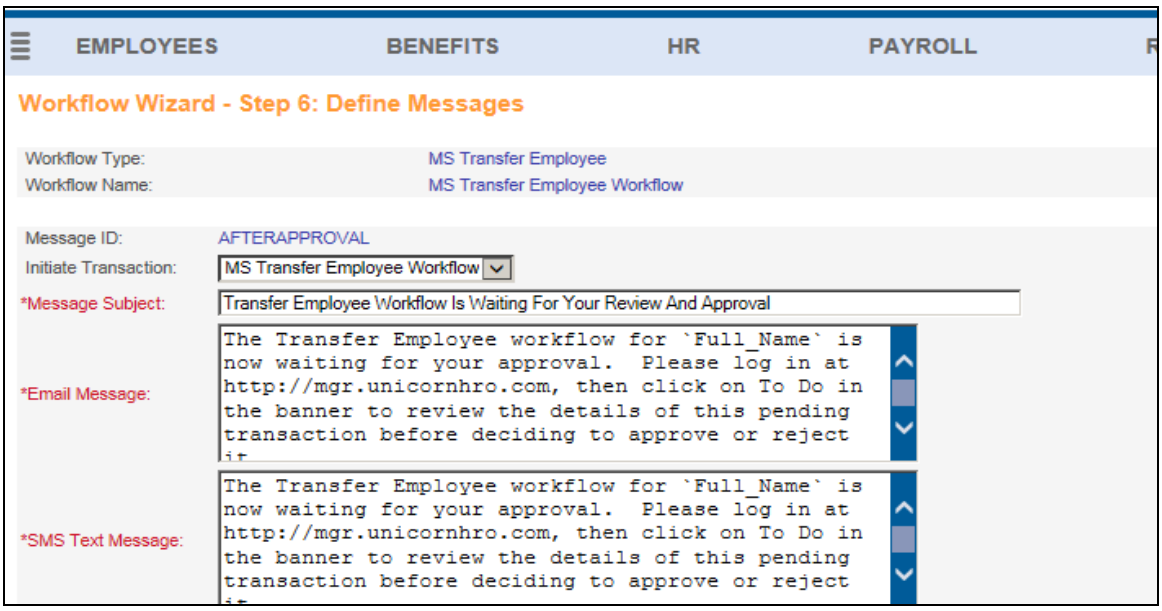
Workflow Wizard - Step 6: Define Messages add

Workflow Type: MS Transfer Employee
Workflow Name: MS Transfer Employee Workflow

Message ID	Message Subject	Action
AFTERAPPROVAL	Transfer Employee Workflow Is Waiting For Your Review And Approval	delete
AFTERDATACHG	The Data Has Changed For The Transfer Employee Workflow	delete
AFTERFINALAPPRVL	Transfer Employee Workflow Has Received Final Approval	delete
AFTERREJECTION	Transfer Employee Workflow Has Been Rejected	delete
AFTERREQUEST	A New Transfer Employee Workflow Is Waiting For Your Review And Approval	delete
ESCALATEDFROM	Transfer Employee Workflow Escalated	delete
ESCALATEDTO	Transfer Employee Workflow Escalated to You for Review And Approval	delete
NOTIFYFINALAPPRVR	Transfer Employee Workflow Notification - No Action Required	delete
NOTIFYVIEWER	Transfer Employee Workflow Has Been Requested - No Action Required	delete
NOTIFYWITHAPPROVAL	Transfer Employee Workflow Waiting For Your Final Approval	delete
ONERROR	Transfer Employee Workflow - Error Notification	delete
PENDINGFINALAPPRVL	Transfer Employee Workflow Pending Final Approval	delete
REMINDER	Reminder of Transfer Employee Workflow Waiting For Your Review	delete

back submit cancel

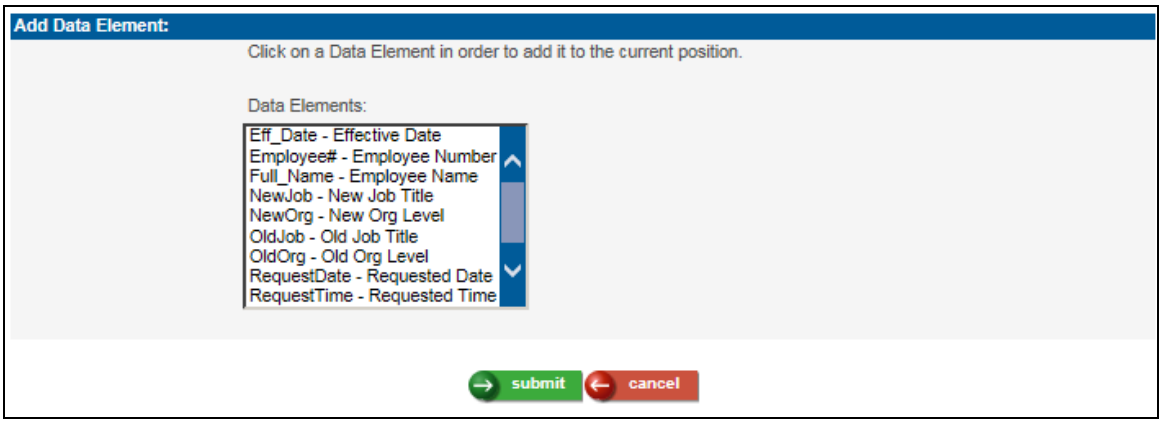
Click on the Message ID if you wish to change the Message Subject and/or Text for any of these messages. The Message ID field for the default message is hard-coded by the system; it cannot be changed. If you update one of the default messages, you will notice that there is an Initiate Transaction field. If this field contains the name of the workflow, it means that an action will be initiated when this message is sent. Do not change the Initiate Transaction field for the default messages.



You may add data elements to the Message Subject, Email Message or SMS Text Message. In the above example, the `Full_Name` data element is in the Email Message and SMS Text Message. Each Workflow Type has data elements specific to the transaction that you can add to the message; this will give the approver or viewer information about the workflow that is being processed.

At the bottom of the page, the available data elements display. The system shows the data element that will be included in back ticks, such as `Full_Name`. Following the data element, a description of the field appears.

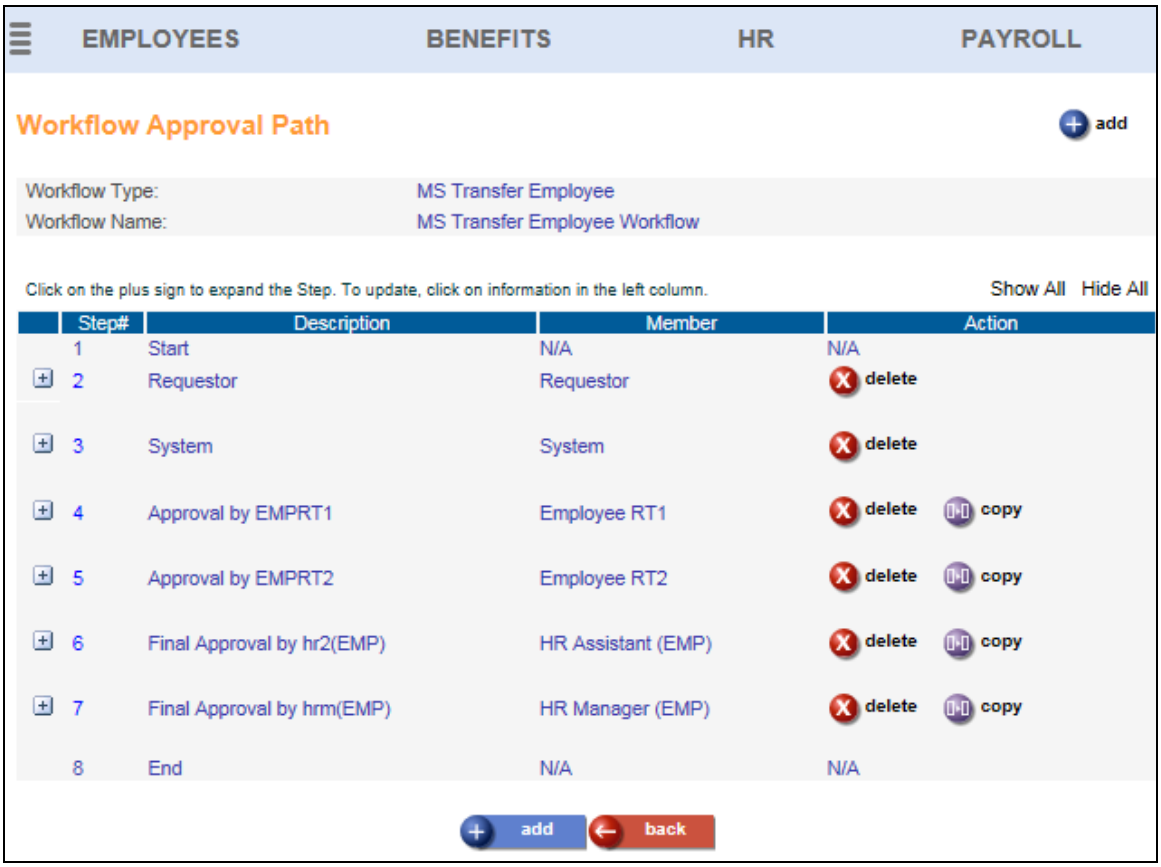
Click in the Subject or Message field where you want to add a data element; then click on the data element that you wish to insert. When you have finished updating information for this message, click Submit to save your changes.



You may add messages if needed. These messages can then be associated with an action in the Approval Path. Click Submit on Step 6 when you have completed defining the messages that will be used. A confirmation message will appear that the Workflow setup was completed successfully.

Approval Path

After adding a workflow, the system will display the Workflow Approval Path page. These steps were created based on the entries that you made during the wizard process. Here is an example of this page:

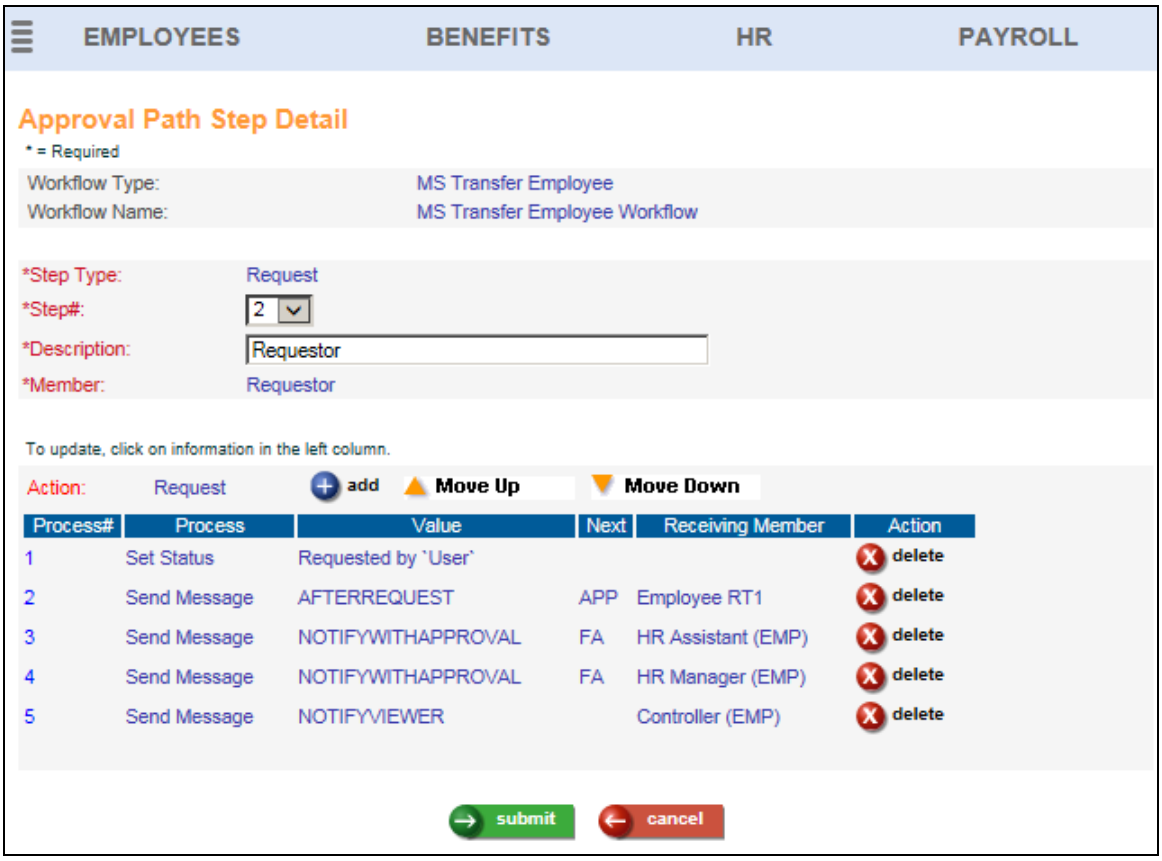


The Approval Path determines what will happen at each step of the workflow. The following steps are required:

- Start: this is created automatically by the system, and is the first Step.
- Requestor: this determines what happens when a user enters data in a workflow-enabled function.
- System: this includes actions that the system performs, such as setting a status when the workflow is complete.
- Approve/Reject: at least one approve/reject step must be specified. Final Approval steps may also be defined.
- End: this is created automatically by the system, and is the last Step.

Below is an example of the Processes that are associated with the Request Step Type. In our example, the workflow wizard automatically created these Processes that will occur when a transaction is requested:

- Process 1 sets the workflow status to Requested by `User`; when any of the workflow members view it in the **To Do List**, this Status will appear.
- Process 2 will send the AFTERREQUEST message to Employee RT1; this is the employee's Reports To as stored in the **Work Profile** function.
- Process 3 will send the NOTIFYFINALAPPRVR message to the HR Assistant, as defined in the **Work Relationships** function.
- Process 4 will send the NOTIFYFINALAPPRVR message to the HR Manager.
- Process 5 will send the NOTIFYVIEWER message to the Controller.



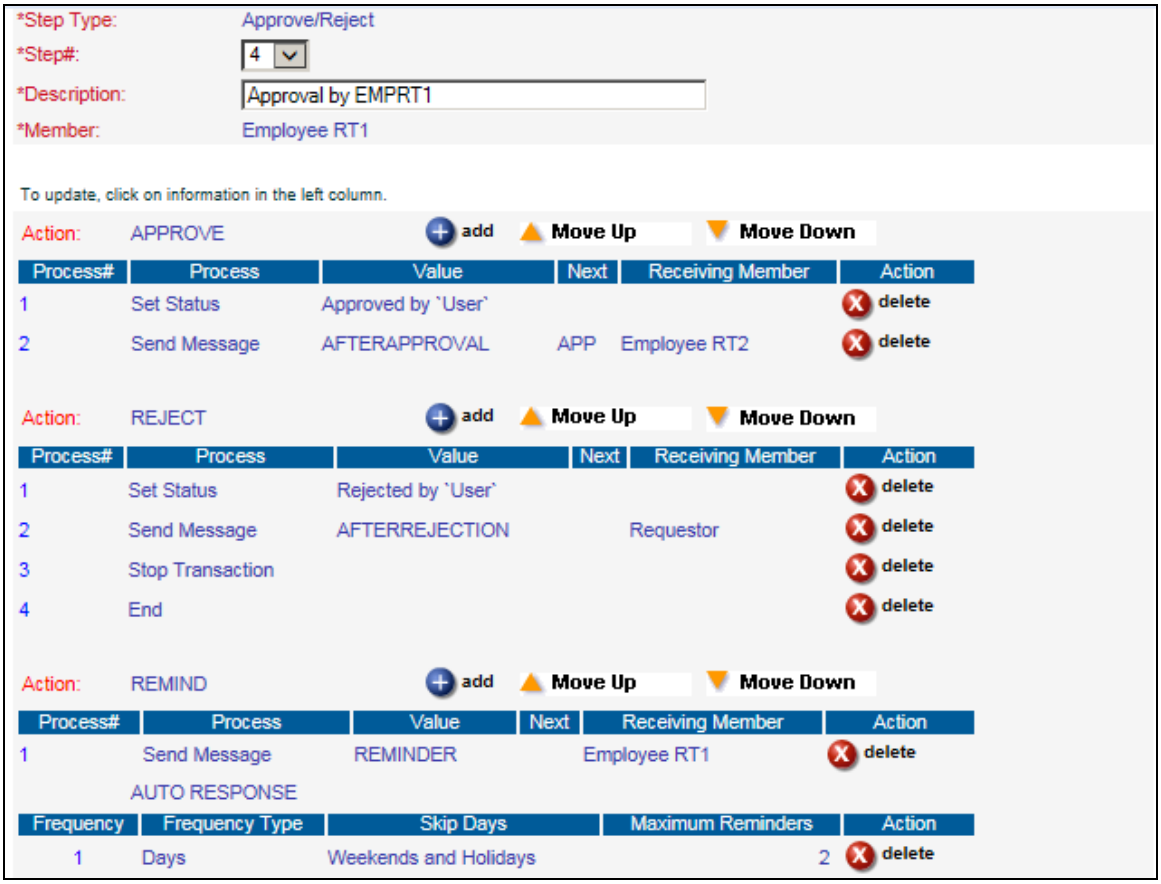
For the Approve/Reject step, the wizard in our example has created Processes for the APPROVE, REJECT, REMIND and ESCALATE actions.

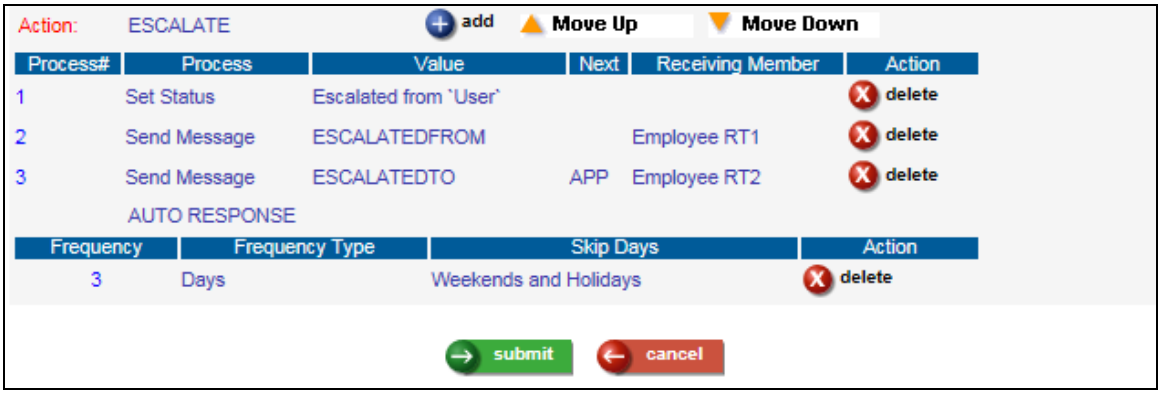
When the Employee's Reports To 1 approves the workflow, the workflow status will be set to Approved by `User`. The AFTERAPPROVAL message will be sent to the employee's Reports To 2, to let him or her know that they must now approve it.

If the Employee's Reports To 1 rejects the workflow, the workflow status will be set to Rejected by `User`. The AFTERREJECTION message will be sent to the Requestor. The workflow will be stopped and ended; the workflow will no longer appear as pending for any of the members.

If the Employee's Reports To 1 does not take action in one day, a REMINDER message will be sent. Two REMINDER messages will be sent if no action is taken.

It will go to the ESCALATE process in 3 days if no action is taken.





The workflow wizard automatically created the following Processes for the HR Manager, a final approver. If he or she approves the workflow, the status will be set to Approved by `User`. The transaction will be saved; the next step is SYS (System). If the user rejects the workflow, the status will be set to Rejected by `User`. The transaction will be stopped; no further action will be taken. No Reminders or Escalations are defined.

Workflow Type: MS Transfer Employee
Workflow Name: MS Transfer Employee Workflow

*Step Type: Final Approval
*Step#: 7
*Description: Final Approval by hrm(EMP)
*Member: HR Manager (EMP)

To update, click on information in the left column.

Action: APPROVE add Move Up Move Down

Process#	Process	Value	Next	Receiving Member	Action
1	Set Status	Approved by `User`			delete
2	Save Transaction		SYS		delete

Action: REJECT add Move Up Move Down

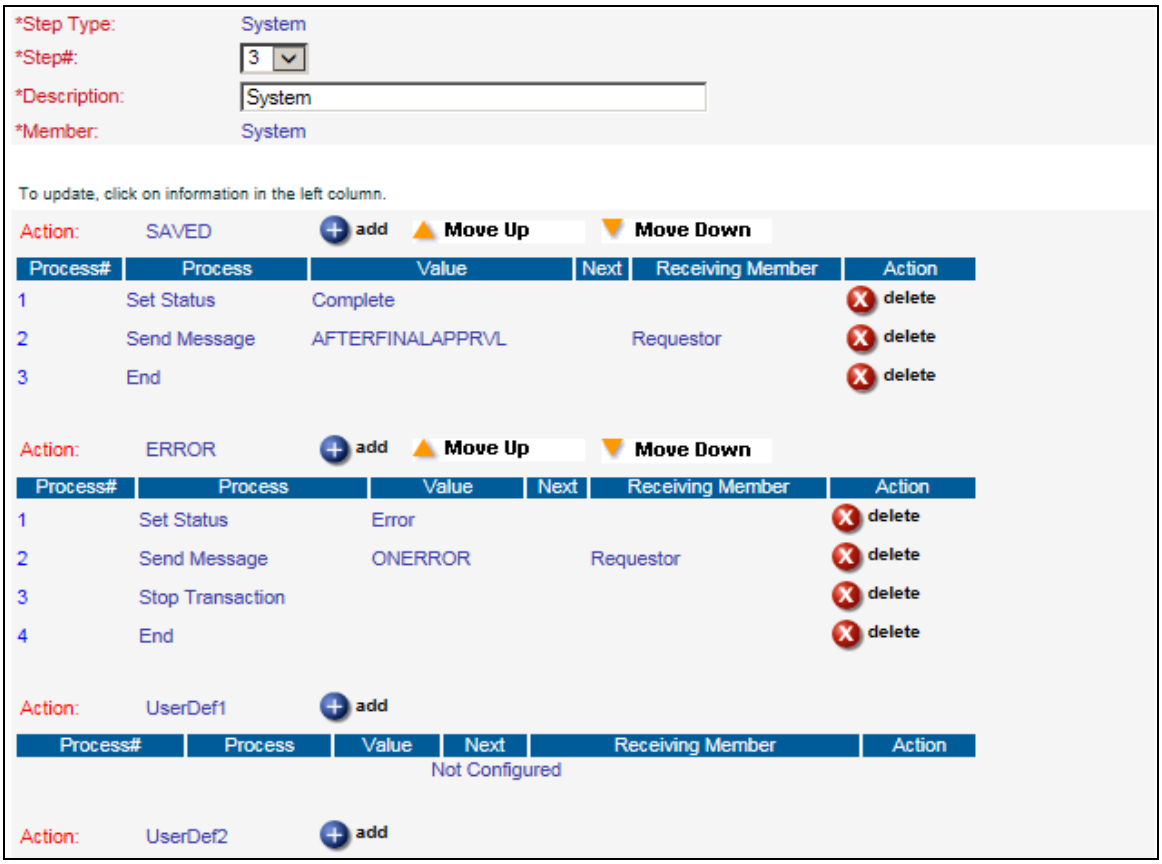
Process#	Process	Value	Next	Receiving Member	Action
1	Set Status	Rejected by `User`			delete
2	Send Message	AFTERREJECTION		Requestor	delete
3	Stop Transaction				delete
4	End				delete

Action: REMIND add

Process#	Process	Value	Next	Receiving Member	Action
			Not Configured		

The workflow wizard automatically created the following Processes for the System member. When one of the final approvers approves the workflow, the system will consider the workflow SAVED, and the workflow status will be set to Complete. The AFTERFINALAPPRVL message will be sent to the Requestor.

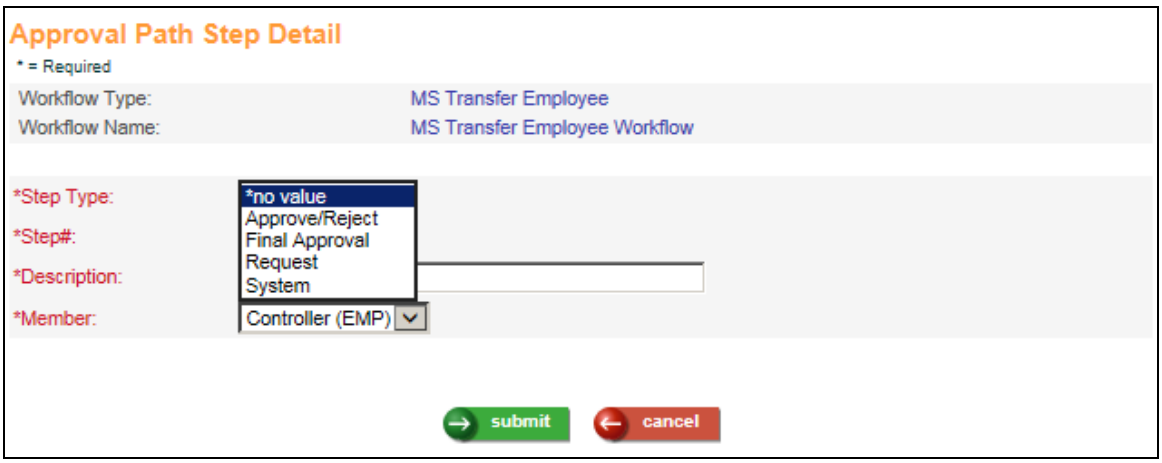
If an error occurs, the workflow status will be set to Error, and the ONERROR message will be sent to the Requestor. The workflow will end and no further action can be taken. If needed, the requestor can submit another transaction.



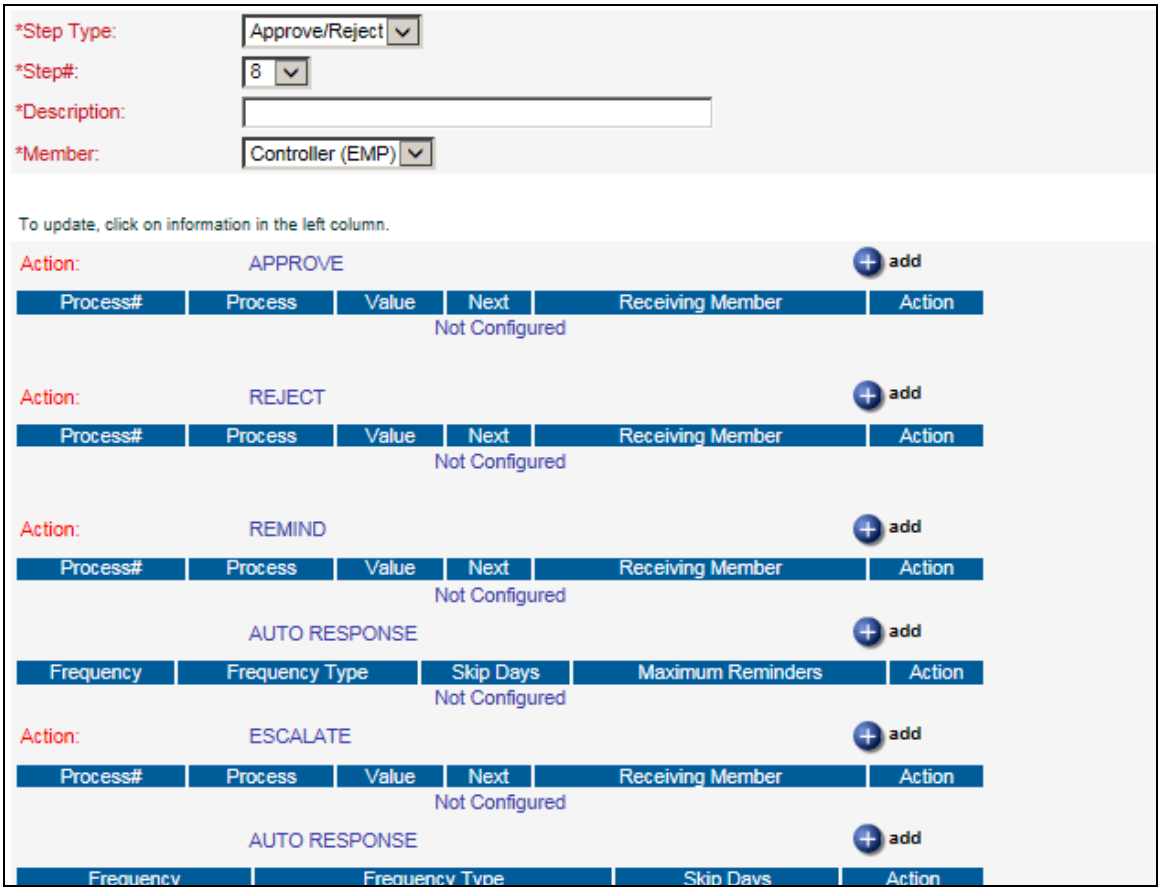
On the Workflow Approval Path page, click on “+” next to any of the Steps in order to see the Processes that are included in that Step. You may click Show All to view all of the Processes.

You may click on the Copy button next to an Approval or Final Approval step. The system will prompt you for the new Step Number and Member. You may then make any changes to the new information that was created.

You may add or update Steps as needed. The available Step Types are: Approve/Reject, Final Approval, Request or System.



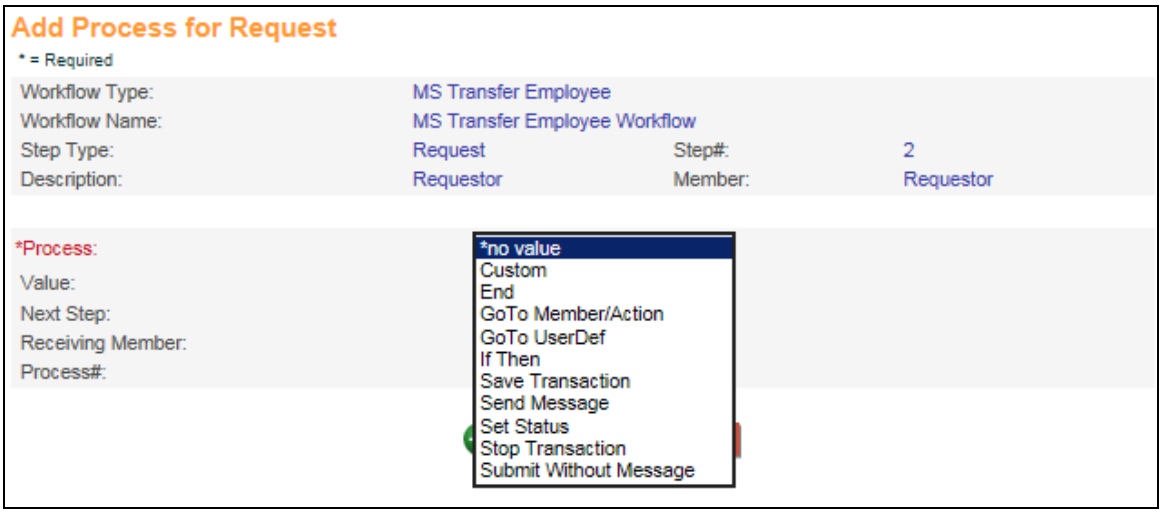
Based on the Step Type that you select, the system will display the applicable Actions. When the Approve/Reject or Final Approval Step Type is selected, and available Actions are APPROVE, REJECT, REMIND, AUTO RESPONSE (for REMIND), ESCALATE and AUTO RESPONSE (for ESCALATE). Actions in the APPROVE and REJECT sections are mandatory; the REMIND and ESCALATE sections are optional.



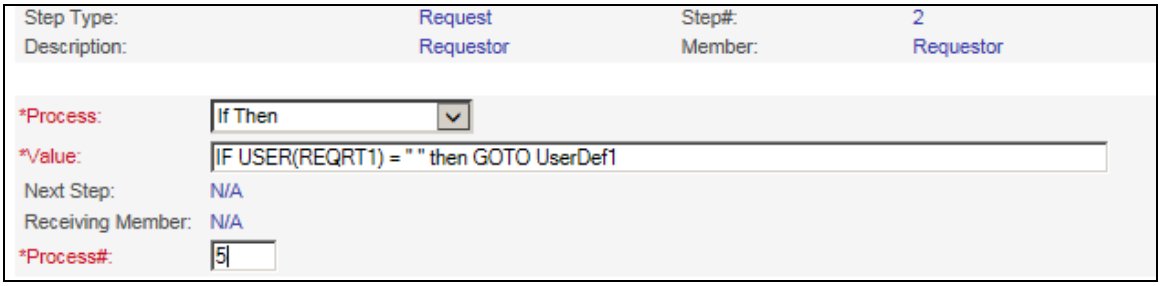
When you select the Request Step Type, the Request Action will be shown. Processes in the Request section are required.

When you select the System Step Type, the SAVED, ERROR, UserDef1, UserDef2 and UserDef3 Actions will be shown. Processes in the Saved and Error sections are required. The UserDef sections must be set up if they are referenced by any other Process.

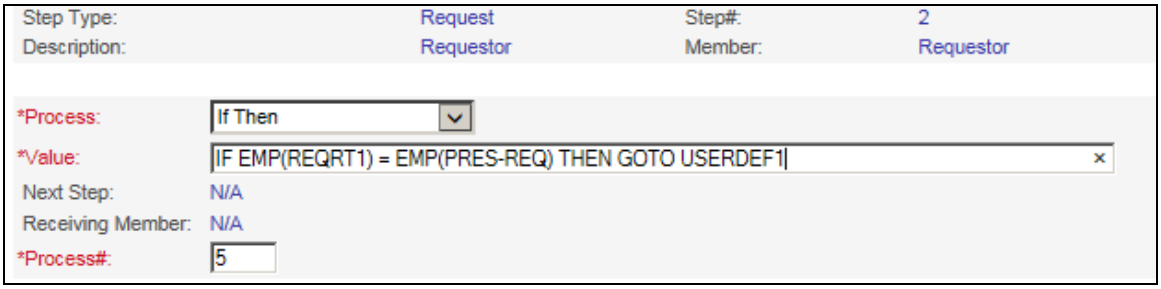
To work with Processes in a Step, click on the Step# to go to the Approval Path Step Detail page. When adding a Process, the following options are available:



- Custom: a programmer may enter specific code to be run
- End: this will end all processing; it should be preceded by a Stop process for a REJECT or ERROR action. In the SAVED action, the Stop process is not needed; include the End process.
- GoTo Member/Action: this will direct the workflow to a particular Action and Member.
- GoTo UserDef: this will direct the workflow to one of the 3 available User Defined steps. Set up UserDef1, UserDef2 and/or UserDef3 in the System step.
- If Then: enter an if/then statement, including instructions for what the system should do next. Consider the following examples:
    - In the Request action, enter the following If Then statement for the scenario where the requestor's Reports To is blank (a space surrounded by double quotes), meaning that the person is at the top level of the company, such as President (where "REQRT1" is the Member ID for the Reports To 1), and you want the system to skip to UserDef1 rather than using the remaining Processes in the Request action:
        - IF USER(REQRT1) = " " THEN GOTO USERDEF1



    - In the Request action, enter the following If Then statement for the scenario where the requestor's Reports To is the President (where "REQRT1" is the Member ID for the Reports To 1, and "PRES-REQ" is the Member ID of Work Relationship "President" for this workflow):
        - IF EMP(REQRT1) = EMP(PRES-REQ) THEN GOTO USERDEF1



- Save Transaction: this is used in the APPROVE action after the final approval is made, typically with a Set Status process of Approved
- Send Message: this will send the selected message to a particular user
- Set Status: this will change the status of the workflow, as seen in the **To Do List** and **Workflow Statistics**
- Stop Transaction: this will stop the workflow; it should be followed by an End process
- Submit Without Message: this gives authority to a user to approve the transaction, without sending a message to that person

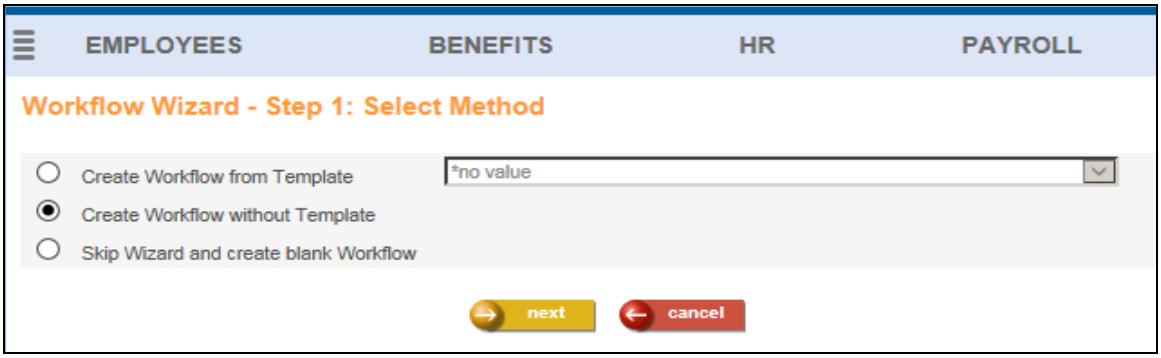
After you have created a workflow using a template or wizard, it is recommended that you run the "Test" feature from the main Workflow Definition page. This will alert you to any missing data before you activate the workflow. Refer to the Prerequisites section of this document for setting up the required data.

Also before activating a workflow, make sure that the Sequence is correct. From the list of Workflow Definitions, you may click on "Yes" in the Filter column to see when each workflow will be used. Make sure that the Sequence for your new workflow will cause it to be processed at the correct time for the correct data.

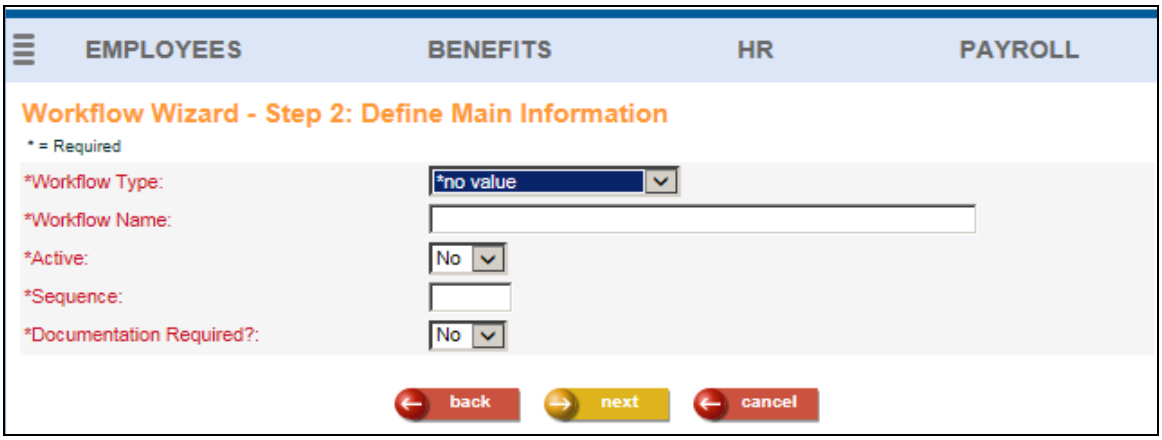
You may update a workflow by clicking on the Workflow Name from the main Workflow Definition page. Click on the tab that you wish to work with: Main, Filter, Requestors, Members, Messages or Statuses. Refer to the Updating a Workflow section of this document for more information on each tab. The Approval Path may also be accessed from the main Workflow Definition page.

Create Workflow without Template

If you do not wish to use a template, but wish to use the wizard to step you through the creation of a workflow, select the second radio button to Create Workflow without Template.



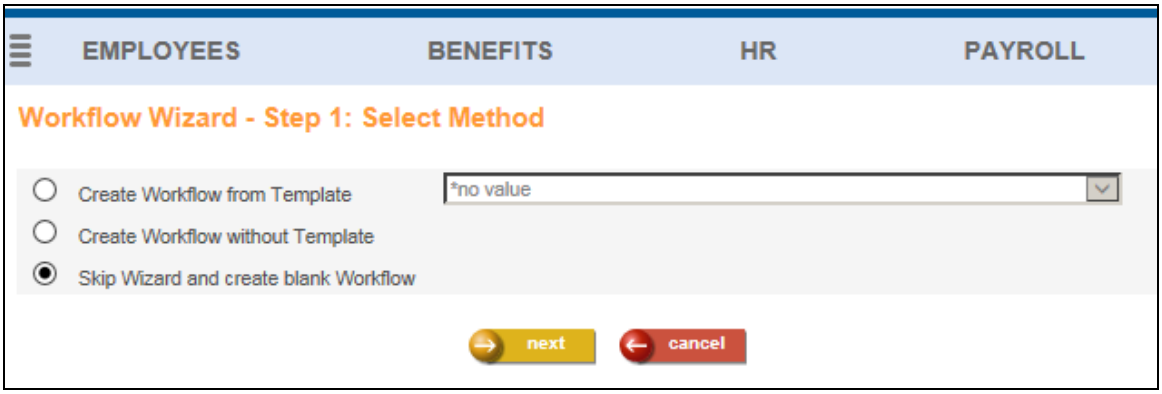
When you click Next, the Workflow Wizard – Step 2 page will appear. Enter information in each step. Remember to leave the Active field set to No until you are finished setting up the workflow.



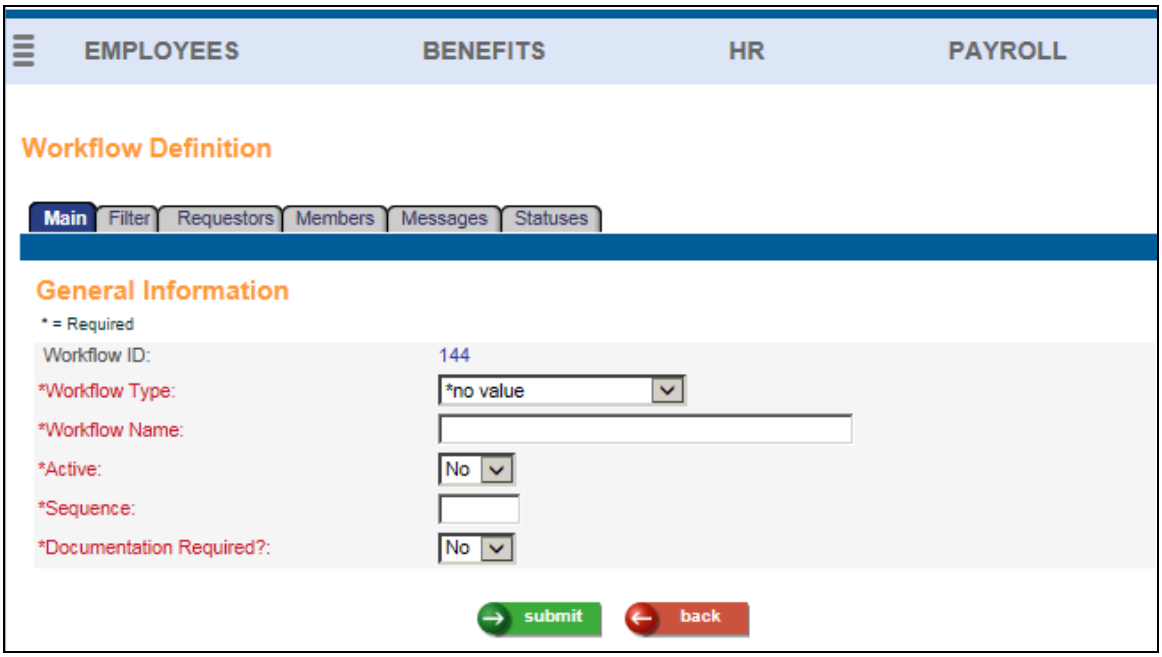
Click on the Next button to continue to Step 3. Refer to the Create Workflow using Template section of this document for information on each of the steps of the wizard.

Create Workflow without Template or Wizard

If you do not wish to use a template or the wizard, select the third radio button to Skip Wizard and create blank Workflow. Note that by using this option, no Approval Path steps will be created automatically; you must add them manually. For this reason, it is highly recommended that you use a template or wizard, so that all of the necessary steps in the Approval Path are created.



Click Next to continue. A page similar to the following will appear, with tabs for each area of setup. Enter the General Information about this Workflow Definition on the Main tab. Leave the Active field as No until you are finished setting up the Workflow Definition and ready to put it into place.



Click Submit when you have finished entering information on the Main tab. Set up information in the next five tabs; this will be required before adding processes to the Approval Path. See the Updating a Workflow section of this document for a description of the fields on each tab.

Click on the Filter tab to define any filters that may apply to this Workflow Definition. For each Workflow Type, data fields specific to that transaction will be available so that different workflows can be used for different data that is entered. For example, you may want one workflow to apply for a certain division or department in your organization, and another workflow to apply to other divisions or departments.

Click on the Requestors tab to define the requestors for which this Workflow Definition will be used. The system will default to All Users, but you may change this if needed. For example, you may want a workflow to apply if certain users

initiate the transaction, but to not apply if other users initiate it. You could also set up separate workflows depending on the user who initiates the transaction.

Click on the Members tab to define the work relationships who are to be part of this workflow process. You must define each person who will receive a message or take part in the approval process. Note that specific users may be set up in this tab, in addition to the Reports To for the Employee and the Requestor, and **Work Relationships**. In order to add a Work Relationship to the Members tab, it must first exist in the Business Relationships common object. In the Work Relationships function, you must set up employees for each Work Relationship prior to setting the workflow to Active.

Click on the Messages tab to define any email or text messages that will be used with this workflow. The same default messages that are created with the wizard will be created when you do not use the wizard. These may be changed as needed; new messages may also be entered.

Click on the Statuses tab to define the statuses that will be associated with this workflow. The same default statuses that are created with the wizard will be created when you do not use the wizard. These may be changed as needed; new statuses may also be entered.

Information on each tab must be entered before the Approval Path can be set up. Once you have entered information in all of the tabs, return to the main Workflow Definition page and click on Approval Path next to the Workflow Definition. The Approval Path determines what will happen at each step of the workflow. The following steps are required:

- Start: this is created automatically by the system, and is the first Step.
- Requestor: this determines what happens when a user enters data in a workflow-enabled function.
- System: this includes actions that the system performs, such as setting a status when the workflow is complete.
- Approval: at least one approval step must be specified. Final Approval steps may also be defined.
- End: this is created automatically by the system, and is the last Step.

See the Approval Path section of this document for more information on setting up the steps of the workflow approval.

After creating a Workflow Definition, it is recommended that you run the “Test” feature from the main Workflow Definition page. This will alert you to any missing data before you activate the workflow. Refer to the Prerequisites section of this document for setting up the required data.

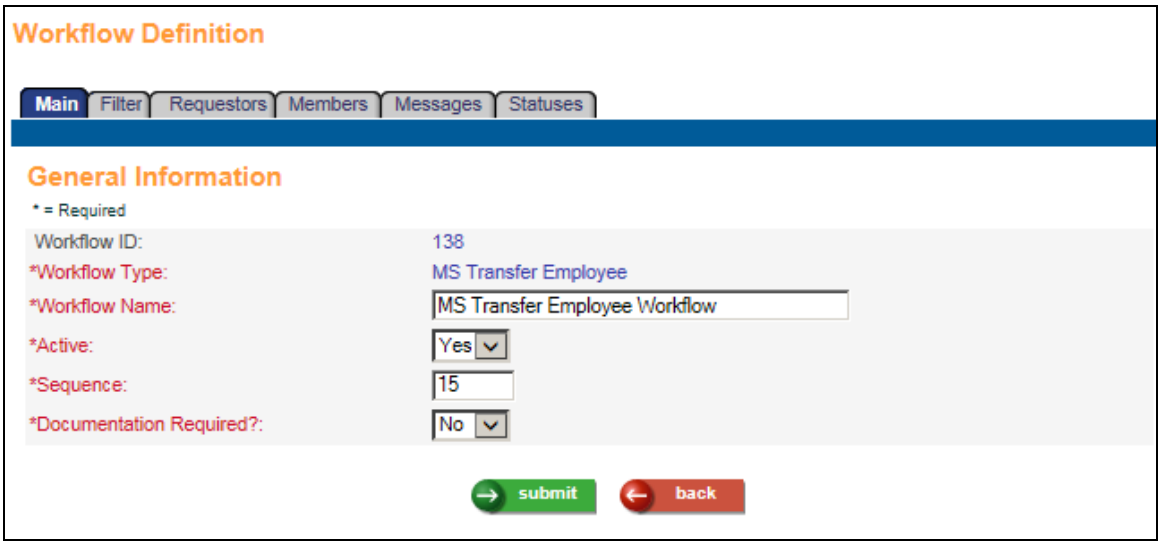
Also before activating a workflow, make sure that the Sequence is correct. From the list of Workflow Definitions, you may click on “Yes” in the Filter column to see when each workflow will be used. Make sure that the Sequence for your new workflow will cause it to be processed at the correct time for the correct data.

Updating a Workflow

After a Workflow has been created, using either a Wizard or entering the information manually, you may update the information using the tabs for each part of the definition. From the main list of workflows, click on the Name. The system will display information in the first tab. From here you can click on any tab to work with other information.

Main Tab

After creating a workflow, this is where you will set the Active field to Yes in order to activate the workflow after all of the setup has been completed.



Enter information as follows:

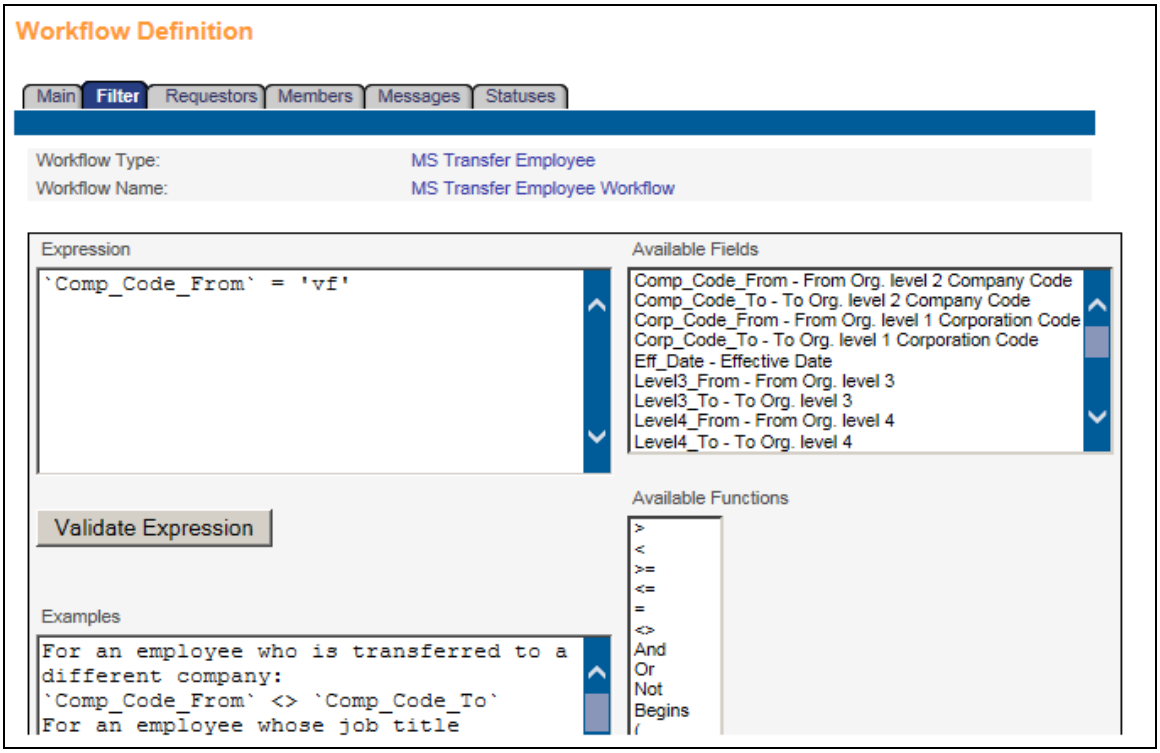
Field	Description
Workflow ID	This is a system-generated sequence number and cannot be changed in this function.
*Workflow Type	This refers to the function in which workflow will be used. MS represents transactions initiated in Manager Services. This field cannot be changed in this function.
*Workflow Name	Enter the name for this workflow. It will be shown in the **To Do List** and **Workflow Statistics**. This field accepts up to 40 alphanumeric characters.
*Active	When a workflow is created, this field will default to No. Only change this to Yes after all set up has been completed and you want the workflow to be used when a user enters data in the related function. If you no longer want this workflow to be used, select No in this field. A Workflow Definition cannot be deleted, since there may be history associated with it; it must be made inactive if it is no longer to be used.
*Sequence	This field determines the order in which workflows will be used when an entry is made in a workflow-enabled function. When data is entered, the system will get all Active workflows for the Workflow Type. It will look at the first workflow with the lowest Sequence number; if the Filter applies to the data, and the Requestor is in the list of Included Users, that workflow will be used. If the Filter and/or Requestor do not apply, the system will use the next highest sequence until it finds a workflow where the Filter and Requestor apply. If no Filters apply, workflow will not be used for that transaction.
*Documentation Required?	This field will default to No. You may change it to Yes if you will require that at least one document be uploaded by the user requesting the workflow. Note that this field appears for all workflows except for MS Address.

** Indicates field is required*

Click Submit to save any changes that you have made. The system will remain on this page; you may click on any other tab, or click Back to return to the list of Workflow Definitions.

Filter Tab

To have this workflow apply only for certain data, enter a filter in the Expression box. An example of the Filter tab for a Transfer Employee workflow is shown below; the workflow will be used if the employee is being transferred from Company Code (organization level 2) 'vf'. This is the code that is stored in the **Organization Setup** function. Click in the Expression field, and then click on either an Available Field or an Available Function to create the filter. Examples are given for each workflow type to help you construct the filter.



Entries in the list of Available Fields first show the field name that must be used in the Expression box; then a description is shown. The Available Fields may be typed into the Expression box manually, but you must include them in back ticks.

For alphanumeric field values such as 'vf', you must include them in single or double quotes. For numeric field values, do not include quotes. For date fields, enter the dates with slashes and no quotes, such as `Eff_Date` >= 1/1/2016.

When you are defining a filter to apply to employees in a particular organization, you may use only the lowest level in the filter, as long as it is unique. For example, if you define divisions at level 3 and departments at level 4, and you want this workflow to apply to the Administrative department whose code is 'ADMIN' for only divisions A and B, and not divisions C and D, you would need to enter a filter for both levels, such as:

(`Level3_From` = 'A' and `Level4_From` = 'ADMIN') or (`Level3_From` = 'B' and `Level4_From` = 'ADMIN')

If you enter the following filter, it would apply to Level 4 ADMIN for all divisions:

`Level4_From` = 'ADMIN'

Here is an example of the "Not" function: to initiate workflow only for a transfer where the Reason doesn't begin with "Z":

Not(`Reason` begins 'Z')

Pay special attention to the use of parentheses. Consider the following example, where the Status Change workflow should be used if an employee is going from Status ACT, AFT or APT, and is going to one of the following Statuses: INA, TER, RES, DS:

(`Ee_Status_From` = "ACT" or `Ee_Status_From` = "AFT" or `Ee_Status_From` = "APT") and
(`Ee_Status_To` = "INA" or `Ee_Status_To` = "TER" or `Ee_Status_To` = "RES" or `Ee_Status_To` = "DS")

For some Workflow Types such as MS Address, an Available Field called AddUpd can be used. You can set up different filters for whether a record is added or updated. If you wish to use this field, use either 'ADD' or 'UPD' as the field value:

`AddUpd` = 'ADD' to have this workflow apply when a record is added, or
`AddUpd` = 'UPD' to have this workflow apply when a record is updated

If you want the workflow to be used when information is added or updated, do not enter a filter for this field.

If you want the workflow to apply only to employees who report to a certain supervisor, use the `Reports_To` filter. Enter the employee number in single quotes, since it is an alphanumeric field, such as: `Reports_To` = '123456'.

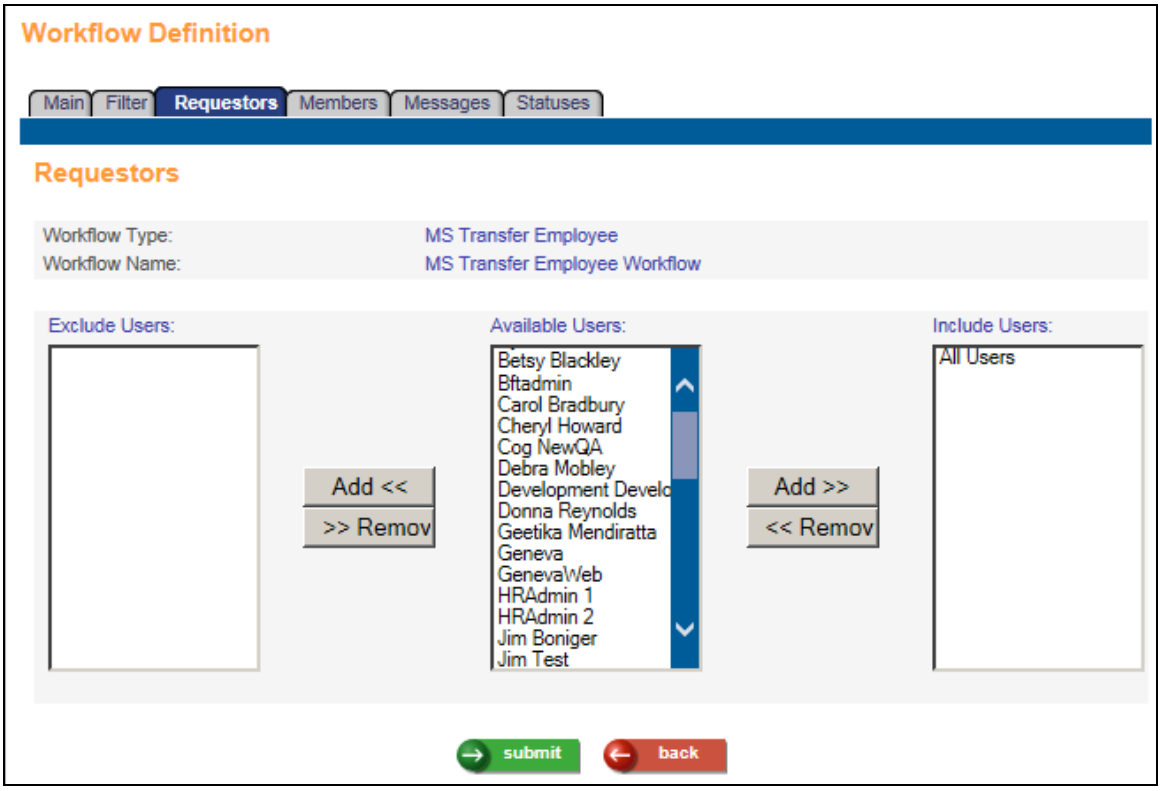
Click on Validate Expression to see if your filter is valid. Click on Submit after making your changes. If the Expression is not valid, a message will appear.

Requestors Tab

When a workflow is created, it will default to being used when any user enters data in the applicable function. If you want to limit the workflow to certain users, you may do so using the Requestors tab. To exclude a user, click on the user name in the Available Users list, and then click Add next to the Exclude Users section.

If you want the workflow to be used for only certain users, click on All Users in the Include Users section; then click on Remove. Then select the desired users from the Available Users list, and click Add next to the Include Users section.

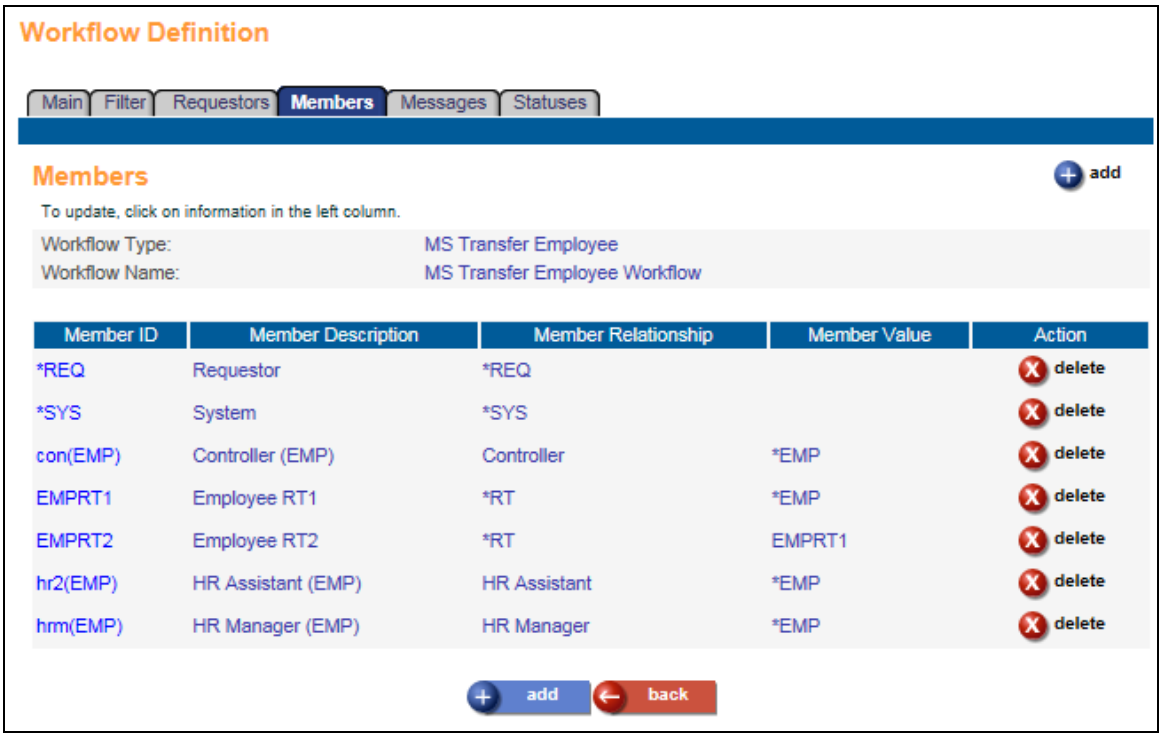
Click on Submit to save your changes.



Members Tab

In order to include someone in the Approval Path, you must first add them to the Members tab. When you create a workflow using a wizard or template, the system will automatically add the members that you select to this tab. If you create a workflow manually, the system will automatically create members for the first five Reports To levels for both the employee and the requestor. You may add Work Relationships as Members; prior to doing this, they must exist in the Business Relationships common object. Before activating the workflow, you must define the applicable employees in the **Work Relationships** function. You may also set up specific users as members; note that this option is not available when using a wizard or template, but may be set up from the Members tab.

Each workflow also requires that the Requestor and System be defined as Member. In addition to these Members, this example includes the following: the Controller for the employee's organization, the employee's first level Reports To, the employee's second level Reports To, the HR Assistant for the employee's organization and the HR Manager for the employee's organization.



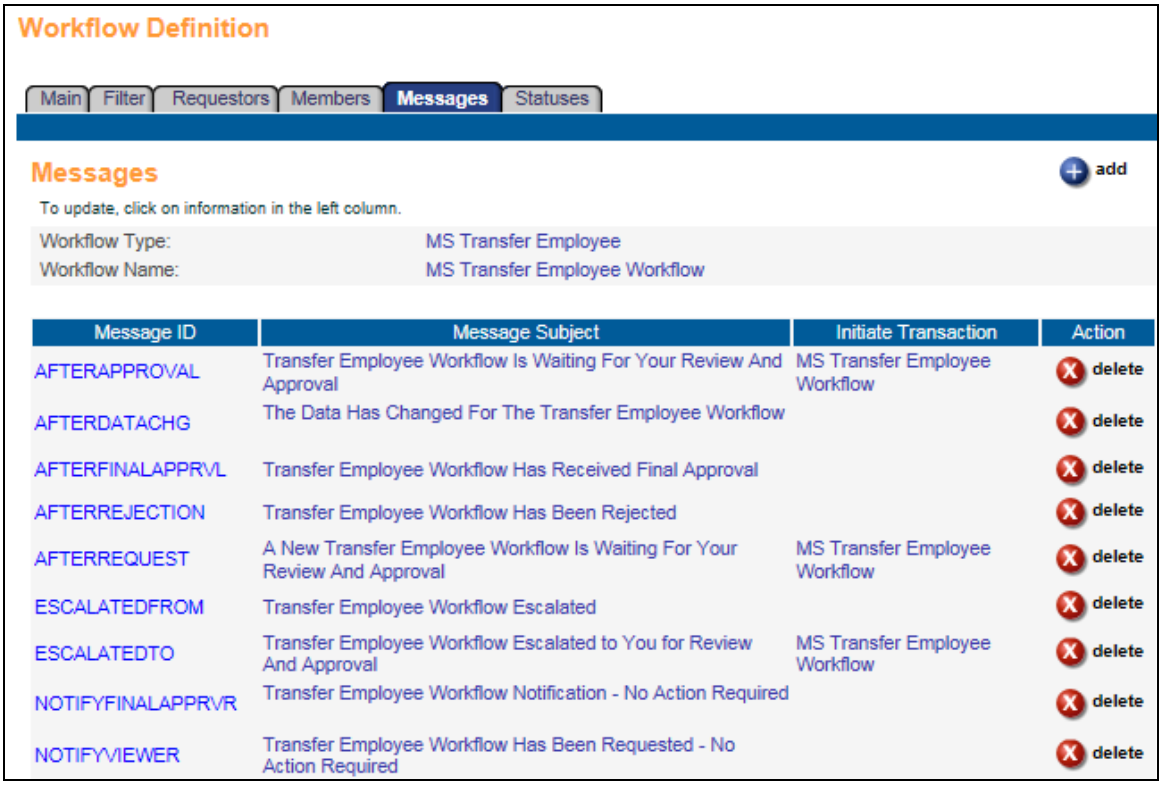
To add a new Member, enter the fields as follows. For some Member Types, not all fields will apply.

Field	Description
*Member Type	Select the Member Type from the following options: Reports To, Requestor, Specific User, System or Work Relationship.
*Member Description	Enter the name for this member. This description will be shown in the **To Do List**. This field accepts up to 40 alphanumeric characters.
*Member ID	Enter the ID for this member. No spaces are allowed in this field. This field accepts up to 12 alphanumeric characters.
*Member Relationship	If you selected Work Relationship as the Member Type, this field will display the values from the Business Relationships common object. Select the value that you wish to use.
*Member Value	If you selected Reports To as the Member Type, select whose Reports To you wish to use. If you selected Specific User as the Member Type, select the user name. If you selected Work Relationship as the Member Type, select whether the system should use the Work Relationship of the Employee or the Requestor.

** Indicates field is required*

Messages Tab

In order to send an email or text message to someone as part of the workflow process, you must first add them to the Messages tab. When you create a workflow, the default messages are automatically added by the system. You may add or delete messages, or update existing messages. Data elements may be put into the Subject or Message fields; when the message is generated as part of the workflow process, the applicable employee data is inserted into the message. Below are the messages that were automatically created for a Transfer Employee workflow.



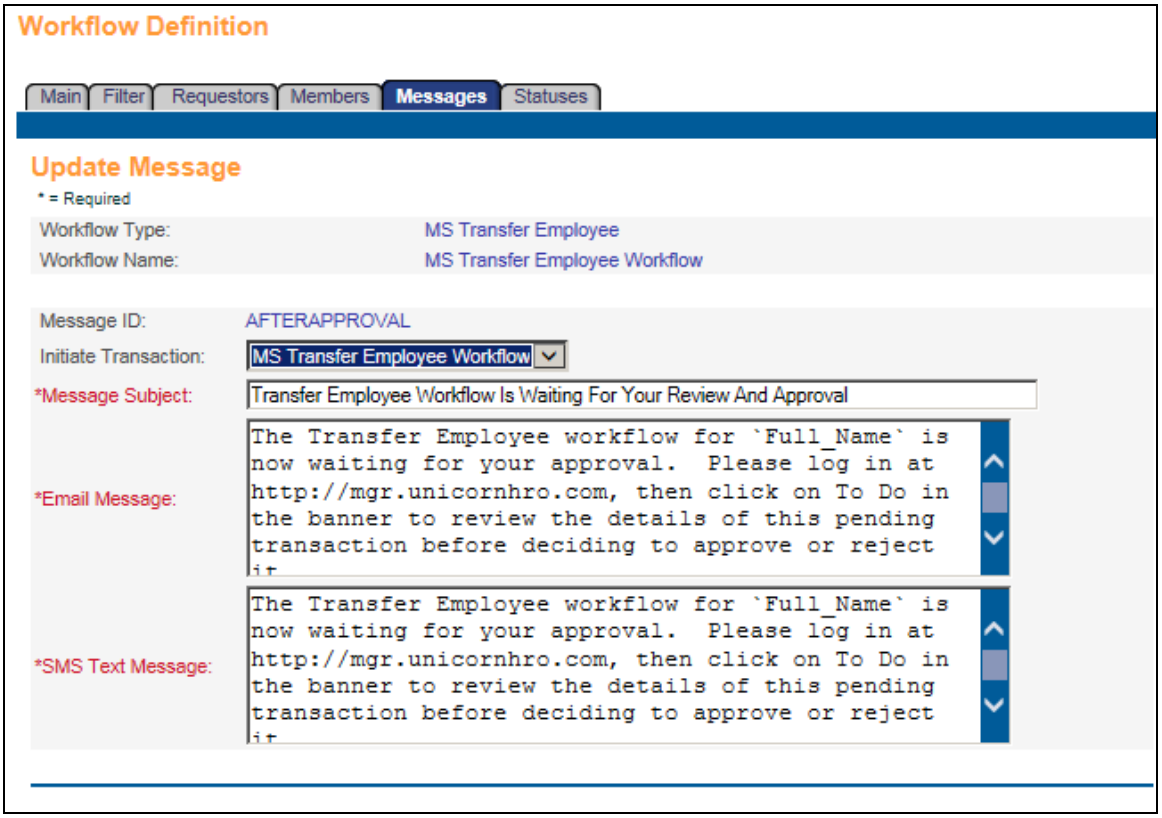
Click on the Message ID to change the Message Subject and/or Text as needed for any of these messages. The Message ID field for the default message is hard-coded by the system; it cannot be changed. If you update one of the default messages, you will notice that there is an Initiate Transaction field. If this field contains the name of the workflow, it means that an action will be initiated when this message is sent. Do not change the Initiate Transaction field for the default messages.

The default messages are used as follows:

- AFTERREQUEST: This message is sent when a transaction is submitted from a workflow-enabled function.
- NOTIFYVIEWER: This message notifies a user that a workflow was started and is in process; the viewer does not have approve/reject ability.
- NOTIFYWITHAPPROVAL: This message notifies the final approver and gives them the ability to approve/reject the workflow at any time; it will appear in their **To Do List**.
- NOTIFYFINALAPPRVR: This message notifies the final approver that a transaction has been submitted, but does not give them the ability to approve/reject until the prior approver(s) have approved the workflow.
- REMINDER: This message notifies an approver if he/she has not responded within the set amount of time.
- ESCALATEDFROM: This message notifies an approver that he/she has not responded within the set amount of time, and it has been escalated to the next approver.
- ESCALATEDTO: This message notifies the user that the previous approver has not responded, and that it is awaiting their approval.
- AFTERDATACHANGE: If your system is programmed to allow data in a pending workflow to be changed, this message notifies the user of the changes.
- AFTERAPPROVAL: This message notifies the next approver that the previous user approved the workflow, and it is now awaiting their approval.
- AFTERREJECTION: This message notifies the user that the workflow has been rejected.

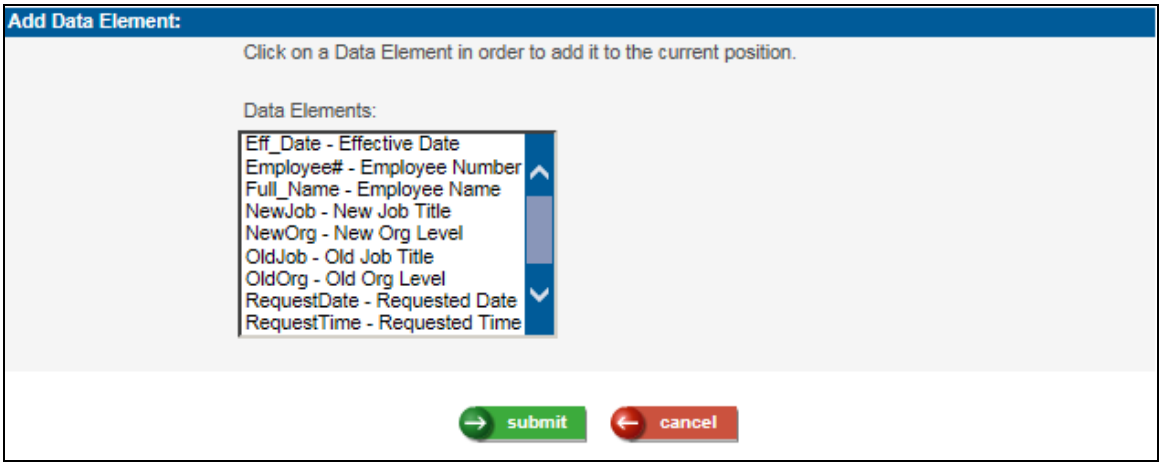
- PENDINGFINALAPPRVL: This message notifies the final approver that the transaction is waiting for their final approval.
- AFTERFINALAPPRVL: This message notifies the user that a transaction reached final approval.
- ONERROR: This message notifies the user that there was an error in processing the workflow; the workflow is ended and a new transaction must be initiated if desired.

You may add data elements to the Message Subject, Email Message or SMS Text Message. In this example, the `Full_Name` data element is in the Email Message and SMS Text Message. Each Workflow Type has data elements specific to the transaction that you can add to the message; this will give the approver or viewer information about the workflow that is being processed.



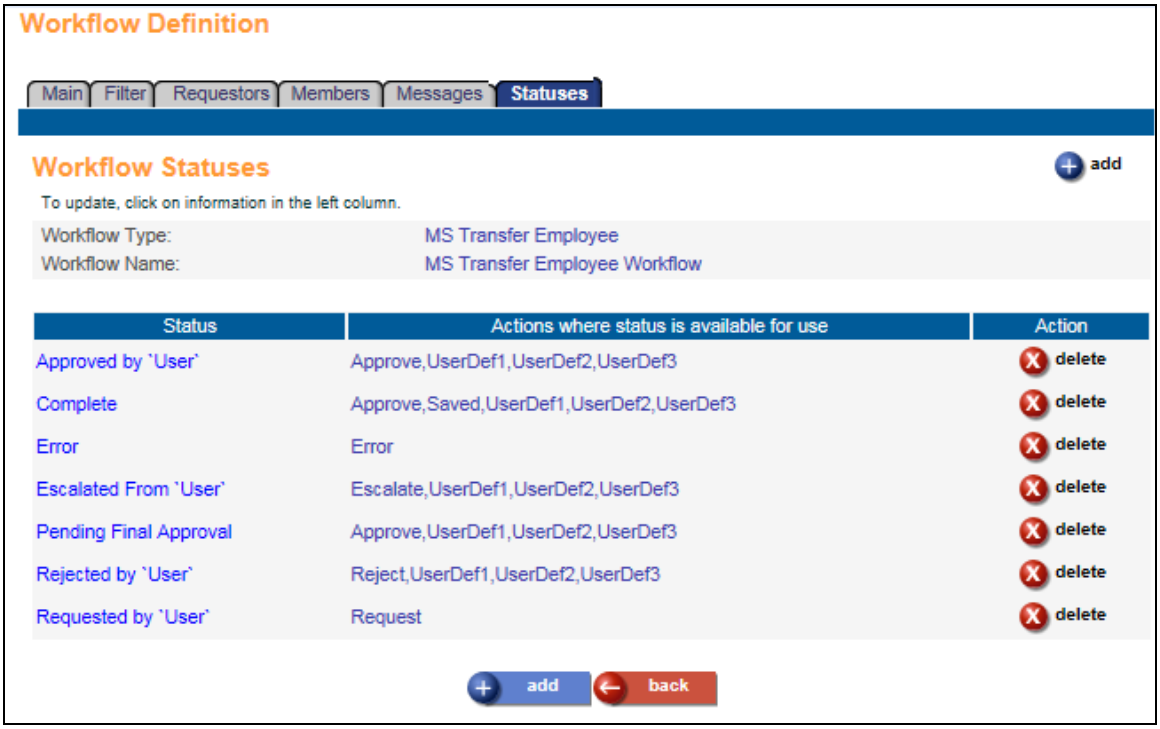
At the bottom of the page, the available data elements display. The system shows the data element that will be included in back ticks, such as `Full_Name`. Following the data element, a description of the field appears.

Click in the Subject or Message field where you want to add a data element; then click on the data element that you wish to insert. When you have finished updating information for this message, click Submit to save your changes.



Statuses Tab

A workflow will have various statuses as it progresses from the original entry of data through the final approval and completion. Statuses must be defined on this tab before setting up the processes in the Approval Path. When you create a workflow, the default statuses are automatically added by the system. You may add or delete statuses, or update existing statuses. Below are the statuses that were automatically created for a Transfer Employee workflow.



To add a new Status, enter the fields as follows.

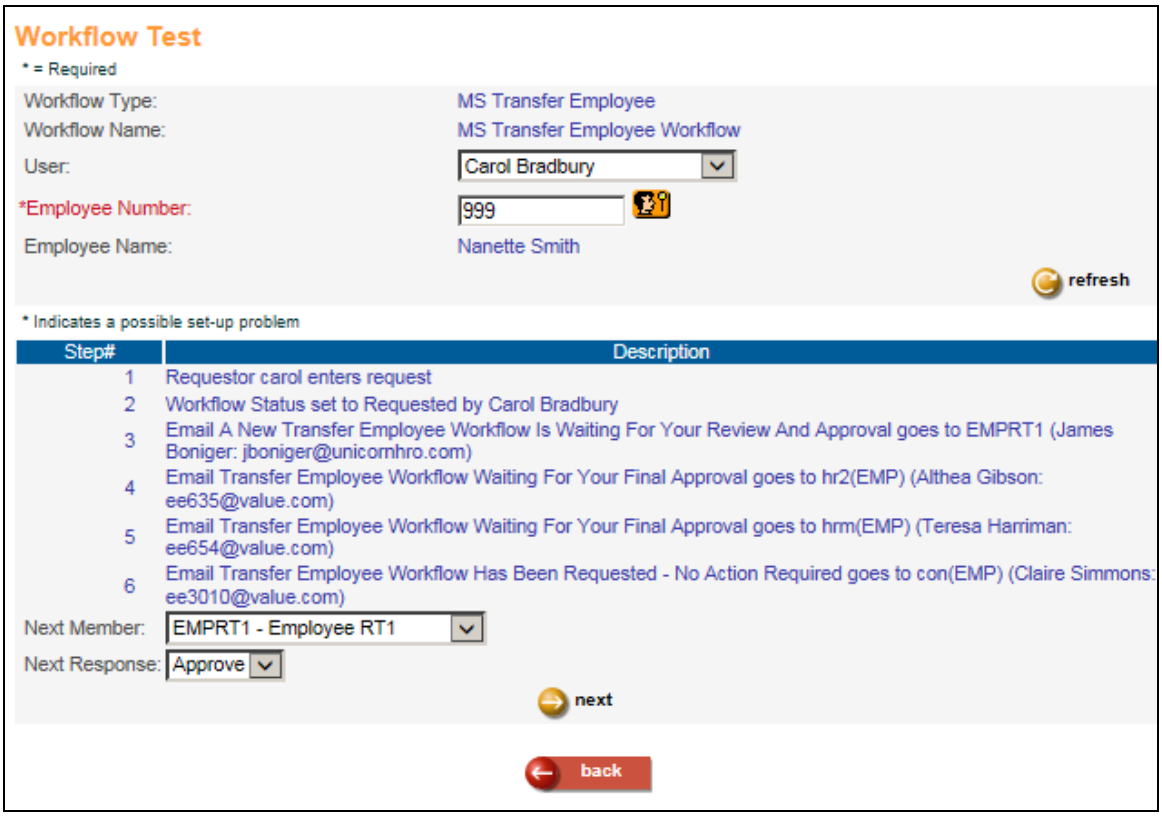
Field	Description
*Status	Enter the Status description that you wish to appear in the **To Do List** and **Workflow Statistics**.
Actions where this status can be used	Select one or more actions where this Status may apply. For example, Approved by `User` could be used on the Approve action, or on any of the User Defined actions.

** Indicates field is required*

Testing The Workflow Definition

When you have finished setting up the Workflow Definition, it is recommended that you use the “Test” feature. This will simulate what will happen when the workflow actually runs. No data will be updated on your system and no email or text messages will be sent during the testing process.

From the main page, click on the Test button next to the workflow you set up. Enter the User and Employee Number that you wish to use for the test. Click on the Refresh button to begin the test. The system will display the actions that will be taken when the selected user enters data for the selected employee. Here is an example of a test for a Transfer Employee workflow:



In the Next Member drop down list, the Members who have the ability to approve or reject the transaction at that point in time will be shown. This includes the next approver, and any final approvers who are allowed to approve the workflow at any time. Select the Next Member that you wish to use, and then select either Approve or Reject in the Next Response field. Click Next. The system will display the next set of actions that will occur.

Continue replying until the test has finished. If the steps have been set up correctly, the workflow will show as Complete.

Workflow Name: MS Transfer Employee Workflow
User: Carol Bradbury
*Employee Number: 999
Employee Name: Nanette Smith
refresh

* Indicates a possible set-up problem

Step#	Description
1	Requestor carol enters request
2	Workflow Status set to Requested by Carol Bradbury
3	Email A New Transfer Employee Workflow Is Waiting For Your Review And Approval goes to EMPRT1 (James Boniger: jboniger@unicornhro.com)
4	Email Transfer Employee Workflow Waiting For Your Final Approval goes to hr2(EMP) (Althea Gibson: ee635@value.com)
5	Email Transfer Employee Workflow Waiting For Your Final Approval goes to hrm(EMP) (Teresa Harriman: ee654@value.com)
6	Email Transfer Employee Workflow Has Been Requested - No Action Required goes to con(EMP) (Claire Simmons: ee3010@value.com)
7	Workflow Status set to Approved by James Boniger
8	Email Transfer Employee Workflow Is Waiting For Your Review And Approval goes to EMPRT2 (Cheryl Howard: choward@unicornhro.com)
9	Text Message Transfer Employee Workflow Is Waiting For Your Review And Approval goes to EMPRT2 (Cheryl Howard: 9735551234@txt.att.net)
10	Workflow Status set to Approved by Cheryl Howard
11	Email Transfer Employee Workflow Is Waiting For Your Review And Approval goes to hr2(EMP) (Althea Gibson: ee635@value.com)
12	Email Transfer Employee Workflow Is Waiting For Your Review And Approval goes to hrm(EMP) (Teresa Harriman: ee654@value.com)
13	Workflow Status set to Approved by Teresa Harriman
14	Data Saved to iCON
15	Workflow Status set to Complete
16	Email Transfer Employee Workflow Has Received Final Approval goes to *REQ (Carol Bradbury: cbradbury@unicornhro.com)

back

If data is missing, a message will appear with an asterisk. In the following example, data is missing for the employee's Reports To, as shown in Step 3. Enter the necessary data as shown in the Prerequisites section of this document and run the test again to make sure that the workflow can be completed.

Workflow Test

* = Required

Workflow Type: MS Transfer Employee
Workflow Name: MS Transfer Employee Workflow
User: Carol Bradbury
*Employee Number: 1701005
Employee Name: Jack Mac Donald
refresh

* Indicates a possible set-up problem

Step#	Description
1	Requestor carol enters request
2	Workflow Status set to Requested by Carol Bradbury
3	* For sending Email, System could not find User Name for EMPRT1
4	Email Transfer Employee Workflow Waiting For Your Final Approval goes to hr2(EMP) (Theresa Bolser HRAsst: tbolser@unicornhro.com)
5	Email Transfer Employee Workflow Waiting For Your Final Approval goes to hrm(EMP) (Barbara Baumgartner: ee170sd15@hrmgr.com)
6	Email Transfer Employee Workflow Has Been Requested - No Action Required goes to con(EMP) (Claire Simmons: ee3010@value.com)

Next Member: EMPRT1 - Employee RT1
Next Response: Approve
next

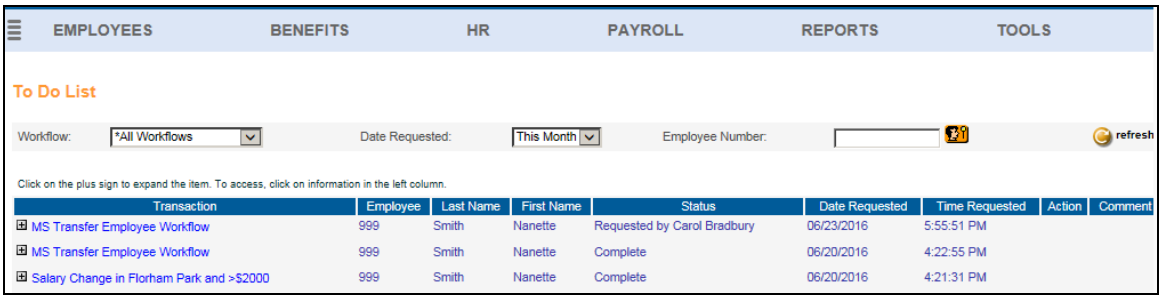
back

Workflow Processing

When a Workflow Definition exists and a user enters information in any of the workflow-enabled functions, an Add Workflow Comment window similar to the following will appear when that user saves the information. In this example, the user entered information in the **Transfer Employee** function.

The system will display the Workflow Name that is being used, as well as information that the user entered. If a file was uploaded, the user may view it at this time. At the bottom of this window, a Comment field is available, where the user may enter any other information that may be useful to the approvers. Click on the Add button below the Comment field to save this information. If no Comment is entered, the user may click on either the Add button or the Close This Window button. The information will then be stored in the pending status until it receives final approval.

In the **To Do List**, which is accessed from the menu bar, you may view the workflows that you have submitted. The choices in the Workflow field are: All Workflows, Pending, In Process, Approved or Rejected. You may change the Date Requested field in order to see workflows from a particular time period. You may also enter an Employee Number if you wish to see workflows for a particular employee. Click on the Refresh button after changing any of these selection fields.



Here is an example of All Workflows. To see more details about a workflow, click on the “+” button to expand it.

EMPLOYEES BENEFITS HR PAYROLL REPORTS TOOLS

To Do List

Workflow: *All Workflows Date Requested: This Month Employee Number: refresh

Click on the plus sign to expand the item. To access, click on information in the left column.

Transaction	Employee	Last Name	First Name	Status	Date Requested	Time Requested	Action	Comment
MS Transfer Employee Workflow	999	Smith	Nanette	Requested by Carol Bradbury	06/23/2016	5:55:51 PM		

New Position		Current Position	
Organization:	Wayne	Organization:	Florham Pk N
Job Title:	Manager - Intermediate Level	Job Title:	Accounts Reveivable Supervisor
Effective Date:	06/23/2016		
Weekly Hours:	40		
Reason For Change:	Transfer		
Replace Position:	Yes		
Update Lump Sums:	yes		

File Name Date Loaded Attached Document

Or, you may click on the Transaction name in the left column to see the Workflow History page, which includes the details of the transaction, responses, comments and any errors that may have occurred.

Workflow History - Internet Explorer

close

Workflow History

Workflow Name: MS Transfer Employee Workflow
Employee: Nanette Smith (999)
Status: Complete

New Position		Current Position	
Organization:	Florham Pk N	Organization:	Florham Pk N
Job Title:	Accounts Reveivable Supervisor	Job Title:	Manager - Intermediate Level
Effective Date:	06/20/2016		
Weekly Hours:	40		
Reason For Change:	Transfer		
Replace Position:	Yes		
Update Lump Sums:	no		

File Name Date Loaded Attached Document

Responses

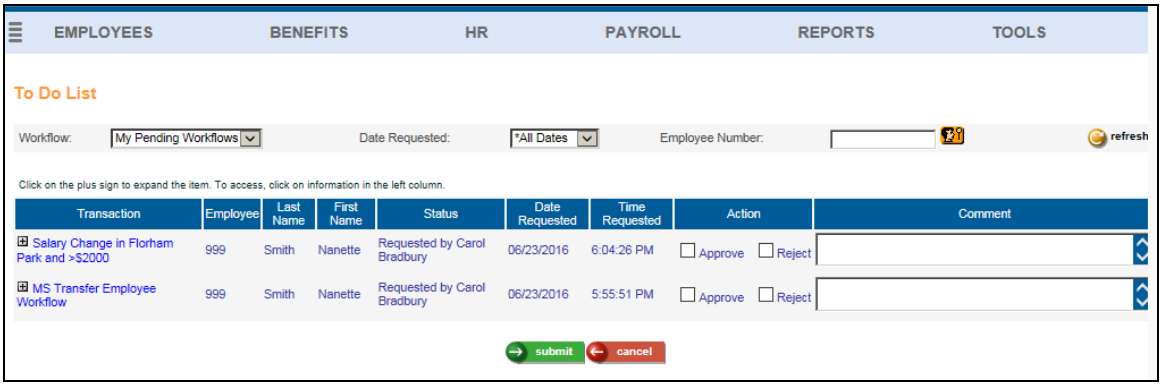
Member	User	Notification Date	Notification Time	Response Date	Response Time	Response
HR Manager (EMP)	Donna Reynolds	06/20/2016	4:22:57 PM	06/20/2016	4:44:09 PM	APPROVED (FINAL)
HR Assistant (EMP)	Theresa Bolser	06/20/2016	4:22:57 PM			
Employee RT1	Jim Boniger	06/20/2016	4:22:56 PM			
Requestor	Carol Bradbury	06/20/2016	4:22:55 PM			REQUESTED

Comments

Member	User	Comment Date	Comment Time	Comment

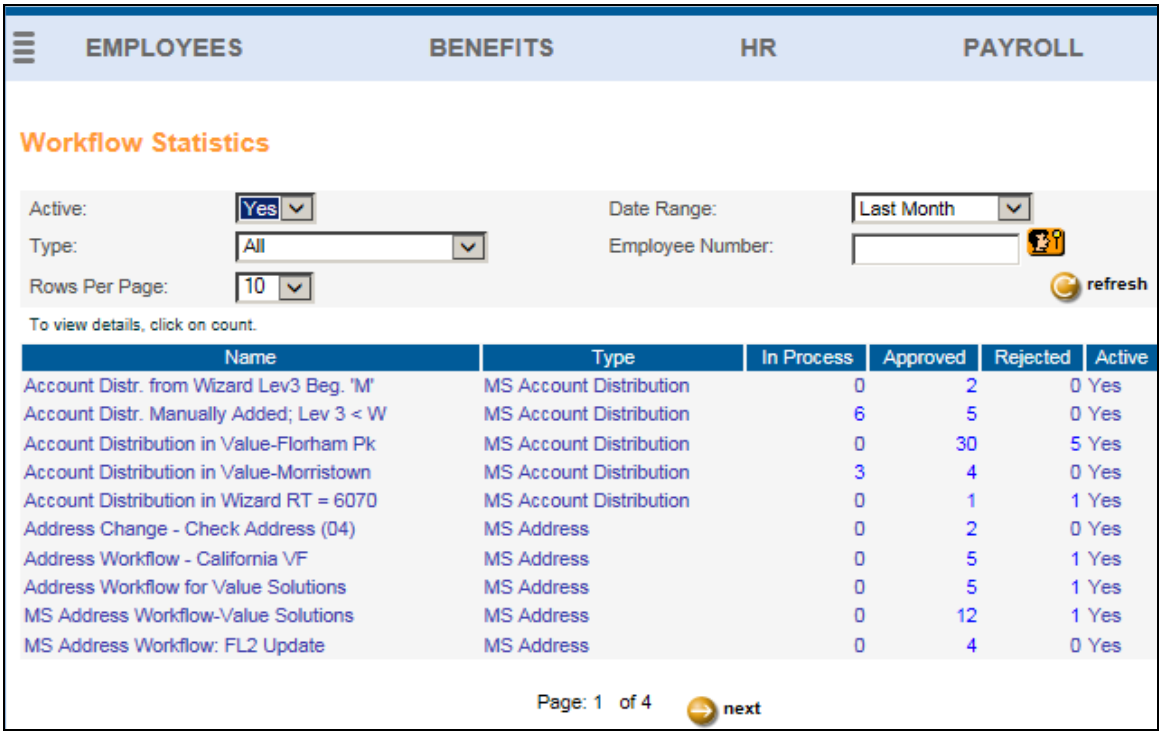
People who have been defined as approvers or final approvers will see the Approve and Reject checkboxes on their **To Do List**, as well as a Comments field. The user can click in the Approve or Reject checkbox. Comments are optional. When all entries have been made, click on the Submit button to save the changes. Note that Comments can be entered and saved with the workflow, without approving or rejecting it.

When an approver approves the workflow, the actions associated with the APPROVE process will be taken. When an approver rejects the workflow, the actions associated with the REJECT process will be taken.



Workflow Statistics

To view counts of the Workflows that are In Process, Approved or Rejected, use the **Workflow Statistics** function.



The system will default to showing the counts of all Active workflows for the Current Month. You may change the selections using the following filters:

- Active: Yes, No or All (as defined in **Workflow Definition**)
- Date Range: Current Month, Quarter or Year; Previous Month, Quarter or Year
- Type: select a Workflow Type or All types
- Employee Number: select a specific employee number or leave blank for all employees
- Rows Per Page: 10, 20, 50 or 100

If you change any of the filter values, click on Refresh to display the updated counts.

When you click on a count, the list of workflows in which you were a member will display. Note that because of this security feature, the count on the main page may be higher than the number of workflows that are displayed on the detail page. You may click on "+" to view the details for the workflow. If any files were associated with the workflow, you may view them from the details section.