5

Routes

Overview of Routes

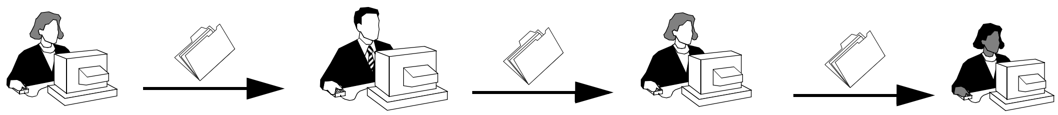
A *route* is a set of tasks that users complete in order to accomplish a business activity. Routes can contain content that helps the route members complete their assigned tasks. For example, you might create a route to get a design specification reviewed and approved. You could include the design specification and other related documentation in the route. Some route members would have tasks for reviewing and commenting on the spec, others would have tasks for approving the spec.

The route creator defines each task to be completed and for each task, specifies:

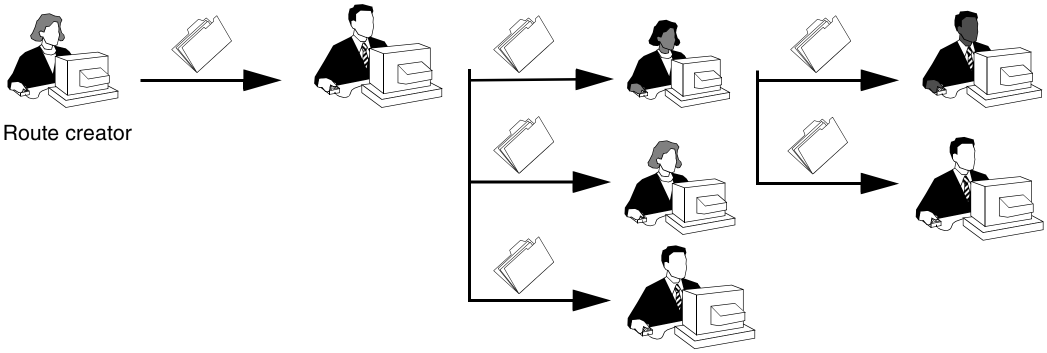
- the order in which the tasks should be completed
- the name of the task
- the route member who should complete each task, called the task assignee; this can be a person or a role
- optionally, when each task is due
- the action the task assignee should perform, such as approve, comment, investigate
- specific instructions for how the person should complete the task
- whether the task assignee can delegate the task to someone else
- whether the route creator needs to review the task before it is completed

More than one task can be active within a route at one time or tasks can become active sequentially, after each member completes a task. If more than one task is active at once, the route creator can specify whether only one task needs to be complete or they all must be complete before the next set of tasks become active.

You can create routes with tasks that should be completed sequentially . . .



or with tasks that should be completed simultaneously.



When the route creator starts a route, the system activates all tasks with an order number of 1 and notifies the assignee for each task. If the assignee is a group or role, one member of the group or role must accept the responsibility for the task. That person then becomes the task assignee. The assignees can then access the task to see the instructions, view and edit content in the route (as allowed based on the access they have for each content item), and enter comments and an approval status (as allowed/required based on the actions specified by the route creator). When the assignees mark the task as complete, the system creates a task for the next person in the route and so on.

You can simplify the process of creating similar routes by saving routes as templates. A route template contains the frequently reused components of a route, such as the route description, members, task order, and instructions.

Listing Routes

You can get lists of routes that include:

- all the routes you created and routes you are included in
- all routes that include a particular item for which you have access, for example, all routes that include a specific document or risk

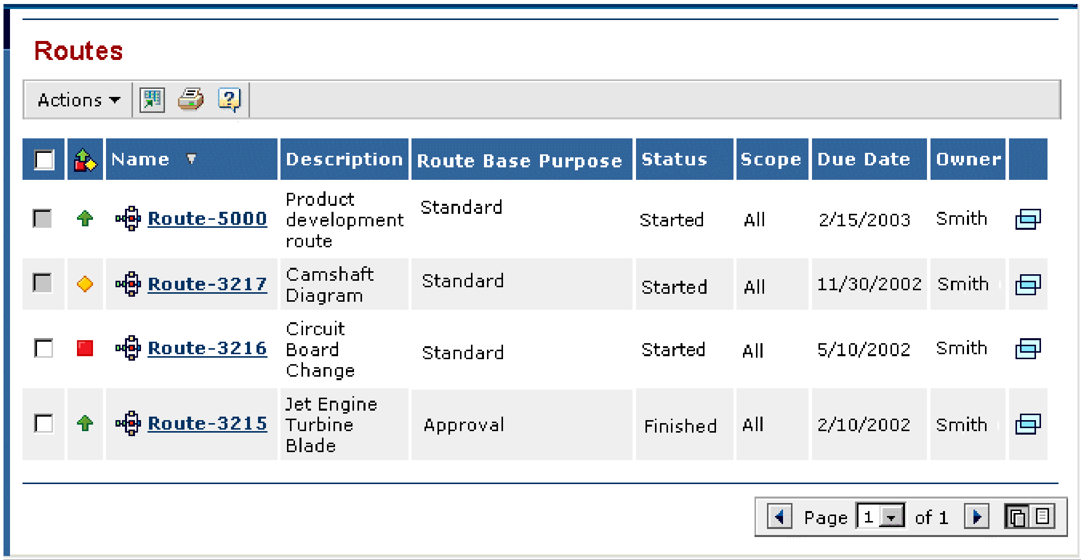
If Team Central is installed, the route lists from within a workspace for Workspace Leads include all routes for the workspace, even those they are not included in.

To list routes

1. To list the routes that you created and that you are assigned a task for, click **Routes>My Routes** from the My Desk menu. This list also includes routes that were created in other installed MatrixOne applications.

   Or

From the category list of the specific object you want to see routes for, click **Routes**. The Routes page opens, showing all routes you are included in that relate to the object.



For each route, the page shows:

Status Icon—Shows the status of the route. A green arrow means all route tasks are on time. A yellow diamond means at least one route task, not including the last task in the route, is late. A red square means the last task is late.

Name—The name of the route. If the owner chose autoname when creating the route, the name contains a prefix and a number. To see details about a route, click its name.

Description—The description the owner entered for the route.

Route Base Purpose—Determines the kind of tasks included in the route.

- Standard—The route can include tasks that require the assignee's approval or comment or tasks intended only for notification or information.
- Approval—The route includes only tasks that require the assignee's approval.
- Review—The route includes only tasks that require the assignee's comment.

Status—Not Started, Started, Stopped, or Finished. Not Started means you began creating the route but didn't start it yet, so no tasks have been created yet. Only the route creator can access Not Started routes. Started means the route has been started but not all members have completed their tasks. Stopped means a route member has rejected the route (chosen Reject for the task approval status). Finished means all members have completed their tasks for the route.

Scope—The members who can access the route: all, organization, or a specific workspace or project space.

Due Date—The date the final route member is scheduled to complete his or her task. If this date has passed and the final task has not yet been completed, the route status is red.

Completed—The date the final route member completed his or her task.

Owner—The person who created the route.

2. Work with the routes as needed using the links on the Routes page:

- To view information about a route, click its **Name**. See *Viewing Information about a Route*.
- To create a new route, click **Create Route** or **Route Wizard** from the page Actions menu. See *Creating a Route: Basic Information Only* and *Creating a Route: All Route Information*.
- To set the task escalation, click **Set Task Escalation**. This appears only for the route owner. See *Setting Up Task Due Date Notifications*.
- To start a route whose state is Not Started, check it and click **Start/Resume Selected** from the Actions menu. See *Starting a Route*.
- To start a route whose state is Stopped, check it and click **Start/Resume Selected** from the Actions menu. See *Processing Rejected Routes*.
- To delete a route that you own, check it and click **Delete Selected** from the Actions menu. See *Deleting a Route*.

Viewing Information about a Route

You can view information about any route that you created or that you are included in. Additionally, you can view routes for an item that you have view access to, even if you are not included in the routes. If Team Central is installed, Workspace Leads can view information for any route for the workspace, even if they are not included in it.

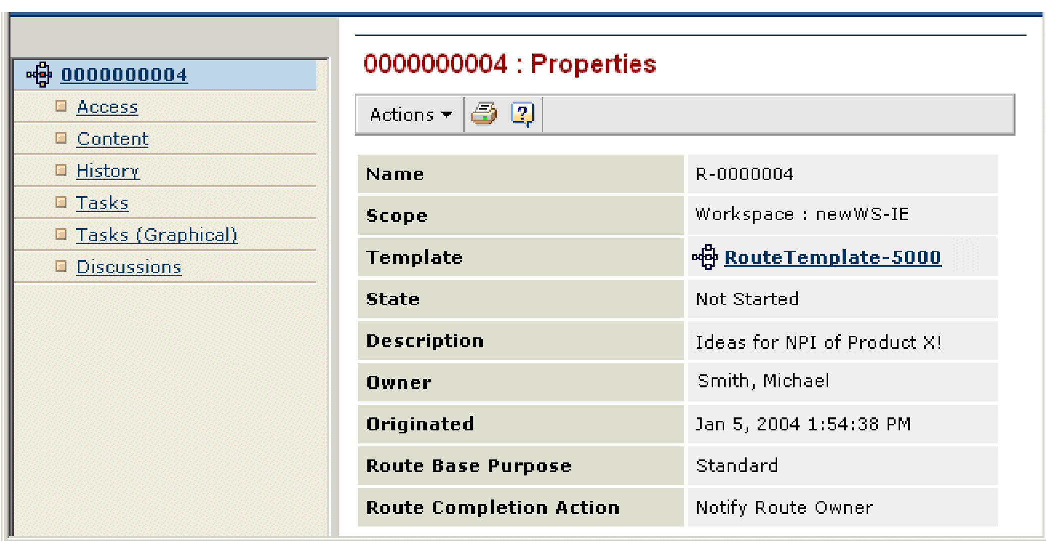
To view information about a route

1. From the My Desk menu, click **Routes>My Routes**.

   Or

   If you are working within an object, click **Routes** from the object category list.
2. From the Routes page, click the **Name** of the route.

   The category list and Properties page for the route opens.



Name—The name assigned by the route creator.

Scope—Determines the members that can be assigned tasks for the route.

- Organization—The route creator can add only people from his/her own company and one other company.

- All—The route creator can add people from any company, including roles and groups.
- project space—If Program Central is installed, the scope can be limited to a specific project space. To see information about the project space, click its name.
- workspace, folder, subfolder—If Team Central is installed, the scope item can be a workspace, folder, or subfolder. This defines not only the route members, but also the upper limit for content that can be added to the route. For example, if the scope is the workspace, the content can be from any folder or subfolder and the route's members can be any person added to the workspace. If the scope is a particular folder or subfolder, the content can only be from that folder and any of its subfolders. The routes members can only be people who have at least Read access to the scope folder. To see information about the workspace/folder, click its name.

Template—The name of the template used to create the route, if any. To see information about the template, click its name.

State—Not Started, Started, Stopped, or Finished. Not Started means you began creating the route but didn't start it yet, so no tasks have been created yet. Only the route creator can access Not Started routes. Started means the route has been started but not all members have completed their tasks. Stopped means a route member has rejected the route (chosen Reject for the task approval status). Finished means all members have completed their tasks for the route.

Description—The purpose or intent of the route.

Owner—The person who created the route.

Originated—The date the route was created. If the route was not started immediately, this could be different from the date and time the route was started.

Route Base Purpose—Determines the kind of tasks included in the route.

- Standard—The route can include tasks that require the assignee's approval or comment, or tasks intended only for notification or information.
- Approval—The route includes only tasks that require the assignee's approval.
- Review—The route includes only tasks that require the assignee's comment.

Route Completion Action—Determines the events that will occur when the route is complete.

- Notify Route Owner—When the route is complete (all tasks are completed), the system sends a notification to the route owner.
- Promote Connected Object—This option is for routes with content for which the route owner has defined lifecycle block states. If this option is selected, the system automatically promotes the object when the route is completed, assuming no other routes or requirements are blocking promotion. The route owner is also notified of the route completion.

3. Use the Actions menu commands to work with the route:
    - To edit the route's name or description, click **Edit Details**. Only route owners can edit details. See *Editing a Route's Details*.
    - To set up notifications about potentially late tasks, click **Set Task Escalation**. See *Setting Up Task Due Date Notifications*.
    - To save the route as a template, click **Save As Template**. See *Saving a Route as a Template*.

- To start the route, click **Start Route**. This is only available for the route owner and when the route has not yet been started. See *Starting a Route*.
- To request to be notified when a task is completed or content is added to the route, click **Subscribe**. If the route is Finished, this option is not available. See [x-ref to subscriptions].
- To request that other people be notified when a task is completed or content is added for the route, click **Push Subscriptions**. This is only available for the route owner. See [x-ref to subscriptions].
- To resume a route that has been rejected, click **Resume**. This button is available only for routes that have been rejected have a status of Stopped. See *Processing Rejected Routes*.

4. Use the category list to view more information about the route.

Category	Description	For details, see:
Access	Lists the route members. For Team Central, also lets the route owner set accesses to the route.	*Listing Route Members*
Content	Shows the content that has been added to the route and lets people with the appropriate access add and remove content.	*Listing Content for a Route*
Discussions	Lists the discussion threads that are associated with this route.	*Listing Discussions for an Item* in Chapter 5
History	Shows a log of events that have occurred for the route.	Click on the History page or see *AEF Help*.
Tasks	Lists the tasks in the route.	*Listing Tasks for a Route*
Tasks (Graphical)	Shows a graphical display of the tasks in the route and their status.	*Listing Tasks for a Route—Graphical View*

Determining a Route's Scope

The scope for a route determines who can be assigned tasks in the route, who can access the route, and in some cases, what content can be added to the route. The following are possible values for the route's scope:

- Organization—The route creator can add only people from his/her own company and one other company.
- All—The route creator can add people from any company, including roles and groups.
- project space—If Program Central is installed, the scope can be a specific project space. To see information about the project space, click its name.
- workspace, folder, subfolder—If Team Central is installed, the scope item can be a workspace, folder, or subfolder. This defines not only the route members, but also the upper limit for content that can be added to the route. For example, if the scope is the workspace, the content can be from any folder or subfolder and the route's members can be any person added to the workspace. If the scope is a particular folder or subfolder, the content can only be from that folder and any of its subfolders. The routes members can only be people who have at least Read access to the scope folder. To see information about the workspace/folder, click its name.

If Team Central is installed, and the scope of the route is defined as a workspace or a folder or subfolder, the scope can further limit the access and content of the route. The scope can:

- Limit the content of the route to the content within the scope item or below it in the workspace hierarchy.

  For example, if the scope is the workspace, the content can be from any folder or subfolder in the workspace. If the scope is a particular folder or subfolder, the content can only be from that folder and any of its subfolders. So to add content from multiple top-level folders, the route's scope must be the workspace. To add content from different subfolders within a folder, the scope must be at least the folder (and can be the workspace).

  You can add files to a route that are not initially in the scope of the route by uploading an external file to the route. However when adding the file, you must place the external file in a folder within the route's scope.

  Note that accesses also limit the content that can be added to a route. The people who add content to the route, which is either the creator or route members who have Add access, can only add content from folders that they have at least Read access to.

- Limit the people who can be assigned tasks to workspace members who have Read access to the scope item.

  For example, if the scope is a workspace, the task assignees can be any member of the workspace. If the scope is a folder or subfolder, only members who have Read access to the folder or subfolder can be assigned tasks.

- Associate the route with a particular folder, subfolder.

  For example, you may want to associate a route with a particular folder because the folder belongs to a project team. A folder-scope route is listed on the Routes page for the workspace and for the folder but not on the Routes page for other folders in the workspace. Associating a route to a folder may be especially useful for routes that have no content. A folder-scope route that contains no content is still listed on the Routes page for the folder, even though it doesn't contains items from the folder.

Consequences of Creating a Route Based on a Route Template

When you create a route, you have the option of basing it on a Enterprise route template or a route template created previously by you. A route template contains the components of a route that are frequently reused, such as the route description, route members, and task definitions. Content is not included in a route template. Basing a route on a route template can speed up the route creation process because the system pre-fills the member and task information for you.

Route templates can be saved with no members and therefore no task assignees. If you create a route based on a template that has no members, you'll have to add members and assign tasks before starting the route. If the route template has members, some tasks may still be unassigned and you'll have to assign these tasks before starting the route.

In Team Central, if the template is based on a route that has a scope item defined (a workspace, for example) and it contains members who do not have at least Basic access to the scope item, they are not included in the route. Any tasks these people are assigned are removed from the route.

The route template controls the amount of editing that can be performed on the task list for routes created from the template. A route template can be defined to allow one of the following four levels of editing. These edit levels control whether the person who creates routes from the template can add and remove tasks, edit the task names, and edit the task orders. The pages that let you define the tasks for a route indicate the tasks that come from the template with a (t).

- **Maintain Exact Task List**—People who create a route from this template must use the exact task list, with no tasks added or removed. The route creator cannot make any changes to the task order or names, but all other fields can be changed, including the task assignee.
- **Extend Task List**—People who create a route from this template must use the exact task list, but more tasks can be added to an existing route order number or a new number. The route creator cannot make any changes to the order or names of tasks from the route template, but can change all other fields. The route owner can make any changes to tasks the owner adds to the route.
- **Modify Task List**—People who create a route from this template can change all information for template tasks except the task name. The route creator can add new tasks but cannot delete template tasks.
- **Modify/Delete Task List**—People who create a route from this template can change and delete any task and can add new tasks.

Creating a Route: Basic Information Only

This section contains instructions for creating a route and entering only basic information for it. You must define content, member access, and tasks before you can start the route. For instructions on using the Route wizard to define all components of the route when you create it, see *Creating a Route: All Route Information*.

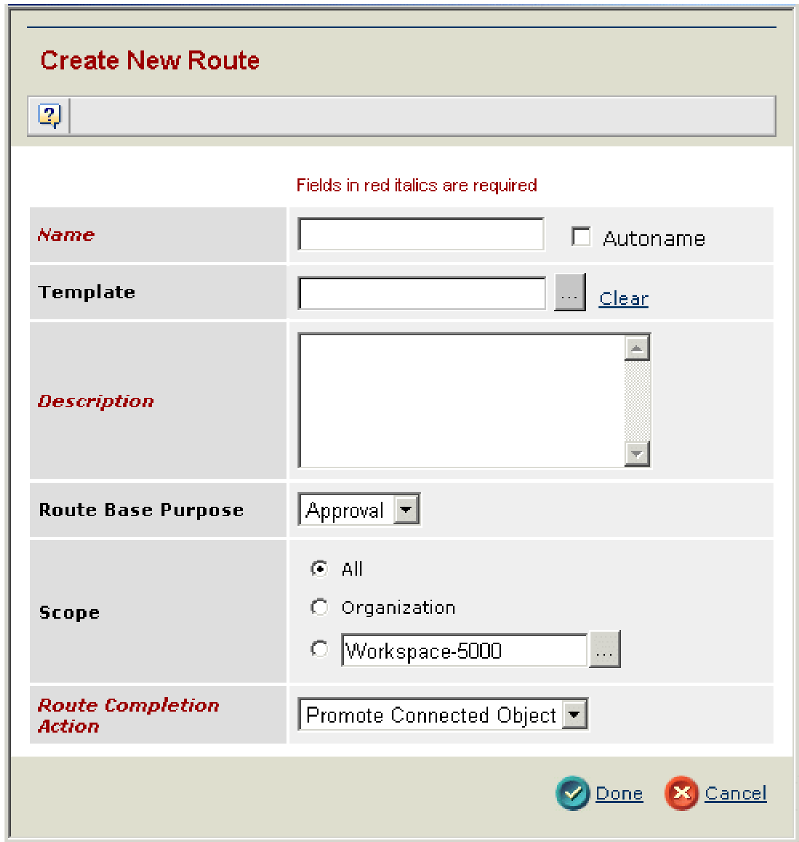
To create a route by entering only basic information

1. From the global toolbar, click **My Desk>Routes>Create Route**.

   Or

   Access the list of routes for a particular object and click **Create Route** from the Actions menu on the Routes page. For details, see *Listing Routes*.

   The Create New Route page opens.



2. Enter the **Name** you want to use for the new route.

   Or

   Check **Autoname** to have the system assign a name. When a route is autonamed, the system assigns a prefix and a sequential number for the name, such as R-000305.

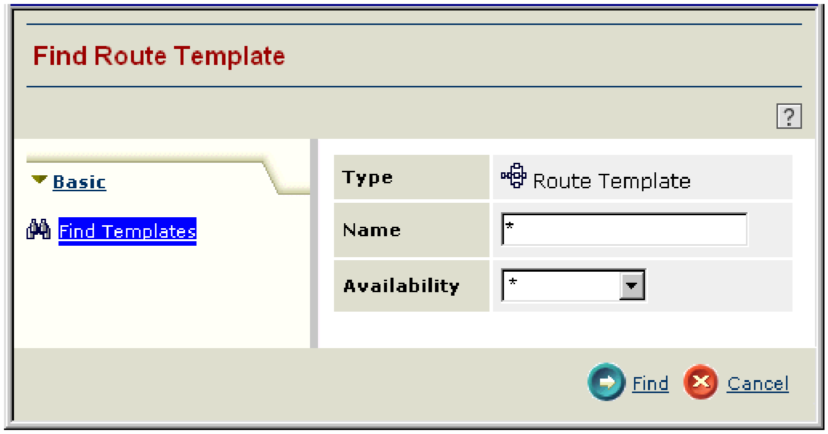
3. If this is a sub-route that you are creating to complete another route's task, use the **Visible to Parent Route Owner** options to choose whether you want the sub-route to be shown to people who can access the parent route. This includes the parent route owner, all members of the parent route, and Workspace Leads (if Team Central is installed).

   - If you don't want others to see the sub-route, choose **No**.
   - If you want others to see the sub-route, choose **Yes**.

   These options are not shown unless the route is a sub-route.

4. Use the Template box to specify a template on which to base the route. After creating a route, you cannot change the template it is based on. See *Consequences of Creating a Route Based on a Route Template*. If you don't want to use a template, proceed to Step 5. To specify a template:

   a) Click .

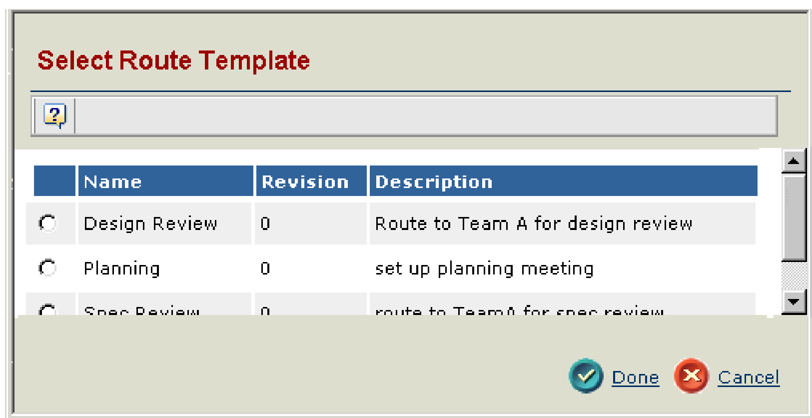


b) From the Find Route Template page, enter search criteria. The search is limited to route templates that you saved (User) or that your Company Representative saved for the company (Enterprise). For Company Representatives, the list includes all route templates created by employees of your company.

Name—To search for templates by name, enter the name of the template or enter part of it and use the wildcard *. The search is case sensitive. If you don't want to search by name, leave the * in the box.

Availability—Choose Enterprise or User to limit the search based on the route template availability. If you don't want to limit the search by availability, choose *.

c) Click **Find**.



d) From the Select Route Template page, choose the template you want.

e) Click **Done**.

5. Enter a **Description** that indicates the route's purpose.

If you are basing the route on an existing template, the description is already entered. You can edit it as needed.

6. Select the **Route Base Purpose**, which determines the kind of tasks included in the route.

- Standard—The route can include tasks that require the assignee's approval or comment or tasks intended only for notification or information.
- Approval—The route includes only tasks that require the assignee's approval.

- Review—The route includes only tasks that require the assignee's comment.

7. Choose the route's **Scope**: All or Organization. If Team Central is installed, you can click to choose a specific workspace or folder, or if Program Central is installed, a project space. For details, see *Determining a Route's Scope*.

8. Select a **Route Completion Action**, which determines the events that will occur when the route is complete:

   - Notify Route Owner—When the route is complete (all tasks are completed), the system sends a notification to the route owner.
   - Promote Connected Object—This option is for routes with content for which the route owner has defined lifecycle block states. If this option is selected, the system automatically promotes the object when the route is completed, assuming no other routes or requirements are blocking promotion. The route owner is also notified of the route completion.

9. Click **Done**.

   The category list and Properties page for the new route opens. Before starting the route, you must add content (if any), add members and assign accesses, and define tasks using these procedures:

   - *Defining Content for a Route*
   - *Adding and Removing Route Members and Defining Access*
   - *Defining the Tasks in a Route*

   Then, when you're ready to start the route, follow the instructions in *Starting a Route*.

Creating a Route: All Route Information

This section contains instructions for using a wizard to create a route and define all of its components. At the end of the wizard, you can choose to start the route immediately or wait to start the route.

Creating a route involves these steps:

1. *Launching the Wizard and Entering Basic Information about the Route*
2. *Adding Content to the Route*
3. *Adding Members and Defining Accesses for the Route*
4. *Defining the Tasks*
5. *Controlling Creation of Tasks that Follow Concurrent Tasks*

Launching the Wizard and Entering Basic Information about the Route

Clicking Create Route Wizard from either the My Desk menu or from the Actions menu of a Routes page opens the first page of the Route wizard, which lets you enter basic information for the route.

If Team Central is installed, you can also launch the Route wizard with preselected content from a folder. When you do this, the route's scope is the folder or subfolder that contains the selected content. From the Content page for the folder, check the content you want to include in the route and click Route Selected. The wizard opens so you can enter basic information. When you reach the step for adding content to the route, the content you selected is listed.

You move through the wizard using the Next and Previous buttons at the bottom of each page. You can skip a page using Next and return to previous pages using Previous.

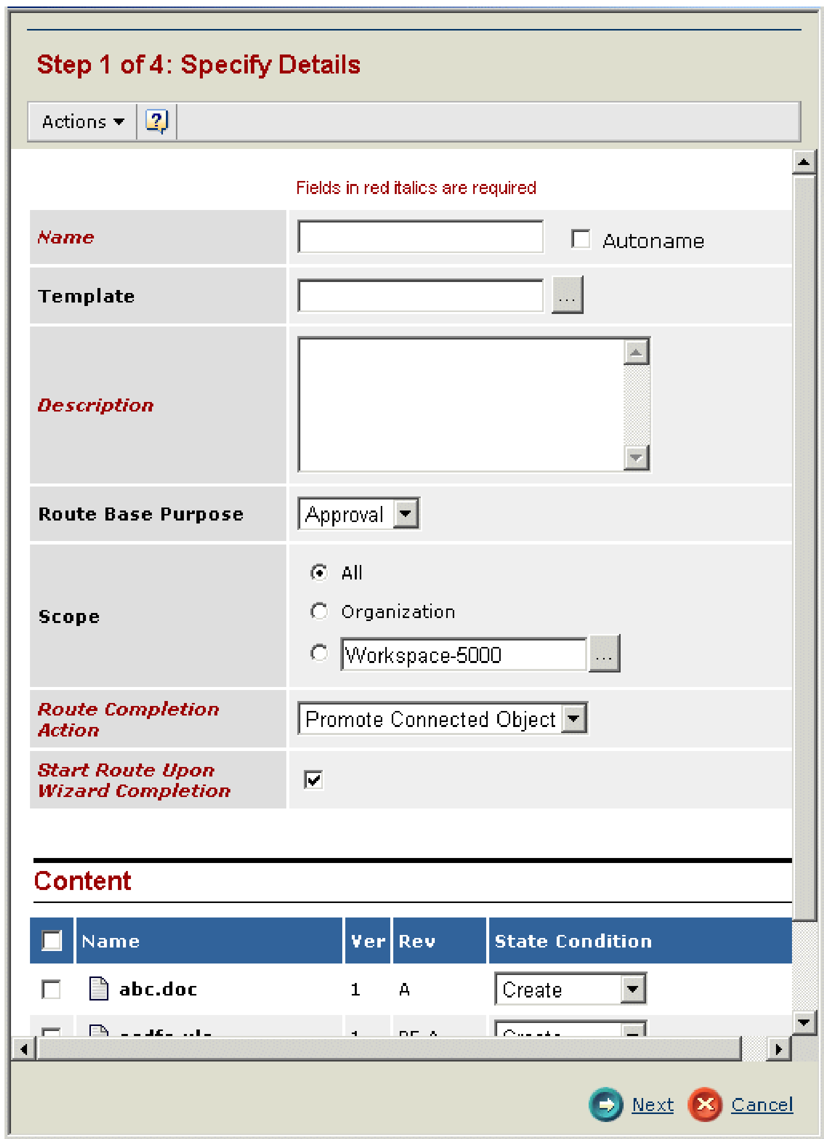
To launch the Route wizard and enter basic information

1. From the global toolbar, click **My Desk>Routes>Create Route Wizard**.

   Or

   Access the list of routes for a particular object and click **Create Route Wizard** from the Actions menu on the Routes page. For details, see *Listing Routes*.

   The first page of the wizard opens, the Specify Details page.



2. Enter the **Name** you want to use for the new route.

   Or

   Check **Autoname** to have the system assign a name. When a route is autonamed, the system assigns a prefix and a sequential number for the name, such as R-000305.

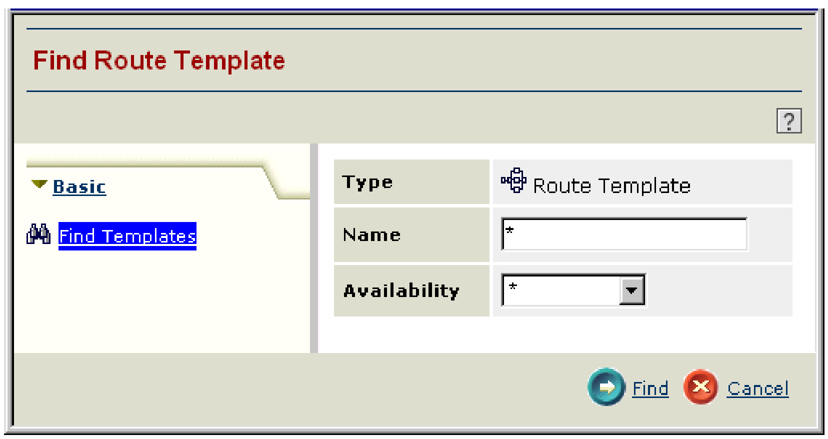
3. If this is a sub-route that you are creating to complete another route's task, use the **Visible to Parent Route Owner** options to choose whether you want the sub-route to be shown to people who can access the parent route. This includes the parent route owner, all members of the parent route, and Workspace Leads (if Team Central is installed).

   - If you don't want others to see the sub-route, choose **No**.
   - If you want others to see the sub-route, choose **Yes**.

   These options are not shown unless the route is a sub-route.

4. Use the Template box to specify a template on which to base the route. After creating a route, you cannot change the template it is based on. See *Consequences of Creating a Route Based on a Route Template*. If you don't want to use a template, proceed to Step 5. To specify a template:

   a) Click .

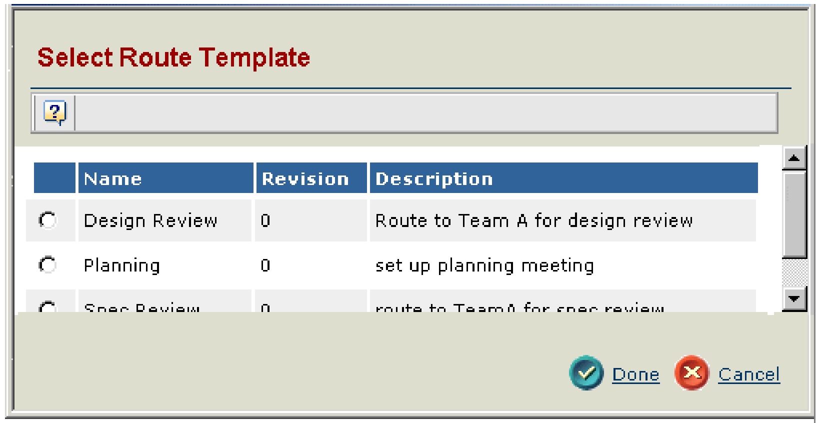


   b) From the Find Route Template page, enter search criteria. The search is limited to route templates that you saved (User) or that your Company Representative saved for the company (Enterprise). For Company Representatives, the list includes all route templates created by employees of your company.

   c) **Name**—To search for templates by name, enter the name of the template or enter part of it and use the wildcard *. The search is case sensitive. If you don't want to search by name, leave the * in the box.

   Availability—Choose Enterprise or User to limit the search based on the route template availability. If you don't want to limit the search by availability, choose *.

   d) Click **Find**.



e) From the Select Route Template page, choose the template you want.

f) Click **Done**.

5. Enter a **Description** that indicates the route's purpose.

If you are basing the route on an existing template, the description is already entered. You can edit it as needed.

6. Select the **Route Base Purpose**, which determines the kind of tasks included in the route.

- Standard—The route can include tasks that require the assignee's approval or comment or tasks intended only for notification or information.
- Approval—The route includes only tasks that require the assignee's approval.
- Review—The route includes only tasks that require the assignee's comment.

7. Choose the route's **Scope**: All or Organization. If Team Central is installed, you can click ... to choose a specific workspace or folder, or if Program Central is installed, a project space. For details, see *Determining a Route's Scope*.

8. Select a **Route Completion Action**, which determines the events that will occur when the route is complete:

- Notify Route Owner—When the route is complete (all tasks are completed), the system sends a notification to the route owner.
- Promote Connected Object—This option is for routes with content for which the route owner has defined lifecycle block states. If this option is selected, the system automatically promotes the object when the route is completed, assuming no other routes or requirements are blocking promotion. The route owner is also notified of the route completion.

9. Click the **Start Route Upon Wizard Completion** check box if you want the route to start automatically when you finish defining it using the route wizard.

Adding Content to the Route

The Content section of the Specify Details page lets you specify the content you want to route to other route members. You can add no content or multiple items. The content that you add to a route can be:

- Documents in a local directory that are not in the database (referred to as an "external file").

- Content already in the database. Depending on which MatrixOne applications you have installed, these objects could be parts, ECRs, ECOs, SCOs, RFQs, etc. If the route's scope is a Team Central folder or subfolder, the content is limited to the content of the folder and its subfolders.

For some non-document items, you can choose a block promotion state. When a block promotion state is chosen for an item, the system will not let the item be promoted from the state until the route is complete.

If you began the route by selecting items from a folder Content page, then that content is listed in the Content section at the bottom of the Specify Details page. Also, if you are creating the route based on a template that includes content, this content is listed. If you don't want to add any content or any additional content, you can click Next and proceed with the next step.

To add content to the route

1. To add database content to the route, click **Add Content** from the page Actions menu.

   The Find Content page opens, where you can search for and select the item(s) that you want included in the route. The default type is Document. Allowable types depend on which MatrixOne applications are installed, and may vary depending on choices made by your Business Administrator for your installation. For example, if you have both Engineering Central and Specification Central installed, you can add items such as Engineering Central parts, ECOs, ECRs, etc., as well as Specification Central items such as SCOs and Technical Specifications.

   a) Specify search criteria:

   Type—Click to select the type or subtype.

   Name—To search for a specific object or group of objects, you can provide a Name. Names can include wildcard characters, for example, 001* or *-Version 8. The default is *****, which includes all names.

   Revision—To search for a specific revision, type the revision number or sequence. Revisions can include wildcards, for example, 5-*. The default is *****, which includes all revisions.

   Description—To search for objects that contain a specific word or phrase in the description, type the word or phrase using wildcards. For example, if you are searching for parts whose description contains the word *machine*, you would type **machine** in the text box.

   Owner—Type an owner name or part of a name (using wildcards) if you want to limit the search results to objects owned by a particular person.

   Originator—Type an originator name or part of a name (using wildcards) from the list if you want to limit the search results to objects created by a particular person.

   Vault—You can choose any of four vault options:

   All—Searches all vaults to which you have access, including local and remote vaults.

   Local—Searches only the local vault.

   Default—Searches only the vault defined as your default vault in your person definition.

   Selected—If multiple vaults are available, you can click to limit the search to specific vault(s).

b) When you have entered your search criteria, click **Find**.

2. To add documents that have not been added to the database but are in a local directory, click **Upload External File** from the page Actions menu. This link is available only if Team Central or Program Central is installed.

   The Checkin Dialog appears, where you can search for and select the file(s) that you want to upload. For details, see [x-ref to checkin section]

3. To specify a **State Condition** for non-document items (only for items that have more than one state in their lifecycle), choose the state from the drop-down list in the State Condition column. If you don't want to specify a state, choose (none).

   If you specify a block promotion state for an item, the system prevents the item from being promoted from that state until the route is completed. For example, suppose a buyer is routing an RFQ to be reviewed internally before sending it to suppliers. The buyer can make sure the RFQ is not sent to suppliers until the route (and associated review) is complete by specifying Initial Review as the block promotion state. Similarly, suppliers can make sure a quotation is not returned to the buyer until its route, which lets others in their company review it, is complete by choosing Review as the block promotion state.

4. To remove an item from the route, check it and click **Remove Selected** from the page Actions menu.

5. When you are finished adding content to the route, click **Next**.

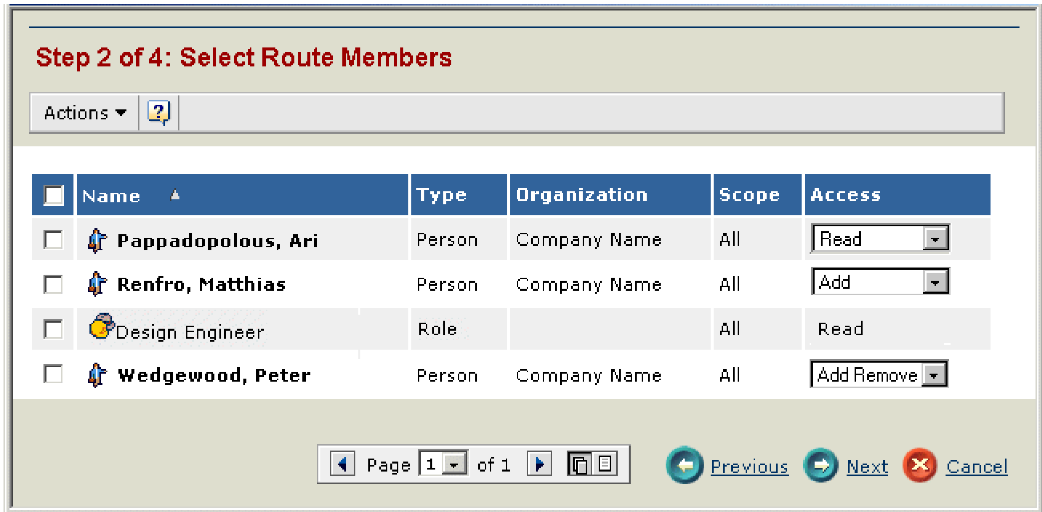
   The Specify Access page displays, as described in the next section.

Adding Members and Defining Accesses for the Route

Clicking Next from the Specify Details page brings up the Select Route Members page. This page lets you select the members to include in the route and specify the accesses they should have for the route.

You can add persons, registered groups and roles to a route. For details on registering groups, see "Configuring Groups for MatrixOne Applications" in the *Application Exchange Framework Administrator Guide*. When the system creates the task assigned to a group or role, it notifies all people who belong to the group or role. The first person who accepts the task is designated as the task assignee and can complete the task.

All route members will be able to access the route once you start it and you can assign one or more tasks to any route member. If you are creating this route based on a route template that includes members, the template members are already listed. You can remove these members, add new ones, change their route access (for Team Central only), or leave them unchanged.



For each member listed, the page shows:

Name—The name of the person, group or role added to the route.

Type—Distinguishes between people added individually/through a member list (Person), groups, and roles.

Organization—The organization the person belongs to. This is blank for groups and roles.

Scope—The scope of the route (all, organization, workspace, or project space), as defined in the first frame of the wizard.

Access—The access each member has for the route. When members are added to the route, their access is Read but you can set a higher access level. This access level is for the route only and not for the content. Groups and roles are added to the route with Read access. See Step 3 below for details on each access level.

To specify who should be included in the route

1. Add members to the route.

You can search for people, groups, roles, or member lists. If you add a member list, each person in the member list is added to the route. If the scope of the route is a workspace or project space, you can add route members outside the scope, but only those members who are within the scope will have access to the route content.

From the page Actions menu, click one of the following: **Add People**, **Add Group**, **Add Role**, or **Add Member List**.

Enter search criteria and click **Search**. For help entering criteria, click  on the Search page or see *AEF Help*.

All members who meet the criteria you entered are shown. The check box for those already added to the route is grayed.

a) Check the members you want to add.

b) Click **Done**.

The members you chose are added to the Select Route Members page.

2. Remove any members that you do not want to assign a task to. For example, if the route was created based on a template, you may want to remove some members who were saved with the template. If you added a member list, you might want to remove some of the people on the member list.

   a) Check the members you want to remove from the route.

   b) Click **Remove Selected** from the page Actions menu.

   c) At the confirmation message, click **OK**.

3. Choose the access for each person.

   These accesses are for the route itself and not for the individual items being routed. Access to route content is defined separately for each content item. For example, a person with Add access to the route can add content to the route but cannot edit or delete a document in the route unless the person has Write and Remove access for the document.

   Read—Every person, group and role included in the route is assigned at least Read access for the route. This means the member can view the category list and Properties page for the route, including all tasks, history, and accesses for the route. The member can also view and download route content but only the items the person has Read access to are listed. Read access also lets members subscribe to the route.

   Read Write—A person with Read Write access to the route has Read permissions and can also check in files to the route.

   Add—A person with Add access to the route has Read Write permissions and can also add new content to the route.

   Remove—A person with Remove access has Read Write permissions and can also remove content from the route.

   Add Remove—A person with Add Remove access has the accesses defined for both Add and Remove access.

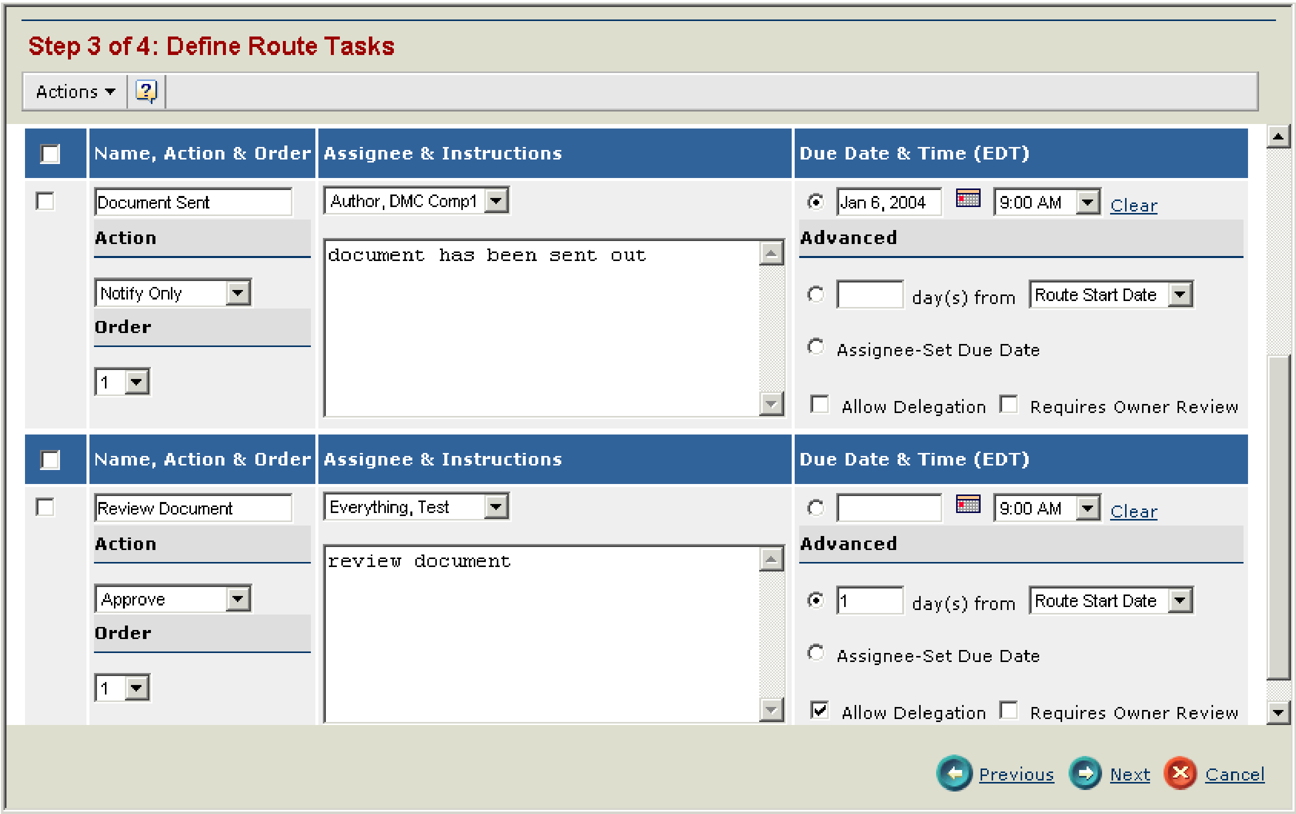
4. Click **Next**.

   The Assign Tasks page appears, as described in the next section.

Defining the Tasks

Clicking Next from the Select Route Members page brings up the Define Route Tasks page. One task is included for each member added to the route. Use this page to specify details about the tasks. You can also create additional tasks for any route members.

If you are creating this route based on a route template, the tasks from the template are also listed and have a (t) next to the task name. Depending on how the template is defined, you may not be able to make many changes to the task list, or you may have full editing ability. For a description of the task editing levels for a route template, see *Consequences of Creating a Route Based on a Route Template*.



To define the tasks in the route

1. For each task, specify the task **Name, Action & Order**.

   a) Entering a Name for the task is optional. If you don't enter a name, the system will use an automatically-generated name, such as IT-292928.

   b) Choose the **Action** you want the task assignee to perform. Note that the action does not affect the person's access to the route's content. In addition to indicating the action the person should perform, the action affects the options presented when the person completes the task:

   Approve—If you choose Approve as the action, in addition to the Comment box, the task recipient must choose an approval status: Approve, Reject, or Abstain. If the task assignee chooses Approve or Abstain and then completes the task, the route continues as usual. If the task assignee chooses Reject and then completes the task, the route is stopped and the route creator is notified. The system does not create the next task in the route until the route creator resumes the route.

   Comment, Investigate, Information Only—If you choose these options as the action, the recipient must enter a comment before completing the task.

   Notify Only—If you choose this option, the recipient need only mark the task as complete to complete the task.

   c) Choose the **Order** number that corresponds to the order in which you want the task to be pending for its recipient. If you want more than one task to be pending at the same time, choose the same order number for each task.

For example, suppose you want one person to complete a task and then you want two people to work on a task simultaneously. You would choose an order number of 1 for the first task. The other two tasks should have order numbers of 2.

2. Choose the **Assignee & Instructions**.

   a) Using the drop-down list, choose the person, group, or role who should receive the task. This is a list of all members you added to the route on the previous page. If you're not ready to choose an assignee, you can leave the task unassigned until you are ready to start the route.

   If you assign a group or role to a task, the system notifies all people in the group or role when the task is created. The first person to accept the task is then assigned to the task and is the only person who can complete it.

   To assign one member to several tasks, check those tasks and click **Assign Selected** from the page Actions menu. Then choose the member from the Assign Tasks page and click **Done**.

   b) Enter instructions for the task.

   This should be a detailed description of what the person should do to complete the task. For example, you may want to indicate which file or section they should review or comment on.

3. For each task, choose how you want to handle the **Due Date/Time**. Choose one of the following options:

   - Specify a due date and time. Click the first button under the Due Date & Time column. Choose the date by clicking the **Calendar** icon and choose the time from the drop-down list. When you first open the calendar to assign a due date, the calendar shows the current date as the default. When you subsequently open the calendar within the same session, the default date is the last date you selected. This facilitates assigning sequential due dates to tasks. For instructions on using the calendar, see *AEF User Help*.
   - Specify the due date/time as the number of days following the route start date or task creation date (the date the previous task assignee completes his/her task). Click the second button under the Due Date & Time column. Enter the number of **days from** and select whether it should be calculated from the **Route Start** or **Task Creation** date.

     When calculating the due date, the system includes weekends and holidays so factor that into the number of days you enter. The maximum number of days is 365. For example, if you want to give the task assignee 10 working days to complete the task, you should enter 14 from the Task Create Date because it's likely there would be 4 weekend days within a 10-day working period. If you want the task to be complete 30 calendar days following the start of the route, you should enter 30 days from Route Start Date.
   - Let the task assignee enter a due date by choosing **Assignee-Set Due Date**. Click the third button under the Due Date & Time column. The task assignee can enter a due date, although the system does not require one. If no due date is entered, the system does not display a status for the task.

   If the assignee does not complete the task by the due date/time, the task is marked as late (red) and the route's status is changed from green to yellow. If late task notifications have been set up, the system sends out notifications to the appropriate people. For sub-routes, the system makes sure none of the task due dates are later than the parent task's due date. If they are, you must make the due dates earlier.

4. To allow the assignee to delegate the task to another person, check **Allow Delegation**.

   If a task allows delegation, the assignee can delegate the task to another member to complete. See *Delegating a Task to Someone Else*. The delegate will temporarily inherit all accesses that the assignee has for the route and its content. The system may also delegate the task automatically if the recipient receives the task during a defined absence period and the person has designated an Absence Delegate. When the system automatically delegates a task, it also notifies the route owner.

   The Tasks page will show a Delegate icon for the tasks.

5. If you want to review a task after the assignee completes it, click **Needs Owner Review**.

   After the assignee completes the task, the system notifies you. After reviewing the task, you must enter a review comment and then either promote the task to indicate approval or demote it to indicate rejection. The system does not create the next task in the route until you promote the task. Demoting the task changes its state back to Assigned and the assignee must recomplete the task based on your comments. When demoting the task, you can reassign it to someone else to work on.

   The Tasks page will show a Requires Owner Review icon for the task.

6. To assign additional tasks, click **Add Task** from the page Actions menu. A new task row is added. Repeat steps 1 through 5 to define the task.

7. Work with the tasks as needed:

   - To remove a task, check it and click **Remove Selected** from the page Actions menu.
   - To sort the list of tasks based on ascending order number and then by task name, click **Sort Task List** from the page Actions menu.

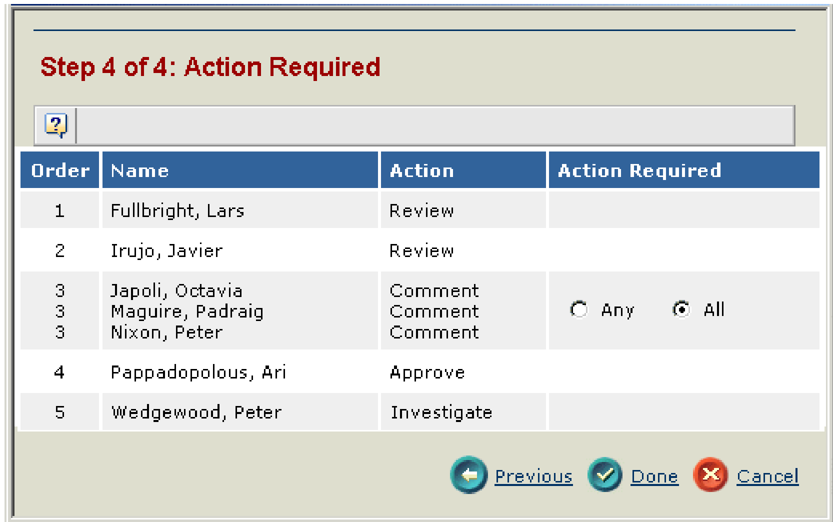
8. Click **Next**.

   The Action Required page appears, as described in the next section.

Controlling Creation of Tasks that Follow Concurrent Tasks

Choosing Next from the Define Route Tasks page brings up the Action Required page. This page lets you specify whether tasks that have the same order number must all be complete before the subsequent tasks become pending or whether only one task must be complete. If you specify that only one task needs to be complete, the system deletes (rescinds) the remaining incomplete tasks at that order level and notifies the assignees for the deleted tasks. For example, suppose you assign three concurrent tasks to three people and ask that they approve a document in the route. All you need is approval from one of them so as soon as one of them completes the task, the other tasks can be deleted and the next task in the route can proceed.

If there are no concurrent tasks in the route, click Done to skip this page.



To control the creation of tasks that follow concurrent tasks

1. For each set of concurrent tasks, choose whether any or all must be completed before the next task(s) becomes pending.

   Any—When one person completes a task in the set of concurrent tasks, the task or tasks in the next order level become pending and the remaining incomplete tasks in the current order level are deleted.

   All—All tasks in the set of concurrent tasks must be complete before the next order level tasks become pending.

2. If this is a sub-route that you are creating to complete another route's task, use the **Visible to Parent Route Owner** options to choose whether you want the sub-route to be shown to people who can access the parent route. This includes the parent route owner, all members of the parent route, and Workspace Leads.

   - If you don't want others to see the sub-route, choose **No**.
   - If you want others to see the sub-route, choose **Yes**.

   If this is not a sub-route, these options are not shown.

3. Click **Done**.

   If you chose the Start Route on Wizard Completion option on the first page of the wizard, the route starts immediately. Otherwise, the route's status is Not Started. You can edit it as needed and then start it when you're ready. See *Starting a Route*.

   If you started the route, the system changes the route to the Started status and creates each task that has an order number of 1. The task recipients will see the task listed in their tasks list and they will receive notification that the task is pending. If the task is assigned to a group or role, all people assigned to the group or role receive the notification. If you receive a message that says no persons were notified, there were no people assigned to the role who have Read access to the route content. You should assign the task to someone else. See *Editing the Definition of a Task*.

   If there are members in the route who are not assigned a task, the application removes them from the route when you start it.

   When you start a sub-route, the system makes sure none of the task due dates are later than the parent task's due date. If they are, you must make the due dates earlier.

When all tasks are completed, the system changes the route status to Finished and notifies you that the route is complete. You should then remove the files from the route so other workspace members can edit and route them. See *Processing Completed Routes*.

If a person chooses Reject for the approval status (approval status is only available if the task action is Approve), then the route is stopped and the system notifies you via email and IconMail. The system does not route the files to anyone else unless you resume the route. See *Processing Rejected Routes*.

Editing a Route's Details

The route creator can edit its name, description, and route completion action even after the route has been started.

To edit details for a route

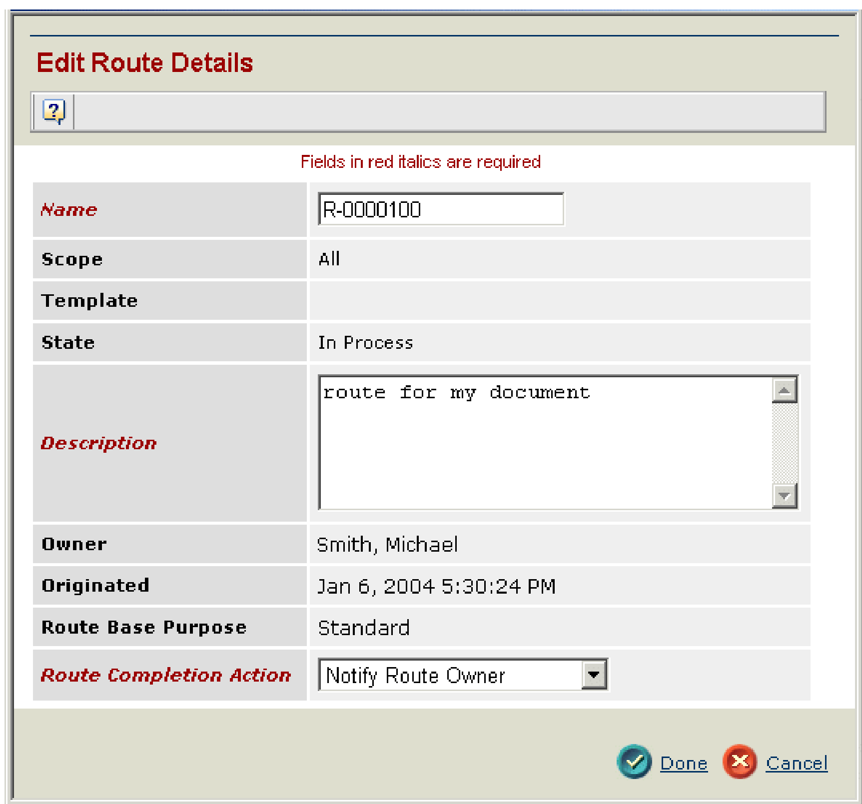
1. From the global toolbar, click **My Desk>Routes>My Routes**.

   Or

   If you are working within an object, click **Routes** from the object's category list.

2. From the Routes page, click the Name of the route.
3. From the Properties page Actions menu, click **Edit Details**.

   The Edit Route Details page opens.



4. Edit the **Name**, **Description** or **Route Completion Action** as needed. The description should indicate the purpose of the route, which is usually the goal the tasks are to accomplish.

The other information on the page is read only and can't be changed after the route is created. For a description of this information, see *Viewing Information about a Route*.

Starting a Route

When using the Route wizard to create a route, you have the option of starting it immediately or waiting to start it later. If you created a route but didn't start it, you can edit it as needed and start it when you're ready. Routes that you create but don't start have a state of Not Started. Once started, the route state is Started. Only the route owner can start the route.

If there are members in the route who are not assigned a task, the application removes them from the route when you start it.

When you start a sub-route, the system makes sure none of the task due dates are later than the parent task's due date. If they are, you must make the due dates earlier.

To start a route you created but didn't start

1. From the global toolbar, click **My Desk>Routes>My Routes**.

   Or

   If you are working within an object, click **Routes** from the object's category list.
2. Check the route you want to start.
3. Click **Start/Resume Selected** from the page Actions menu.

   The system changes the route to the Started status and creates each task that has an order number of 1. The task recipients will see the task listed in their tasks list and they will receive notification that the task is pending. If the task is assigned to a group or role, all people assigned to the group or role receive the notification and can access the task. If you receive a message that says no persons were notified, there were no people assigned to the group or role who have Read access to the route content. You should assign the task to someone else. See *Editing the Definition of a Task*.

   When all tasks are completed, the system changes the route status to Finished and notifies you that the route is complete. If your system is configured so a document can only be in one route at a time, it is important to remove files from a route when the route is finished so the document can be routed and edited as needed. See *Processing Completed Routes*. If a person chooses Reject for the approval status (approval status is only available if the task action is Approve), then the route is stopped and the system notifies you via email and IconMail. The system does not route the files to anyone else unless you resume the route. See *Processing Rejected Routes*.

Processing Completed Routes

When the last person in a route completes his or her task, the route state changes to Finished and the system notifies the route creator. At this point, the route creator should review the tasks and any content that has been edited or added. If your system is configured so a document can only be in one route at a time, it is important to remove files from a route when the route is finished so the document can be routed and edited as needed.

To process a completed route

1. From the global toolbar, click **My Desk>Routes>My Routes**.

   Or

   If you are working within an object, click **Routes** from the object's category list.

2. From the Routes page, click the Name of the finished route.
3. From the category list for the route, click **Tasks**.
4. For each task, review the comment and approval status chosen and entered by the task assignee.

   A comment is required for all task actions except Notify Only. Tasks with Approve action require the assignee to select an approval option.
5. Review any edited or added content by clicking **Content** from the route category list.

   For instructions on viewing content, see *Viewing a Document in a Folder or Route* in Chapter 4 and *Viewing Information about Content* in Chapter 4. [x-ref to document section...you might have different headings than this now]
6. To remove content from the route:

If your system is configured so a document can only be in one route, it is important to remove files from a route when the route is finished so the document can be routed and edited as needed.

   a) From the route Content page, check the items you want to remove.

   b) Click **Remove Selected** from the page Actions menu.

   c) At the confirmation message, click **OK**.

Processing Rejected Routes

If a task assignee chooses Reject for the approval status (approval status is only available if the task action is Approve) and then completes the task, the system stops the route and notifies the route owner via email and IconMail. The system does not activate the remaining tasks in the route unless the route owner resumes the route.

If there are other tasks of the same sequence order as the rejected task and the route is set up so all tasks must be completed for that sequence order, the task assignees can complete the remaining tasks. If the route owner resumes the route, the assignees must complete the tasks, as usual. If the sequence order is set up so any task must be completed, then the remaining tasks are rescinded when the rejected task is completed.

To process a rejected route

1. From the global toolbar, click **My Desk>Routes>My Routes**.

   Or

   If you are working within an object, click **Routes** from the object's category list.
2. From the Routes page, click the Name of the stopped route.
3. From the category list for the route, click **Tasks**.
4. Review the comment entered by the person who rejected the route.
5. If needed, review the route content by clicking **Content** from the route category list.

   For instructions on viewing content, see *Viewing a Document in a Folder or Route* in Chapter 4 and *Viewing Information about Content* in Chapter 4. [x-ref to document section...you might have different headings than this now]
6. Based on the comments, approval statuses, and content, decide how you want to process the rejected route. You have three options:

- Resume the route and have the system activate the remaining tasks in the route as it normally would, beginning with the tasks in the sequence order following the order for the rejected task. Before resuming the route, you can edit the route as needed. For example, you can add, remove, and edit content; define new tasks; and edit task definitions. You might want to add another task for the person who rejected the route so the person can review and approve it. Additionally, you might want to edit the instructions for tasks to clarify them and change due dates. To resume a rejected route, go to the Routes page that lists the route (Step 1 above), check the route, and click **Start/Resume Selected**.
- Delete the route. Then you can create a new route when you are ready. See *Deleting a Route*.
- Leave the route in the Stopped state. You can always resume it or delete it at a later date.

Deleting a Route

You can delete routes that you have created, no matter what state the route is in. Deleting a route removes all information about the route, including all of its tasks, and stops any further tasks from being created. The system notifies task assignees who have an active task so they know why their task has been removed.

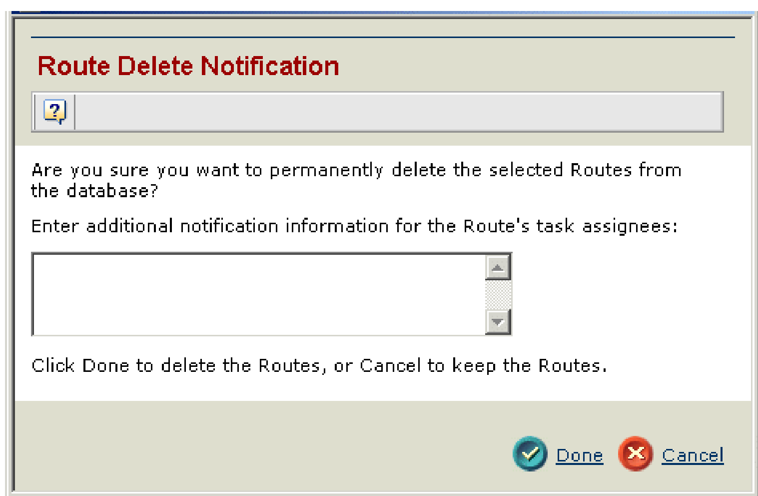
If the deleted route's tasks have sub-routes, the sub-routes and associated tasks are also deleted and their assignees are notified.

To delete a route you created

1. From the global toolbar, click **My Desk>Routes>My Routes**.

   Or

   If you are working within an object, click **Routes** from the object's category list.
2. From the Routes page, check the route you want to delete.
3. Click **Delete** from the page Actions menu.



4. At the confirmation message, enter additional information about why you are deleting the route. This information will be included in the notification sent to task recipients.
5. Click **Done**.

   The system sends notifications to task assignees who have active tasks.

Routes: Tasks

This section contains the following topics related to working with all tasks in a route. Because these procedures pertain to all tasks in a route, they are mainly for the route owner. However any member in the route can list tasks for a route. If Team Central is installed, the workspace owner can set up task due date notifications. For information on working with tasks assigned to you, see *Tasks Assigned to You*.

Setting Up Task Due Date Notifications

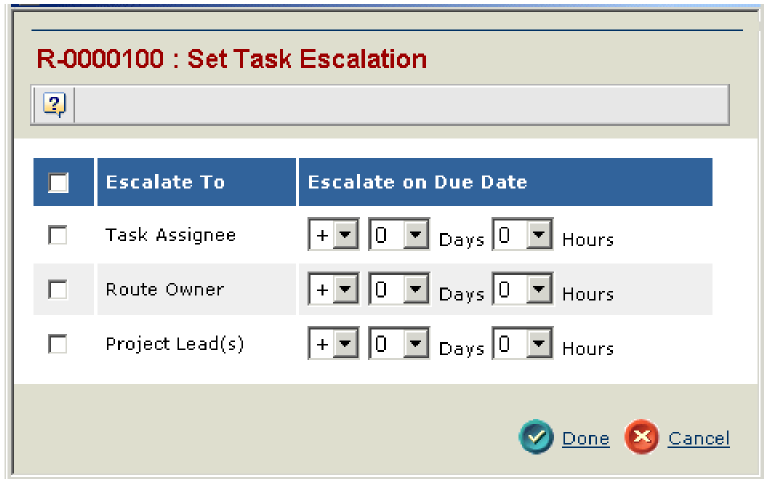
The owner of a route or workspace (for Team Central) can have the system notify people as task due dates approach and the tasks have not yet been completed. The owner can choose to notify task assignees, route owners, and/or workspace leads and can specify when these notifications should be sent by specifying the number of days and hours before or after the task due date. People receive these notifications in IconMail and email and receive one notification per task. For Team Central, these settings apply to all routes for the workspace and all of its folders. For other MatrixOne applications, these settings apply to the route they were created on.

The system also indicates that tasks are late by changing the task status from green to red if the assignee does not complete it by the due date. When at least one task is late, the route's status changes from green to yellow. If the last task in the route is overdue, the route status changes to red.

To set task due date notifications

1. Access a Routes list or the Properties page for a specific route. For details, see *Listing Routes* or *Viewing Information about a Route*.
2. From the page Actions menu, click **Set Task Escalation**.

   The Set Task Escalation page opens.



3. Check the group(s) of people you want to send notifications to.

The Task Assignees include anyone who is currently the task assignee, which could be the original assignee or a delegate. The Project Lead(s) include the workspace owner and all Workspace Leads (for Team Central only) and project owners (for Program Central only).

4. To accept the default notification time and date for all checked groups, skip to Step 5. The default is the exact due date and time for the task (0 hours and days from the due date/time).

Or

To define the relative time before or after the task due date/time that the notifications should be sent, use the **Escalate on Due Date** drop-down lists.

- Use the first list to indicate if the time should be added (+) or subtracted (-) from the due date/time.
- Use the Days list to choose the number of days to add or subtract from the due date.
- Use the Hours list to choose the number of hours to add or subtract from the due time.

For example, suppose you want to notify task assignees 2 days before the task due date; route owners, 6 hours before; and Project Leads, 1 day after. You would fill in the page so it looks like this:

```
Task Assignee     - 2 Days 0 Hours
Route Owner       - 0 Days 6 Hours
Project Lead      + 1 Days 0 Hours
```

The host company configures how frequently the system should check the task due dates. Depending on the specified frequency, the notifications may be later than the time offset established. For example, if the system only checks every two hours, the notifications could be as much as two hours later than the time set here.

5. Click **Done**.

Listing Tasks for a Route

You can list tasks for any route that you created or are included in.

To list the tasks for a route

1. From the global toolbar, click **My Desk>Routes>My Routes**.

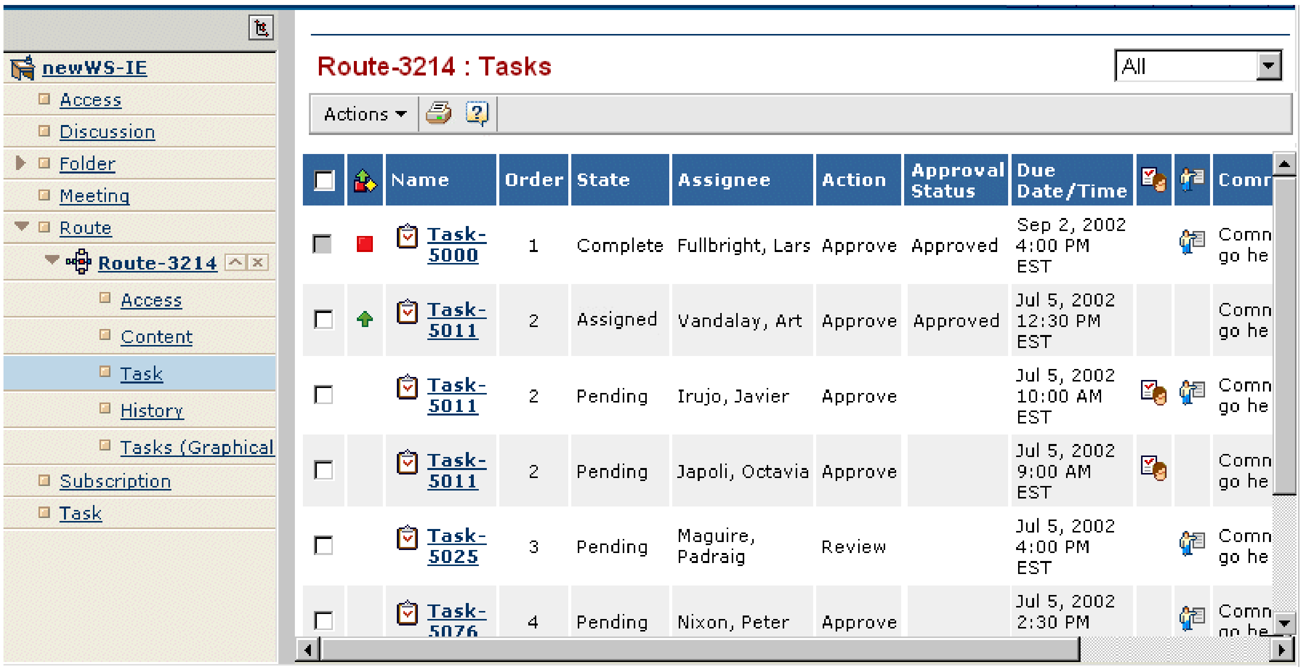
   Or

   If you are working within an object, click **Routes** from the object's category list.

2. From the Routes page, click the Name of the route.

3. From the category list for the route, click **Tasks**.

   The Tasks page opens, listing all tasks in the route. To see only the tasks in the Review state, choose Needs Review from the filter list on the top right of the page. This filter option is available only for the route owner.



For each task, the page shows:

Status—Shows the status of the task. A green arrow means the task is on time. It's either not yet due or was completed before the due date. A red square means the task was not completed in time for the due date. Pending tasks and tasks that do not have an assigned due date have no status.

Name—The name of the task. To see details about the task, click its Name.

Order—The order of the task within the route.

State—Pending, Assigned, Review, or Complete.

- Pending—The previous task in the route hasn't been completed so the assignee isn't assigned to work on it yet. If the route isn't started yet, all tasks are pending.
- Assigned—When a task is created for an assignee, its state is Assigned.
- Review—Only tasks with a Needs Owner Review icon go through the Review state. For these tasks, the state changes from Assigned to Review when the assignee completes the task. If the route owner promotes the task, indicating approval, the state changes to Complete. If the owner demotes the task, indicating rejection, the state returns to Assigned so the assignee can redo the task.

- Complete—For tasks that do not have the Needs Owner Review icon, when the assignee indicates a task is complete by clicking Complete, the state changes to Complete and the next task in the route is created (provided there are no other tasks that must be completed).

Assignee—The person, group, or role the route creator assigned to the task unless the original assignee delegated the task to someone else. If the route creator assigned the task to a group or role, the assignee changes to the name of the first person in that group or role to accept the task.

Action—The action the task assignee should perform: Approve, Comment, Notify Only, or Investigate. If the action is Approve, the assignee must choose an approval status to complete the task: Approve, Reject, or Abstain. All actions except Notify Only require that the route member enter a comment to complete the task.

Approval Status—For tasks with an action of Approval, this column shows the approval option the task assignee selected: Approve, Reject, or Abstain. The column is blank for non-approval tasks.

Due Date/Time—The date and time the route owner requests that the assignee complete the task. If the assignee does not complete the task by this date, the task is marked as late (red) and the route's status is changed from green to yellow (if it's the last task in the route, the status changes to red). If the route has set up late task notifications, the system sends out notifications to the appropriate people.

If the route owner set the task due/time by specifying a number of days following the route start date and the route is not yet started, the field indicates the number of days following the route start. Similarly, if the due date/time is a number of days following the task creation and the task isn't created yet, the field indicates this.

If no date/time is displayed, the route owner is allowing the task assignee to set the due date and the assignee has not yet entered one.

Allow Delegation—Shows whether the route creator has indicated that the task can be delegated. If a task allows delegation, the assignee can delegate the task to someone else to complete. See *Delegating a Task to Someone Else*. The delegate will temporarily inherit all accesses that the assignee has for the route and its content. The system may also delegate the task automatically if the recipient receives the task during a defined absence period and the person has designated an Absence Delegate. When the system automatically delegates a task, it also notifies the route owner.

Needs Owner Review—If there is no icon in this column, the task's state changes to Complete when the task assignee completes the task and the next task in the route is created. If the Needs Owner Review icon is displayed, when the assignee completes the task, the task's state changes to Review and the system notifies the route owner. After reviewing the task, the route owner must enter a review comment and then either promote the task to indicate approval or demote it to indicate rejection. The system does not create the next task in the route until the owner promotes the task. Demoting the task changes its state back to Assigned and the task assignee must recomplete the task based on the route owner's comments. When demoting the task, the route owner can reassign it to someone else to work on.

Comments—Ad hoc comments entered by the task assignee when completing the task. To complete the task, the assignee must fill in the comment field except for tasks with Notify Only actions.

Completed Date—The date and time the person clicked Complete for the task, as recorded by the system. If the task hasn't been completed yet, the column is empty.

4. Work with the tasks as needed:

- To view information about a task, click the task Name. See *Viewing Information about Any Route Task*.
- To add tasks or make changes to the tasks, click **Edit All** from the page Actions menu. These changes include the task name, order, due date, and instructions, and the action required settings. Only the route owner can define the tasks. See *Defining the Tasks in a Route*.
- To delete a task, check the task and click **Delete** from the page Actions menu. Only the route owner can delete a task. See *Deleting a Task from a Route*.

Listing Tasks for a Route—Graphical View

In addition to accessing a list of tasks for routes that you created or are included in, you can also view route tasks graphically. The graphical view shows how tasks fit sequentially into the route, where the route currently is within the sequence, who owns the task, and actions taken on tasks that have been completed.

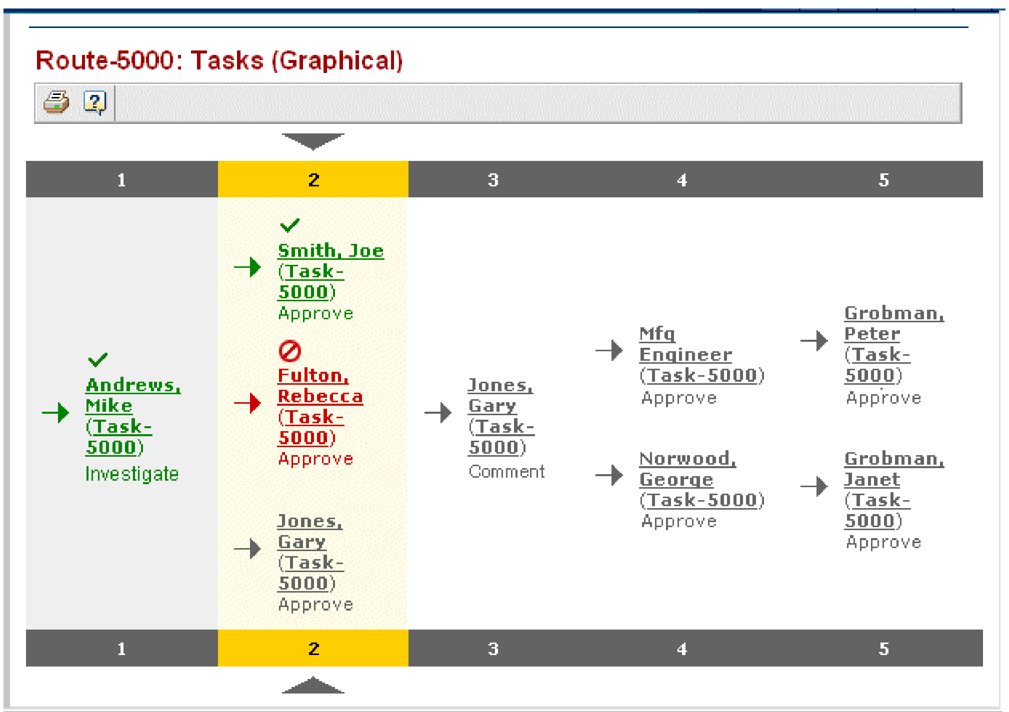
To list the route tasks in a graphical view

1. From the global toolbar, click **My Desk>Routes>My Routes**.

   Or

   If you are working within an object, click **Routes** from the object's category list.
2. From the Routes page, click the Name of the route.
3. From the category list for the route, click **Tasks (Graphical)**.

   The Tasks page opens, listing all tasks in the route.



The columns show the task sequence. The first column shows tasks that were assigned with order number 1, the second column shows tasks assigned order number 2, etc. Each column can contain multiple tasks. The column containing tasks in progress is highlighted with an arrow below the column. If the tasks exceed the visual area, you can use the scroll bars to view additional tasks.

For each task, the following information is shown:

- **Assignee**—User who is responsible for completing the task. You may see a group or role name for future tasks or for tasks in the current sequence that have not yet been accepted. Once a member of the group or role accepts the task, the graph shows the person name.

  Click on the assignee name to view the Properties page and tree for that person.
- **Task name**—Name of the task specified when the route was created.
  - For current and completed tasks, clicking on the task name shows the Task Properties/Content page and category list. This is in view-only mode for everyone except the task owner, who has a page Actions menu with links for updating the assignee and completing the task. If a task in the current sequence is assigned to a group or role, members of that group or role can click the task name to see the Task Properties page and tree, and can accept the task.
  - If the task is a future task, clicking on the task name brings up the view-only Task Properties popup page.
- **Action**—Under each task name is the action the assignee is required to perform: Approve, Comment, Investigate, or Notify Only.
- **Approval Status**—On completed tasks only, the action taken (Approve, Reject or Abstain) is shown as a .gif image above the assignee's name and color coded.
  - Green. Task has been completed and approved.
  - Red. Task has been rejected.
  - Gray. Task has not been completed.

Viewing Information about Any Route Task

You can view information about tasks in any route that you created or are included in. Workspace Leads (Team Central only) can view tasks for any route in the workspace. If you are assigned the task and want to complete it, see *Completing a Task*.

To view information about a task

1. If the task is assigned to you and active, click **My Desk>My Tasks** from the global toolbar. See *Viewing Information about Your Assigned Tasks*.

   Otherwise

   a) From the global toolbar, click **My Desk>Routes>My Routes**.

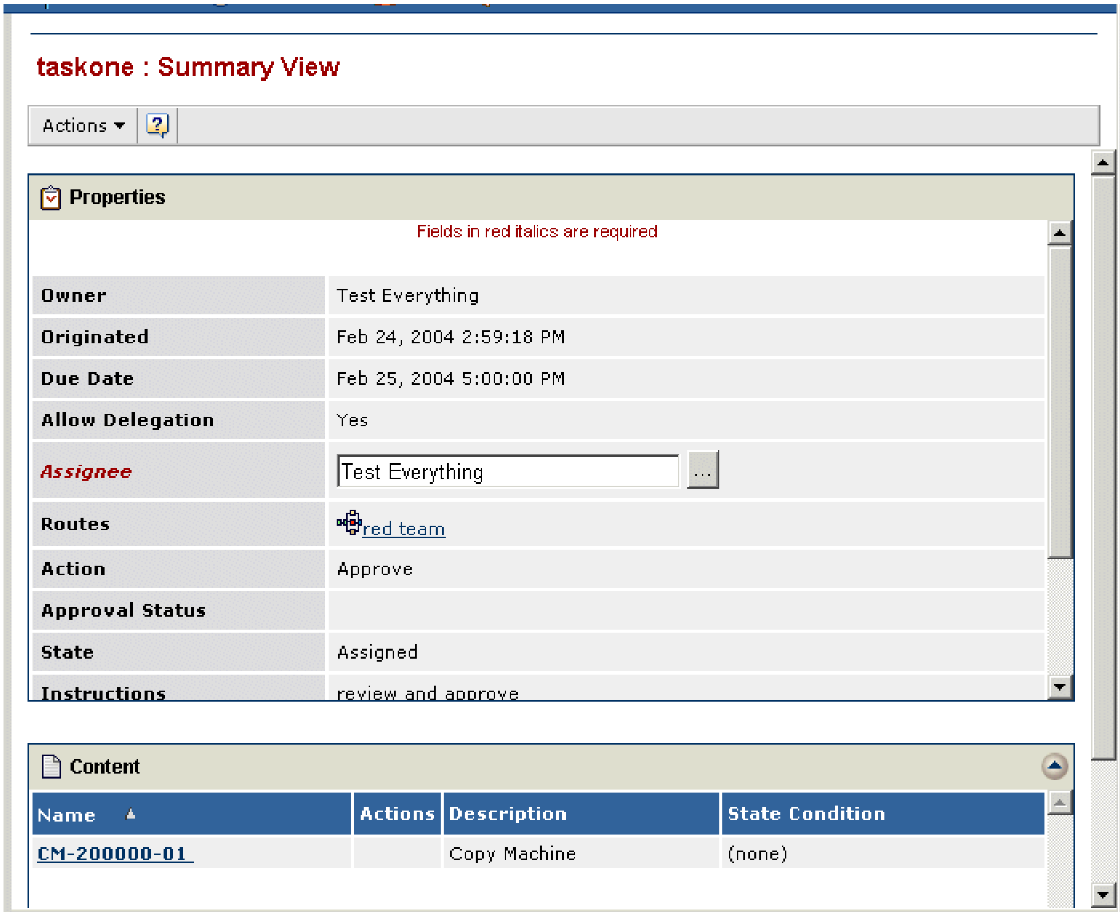
   Or

   If you are working within an object, click **Routes** from the object's category list.

   b) From the Routes page, click the Name of the route.

   c) From the category list for the route, click **Tasks**.
2. From the Tasks page, click the Name of the task you want to view information about.

   The Properties/Content page for the task opens.



The Properties section of the task page contains the following:

Owner—The person who created the route.

Originated—Date the task was created, which is the date the route was defined, or last modified.

Due Date/Time—The date and time the route owner requests that the assignee complete the task. If the assignee does not complete the task by this date, the task is marked as late (red) and the route's status is changed from green to yellow (if it's the last task in the route, the status changes to red). If the route or workspace owner has set up late task notifications, the system sends out notifications to the appropriate people.

If the route owner set the task due/time by specifying a number of days following the route start date and the route is not yet started, the field indicates the number of days following the route start. Similarly, if the due date/time is a number of days following the task creation and the task isn't created yet, the field indicates this.

If no date/time is displayed, the route owner is allowing the task assignee to set the due date and the assignee has not yet entered one.

Allow Delegation—If True, the assignee can delegate the task to another person in the assignee's company. See *Delegating a Task to Someone Else*. The system can also delegate the task automatically if the recipient receives the task during a defined absence period and the person has designated an Absence Delegate. For instructions on designating an Absence Delegate, see *Viewing and Updating Your Personal Profile* in Chapter 3 [x-ref to editing your profile section]. If False, the task cannot be delegated by the assignee or automatically by the system.

Assignee—The person, group, or role that is currently responsible for completing the task. This is person the route creator assigned to the task unless the original assignee delegated the task to someone else. If the route creator assigned the task to a group or role, the assignee changes to the name of the first person in that group or role to accept the task. If Allow Delegation is Yes and you own the task, this is an editable field. Click  if you want to assign the task to another person.

Route—Name of the route that contains the task. To see details about the route, click its name.

Action—The action the task assignee should perform: Approve, Comment, Notify Only, Information Only or Investigate. If the action is Approve, the route member must choose an approval status to complete the task: Approve, Reject, or Abstain. All actions except Notify Only require that the route member enter a comment to complete the task.

Approval Status—Only shown for completed tasks with Approve actions, this field shows the option the assignee chose: Approve, Reject, or Abstain. If the task assignee chooses Reject for the status to complete the task, the route is stopped, which means no new tasks are activated for the route. The route creator receives email and IconMail notification about the rejection. If the assignee chooses Approve or Abstain, the route continues as usual.

State—Pending, Assigned, Review, or Complete.

- Pending—The previous task in the route hasn't been completed so the assignee isn't assigned to work on it yet. If the route isn't started yet, all tasks are pending.
- Assigned—When a task is created for an assignee, its state is Assigned.
- Review—Only tasks with a Needs Owner Review icon go through the Review state. For these tasks, the state changes from Assigned to Review when the assignee completes the task. If the route owner promotes the task, indicating approval, the state changes to Complete. If the owner demotes the task, indicating rejection, the state returns to Assigned so the assignee can redo the task.
- Complete—For tasks that do not have the Needs Owner Review icon, when the assignee indicates a task is complete by clicking Complete, the state changes to Complete and the next task in the route is created (provided there are no other tasks that must be completed).

Instructions—Describes how to perform the task.

Comments—Ad hoc comments entered by the task assignee when completing the task. To complete the task, the assignee must fill in the comment field except for tasks with Notify Only actions.

Review Comments—Displayed only for tasks marked with Needs Owner Review. Shows comments entered by the route owner after the assignee marked the task as complete. After entering review comments, the route owner promotes the task to indicate approval or demotes it to indicate rejection. If the route owner reviewed the task more than once, as a result of demoting the task and having the task recompleted, comments from the previous review are included.

Sub-Routes—If the task assignee created a sub-route(s) for the task and chose to display it to people who can access the route, the sub-route is listed. To see details about it, click its name. The Properties page for the sub-route opens in a new window.

Route Owner Review—If No, the task's state changes to Complete when the task assignee completes the task and the next task in the route is created. If Yes, when the assignee completes the task, the task's state changes to Review and the system notifies the route owner. After reviewing the task, the route owner must enter a review comment and then either promote the task to indicate approval or demote it to indicate rejection. The system does not create the next task in the route until the owner promotes the task. Demoting the task changes its state back to Assigned and the task assignee must recomplete the task based on the route owner's comments. When demoting the task, the route owner can reassign it to someone else to work on.

3. To edit the definition of any pending task, click **Edit Details** from the page Actions menu.

   Only the route owner can edit the definition of tasks in the route. Note that the Approval Status and Comments are for the assignee to complete. If the task allows delegation, the owner can also change the assignee. For instructions on how the route owner can edit task information, see *Editing the Definition of a Task*. For instructions on how the task assignee can edit task information, see *Completing a Task* and *Delegating a Task to Someone Else*.

Defining the Tasks in a Route

If you created a route by entering only basic information for it (you did not use the Route wizard), you'll need to use this procedure to define tasks for the route. You can also use this procedure if you did define tasks for the route and want to edit them or add more. The route owner can edit any task in a route as long as the task has not been completed yet. The owner can also add new tasks as long as the route is not complete.

If you just want to edit properties for one task, you can use Edit Details on the task's Properties page. For tasks that are active (the assignees can work on them now), the only way to edit them is to use Edit Details and not this procedure. See *Editing the Definition of a Task*.

To define the tasks in a route

1. From the global toolbar, click **My Desk>Routes>My Routes**.

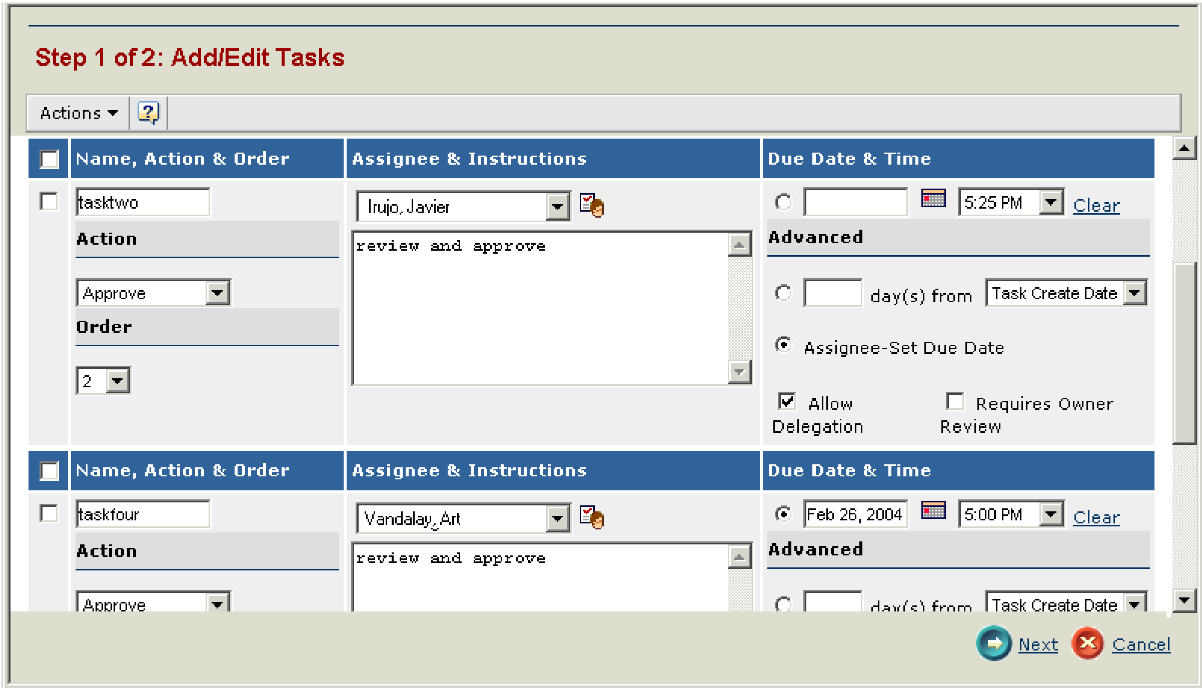
   Or

   If you are working within an object, click **Routes** from the object's category list.

2. From the Routes page, click the Name of the route.
3. From the category list for the route, click **Tasks**.
4. From the Tasks page Actions menu, click **Edit All**.

   The Add/Edit Tasks page opens, listing all tasks that have been added to the route. Completed and active tasks are not editable.

   If this route is based on a route template, the tasks from the template have a (t) next to the task name. Depending on how the template is defined, you may not be able to make many changes to the task list or you may have full editing ability. For a description of the task editing levels for a route template, see *Consequences of Creating a Route Based on a Route Template*.



1. To add new tasks, click **Add Task** from the page Actions menu.
2. Specify the task **Name, Action & Order**.
   - a) Entering a Name for the task is optional. If you don't enter a name, the system will use an automatically-generated name, such as IT-292928.
   - b) Choose the **Action** you want the task assignee to perform. Note that the action does not affect the person's access to the route's content. In addition to indicating the action the person should perform, the action affects the options presented when the person completes the task:

     Approve—If you choose Approve as the action, in addition to the Comment box, the task recipient must choose an approval status: Approve, Reject, or Abstain. If the task assignee chooses Approve or Abstain and then completes the task, the route continues as usual. If the task assignee chooses Reject and then completes the task, the route is stopped and the route creator is notified. The system does not create the next task in the route until the route creator resumes the route.

     Comment, Investigate, Information Only—If you choose these options as the action, the recipient must enter a comment before completing the task.

     Notify Only—If you choose this option, the recipient need only mark the task as complete to complete the task.
   - c) Choose the **Order** number that corresponds to the order in which you want the task to be pending for its recipient. If you want more than one task to be pending at the same time, choose the same order number for each task.

     For example, suppose you want one person to complete a task and then you want two people to work on a task simultaneously. You would choose an order number of 1 for the first task. The other two tasks should have order numbers of 2.

     If the route has already started, you cannot choose an order number that has already been completed.

3. Choose the **Assignee & Instructions**.

    a) Using the drop-down list, choose the person, group, or role who should receive the task. This is a list of all members you added to the route on the previous page. If you're not ready to choose an assignee, you can leave the task unassigned until you are ready to start the route.

    If you assign a group or role to a task, the system notifies all people in the group or role when the task is created. The first person to accept the task is then assigned to the task and is the only person who can complete it.

    To assign one member to several tasks, check those tasks and click **Assign Selected** from the page Actions menu. Then choose the member from the Assign Tasks page and click **Done**.

    If the original task assignee has created a sub-route for the task and the sub-route is incomplete, you cannot assign the task to someone else.

    b) Enter instructions for the task.

    This should be a detailed description of what the person should do to complete the task. For example, you may want to indicate which file or section they should review or comment on.

4. For each task, choose how you want to handle the **Due Date/Time**. Choose one of the following options:

    - Specify a due date and time. Click the first button under the Due Date & Time column. Choose the date by clicking the **Calendar** icon and choose the time by choosing from the drop-down list. When you first open the calendar to assign a due date, the calendar shows the current date as the default. When you subsequently open the calendar within the same session, the default date is the last date you selected. This facilitates assigning sequential due dates to tasks. For instructions on using the calendar, see the *AEF User Help*.
    - Specify the due date/time as the number of days following the route start date or task creation date (the date the previous task assignee completes his/her task). Click the second button under the Due Date & Time column. Enter the number of **days from** and select whether it should be calculated from the **Route Start** or **Task Creation** date.

      When calculating the due date, the system includes weekends and holidays so factor that into the number of days you enter. The maximum number of days is 365. For example, if you want to give the task assignee 10 working days to complete the task, you should enter 14 from the Task Create Date because it's likely there would be 4 weekend days within a 10-day working period. If you want the task to be complete 30 calendar days following the start of the route, you should enter 30 days from Route Start Date.
    - Let the task assignee enter a due date by choosing **Assignee-Set Due Date**. Click the third button under the Due Date & Time column. The task assignee can enter a due date, although the system does not require one. If no due date is entered, the system does not display a status for the task.

    If the assignee does not complete the task by the due date/time, the task is marked as late (red) and the route's status is changed from green to yellow. If late task notifications have been set up, the system sends out notifications to the appropriate people. For sub-routes, the system makes sure none of the task due dates are later than the parent task's due date. If they are, you must make the due dates earlier.

5. To allow the assignee to delegate the task to another person, check **Allow Delegation**.

If a task allows delegation, the assignee can delegate the task to another member to complete. See *Delegating a Task to Someone Else*. The delegate will temporarily inherit all accesses that the assignee has for the route and its content. The system may also delegate the task automatically if the recipient receives the task during a defined absence period and the person has designated an Absence Delegate. When the system automatically delegates a task, it also notifies the route owner.

The Tasks page will show a Delegate icon for the tasks.

6. If you want to review a task after the assignee completes it, click **Requires Owner Review**.

   After the assignee completes the task, the system notifies you. After reviewing the task, you must enter a review comment and then either promote the task to indicate approval or demote it to indicate rejection. The system does not create the next task in the route until you promote the task. Demoting the task changes its state back to Assigned and the assignee must recomplete the task based on your comments. When demoting the task, you can reassign it to someone else to work on.

   The Tasks page will show a Requires Owner Review icon for the task.

7. Click **Done**. The task is added to the list on the Add/Edit Tasks page. To assign additional tasks, repeat steps 1 through 6.

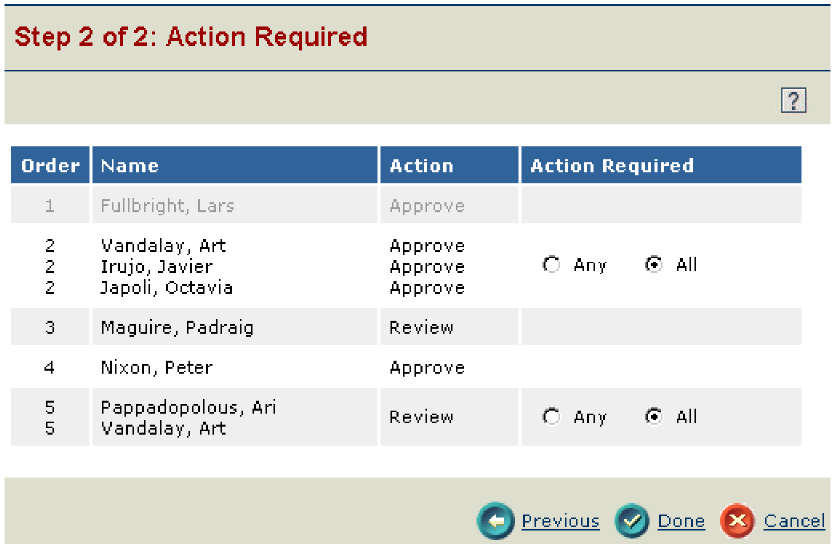
8. Work with the tasks as needed:

   - To remove a task, check it and click **Remove Selected** from the page Actions menu.
   - To sort the list of tasks based on ascending order number and then by task name, click **Sort Task List** from the page Actions menu.

9. Click **Next**.

   The Action Required page opens. This page lets you specify whether tasks that have the same order number must all be complete before the subsequent tasks become pending or whether only one task must be complete. If you specify that only one task needs to be complete, the system deletes (rescinds) the remaining incomplete tasks at that order level and notifies the assignees for the deleted tasks. For example, suppose you assign three concurrent tasks to three people and ask that they approve a document in the route. All you need is approval from one of them so as soon as one of them completes the task, the other tasks can be deleted and the next task in the route can proceed.

   You cannot change the action required status for completed tasks. As long as one of the tasks in a set of concurrent tasks is not complete, you can change the setting.



10. For each set of concurrent tasks, choose whether any or all must be completed before the next task(s) becomes pending.

    Any—When one person completes a task in the set of concurrent tasks, the task or tasks in the next order level become pending and the remaining incomplete tasks in the current order level are deleted.

    All—All tasks in the set of concurrent tasks must be complete before the next order level tasks become pending.

11. Click **Done**.

Editing the Definition of a Task

The route owner can edit the definition of any task in the route as long as the task has not been completed yet. This includes changing the assignee to another person, for example, if the original assignee cannot complete the task in time. This procedure describes how to edit the definition of one task at a time and is the procedure you must use to edit tasks that are active (those assignees can work on now). To edit properties for more than one pending task and add new ones, see *Defining the Tasks in a Route*.

To edit the definition of a task

1. From the global toolbar, click **My Desk>Routes>My Routes**.

   Or

   If you are working within an object, click **Routes** from the object's category list.

2. From the Routes page, click the Name of the route.
3. From the category list for the route, click **Tasks**.
4. From the Tasks page, click the Name of the task you want to edit.
5. From the Actions menu on the Task Properties page, click **Edit Details**.

6. From the Edit Task Details page, edit the information as needed:

   Name—The name of the task. The route owner can change the task name only using the Edit All option.

   Owner—The person who created the route. You cannot assign ownership to someone else.

   Originated—Date the task was created, which is the date the previous task(s) (previous order in route) was completed.

   Due Date/Time—If the assignee does not complete the task by the due date/time, the task is marked as late (red) and the route's status is changed from green to yellow. If the route or workspace owner has set up late task notifications, the system sends out notifications to the appropriate people. If you are defining tasks for a sub-route, the task due dates cannot be later than the parent task's due date. Choose one of these three options. If the task has already been created, the second option is not available.

   - Specify a due date and time. Make sure the first of the three buttons for the tasks's Due Date/Time is selected. Click to choose the date, and choose the time by choosing from the drop-down list. When you first open the calendar to assign a due date, the calendar shows the current date as the default. When you subsequently open the calendar within the same session, the default date is the last date you selected. This facilitates assigning sequential due dates to tasks. For instructions on using the calendar, see *AEF User Help*.

- Specify the due date/time as the number of days following the route start date or task creation date (the date the previous task assignee completes his/her task). Choose the second of the three buttons available for the Due Date/Time and enter the number of **days from** and select whether it should be calculated from the **Route Start** or **Task Creation** date.

  When calculating the due date, the system includes weekends and holidays so factor that into the number of days you enter. The maximum number of days is 365. For example, if you want to give the task assignee 10 working days to complete the task, you should enter 14 from the Task Creation Date because it's likely there would be 4 weekend days within a 10-day working period. If you want the task to be complete 30 calendar days following the start of the route, you should enter 30 days from Route Start date.

- Let the task assignee enter a due date by choosing **Assignee-Set Due Date**. Click the third button available for the Due Date/Time. The task assignee can enter a due date, although the system does not require one. If no due date is entered, the system does not display a status for the task.

Allow Delegation—Yes means the assignee can delegate it to any other user in the assignee's company. See *Delegating a Task to Someone Else*. The system can also delegate the task automatically if the assignee receives the task during a defined absence period and the person has designated an Absence Delegate. No means the task cannot be delegated by the assignee or by the system.

Assignee—The person, group or role who is to perform the task. To change the assignee to another route member, choose the member from the drop-down list. If the person, group or role you want to assign it to is not in the list, you must first add the person or role to the route. Note that if you change the task assignee so that one of the original route members has no tasks, the system removes the member from the route access list.

If you assign a group or role to a task, the system notifies all people in the group or role when the task is created. The first person to accept the task is then assigned to the task and is the only person who can complete it.

If the original task assignee has created a sub-route for the task and the sub-route is incomplete, you cannot assign the task to someone else.

Route—Name of the route that contains the task.

Action—The action the task assignee should perform: Approve, Comment, Notify Only, or Investigate. If the action is Approve, the route member must choose an approval status to complete the task: Approve, Reject, or Abstain. All actions except Notify Only require that the route member enter a comment to complete the task.

Approval Status—Only the assignee can change the approval status and only for tasks with Approve actions. The approval statuses available are Approve, Reject, or Abstain. If a person chooses Reject for the status and completes the task, the route is stopped and no other tasks are created for the route until the route creator resumes the route. The route creator receives email and IconMail notification about the rejection. If the task assignee chooses Approve or Abstain and then completes the task, the route continues as usual.

State—Pending, Assigned, Review, or Complete. The route owner cannot change the state from this page.

- Pending—The previous task in the route hasn't been completed so the assignee isn't assigned to work on it yet. If the route isn't started yet, all tasks are pending.
- Assigned—When a task is created for an assignee, its state is Assigned.

- Review—Only tasks with a Needs Owner Review icon go through the Review state. For these tasks, the state changes from Assigned to Review when the assignee completes the task. If the route owner promotes the task, indicating approval, the state changes to Complete. If the owner demotes the task, indicating rejection, the state returns to Assigned so the assignee can redo the task.
- Complete—For tasks that do not have the Needs Owner Review icon, when the assignee indicates a task is complete by clicking Complete, the state changes to Complete and the next task in the route is created (provided there are no other tasks that must be completed).

Instructions—Instructions to the assignee about how to perform the task.

Comments—Ad hoc comments entered by the task assignee when completing the task. This field is not required for tasks with Notify Only actions.

Route Owner Review—If you want to review a task after the assignee completes it, choose Yes.

The Needs Owner Review icon displays for the task on the Tasks pages. After the assignee completes the task, the system notifies you. After reviewing the task, you must enter a review comment and then either promote the task to indicate approval or demote it to indicate rejection. The system does not create the next task in the route until you promote the task. Demoting the task changes its state back to Assigned and the assignee must recomplete the task based on your comments. When demoting the task, you can reassign it to someone else to work on.

Review Comments—Only for tasks marked with Needs Owner Review and that are in the Review state, which occurs after the task assignee completes the task. The route owner must enter review comments before promoting or demoting the task. If demoting the task, the comments should explain what the task assignee should do to complete the task.

7. Click **Done**.

Processing a Task that Needs Owner Review

When the assignee completes a task marked as Needs Owner Review, the route owner must review the task and indicate approval or rejection. The task does not proceed to the Complete state until the route owner approves it. When the task assignee completes a Needs Owner Review task, the route owner receives notification.

For instructions on defining a task as Needs Owner Review, see *Defining the Tasks in a Route*.

To process a task that needs owner review

1. From the IconMail Task for Review notification, click the link to open the category list and Properties/Content page for the task.
2. Review the task:
   - To see Comments and Approval Status that the assignee entered, look at the Properties section of the page.
   - To see content that the assignee edited or added, click the link in the Content section of the page.
3. Enter **Review Comments** in the Properties section of the page. If you plan on demoting the task, include instructions for the task assignee about how the task should be completed.

4. To reassign the task to someone else to complete (only if you will demote the task), click ... next to the **Assignee** to select the person you want to complete the task. See *Delegating a Task to Someone Else*.
5. Indicate your approval or rejection of the task by clicking the appropriate link from the task Properties page.
   - To approve the task, click **Promote** from the page Actions menu.

     The task is promoted to Complete and the system sends a Review Complete notification to the task assignee that indicates you promoted the task. The system creates the next task in the route (if no other tasks must be completed).

     Or
   - To reject the task, click **Demote** from the page Actions menu.

     The task is demoted to Assigned and the system sends a Review Complete notification to the task assignee that indicates you demoted the task. If you assigned the task to someone other than the original assignee, the new assignee receives the notification. You will be notified when the assignee recompletes the task.

Deleting a Task from a Route

You can delete a pending task from any route that you own. You cannot delete active or completed tasks.

To delete a task from a route

1. From the global toolbar, click **My Desk>Routes>My Routes**.

   Or

   If you are working within an object, click **Routes** from the object's category list.
2. From the Routes page, click the Name of the route.
3. From the category list for the route, click **Tasks**.
4. From the Tasks page, check the pending tasks you want to delete.
5. Click **Delete** from the page Actions menu.

   The system presents a confirmation message.
6. Click **OK**.

Routes: Member Access

This section contains these topics:

- *Understanding Route Accesses*
- *Listing Route Members*
- *Adding and Removing Route Members and Defining Access*

Understanding Route Accesses

The route creator assigns access to a route by adding members to the route. Route members can be assigned multiple tasks. Every route member must be assigned at least one task before starting the route. When you start a route, the system removes any members who do not have at least one task assigned. Being a route member gives you at least Read access to the route, which means you can view the route and its tasks.

In Team Central, if the route's scope is a folder or subfolder, only members with Read access to the folder/subfolder can be added to the route. Also, the route creator can assign Add, Remove, or Add Remove access to members as needed, which gives members the ability to add and remove route content. Route accesses are for the route itself and not for the individual items being routed. Access to route content is defined separately for each content item. For example, a person with Add Remove access to the route can add content to the route but cannot edit a document in the route unless the person has Write and Remove access for the document, which is specified within the folder the document is added to.

This list describes the actions Team Central members can perform for each route access level:

Read—Every person, group and role included in the route is assigned at least Read access for the route. This means the member can view the category list and Properties page for the route, including all tasks, history, and accesses for the route. The member can also view and download route content but only the items the person has Read access to are listed. Read access also lets members subscribe to the route.

Read Write—A person with Read Write access to the route has Read permissions and can also check in files to the route.

Add—A person with Add access to the route has Read Write permissions and can also add new content to the route.

Remove—A person with Remove access has Read Write permissions and can also remove content from the route.

Add Remove—A person with Add Remove access has the accesses defined for both Add and Remove access.

Listing Route Members

You can view the members in any route that you created or that you are included in.

To list the members included in a route

1. From the global toolbar, click **My Desk>Routes>My Routes**.

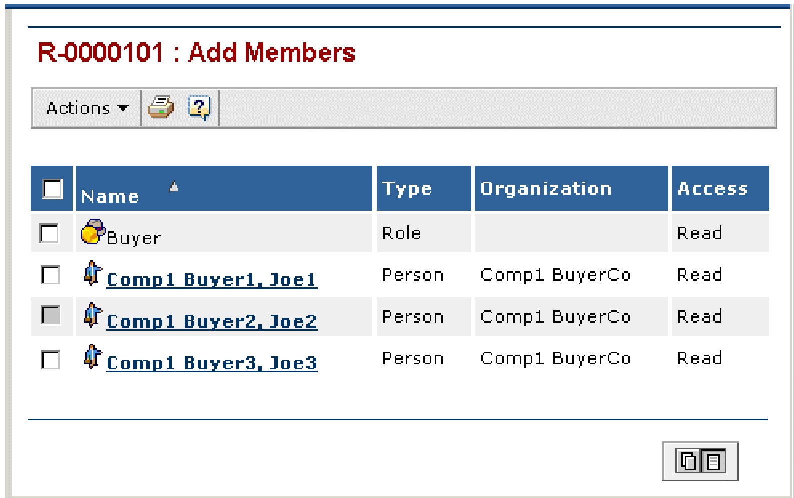
   Or

   If you are working within an object, click **Routes** from the object's category list.

2. From the Routes page, click the Name of the route.

3. From the category list for the route, click **Access**.

   The Access page opens, listing all the members who are included in the route. These are the people, groups and roles who can access the route and who can be assigned tasks. If the check box next to a member's name is grayed, the member's task has already been created. People who have temporary access to the route because a task assignee delegated the task to them are not listed. In Team Central, Workspace Leads for the workspace can also view routes, even if they are not a route member.



For each member in the route, the page shows:

Name—The name of the person, group or role added to the route.

Type—Distinguishes between people added individually, groups, and roles.

Organization—The organization the person belongs to. This is blank for groups and roles.

Access—Shows the access each member has for the route. When members are added to the route, their access is Read Write but the route creator can set a higher access level. These accesses are for the route itself and not for the individual items being routed. Access to route content is defined separately for each content item. For example, a person with Add Remove access to the route can add content to the route but cannot edit or delete a document in the route unless the person has Write and Remove access for the document. For a description of each access level, see *Understanding Route Accesses*.

Adding and Removing Route Members and Defining Access

Route members are the people, groups and roles who can be assigned tasks for the route and who will be able to access the route when it is started. The route creator can add members to the route, even after the route has started. The creator can also remove a member as long as there are no tasks assigned to the member. In Team Central, Workspace Leads can view any route in the workspace even if they are not a member of the route.

In Team Central, only workspace members who have at least Read access to the route's scope item can be included in the route. In other MatrixOne applications, you specify when you create the route whether you want route membership limited. You can add these types of members to a route.

- People—People added individually to the route.
- Buyer Desk Person—People added to the workspace because they belong to an associated Buyer Desk. This is available only if Team Central is installed.
- Role—When the system creates the task assigned to the role, it notifies all people who belong to the role. The first person who accepts the task is designated as the task assignee and can complete the task.

- Group—When the system creates the task assigned to the group, it notifies all people who belong to the group. The first person who accepts the task is designated as the task assignee and can complete the task.

All route members will be able to access the route once you start it and you can assign one or more tasks to any route member. Every route member must be assigned at least one task before starting the route. When you start a route, the system removes any members who do not have at least one task assigned. If you are creating this route based on a route template that includes members, the template members are already listed. You can remove these members, add new ones, change their route access, or leave them unchanged.

To add or remove members from a route and define route accesses

1. From the global toolbar, click **My Desk>Routes>My Routes**.

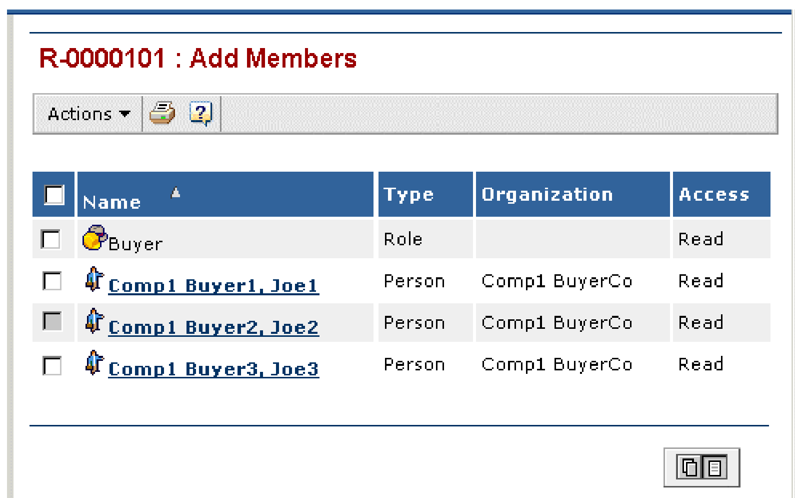
   Or

   If you are working within an object, click **Routes** from the object's category list.

2. From the Routes page, click the Name of the route.

3. From the category list for the route, click **Access**.

   The Access page opens, listing all people, groups and roles who can be assigned tasks for the route.



4. Add members to the route. From the page Actions menu, select what type of members you want to add: **Add People**, **Add Group**, **Add Role**, or **Add Member List**.

   The Search page for your selections opens. Search and select members to add to the route.

   Specify search criteria to limit the number of items included in the search results, or leave the defaults of * to search for all of the type of user selected. For details, see "Finding and Selecting People" in *AEF Help*.

   The members you choose are added to the Route Access page. All route members have Read Write access to the route by default. You can choose a higher access level for members as needed.

5. Remove any members that you do not want to assign a task to. For example, if the route was created based on a template, you may want to remove some members who were saved with the template. If you added a member list, you might want to remove some of the people on the member list.

a) Check the members you want to remove from the route.

b) Click **Remove** from the page Actions menu.

c) At the confirmation message, click **OK**.

6. Assign access levels for the route by clicking **Edit Access** and choosing the appropriate access for each person.

   These accesses are for the route itself and not for the individual items being routed. Access to route content is defined separately for each content item. For example, a person with Add Remove access to the route can add content to the route but cannot edit or delete a document in the route unless the person has Write and Remove access for the document.

   Read—Every person, group and role included in the route is assigned at least Read access for the route. This means the member can view the category list and Properties page for the route, including all tasks, history, and accesses for the route. The member can also view and download route content but only the items the person has Read access to are listed. Read access also lets members subscribe to the route.

   Read Write—A person with Read Write access to the route has Read permissions and can also check in files to the route.

   Add—A person with Add access to the route has Read Write permissions and can also add new content to the route.

   Remove—A person with Remove access has Read Write permissions and can also remove content from the route.

   Add Remove—A person with Add Remove access has the accesses defined for both Add and Remove access.

Routes: Content

This section contains these topics:

- *Listing Content for a Route*
- *Defining Content for a Route*

Listing Content for a Route

You can list the content of any route that you created or that you are included in. In Team Central, Workspace Leads can list content for any route in the workspace. The Content page lists all the items added to the route.

To list the items added to a route

1. From the global toolbar, click **My Desk>Routes>My Routes**.

   Or

   If you are working within an object, click **Routes** from the object's category list.

2. From the Routes page, click the Name of the route.

3. From the category list for the route, click **Content**.

   The Content page lists all items added to the route.

For each item in the route, the page shows:

Selection check box—The Route Content page contains the standard check boxes in the left column, which let you select items to work on. If you don't have accesses for removing an item, the check box is gray and unavailable for checking. You can still view information about the item but you can't remove it from the route

Locked status—For documents only, shows whether the document is locked for edit, as indicated by a Lock icon. To see who locked the file, move your mouse pointer over the Lock icon. When a file is locked for edit, no one else can lock the file for editing or check in a new version of the file until the person who is editing it unlocks the file manually or by checking in a new version. Even if a file is locked, you can still view it and save it to your computer.

Name—The name of the item. To view more information about an item, click its Name.

4. To get more information about an item, click its **Name**. For more information, see *Viewing Information about Content* in Chapter 4.[x-ref to content section]

5. Select any of the following from the page Actions menu:
   - To add objects that are already in the database, click **Add Content**. See *Defining Content for a Route*.
   - Team Central and Program Central users can add a file that is on a local disk and that has not been added to the database, click **Upload External File**. See *Adding New Document Content* in Chapter 4. [x-ref to checkin]
   - To remove an item from the route, check it and click **Remove Selected**.
   - To edit the Blocked State for non-document items, click **Edit Lifecycle Block**. See *Defining Content for a Route*.

Defining Content for a Route

The route creator can define the content of a route at any point up until the route is Finished. Team Central route members with Add access to the route can add content from the workspace, and members with Remove access can remove content as needed until the route is Finished. If Team Central or Program Central is installed, members who have access can add content from a local directory.

To define content for a route

1. From the global toolbar, click **My Desk>Routes>My Routes**.

Or

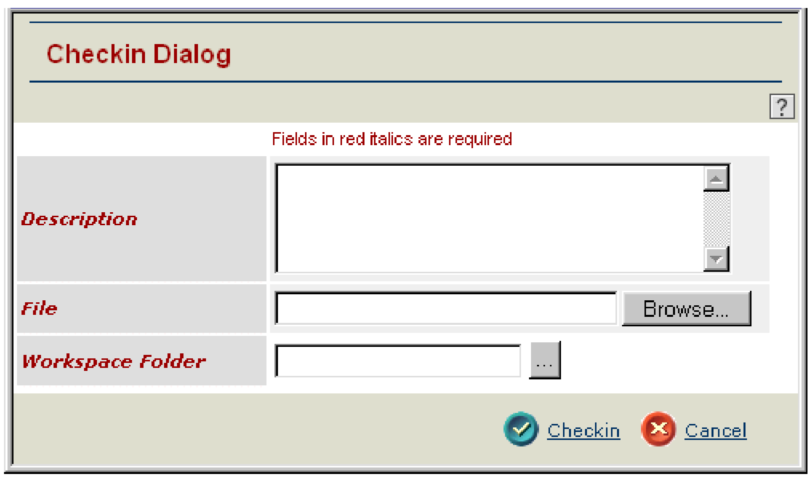
If you are working within an object, click **Routes** from the object's category list.

2. From the Routes page, click the Name of the route.
3. From the category list for the route, click **Content**.
4. To add general content, click **Add Content**. This allows you to add any database content. For example, if Engineering Central is installed, you can add parts, ECRs, ECOs, etc. Search and select database items that you want included in the route. For details, see [x-ref to "Using Search and Select"].
5. To add documents that have not been added to the database but are in a local directory:

   a) From the Add Content page, click **Upload External File**. This option is shown only if Team Central or Program Central is installed.

   Depending on how your system is set up, a File Checkin/Checkout Login page may appear. If so, enter the same **Username** and **Password** that you enter when logging into MatrixOne application and click **Login**.

   The Checkin Dialog page appears.



   a) Enter a **Description** for the file.

   b) In the **File** box, click **Browse** to select the file.

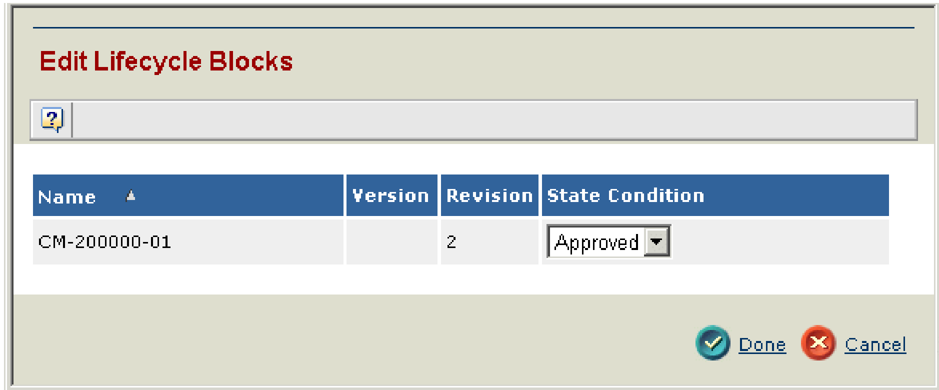
   c) Specify a folder or subfolder to add the document to by clicking ... for the **Workspace Folder** box. From the list of folders for which you have Read access, choose a folder. If the route's scope is a folder or subfolder, then only that folder or its subfolders can be chosen.

   d) Click **Checkin**.

   The file is added to the Content page.

6. To specify a Blocked State for non-document items (only for items that have more than one state in their lifecycle):

   a) From the Content page, click **Edit Lifecycle Blocks**.



b) Choose the state from the **State Condition** column. To remove a blocked state, choose (none).

If you specify a block promotion state for an item, the system prevents the item from being promoted from that state until the route is completed. For example, suppose a buyer is routing an RFQ to be reviewed internally before sending it to suppliers. The buyer can make sure the RFQ is not sent to suppliers until the route (and associated review) is complete by specifying Initial Review as the block promotion state. Similarly, suppliers can make sure a quotation is not returned to the buyer until its route (which lets others in their company review it) is complete by choosing Review as the block promotion state.

State-based blocking must be enabled by the Matrix Business Administrator. See the Common Components Administrator Guide *for details.*

7. To remove an item from the route:

a) From the route Content page, check the items you want to remove.

b) Click **Remove** from the page Actions menu.

c) At the confirmation message, click **OK**.

8. Click **Done**.

Tasks Assigned to You

A *task* is a request that you perform some activity—such as review, comment, or approve information—by a particular date and time. Tasks are assigned when a route is created or modified. The route that is associated with a task may contain documents and other items such as parts, quotations and Requests for Quotes. You can be assigned more than one task for a route.

This section includes these topics:

- *Listing Your Active and Completed Tasks*
- *Viewing Information about Your Assigned Tasks*
- *Listing Sub-Routes for a Task*
- *Creating a Sub-Route for a Task*
- *Accepting a Task Assigned to a Group or Role*
- *Setting a Due Date for Your Task*
- *Delegating a Task to Someone Else*
- *Completing a Task*
- *Processing a Rejected Task*

Listing Your Active and Completed Tasks

When a route that you are included in is started, you can immediately see the route in your list of routes. If you are assigned a task in the route, it won't be listed in your task list until the prior route tasks are completed and it's your turn to complete your task. When you first open the task lists, only active tasks are listed but you can see completed tasks using the filter list.

Tasks assigned to you can be deleted and if they are, you are notified. The route owner can delete tasks. Another reason tasks are deleted is if the route owner defines several tasks to be assigned at once and specifies that only one needs to be completed.

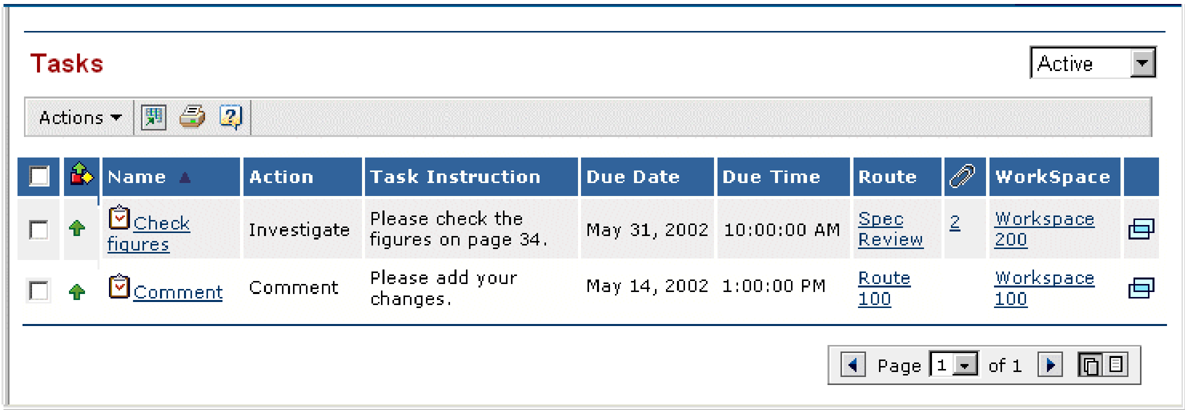
To list your active and completed tasks

1. To list all your assigned tasks, click **My Desk>My Tasks** from the global toolbar.

   Or

   In Team Central, to list assigned tasks for a particular workspace, click **My Desk>Team>Workspaces** from the global toolbar and then click the Name of the workspace. From the workspace category list, click **Tasks**.

   The Tasks pages shows your tasks. Use the filter in the upper right to select which tasks you want to view: All tasks, Active, Complete, Tasks to be Accepted.



Status—The icons in this column show if the task is late. A green arrow means the task is on time and a red square means it is late.

Name—The task name specified by the route creator. If the route creator didn't specify a name, the system automatically generates it. To get more information about a task, click its **Name**.

Action—The action the route creator requests that you perform: Approve, Comment, Investigate, Information Only, or Notify Only. If the action is Approve, you must choose an approval status to complete the task: Approve, Reject, or Abstain. All actions except Notify Only require that you enter a comment to complete the task.

Task Instructions—The instructions the route creator included for you.

Due Date/Time—The date and time by which the route creator requests you complete the task, if specified. If the task is overdue (the due date has passed and the task is not yet completed), its status is red. If there is no due date, the route creator didn't specify one and you can enter one if you choose to.

Route—The name of the route the task belongs to. To see details about the route—including route members, other tasks for the route, comments people have entered, and approval statuses people have chosen—click the Route name.

Content—Contains the number of items included in the route content. Clicked the number to open the Content page. See *Listing Content for a Route*.

Workspace—Shows the Team Central workspace the route is associated with. If no workspace is listed, then the route has been created from another application, such as Engineering Central or Program Central.

2. To see all tasks, including your completed tasks, choose **All Tasks** from the filter list.

Viewing Information about Your Assigned Tasks

This procedure describes how to view information about tasks that are assigned to you and are ready to be completed or that you have already completed.

You can also view information about your pending tasks (those not yet active) and about tasks assigned to any person in a route, including those assigned to other people, as long as you belong to the route or you created the route. For instructions, see *Viewing Information about Any Route Task*.

To view information about an assigned or completed task

1. Access the Properties page for the task.

- If the task is active, the fastest way to access the task is to click **My Desk>My Tasks** from the global toolbar and then click the task Name.

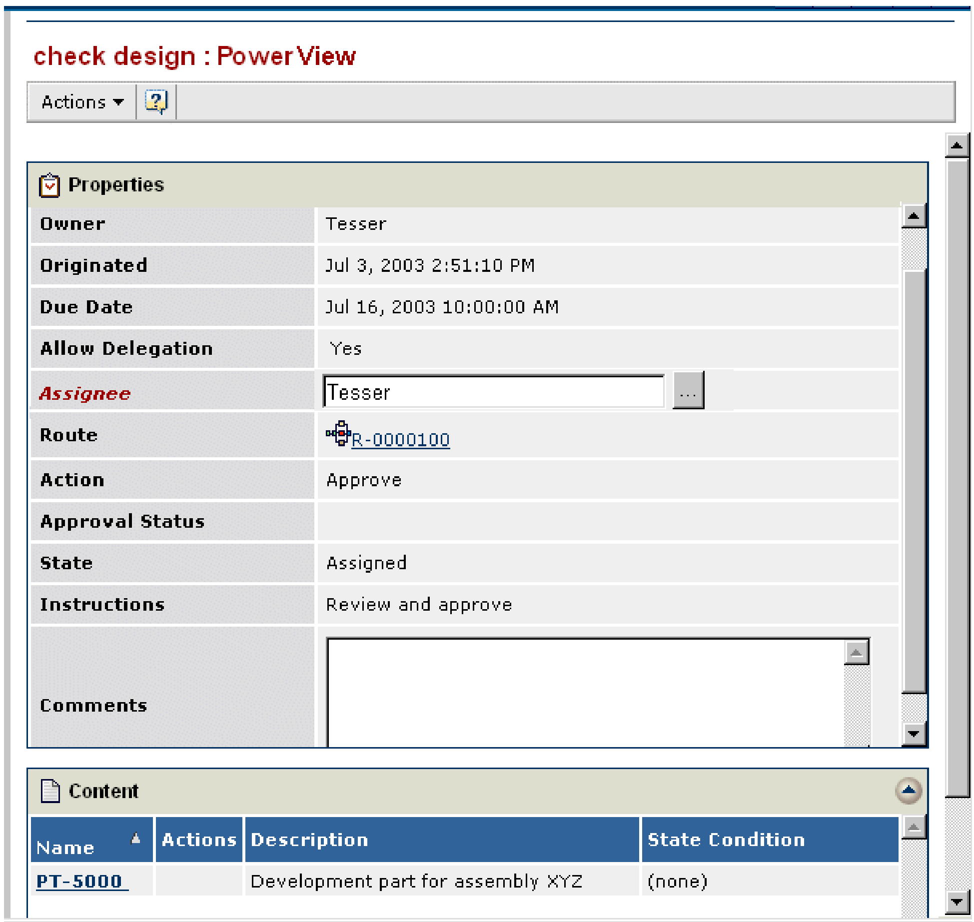
  Or

- For Team Central users, click the task Name from **My Desk>Team>My View**.

  Or

- From the category list for the Team Central workspace the task belongs to, click **Task** and then click the task Name.

The category list and Properties/Content page for the task opens. From this page, you can delegate or complete the task, set the task's due date and time, or access the task's content.



The page is divided into two sections. The top section shows task properties. The bottom section contains basic details about the task's content.

Properties include the following:

Owner—The person who created the route.

Originated—Date the task was last defined by the route owner.

Due Date/Time—The date and time the route owner requests that you complete the task, if specified. If you do not complete the task by this date, the task is marked as late (red) and the route's status is changed from green to yellow (if it's the last task in the route, the status changes to red). If the route or workspace owner has set up late task notifications, the system sends out notifications to the appropriate people. If there is no due date, the route creator didn't specify one and you can enter one if you choose to.

Allow Delegation—If Yes, the assignee can delegate the task to another person. The system can also delegate the task automatically if the recipient receives the task during a defined absence period and an Absence Delegate has been assigned. (See *Viewing and Updating Your Personal Profile* in Chapter 3.) [x-ref to editing your profile] If No, then neither the assignee nor the system can delegate the task.

Assignee— The person responsible for completing the task. This is the person the route creator assigned to the task unless the task was delegated to someone else. If task delegation is allowed, this is an editable field. Click ... to select the person you want to complete the task. See *Delegating a Task to Someone Else*.

Route—Name of the route that contains the task. To see details about the route, click its name.

Action—The action the assignee should perform: Approve, Comment, Notify Only, Information Only or Investigate. If the action is Approve, you must choose an approval status to complete the task: Approve, Reject, or Abstain. All actions except Notify Only require that you enter a comment to complete the task.

Approval Status—For tasks with Approve actions, this field shows the option the task assignee chose: Approve, Reject, or Abstain. If the assignee chooses Approve or Abstain and completes the task, the route continues as normal, and new tasks are created when the ones for the current order are completed. If a person chooses Reject for the status and completes the task, the route is stopped, which means no new tasks are activated for the route. The route creator receives email and IconMail notification about the rejection.

State—Assigned or Complete. When a task is created for an assignee, its state is Assigned. When the assignee indicates the task is complete, the state changes to Complete.

Instructions—Describes how to perform the task.

Comments—Ad hoc comments entered by the task assignee when completing the task. This field is not shown for tasks with Notify Only or Information Only actions.

2. Work with the task, as needed:
   - To complete the task, click the appropriate link from the page Actions menu. These links are available only for the task assignee. See *Completing a Task*.
   - To view details about the route or content object, click its name.

3. Use the category list for the task to see more information:

Category	Description	For details, see:
Properties	Shows the Properties page for the task.	*Viewing Information about Any Route Task*
Content	Provided you have the appropriate access to the content item, the Route Content page lets you view, download, lock for edit, and check in new versions of documents in the route and work with other route content. For example, you can only edit documents that you have at least Read Write access to.	The Route Content page for a task is just like the Content page for the route, described in *Listing Content for a Route*, except there are no links for adding and removing content. To add and remove content for the route, you must access the Content page for the route. See *Defining Content for a Route*.
History	Shows a log of events that have occurred for the task.	Click on the History page or see *AEF Help*.
Route	Shows sub-routes created to complete the task.	*Listing Sub-Routes for a Task*

Listing Sub-Routes for a Task

A sub-route for a task is a route that the task assignee creates to help complete the task. For more information about sub-routes, see *Creating a Sub-Route for a Task*.

To list the sub-routes for a task assigned to you

1. Access the category list and Properties page for the task.
    - If the task is active, the fastest way to access the task is to click **My Desk>My Tasks** from the global toolbar and then click the task Name.

      Or
    - For Team Central users, click the task Name from **My Desk>Team>My View**.

      Or
    - From the category list for the Team Central workspace the task belongs to, click **Task** and then click the task Name.
2. From the category list for the task, click **Route**.

   A Routes page displays, listing all sub-routes for the task. This page is just like the top-level Routes pages. See *Listing Routes*.

Creating a Sub-Route for a Task

A sub-route for a task is a route that the task assignee creates to help complete the task. For example, suppose a task requires that you approve a document, but you want other people's feedback before you enter your approval. You can create a sub-route to gather information from the other people and then complete your task. If needed, you can create multiple sub-routes for a task. A task cannot be completed until its sub-routes are complete.

If you have Create Route access, you can create one or more sub-routes for any task that you are assigned. The steps for creating a sub-route are very similar to the steps for creating a route, with the following exceptions:

- The sub-route creator can choose whether the sub-route is displayed to other people who have access to the parent route (the parent route creator, other members of the parent route, and Team Central Workspace Leads). The Sub-Route Visibility options are available on the last page of the Create Route wizard and on the Create Route page when not using the wizard.
- The due dates for tasks in sub-routes cannot be later than the due date for the parent route's task. When you start the sub-route, the system notifies you if any task due dates are later than the parent task's due date. Similarly, if a task assignee sets a due date that is later than the due date for the parent route's task, the system displays an error message.

The following exception is for Team Central:

- The scope for sub-routes is always the parent route's workspace, even if the parent route's scope is more limited. So even if the parent route's scope is a folder, the task assignee can add members and content from the entire workspace to a sub-route.

Also note these characteristics of sub-routes:

- If a task that has sub-routes is deleted, the sub-routes and all of its tasks are also deleted. People who have current tasks assigned are notified. A task might be deleted because the route owner deletes it or because another task of the same order was completed and the tasks were defined with the Any completion option.
- If you delegate a task for which you have created a sub-route, you remain the owner of the sub-route, not the delegate.

To create a sub-route for a task

1. Access the category list and Properties page for the task.
   - If the task is active, the fastest way to access the task is to click **My Desk>My Tasks** from the global toolbar and then click the task Name.

     Or
   - For Team Central users, click the task Name from **My Desk>Team>My View**.

     Or
   - From the category list for the Team Central workspace the task belongs to, click **Task** and then click the task Name.
2. From the category list for the task, click **Routes**.
3. From the Routes page, click the appropriate link at the top of the page:

   To fill in only basic information for sub-route and define tasks, members, and content separately, click **Create New**. For instructions, see *Creating a Route: Basic Information Only*.

   To use the route wizard to enter all the information for the route, click **Route Wizard**. For instructions, see *Creating a Route: All Route Information*.

Accepting a Task Assigned to a Group or Role

When the route creator assigns a task to a group or role and that task is created, the system notifies everyone assigned to the group or role. Before the task can be completed, one of the recipients must accept the task, which assigns the task to that person. The first person who accepts the task becomes the new assignee and no one else can complete the task (unless the assignee delegates the task).

To accept a task assigned to a role that you belong to

1. Open the New Task Assignment Notice that the system sent to you:
   a) From the global toolbar, click **Tools>IconMail**.
   b) From the IconMail page, click the **Subject** of the New Task Assignment Notice.
2. From Mail Properties, click the link in the **Message** row to open details about the task.
3. From the Actions menu on the Properties/Content page for the task, click **Accept Task**.

   The system changes the task assignee from the group or role name to your name and notifies other group or role members that you have accepted the task. You are the only person who can complete the task now and you do so as you would any task. See *Completing a Task*.

Setting a Due Date for Your Task

If the route creator did not enter a due date/time for your task, you can enter one. You may want to enter a date to let other route members know when you plan to complete the task. After setting the due date, the task status flags will show whether the task is on time or late.

If the task is part of a sub-route, the due date you enter cannot be later than the due date for the parent task.

To set a due date for a task you are assigned to

1. From the global toolbar, click **My Desk>My Tasks**.
2. From the Tasks page, click the Name of the task you want to set a due date for.

   The category list and Properties page for the task opens.
3. From the Actions menu on Properties page for the task, click **Edit Details**.
4. From the Edit Task Details page, choose a **Due Date/Time** by clicking the Calendar icon. For instructions on using the Calendar, see *AEF User Help*.
5. Click **Done**.

Delegating a Task to Someone Else

If you are assigned a task and the route owner has indicated that you can delegate the task (Allow Delegation is set to Yes), you can make someone else the assignee for the task. You can delegate the task to any user in your company.

When you delegate a task to someone, that person becomes the new task assignee and is now the only person who can complete the task. The assignee inherits all the accesses that you have for the route and its content and receives notifications sent by the system regarding the task. However, these access are only temporary and are removed when the route is completed. The original assignee’s access to the route and content remains and the list of members for the route continues to list the original assignee and not the delegate.

If you delegate a task for which you have created sub-routes, you remain the owner of the sub-routes. The new task assignee cannot complete the task until your sub-routes are complete.

Only the original task assignee can delegate the task. The delegate can not delegate the task again.

To delegate an active task to someone else

1. From the global toolbar, click **My Desk>My Tasks**.
2. From the Tasks page, click the Name of the task you want to delegate.

   The Properties/Content page for the task opens.
3. Click for the **Assignee** field. This is available only if Allow Delegation is set to Yes.

   The Find Person page opens.

   a) Enter search criteria for the person.

   Last Name, First Name—To search by a person’s name, enter the person’s first/last name. To enter part of a person’s first/last name, use the wildcard * to represent any number of characters. For example, to search for “Joseph Huenoth”, you could enter “Hue*” for the Last Name. The search is case sensitive so use the correct capitalization. If you don’t want to search by name, leave the * in the box.

   Role—To search for people assigned to a particular role, choose the role or choose All Roles.

   Group—To search for people assigned to a particular group, choose the group or choose All Groups.

   b) Click **Find**.

   c) From the Select Person page, choose the person you want to delegate the task to.

   d) Click **Done**.

To delegate a pending task to someone else

1. If the task has been assigned to you but is not yet active, click **My Desk>Routes>My Routes** from the global toolbar, then click the Name of the Route. From the category list for the route, click **Tasks**.
2. From the Tasks page, click the Name of the pending task you want to delegate.

   The Properties page for the task opens.
3. From the Properties page for the task, click **Edit Details**.
4. From the Edit Task Details page, click for the **Assignee** field. The Find Person page opens.

   a) Enter search criteria for the person.

   Last Name, First Name—To search by a person’s name, enter the person’s first/last name. To enter part of a person’s first/last name, use the wildcard * to represent any number of characters. For example, to search for “Joseph Huenoth”, you could enter “Hue*” for the Last Name. The search is case sensitive so use the correct capitalization. If you don’t want to search by name, leave the * in the box.

   Role—To search for people assigned to a particular role, choose the role or choose All Roles.

Group—To search for people assigned to a particular group, choose the group or choose All Groups.

b) Click **Search**.

c) From the Select Person page, choose the person you want to delegate the task to.

d) Click **Done**.

Completing a Task

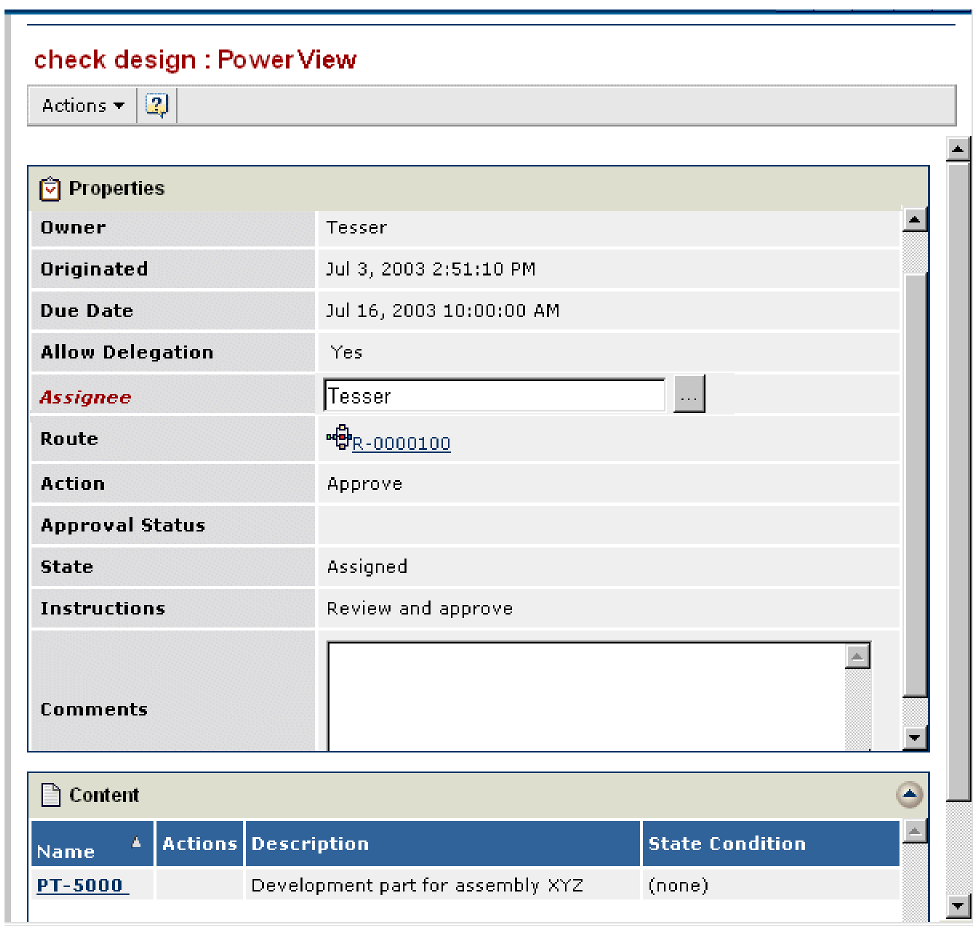
The steps you need to perform to complete a task differ depending on the Task Action chosen and instructions entered by the route creator. At a minimum, you must read and follow the instructions for the task and then mark the task as completed. You may also have to enter comments, choose an approval option, or review, edit, or add routed content.

If you (or the original task assignee) created sub-routes for the task, the sub-routes must be complete before you can complete the task.

To complete an active task

1. From the global toolbar, click **My Desk>My Tasks**.
2. From the Tasks list, click the Name of the task you want to complete.

   The category list and Properties/Content page opens for the task.



3. Read the **Instructions** that the route creator entered for you.

4. If the instructions involve working with route content:

   a) Click the content Name from the content section at the bottom of the page.

   b) Work with the content as instructed. You must have the appropriate access for each content item to be able to work with the item. For Team Central, you must also have the appropriate access for the route to be able to add and remove content. For example, you can only edit documents that you have at least Read Write access to. To add and remove content from the route, you must have Add Remove access for the route.

   For instructions on working with route content, such as viewing or editing content, see *Listing Content for a Route*. For instructions on adding and removing content from the route, see *Defining Content for a Route*.

5. To add new content to the route or remove content, access the Content page for the route:

   a) From the task's Properties/Content page, click the **Route** name.

   The category list and Properties page opens for the route.

   b) From the category list for the route, click **Content**.

   c) Work with the content as instructed.

   You must have the appropriate access for each content item to be able to work with the item. For Team Central, you must also have the appropriate access for the route to be able to add and remove content. For example, to add and remove content from the route, you must have Add Remove access for the route.

   For instructions on working with route content, such as viewing, editing, adding, and removing content, see *Routes: Content*.

6. If the Task Action is Approve, Comment, or Investigate:

   d) Enter **Comments** for the task.

   e) If the page contains approval options (only if the Task Action is Approve), choose the appropriate **Complete Task Action** option from the page Actions menu: Approve, Reject, Abstain.

   Approve. Indicates that you approve the information you have been requested to approve. For example, if the task instructions indicate that you should approve a document in the route content and you do approve the document, you should choose Approve. When you complete a task by choosing Approve for the Approval Status, the system continues the route normally.

   Reject. Indicates that you reject the information you have been requested to approve. When you complete a task by choosing Reject for the Approval Status, the route is stopped and the route creator receives email and IconMail notification that you rejected the route.

   Abstain. Indicates that you abstain from approving the information you have been requested to approve. When you complete a task by choosing Abstain for the Approval Status, the system continues the route normally.

7. If the Task Action is Notify Only or Information Only, click **Complete** from the page Actions menu.

   After completing the task, the system promotes the task to Complete and enters the current date for the Completion date. The task is no longer on your Tasks pages, but you can still access the task through the route (unless the task was delegated to you and you do not have access to the route independently). If no one else needs to complete a task for this order number in the route, the tasks at the next order number become active. Those task assignees are notified that they have active tasks. If you are the last person to complete a task for the route, then the route is complete.

If the task is not designated as Needs Owner Review, the system promotes the task to Complete.

If the task is designated as Needs Owner Review, the system promotes the task to Review and notifies the route owner. After reviewing the task, the owner approves or rejects it. If approved, the system promotes the task to Complete and notifies you. If rejected, the system demotes the task to Assigned and notifies the assignee, which could be someone other than you if the route owner reassigns it.

When a task is promoted to Complete, the system enters the current date for the Completion date. If no one else needs to complete a task for this order number in the route, the tasks at the next order number become active. Those task assignees are notified that they have active tasks. If you are the last person to complete a task for the route, then the route is complete.

Processing a Rejected Task

After the task assignee completes a task that is marked as Needs Owner Review, the task is promoted to the Review state and the route owner reviews the task. If the owner approves the task, the system promotes the task to Complete and notifies the task assignee. If the owner rejects the task, the system demotes the task back to Assigned and notifies the assignee. The task assignee must complete the task again based on the review comments the route owner entered.

When rejecting a task, the route owner may reassign the task to someone other than the original assignee. The new assignee receives the notification and must complete the task. This means you might receive a notification about a task that is rejected even though you didn't work on the task originally.

You complete a rejected task in the same way you complete a new task, as described in *Completing a Task*. The only differences are:

- You, the task assignee, will receive a Review Complete notification about the task and can click the hyperlink in the message to access details about the task. Alternatively, you can click the task's Name from the Tasks pages as you would any Assigned task.
- Review the information on the Properties page for the task, focusing especially on the Review Comments. These are comments the route owner entered to explain how the task should be completed. Also look for updated information in the other fields, such as new Instructions, a new Due Date/Time, and a different Action.

Route Templates

Use route templates to speed up the process of creating a route that is similar to one you have already created. A route template saves the components of a route that are frequently reused, including the:

- route description
- route members (included optionally)
- tasks definitions

The components of a route that are typically unique for each route—the route name, the content being routed, and the access levels assigned to route members—are not saved in the template.

A route template's availability determines who can use the template to create routes. A route template's availability can be:

- User—Only the template owner can use it. Any person can create a User route template.
- Enterprise—Anyone can use the template to create a route. Only Company Representatives can create Enterprise-level route templates.

This section includes these topics:

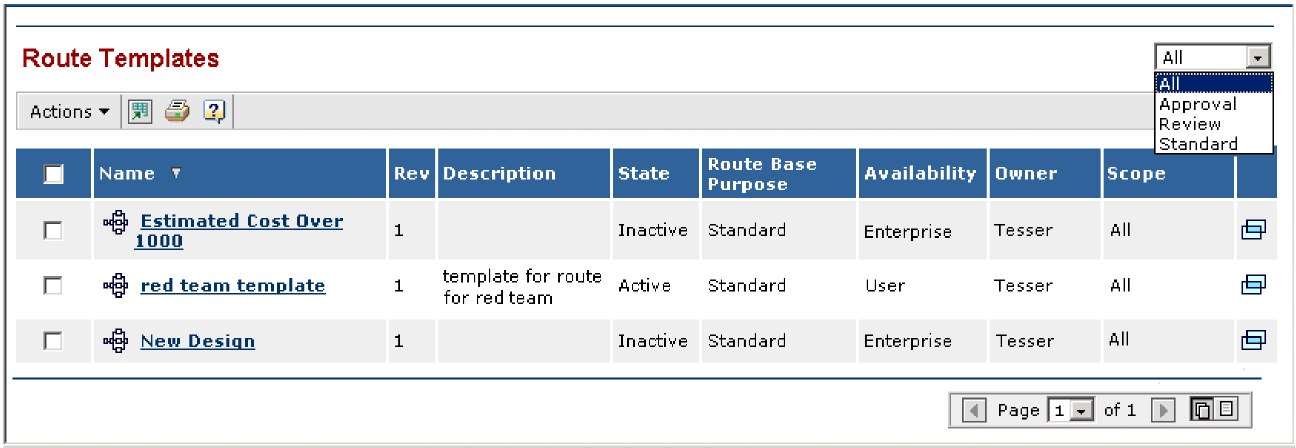
- *Listing Route Templates*
- *Viewing Information about a Route Template*
- *Saving a Route as a Template*
- *Listing Route Template Members*
- *Listing Previous Revisions of a Route Template*
- *Listing and Editing Tasks for a Route Template*
- *Revising a Route Template*
- *Editing Details for a Route Template*
- *Deleting a Route Template (Revision)*

Listing Route Templates

You can get a list of route templates that includes all route templates that you own, the Enterprise-level templates for your company, and for Team Central users, Workspace-level templates for workspaces that you belong to. For Company Representatives, the list includes all templates created by employees of your company.

To list route templates

1. From the global toolbar, click **My Desk>Routes>Route Templates**.



For each template the page shows:

Name—The name assigned by the person who saved the template. To see details about the template, click its Name.

Rev—The revision number for the template. Each time a template is updated and saved, the system increments the revision number. The page shows only the highest revision of each template.

Description—A summary of the template's purpose.

State—Shows if the template is active or inactive.

Route Base Purpose—Shows the kind of tasks included in the route.

- Standard—The route can include tasks that require the assignee's approval or comment or tasks intended only for notification or information.
- Approval—The route includes only tasks that require the assignee's approval.
- Review—The route includes only tasks that require the assignee's comment.

Availability—Defines who can use the template to create routes. User means the template owner is the only person who can use the template. Enterprise means the template is available to all.

Owner—The person responsible for maintaining the template.

Scope—All or Organization. For templates whose scope is a workspace, folder or project space, this lists the Team Central workspace or folder, or the Program Central project space where the template can be used.

2. To delete a template, check it and click **Delete Selected**. See *Deleting a Route Template (Revision)*.

3. To view details about a template, click its Name. See *Viewing Information about a Route Template*.

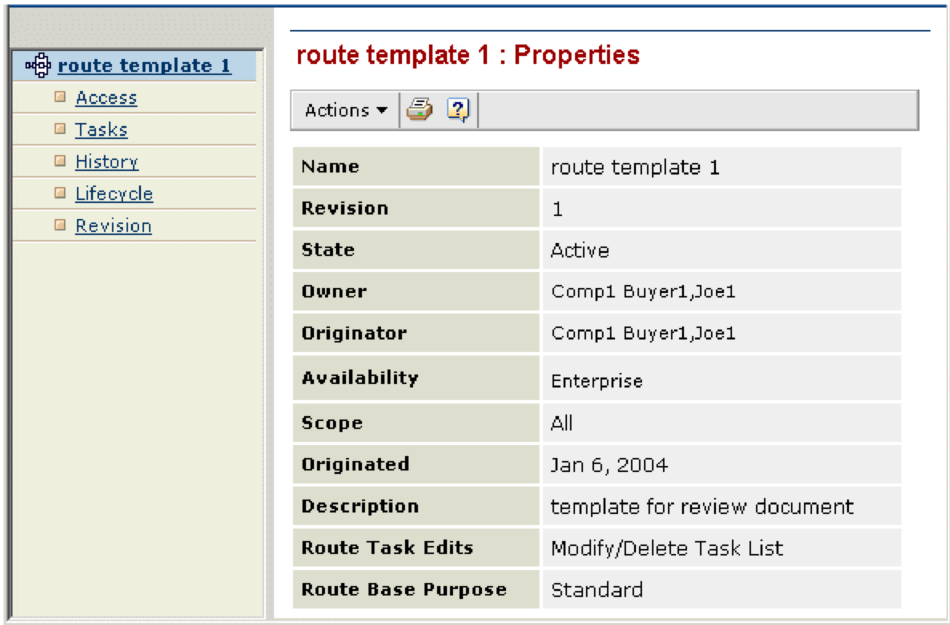
Viewing Information about a Route Template

You can view information about any route template listed on your Route Templates page. This list includes all route templates that you own, the Enterprise-level templates for your company, and (for Team Central users) Workspace-level templates for workspaces that you belong to. For Company Representatives, the list includes all templates created by employees of your company.

To view information about a route template

1. From the global toolbar, click **My Desk>Routes>Route Templates**.
2. From the Route Templates page, click the Name of the template you want to view.

   The category list and Properties page for the template opens.



Name—The name assigned by the person who saved the template.

Revision—The revision number for the template. Each time a template is updated and saved, the system increments the revision number.

State—Whether the template is in an Active or Inactive state. Templates in the Inactive state cannot be used to create routes.

Owner—The person responsible for the template.

Originator—The person who saved the template version.

Availability—Defines who can use the template to create routes. User means the template owner is the only person who can use the template. Enterprise means the template is available to everyone.

Scope—Defines who can be included in routes created from this template: All, Organization, or members of the specified Team Central workspace or the specified Program Central project space only.

Originated—The date the template or template revision was created.

Description—A summary of the purpose of the template.

Route Task Edits—Defines how people who create routes based on the template can edit the task list. The options range from the most restrictive at the top to the least restrictive. The editing restrictions are related to adding and removing tasks, changing the task order, and changing the task name only. The route owner can edit all other fields, such as task assignee, instructions, and due dates, no matter what the Route Task Edit option is.

- **Maintain Exact Task List**—People who create a route from this template must use the exact task list, with no tasks added or removed. The route creator cannot make any changes to the task order or names, but all other fields can be changed.

- **Extend Task List**—People who create a route from this template must use the exact task list, but more tasks can be added to an existing route task order or a new order number. The route creator cannot make any changes to the order or names of tasks from the route template, but can change all other fields. The route owner can make any changes to tasks the owner adds to the route.
- **Modify Task List**—People who create a route from this template can change all information for template tasks except the task name. The route creator can add new tasks but cannot delete template tasks.
- **Modify/Delete Task List**—People who create a route from this template can change and delete any task and can add new tasks.

Route Base Purpose—Determines which task actions are included in the route template.

- **Standard**—Can have several task actions.
- **Approval**—All task actions are set to Approve.
- **Review**—All task actions are set to Comment.

3. To make changes to the template, click **Edit Details** from the page Actions menu. See *Editing Details for a Route Template*.
4. To change the state of the route template, click Activate/Deactivate from the page Actions menu. This is visible only if you have promote/demote access for the template.
5. Use the category list to work with the route template:

Category	Description	For details, see:
Access	Lists the route members saved with the template, if any.	*Listing Route Template Members*
Tasks	Lists the tasks in the template and lets the owner edit the task definitions (must create a new revision to make changes).	*Listing and Editing Tasks for a Route Template*
History	Shows a log of events that have occurred for the route template.	Click on the History page or see *AEF Help*.
Lifecycle	Shows the current state of the route template and allows you to promote and demote it.	Click on the Lifecycle page or see *AEF Help*.
Revisions	Lists the previous revisions of the template and lets you view history for all revisions.	*Listing Previous Revisions of a Route Template*

Saving a Route as a Template

Use route templates to speed up the process of creating a route that is similar to one you have already created. A route template saves the components of a route that are frequently reused, including the route members and task definitions. You can save as a template any route that you create.

To save a route as a template

1. Access the route that you want to save as a template by clicking **My Desk>Routes>My Routes** from the global toolbar. Then click the Name of the route.
2. From the Properties page Actions menu, click **Save As Template**.

   The Save Route as Template page opens.

3. Enter a **Template Name**.
4. Enter a **Description** of the template. You might want to describe the kinds of routes that should be created using it and/or summarize the tasks and members.
5. Using the **Availability** options, choose who can use the template to create a route:

   User—The template will be available only to you.

   Enterprise—The template will be available to everyone. Only Company Representatives can create Enterprise templates.
6. Using the Scope options, choose which persons can be added to routes created from this template. In Team Central and Program Central, the scope also limits the content that can be included in the route.

   All—Any person in the database whose status is active.

   Organization—Only employees of the route creator's company, plus one other specified organization, can be included in the route.

workspace or project space—This option is available only if Team Central or Program Central is installed. Click the third button and click ... to select a workspace (for Team Central) or a project space (for Program Central).

7. Use the **Route Task Edits** list to choose how people who create routes based on the template can edit the task list. The editing restrictions are related to adding and removing tasks, changing the task order, and changing the task name only. The route owner can edit all other fields, such as task assignee, instructions, and due dates, no matter what the Route Edit Task option is.

   Maintain Exact Task List—People who create a route from this template must use the exact task list, with no tasks added or removed. The route creator cannot make any changes to the task order or names, but all other fields can be changed.

   Extend Task List—People who create a route from this template must use the exact task list, but more tasks can be added to an existing route task order number or a new order. The route creator cannot make any changes to the order or names of tasks from the route template, but can change all other fields. The route owner can make any changes to tasks the owner adds to the route.

   Modify Task List—People who create a route from this template can change all information for template tasks except the task name. The route creator can add new tasks but cannot delete template tasks.

   Modify/Delete Task List—People who create a route from this template can change and delete any task and can add new tasks.

8. If the route was already based on a template that you created, the page includes Save Options. To save the route as a new template, choose **Save as New Template**. To save the route as a new revision of the template from which it was created, choose **Revise Template**.

9. If you do not want to save the route's member list with the template, uncheck **Task Assignees** in the **Template Data** field. The route template's Access page will be empty and the tasks will all be unassigned. When people use the template to create a route, they will have to add members and assign them to tasks before they can start the route.

   Or

   To save the route's member list and task assignments in the template, check **Task Assignees** in the **Template Data** field. The route template's Access page will contain the same members as the route's Access page and tasks will be assigned to the same members. You cannot remove members from the template but you can change the assignee for tasks and remove the assignees from tasks. See *Listing and Editing Tasks for a Route Template*.

10. Click **Done**.

Listing Route Template Members

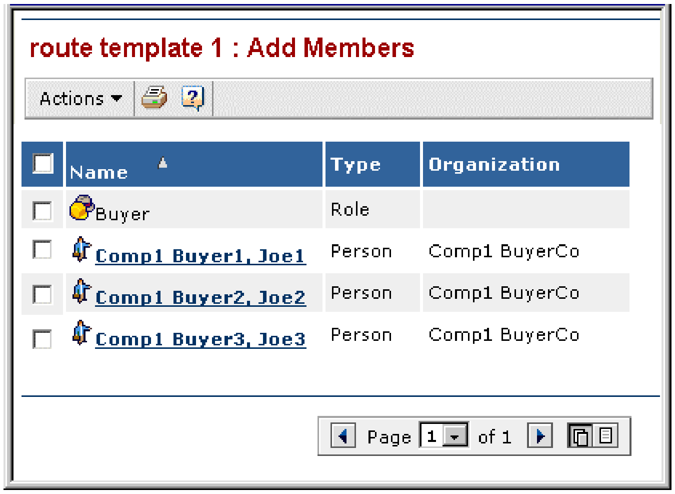
You can list the members included in any route template that is listed on your Route Templates page. Template accesses can be changed only by creating a new revision of the template.

To list members in a route template

1. From the global toolbar, click **My Desk>Routes>Route Templates**.
2. From the Route Templates page, click the Name of the template you want to work with.

3. From the category list for the template, click **Access**.

The Access page opens, listing all members saved with the template. Since route access levels are not saved with the template, the access levels are not listed.



Name—The name of the person, group or role included in the route template.

Type—Distinguishes between people added individually, groups, and roles.

Organization—The organization the person belongs to. This is blank for groups and roles.

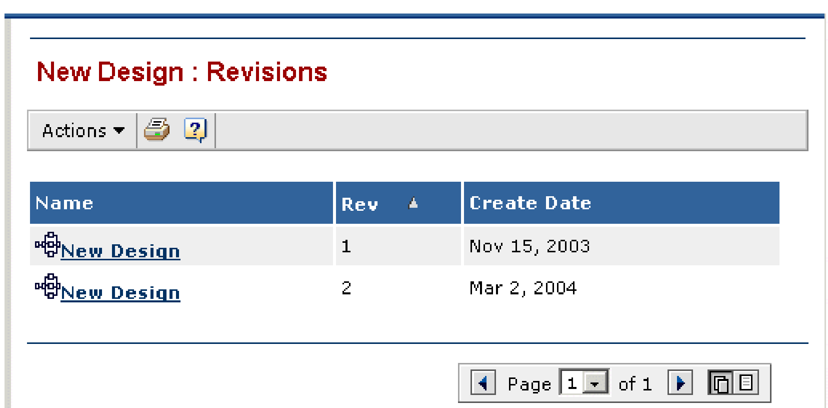
Listing Previous Revisions of a Route Template

You can list previous revisions of any route template that is listed on your Route Templates page.

To list previous revisions of a template

1. From the global toolbar, click **My Desk>Routes>Route Templates**.
2. From the Route Templates page, click the Name of the template you want to work with.
3. From the category list for the template, click **Revisions**.

The Revisions page opens, listing all revisions of the template. The page shows the name, revision number, and creation date for each.



4. To view information about a revision, click its **Name**.

   The category list and Properties page for the template revision opens. The category list and Properties page is the same as the pages for the highest revision, except you cannot edit a previous revision.

5. To view the history for all revisions, click **Revision History** from the page Actions menu. The History page shows historical information for each revision starting with the most recent.

Listing and Editing Tasks for a Route Template

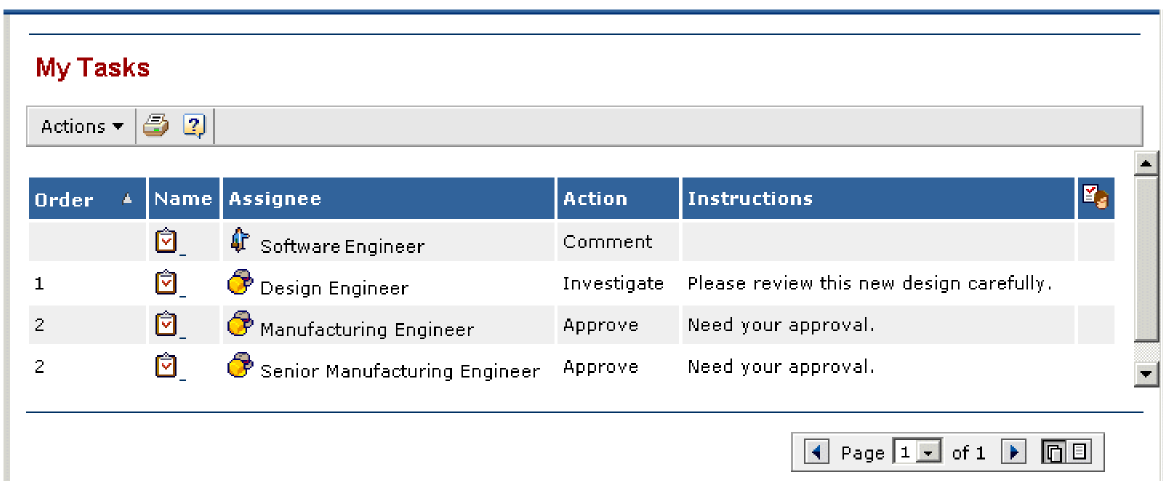
You can list the tasks included in any route template listed on your Route Templates page. Generally, only the current template owner can edit tasks for a template although Team Central Workspace Leads can change any Workspace-level route template for their workspaces. To edit tasks, you must create a new revision of the template.

This section describes how to view and edit all tasks in a route template at once. You can also view and edit information for a single task by clicking the task Name from the Tasks page of the route template. The Properties and editing pages for individual template tasks are different from the corresponding route task pages in the same ways described below.

To list and edit tasks in a route template

1. From the global toolbar, click **My Desk>Routes>Route Templates**.
2. From the Route Templates page, click the Name of the template you want to work with.
3. From the category list for the template, click **Tasks**.

   The Tasks page opens, listing all tasks saved with the template.



It contains the following columns:

Order—The order of the task within the route.

Name—The name of the task. If the template was created from a route that included automatically-named tasks, no task names are included.

Assignee—The person, group, or role the route creator assigned to the task. If the task assignees were not saved with the template, the Assignee column is empty. Also, if task assignees were saved with the template but the template owner removed the assignment for a task, the Assignee column for that task is empty.

Action—The action the task assignee should perform: Approve, Comment, Notify Only, or Investigate. If the action is Approve, the assignee must choose an approval status to complete the task: Approve, Reject, or Abstain. All actions except Notify Only require that the route member enter a comment to complete the task.

Instructions—Describes how to perform the task.

4. To edit the tasks, click **Edit All** from the page Actions menu.

   A message is displayed: "You can edit a Route Template only by creating a new revision of it." Click OK to create a new revision of the template. The new revision is inactive. You must activate it before anyone can use it to create routes.

5. Edit the tasks as you would the tasks for a route (see *Defining the Tasks in a Route*) with these exceptions:

   - There is no option for allowing the task assignee to set the due date so you must specify a date or the number of days after the route start or task creation.
   - If task assignees were not saved with the template, you cannot assign route members to tasks. People who use the template to create routes will have to add members and assign tasks before starting the route.
   - If task assignees were saved with the template, you can change the assignee to any other person in the access list. You can also unassign the task by choosing the empty row at the top of the tasks's Assignee list.

6. Click **Done**.

Revising a Route Template

You can revise any route template that you created. Only the newest revision of a template can be used to create new routes. One way to revise a template is to edit the tasks in the template. See *Listing and Editing Tasks for a Route Template*. Another way to make a new revision of a template is by editing a route that was created from the template and then clicking Save as Template from the route's Properties page. See *Saving a Route as a Template*.

Unless you are the template owner or Team Central Workspace Lead for a Workspace-level template, you cannot edit a route template. However, you can save a view-only template under a new name and then revise it. To do this, save a route created from the template as a template.

Editing Details for a Route Template

People with editing access for a route template can edit details of it, including reassigning the owner and changing the description, availability, and route task edit level. Generally, only the current template owner can make these changes, although Team Central Workspace Leads can change any Workspace-level route template for their workspaces.

To edit details for a route template

1. From the global toolbar, click **My Desk>Routes>Route Templates**.
2. From the Route Templates page, click the Name of the template you want to work with.
3. From the Properties page, click **Edit Details**.
4. From the Edit Route Template Details page, change information as needed.

Owner—The person who is responsible for maintaining the template. Who you can reassign ownership to depends on the template's scope and availability.

If the route template's Availability is:	Ownership can be reassigned to:
User	Anyone in the current owner's company.
Enterprise	Any Company Representative in the current owner's company.

If the scope of the route is a Team Central workspace, ownership can be reassigned only to another Workspace Lead in the specified workspace.

To change ownership, click ... next to the Owner field and search for the new owner. For details, see [x-ref to finding people].

Availability—Defines who can create routes from the template. User means the template owner is the only person who can use the template. Enterprise means the template is available to all company employees. Only Company Representatives can change a User template to an Enterprise template.

Scope—Defines who can be included in routes created from this template: All, Organization, or members of the specified Team Central workspace or Program Central project space only.

In Team Central, the template owner can change the scope only to another workspace for which the owner is a Workspace Lead. To change or specify a workspace, click ... and choose a workspace.

Description—Change the template description as needed.

Route Task Edits—Use the Route Task Edits list to choose how people who create routes based on the template can edit the task list.

- **Maintain Exact Task List**—People who create a route from this template must use the exact task list, with no tasks added or removed. The route creator cannot make any changes to the task order or names, but all other fields can be changed.
- **Extend Task List**—People who create a route from this template must use the exact task list, but more tasks can be added to an existing route task level or a new level. The route creator cannot make any changes to the order or names of tasks from the route template, but can change all other fields. The route owner can make any changes to tasks the owner adds to the route.
- **Modify Task List**—People who create a route from this template can change all information for template tasks except the task name. The route creator can add new tasks but cannot delete template tasks.
- **Modify/Delete Task List**—People who create a route from this template can change and delete any task and can add new tasks.

5. Click **Done**.

Deleting a Route Template (Revision)

You can only delete User and Enterprise route templates that you own. Any Team Central Workspace Lead for the workspace can delete Workspace-level route templates. When you delete a template, you delete only the most recent revision of the template and the next-most recent revision becomes the active template. To delete a template entirely, you must delete all revisions of it.

To delete a route template

1. From the global toolbar, click **My Desk>Routes>Route Templates**.
2. From the Route Templates page, check the template(s) you want to delete.
3. Click **Delete Selected** from the page Actions menu.
4. At the confirmation message, click **OK**.

   If there is more than one revision of the template, only the most recent revision is deleted and the next-most recent becomes the active template and is listed on the Route Templates page.
5. To delete the template entirely, repeat Steps 2 through 4 until there are no more revisions.