Training Guide

Microsoft SharePoint 2010

13 – Working with workflows

CORPORATE **LEARNING & DEVELOPMENT**

WORKING WITH WORKFLOWS

INFOCUS

Workflows let you automate repetitive processes that involve files or list items. SharePoint does this by automatically generating the tasks necessary to complete each step in the workflow, in the required order and assigned to the person (or people) responsible for completing the step. Using workflows ensures that nothing gets forgotten or missed along the way which could easily happen if you were completing the process manually.

As well as automating processes, another advantage for using workflows is that SharePoint retains a complete history of all tasks that are generated during the workflow.

Only developers can create workflows, but authors or contributors for a list or document library might be required to manually initiate or participate in a workflow.

In this booklet you will be shown how to:

- ✓ Understand workflows
- ✓ create a workflow using a predefined template
- ✓ customise the workflow settings
- ✓ manually initiate a workflow
- ✓ work with tasks in a workflow
- ✓ track a workflow

What Is A Workflow?

Workflows are used to automate repetitive processes, such as document approval. When a workflow is created, the author specifies the tasks that must be completed and who is responsible for each task. Once a workflow is initiated for a specific item, tasks will be generated automatically and the various statuses will be updated and recorded in a history log.

Workflows are commonly attached to a list or library because they're usually triggered by a document being edited or a list item being created.

You should add an extra column (***Status***) to the default document library, because three-state workflows require you to select a column with three values that will be used to define the three states of the workflow. The ***Status*** column (which you can see at the right end of the three samples below) will display one of three values indicating the workflow's current state:

Draft the workflow has been initiated for the uploaded document

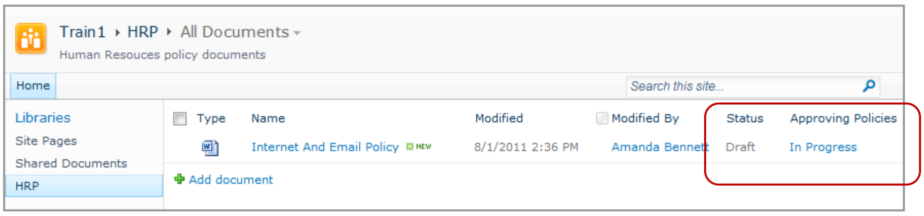
Final the workflow has moved into its middle state

Approved the workflow has been completed.

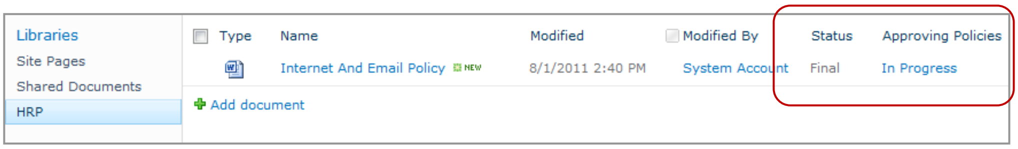
The Three States Of A Three-State Workflow

When the workflow is initiated for a document (manually in our exercise, although they can be set to start automatically), SharePoint will automatically add a new workflow column to the library view. This column shows the workflow name in the column header (***Approving Policies***) and the status of the workflow in the property value (***In Progress*** for a newly-initiated workflow, as shown below). SharePoint will also automatically display ***Draft*** in the document's Status field, generate a ***Workflow initiated*** task in the ***Tasks*** list and send an email to the user to whom the task has been assigned.

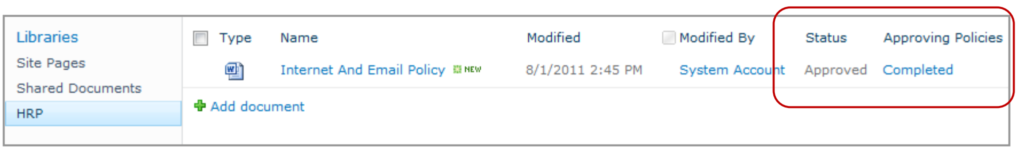
1



2 When the user completes the ***Workflow initiated*** task (e.g., by reviewing the policy document), SharePoint will automatically generate the next task in the workflow called ***Review task***, assigning it to the appropriate user. SharePoint will also automatically update the document's Status field to ***Final*** (which is the middle state of this workflow) and the workflow status will remain as ***In Progress***.



3 When the user completes the ***Review task*** (e.g., by approving the policy document), SharePoint will automatically update the document's Status field to ***Approved*** and the workflow status to ***Completed***.



Creating a Workflow

Workflows are often created for libraries or lists as they're usually started by a file being edited or a list item being created. Creating a workflow can be divided into two halves. The first half involves selecting a template, naming the workflow, choosing a task list and history list to store the tasks and history records that will be generated during the workflow, and setting the start options.

Example:

1 We opened the ***HRP*** library, then clicked on the top half of ***Workflow Settings*** on the ***Library*** tab to open the ***Workflow Settings*** page

2 Then we clicked on ***Add a workflow*** to display the settings

3 Then selected ***Three-state*** in the ***Workflow*** section

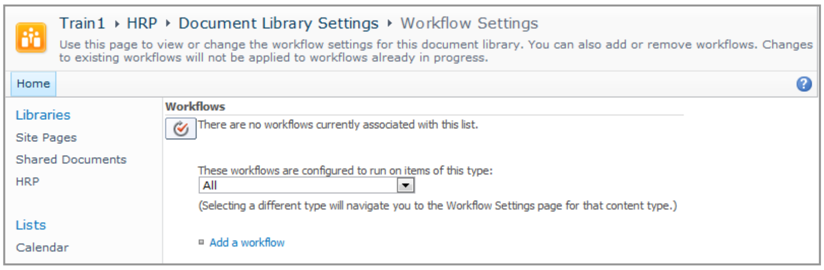
4 And typed **Approving Policies** in the ***Name*** section

5 We ensured that ***Tasks*** is selected in the ***Task List*** section

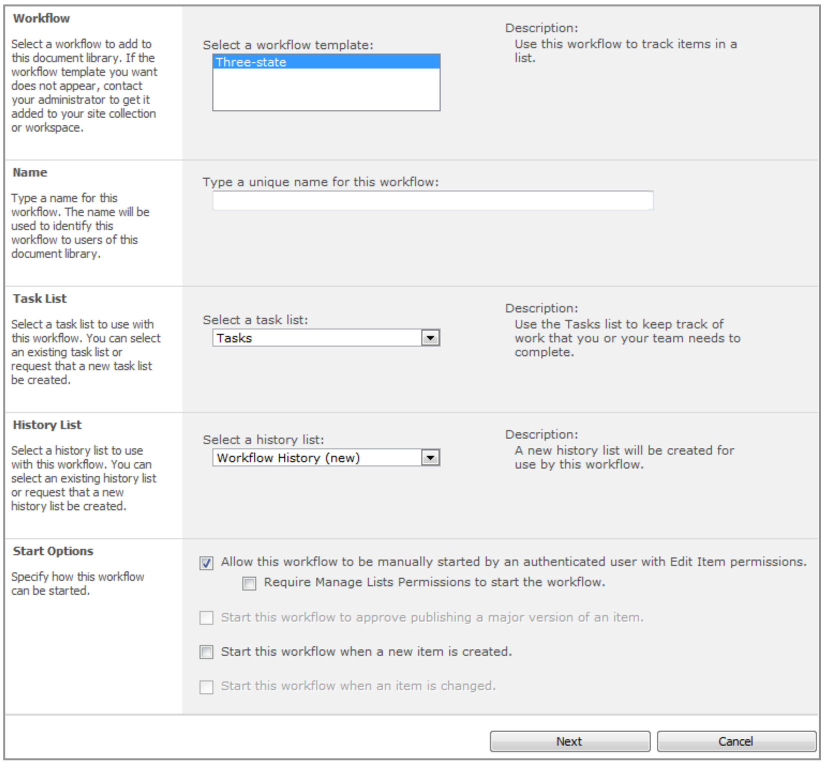
6 And ensured that ***Workflow History*** is selected in the ***History List*** section

7 Finally we ensured that ***Allow this workflow…*** is selected in the ***Start Options*** section, then clicked on **[Next]** to open the ***Customise the Three-state workflow*** page

We'll complete this on the next page…



1 *Currently, there are no workflows attached to this library.*



2 *The default Start option is for a workflow to be started manually, which is perfect for our workflow as new policy documents could be edited 20 times before they're ready to be approved. You can also choose to start a workflow automatically when a document is added to the library.*

For Your Reference…

To ***create*** a ***workflow***:

1. Open the list or library
2. Click on the top half of ***Workflow Settings*** on the ***Library*** tab
3. Click on ***Add a workflow***
4. Select a template, type the ***Name*** and complete the other settings as desired

Handy to Know…

- If you are using SharePoint Server, you will have access to several workflow templates, such as templates for collecting feedback and requesting approval for a document.

Customising The Workflow Settings

After specifying the options on the ***Workflow Settings*** page, the second half of the workflow creation process lets you specify some default values. For instance, here you will select the users to whom the two tasks that will be automatically generated during the workflow will be assigned. You could also alter the information that appears in a message and more.

Example:

Same Page

Continuing on from Three-state workflow page from the previous page…

1 We ensured that ***Status***, ***Draft***, ***Final*** and ***Approved*** are selected in the ***Workflow states*** section

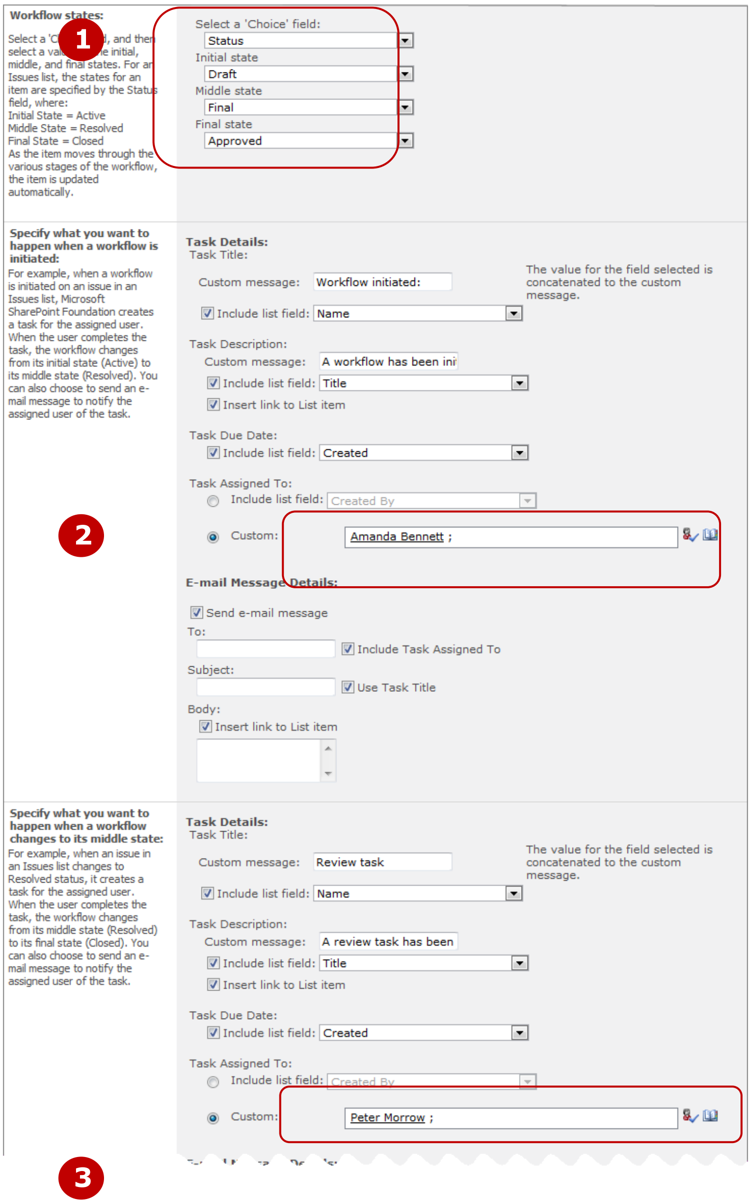
2 For the ***Specify what you want to happen when a workflow is initiated*** section, leave all default values except:

Click on ***Custom*** under ***Task Assigned To*** and select a ***Contribute*** user in the name box, then click on ***Check Names*** to ensure that SharePoint recognises the user

3 For the ***Specify what you want to happen when a workflow changes to its middle state*** section, leave all default values except:

Click on ***Custom*** under ***Task Assigned To*** and select a ***Contribute*** user in the name box, then click on ***Check Names*** to ensure that SharePoint recognises the user

4 Then we clicked on **[OK]** to create the workflow



For Your Reference…

To ***customise*** the ***workflow settings***:

1. Open the library
2. Click on the drop arrow for ***Workflow Settings*** on the ***Library*** tab and select **Workflow Settings**
3. Click on the workflow name
4. Make the desired changes and click on **[OK]**

Handy to Know…

- The ***three-state*** workflow template can be attached to any list that has a status field with three available choices, such as draft, final and approved in our sample.
- The options that appear on the ***Customise*** page are determined by the template that you choose on the ***Workflow Settings*** page.

Initiating A Workflow

Because policies tend to go through several drafts before being made public, we have created and attached a workflow to this library (***Approving Policies***) that will formalise the review and approval of new policy documents. Here you will see how to upload a policy document and manually initiate the workflow.

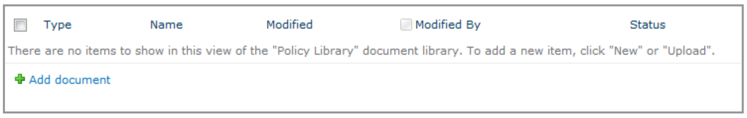
Example:

1. We clicked on ***HRP*** in the Quick Launch bar to open this document library
2. Then we clicked on the ***Add document*** link, browsed to and clicked on ***Internet And Email Policy*** in the course files folder, then clicked on **[Open]** and on **[OK]** to open the properties dialog box

   A second mandatory property, Status, must be selected for documents in this library…
3. We ensured that ***Draft*** is selected in ***Status*** – this is the workflow's first state – then clicked on **[Save]** to upload the file
4. Next we clicked on the check box to selected the policy document, then clicked on ***Workflows*** on the ***Documents*** tab to open the ***Workflows*** page

   You can see that the Approving Policies workflow is attached to this library…
5. Finally we clicked on ***Approving Policies*** under ***Start a New Workflow***

   The Approving Policies column, which is the name of the workflow, will be automatically added to this library view



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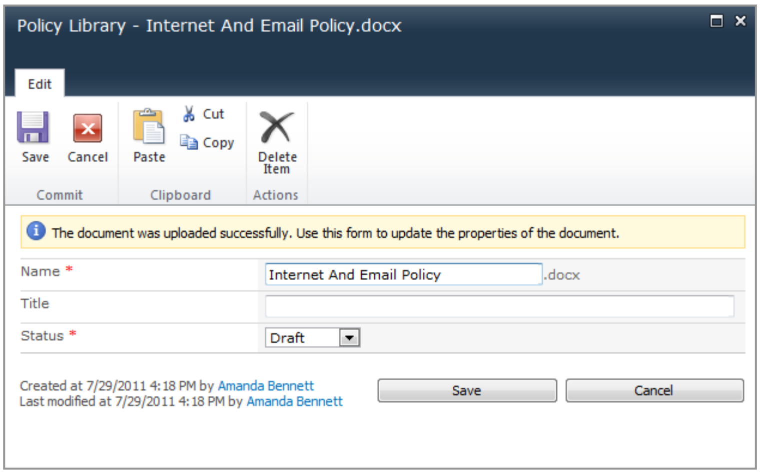

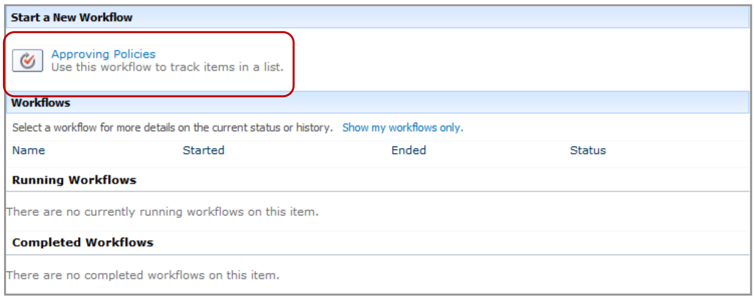

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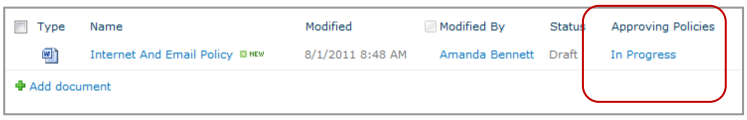

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For Your Reference…

To ***manually initiate*** a ***workflow***:

1. Open the library or list
2. Select the document or list item
3. Click on ***Workflows*** on the ***Documents*** or ***Items*** tab
4. Click on the name of the workflow under ***Start a New Workflow***

Handy to Know…

- When you attempt to manually start a workflow, an initiation page may display with options that you must select, such as choosing who to assign the first task to. After setting the options and clicking on **[Start]**, the workflow will start. Our workflow is very simple and didn't require an initiation page.

Working With Tasks In A Workflow

When a workflow is started, a task will be generated in the ***Tasks*** list assigned to the user responsible for performing the first step in the workflow. This user will also receive an email describing how to complete the task. Once finished, a new task (and email) will be generated for the next step in the workflow. When this task is finalised, the workflow will be completed.

Example:

1 We clicked on ***Tasks*** to open the ***Tasks*** list

A new Workflow initiated task will appear at the bottom of the list…

2 Then we clicked on the Title of the ***Workflow initiated*** task to open it in the ***Tasks*** dialog box, then clicked on ***Edit Item***

Let's assume we've finished reviewing this document…

3 We clicked on the drop arrow for ***Status*** and selected ***Completed***, then clicked on **[Save]**

A new task will be generated in the Tasks list but we will have to refresh the list to see it…

4 We pressed F5 and clicked on **[Retry]**

To complete this Review task now…

5 We repeated steps ***2*** and ***3*** to complete the ***Review task***

To check the Workflow status in the HRP library…

6 We clicked on ***HRP***

Notice that Status has changed to Approved and Approving Policies has changed to Completed

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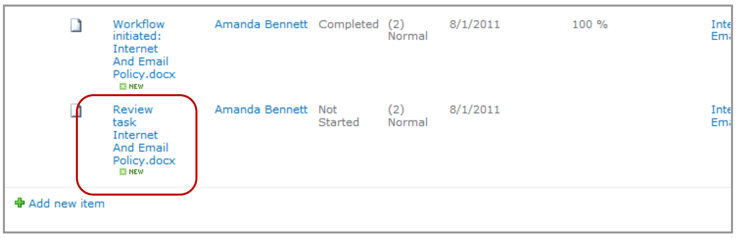

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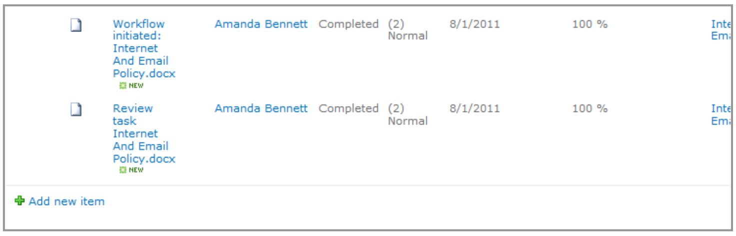

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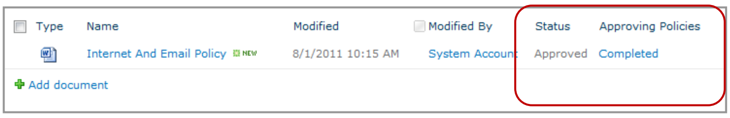

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For Your Reference…

To ***work*** with a ***workflow task***:

1. Complete the process as requested, such as reviewing/approving a document
2. Open the ***Tasks*** list and click on the Title of the workflow task
3. Select ***Completed*** in ***Status***
4. Click on **[Save]**

Handy to Know…

- When the workflow was created for this exercise, the manager specified that both tasks were assigned to the same user. Typically, this wouldn't be the case. The person responsible for reviewing a document would normally be different to the person approving the final document.

Tracking A Workflow

The ***Workflow Status*** page shows where the workflow is currently at. It includes a summary at the top, followed by a list of tasks that have been generated by the workflow, and finally, the history of the workflow progress is shown below that. If you were working on a complex workflow, you could use this history to see who worked on which task, how long they took to complete a task, and more.

Example:

1 We clicked on ***HRP*** to open this document library

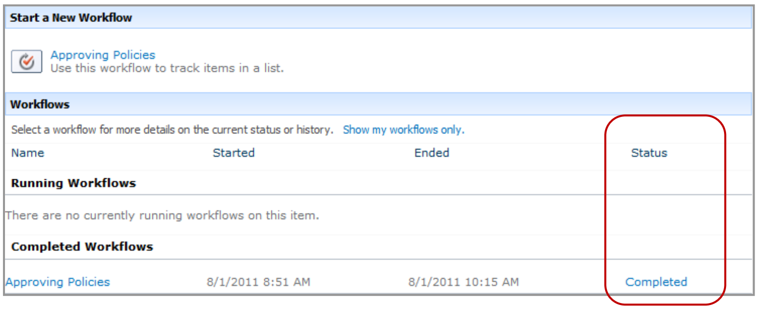
2 Then we clicked on the check box to select the ***Internet And Email Policy*** document, then clicked on ***Workflows*** on the ***Documents*** tab to open the ***Workflows*** page

The Approving Policies workflow is completed, to look at its history…

3 We clicked on ***Approving Policies*** under ***Completed Workflows*** to open the ***Workflow Status*** page

This page is divided into three areas: Workflow Information, Tasks and Workflow History. We had two errors listed in the history in our sample. These are due to our server set up and can be ignored.

Note that for some workflow templates, you may also see a Visio visualisation of the process beneath the Workflow Information section



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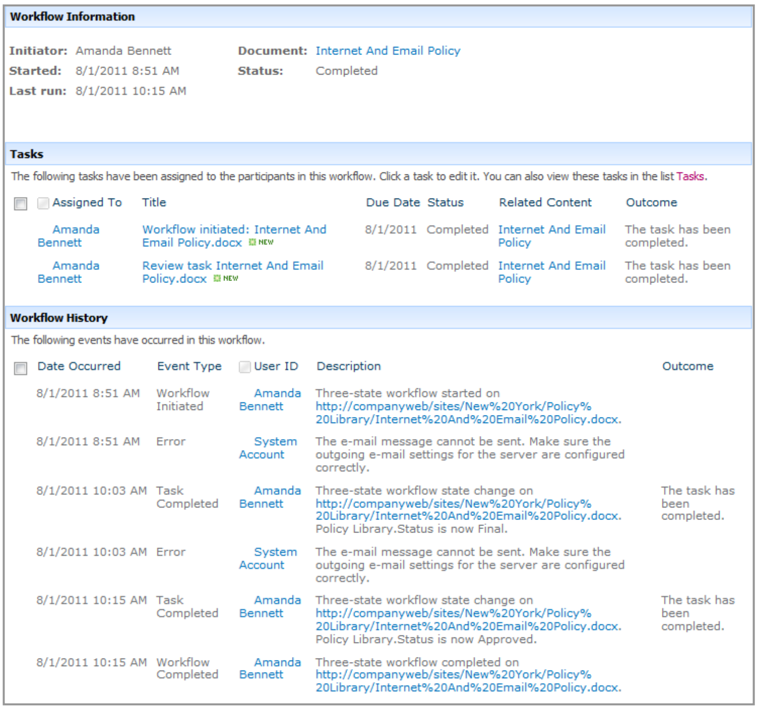

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For Your Reference…

To ***track*** a ***workflow***:

1. Open the library or list
2. Select the document or list item
3. Click on ***Workflows*** on the ***Documents*** or ***Items*** tab
4. Click on the Name or Status of the workflow to see the workflow status

Handy to Know…

- You could have opened the ***Workflow Status*** page directly by clicking on ***Completed*** in the ***Approving Policies*** column of the ***Policy Library***. You can only use this method when the workflow adds a column to the list/library view that shows the status of the workflow.

CONCLUDING REMARKS

Congratulations!

You have now completed the **Working with workflows** booklet. This booklet was designed to get you to the point where you can competently perform a variety of operations as listed in the objectives on page 2.

We have tried to build up your skills and knowledge by having you work through specific tasks. The step by step approach will serve as a reference for you when you need to repeat a task.

Where To From Here…

The following is a little advice about what to do next:

- Spend some time playing with what you have learnt. You should reinforce the skills that you have acquired and use some of the application's commands. This will test just how much of the concepts and features have stuck! Don't try a big task just yet if you can avoid it - small is a good way to start.
- Some aspects of the course may now be a little vague. Go over some of the points that you may be unclear about. Use the examples and exercises in these notes and have another go - these step-by-step notes were designed to help you in the classroom and in the work place!

Here are a few techniques and strategies that we've found handy for learning more about technology:

- visit CLD's e-learning zone on the Intranet
- read computer magazines - there are often useful articles about specific techniques
- if you have the skills and facilities, browse the Internet, specifically the technical pages of the application that you have just learnt
- take an interest in what your work colleagues have done and how they did it - we don't suggest that you plagiarise but you can certainly learn from the techniques of others
- if your software came with a manual (which is rare nowadays) spend a bit of time each day reading a few pages. Then try the techniques out straight away - over a period of time you'll learn a lot this way
- and of course, there are also more courses and booklets for you to work through
- finally, don't forget to contact CLD's IT Training Helpdesk on **01243-752100**