

# **WORKFLOWS IN ARCHIE: A GUIDE FOR STAGE 3 PILOT GROUPS**

**Version 1.3, April 2010**

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## Purpose and scope of this document

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This document is intended to serve as a basic guide to using the workflow system for Cochrane Review Groups (CRGs) participating in Stage 3 of the workflow pilot. The current version (April 2010) incorporates information on improvements made to the workflow system since Stage 2b began in May 2009, including the extensive changes introduced in Archie 3.0 (deployed on 13 December 2009). The material covered here will be further revised and expanded as the pilot proceeds, and a more complete version of this Guide will eventually be incorporated into the CRG Super Users' Guide to Archie.

If you encounter problems using the workflow system during the pilot, or have questions that are not addressed in this Guide, please contact your IMS Support person for assistance (<http://ims.cochrane.org/organization/ims-support/ims-support>).

### Other resources

1. Archie's online Help file – accessed from the Help menu in Archie. See also Help > What's New for a detailed listing of changes made to the workflow system since May 2009.
2. IMS Bulletins for CRG Super Users (archived at: <http://ims.cochrane.org/support/crgs/bulletins>).
3. The Workflows page of the IMS website (<http://ims.cochrane.org/archie/workflows>). This includes, among other things, a link to the workflow template page (<http://ims.cochrane.org/archie/workflows/templates>), where you can view graphical and text definitions of the workflow templates.

# Workflows in Archie

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## Purposes of the workflow system in Archie

The main purposes of the workflow system in Archie are (1) to help CRGs keep track of where each review is in the editorial process; and (2) to inform people involved in the preparation and editorial processing of reviews when they need to take action. Once most of a CRG's reviews have been incorporated into the workflow system, staff at the editorial base should also be able to use the system to (3) plan and prioritize work more effectively across multiple reviews; and (4) identify and analyze trends in the Group's processes (e.g., by identifying recurring slow or problem points in the review process). Finally, once most CRGs are using the workflow system to track most reviews, it will be possible for the system to (5) generate various reports for Collaboration-wide monitoring purposes.

From a CRG perspective, the workflow system should ideally:

- Be easy to use.
- Minimise data entry and processing errors by drawing on data already held in Archie.
- Generate routine prompting when editorial action is required.
- Assist in carrying out repetitive tasks.
- Make it easy to determine:
  - the status of any given review in the editorial process;
  - the workload of individuals involved in the editorial processing of reviews; and
  - which tasks need to be completed and when.

Most of the planned functionality for the workflow system has been implemented for Stage 3, but other parts need to be developed or refined over the coming months. Your input during the pilot is critically important to the development of the best possible system for general release.

## Definitions of basic terms

The table below provides brief definitions of terms that have a specific meaning in relation to the workflow system in Archie. The order of terms in the table is logical rather than alphabetical.

Term	Definition
Workflow (generic definition)	An ordered and interrelated sequence of tasks that need to be completed to achieve a finished product (e.g., a published protocol). <ul style="list-style-type: none"><li>- Sometimes depicted in the form of a 'flowchart'.</li><li>- Involves some decision tasks ('yes/no'), as well as non-decision tasks.</li><li>- May involve repeating loops or parallel strings of tasks.</li></ul>
Workflows (in Archie)	The workflows currently available in Archie all relate to reviews, and each describes a particular editorial process or type of product, namely 'Title Registration', 'Protocol Development', 'Protocol Amendment', 'Review Development', 'Review Amendment', or 'Review Update'. A 'Feedback' workflow is under development.
Workflow template	A specific version of a workflow (e.g., 'Protocol Development (version 1.3)').

<b>Term</b>	<b>Definition</b>
CRG-specific workflow template	A workflow template that has been customized to reflect the way a particular CRG works (e.g., ‘Protocol Development IBD (version 1.3)’).
Workflow duration	Length of time scheduled for completion of a workflow as a whole.
Workflow Roles	Link specific people with specific tasks within a workflow. Some Workflow Roles (e.g., External Referee) are ‘non-unique’ in the sense that they can be assigned to several different people for a given workflow, while others (most notably, Workflow Manager) are ‘unique’ and must be assigned to one person.
Workflow Manager	A specific Workflow Role; refers to the person at the editorial base who is responsible for managing the associated workflow.
Workflow status	Describes the status of individual workflows – either Not started, In Progress, Completed, or Aborted.
Task	An individual task within a workflow; assigned to a specific person or persons via Workflow Roles.
Tasks list	List of individual tasks displayed on the Tasks tab of the workflow Properties.
Task name	Short description of a task, as displayed in the Tasks list.
Task description	More detailed description of a task; displayed on the General tab of the task’s Properties.
Task number	For ease of reference during the pilot, every task has been assigned a task number as part of its name. Once you start a workflow, tasks may not appear in a logical numerical order in the Tasks list, but the task numbers still provide a useful reference point for both pilot CRGs and the IMS team.
Task assignee	Person to whom a task is assigned.
Task duration	Length of time scheduled for completion of an individual task.
Task status	Describes the status of individual tasks – either Completed, In Progress, Not Started, Aborted, or Passive (the latter meaning that as a result of a decision taken in a preceding task, the passive task no longer needs to be completed).
Milestone	Markers in the Tasks list indicating that a significant point in the workflow/editorial process has been reached (e.g., authors have submitted their review for editorial approval).
Ticket	Web link that allows a task assignee to notify the Workflow Manager when their task has been completed and to submit relevant documents (e.g., completed refereeing forms), all via Archie, but without logging in.
Ticketing email	Email sent from within the workflow system to a task assignee; contains a link to the ticket.

## About Stage 3 of the pilot

Stage 3 of the workflow pilot is the last stage planned before the workflow system is rolled out to all CRGs. The Appendix provides an overview of the users involved, available workflows, and new system functionality for each of the three stages.

## Currently available workflows

Six workflows can now be run on the live Archie server: Title Registration, Protocol Development, Protocol Amendment, Review Development, Review Amendment, and Review Update. Note that the stage of a review determines which workflows can be run on it; for example, the Protocol Development workflow can only be run on a Registered Title or a draft Protocol.

The default workflows available in Archie may be modified over time in response to input from users (especially during the pilot), and new versions are occasionally deployed to the server. For this reason, each workflow has an associated version number (e.g., 'Review Update (version 1.3)'). Also, as described below (*see* 'Customizing your CRG's workflow templates'), the default workflows supplied by Archie can be customized in various ways to reflect more closely the way your particular Group works; workflows that have been modified in this way will include your Group's Publisher ID as part of the workflow name (e.g., 'Review Update SYMPT (version 1.3)').

A seventh workflow (Feedback) is currently under development. In the meantime, we recommend that pilot CRGs use the Protocol Amendment or Review Amendment workflows to track the progress of drafts that have been amended and submitted for editorial approval in response to feedback (with the Feedback Editor playing the role of a CRG Advisor or External Referee, as appropriate). In the case of Full Reviews, if the authors have updated their search in response to feedback and incorporated the results into the review, we suggest you start a Review Update workflow rather than a Review Amendment workflow.

## Workflow Properties

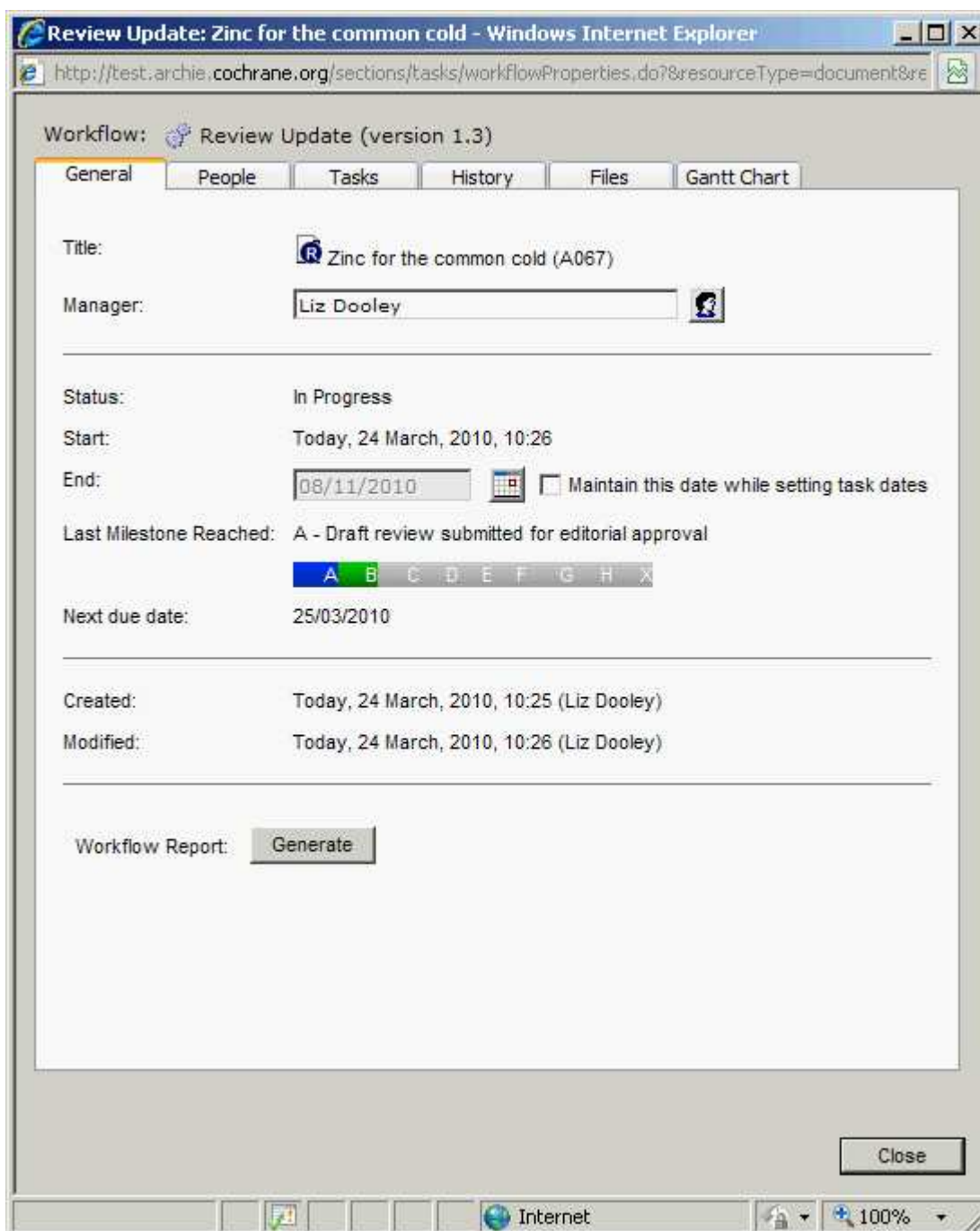
### Overview

Like other resources in Archie, every workflow has a Properties sheet, which can be opened by double-clicking the workflow name in the Workflows folder under Resources, or by right-clicking and choosing Properties. Alternatively, you can access the Properties of an existing workflow by (a) right-clicking the name of the relevant review in the Reviews folder and choosing Workflow Properties, or (b) opening the Properties of the review to the Workflows tab, clicking the desired workflow, and clicking Properties.

The Properties sheet summarizes information about the workflow under the following tabs:

- General tab (*see* Figure 1) – Includes the title (and review number, if any) of the review; the name of the Workflow Manager; the status of the workflow (either Not started, In Progress, Completed, or Aborted); the date the workflow was started and its scheduled end date; a graphical display of the last milestone reached (if any); the due date of the current or next task; and information about when and by whom the workflow was created and last modified. You can also generate a Workflow Report from this tab (*see* 'Available reports/report generators', below). Note that the name of the workflow template (e.g., 'Review Update ARI (versions 1.0)') appears at the top of the workflow Properties sheet, above the various tabs.

Figure 1. General tab of workflow Properties

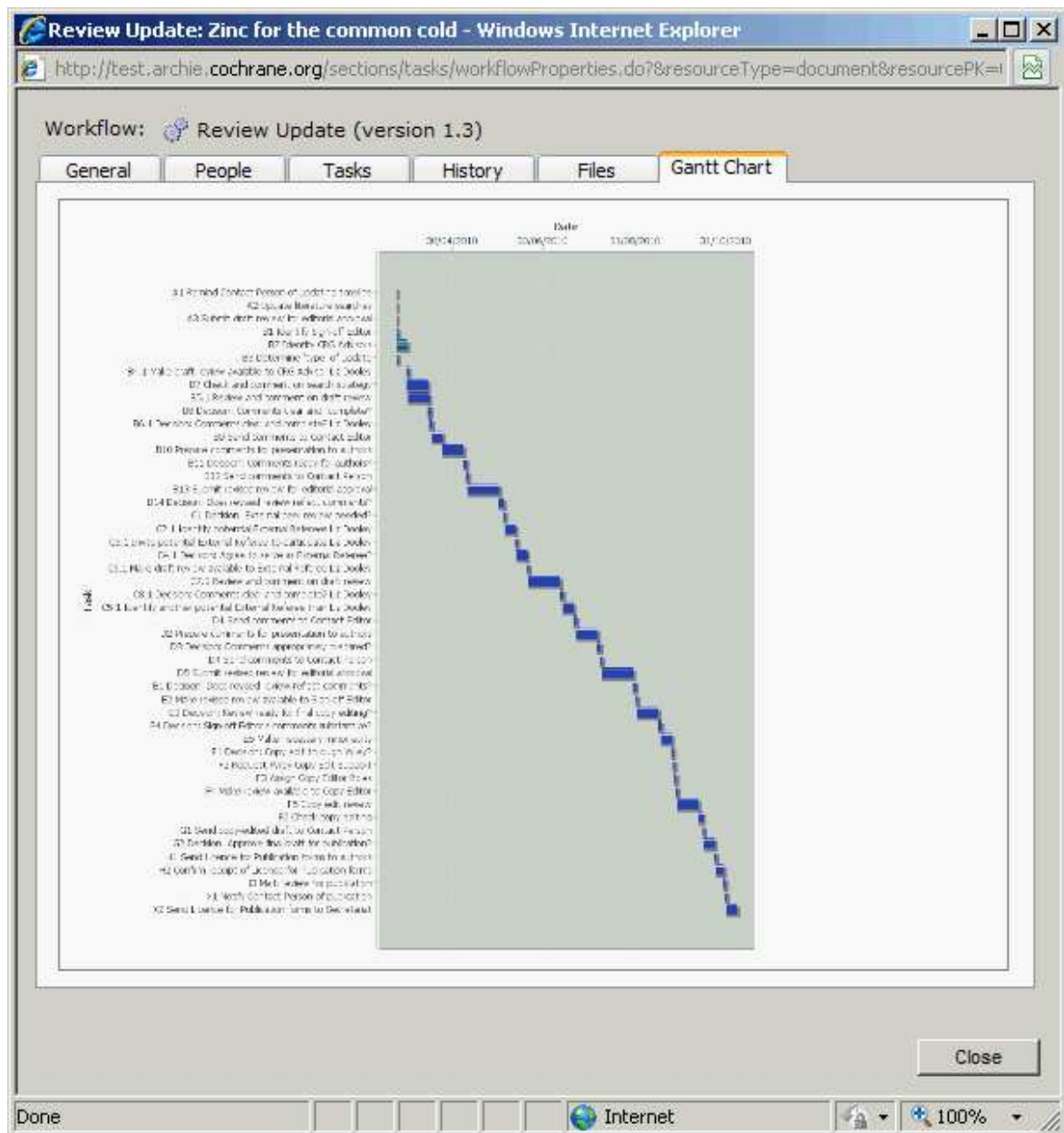


- People tab – Lists the Workflow Roles available for the selected workflow and shows the people these have been assigned to.
- Tasks tab – Lists individual tasks, grouped according to whether they are Completed, In Progress, Not Started, Aborted, or Passive. Shows progress toward several standard milestones. For details on customizing and interpreting the information displayed on this tab of the workflow Properties, see 'More on the Tasks list', below.

- History tab – Preserves a record of every action performed in relation to the workflow (listed as Events), including actions performed automatically by the system. You can add your own notes to the history of the workflow by typing text into the Notes field at the bottom of the tab and clicking Apply. This will create a new Event (‘Notes made’), and the text you entered will appear in the Details column. The information displayed on the History tab can be customized in various ways; for details, *see* ‘More on the workflow History display’, below.
- Files tab – This is where files submitted by others using the ticketing system will be saved (*see* ‘Using the “ticketing” system’, below). You can also upload and store various documents related to the review here, e.g., the final title registration form or completed peer refereeing forms. Maximum size is 5 MB.
- Gantt Chart tab (Figure 2) – Displays a Gantt chart depicting progress over time on the various tasks that make up the workflow. Blue bars indicate the time spent on completed tasks or allotted for future tasks; grey bars appear for tasks that were skipped or completed in less than one day. In Progress tasks that are not overdue are marked with a green stripe; those that are overdue feature a red stripe. Clicking anywhere on the Gantt chart display allows you to zoom in for a closer view; clicking again zooms the view back out. (Note: The availability of the zoom in/out option is related to the Internet browser being used to view Archie; contact your IMS Support person if you encounter problems with this.)



Figure 2. Gantt Chart tab (zoomed out view)



**More on the workflow History display**

When viewing the workflow History, you can select from three levels of detail (Full, Medium, and Simple) using the pull-down list at the top of the History tab. For each level of detail, you can also indicate whether you want to view task events in addition to more general workflow events by ticking the ‘Include task events’ box. ‘Task events’ describe actions taken in relation to specific numbered tasks in the workflow; for example, for the task ‘Review and comment on draft protocol’, events might include ‘Task started’, ‘Task done’, ‘Ticket sent’, and so on. Workflow events, by contrast, do not relate to specific tasks and include things such as ‘Workflow started’, ‘Milestone reached’, ‘Manager changed’, and so on.

A detailed listing of the task and workflow events displayed under the Full, Medium, and Simple views will be made available to users soon. In the meantime, and in brief:

- The **Simple** view shows only the most general workflow events ('Workflow started', 'Milestone reached', 'Notes made', 'Workflow reactivated', and 'Workflow aborted') and a few basic task events ('Decision made', 'Task reactivated', and 'Task added to workflow').
- The **Medium** view adds a significant number of workflow events (e.g., 'Manager set', 'Manager changed', 'Role assigned', 'Document role updated', 'Start date changed', 'End date changed') and a significant number of task events (e.g., 'Task started', 'Task skipped', 'Task done', 'Task assigned', 'Ticket sent').
- The **Full** view adds a few more task events ('Task made passive', 'Task [start or end] dates changed', and 'Task made passive').

The default option on the History tab is to provide the maximum amount of information (i.e., Full details, including task events). History events that you create yourself using the Notes field are displayed in all the various views.

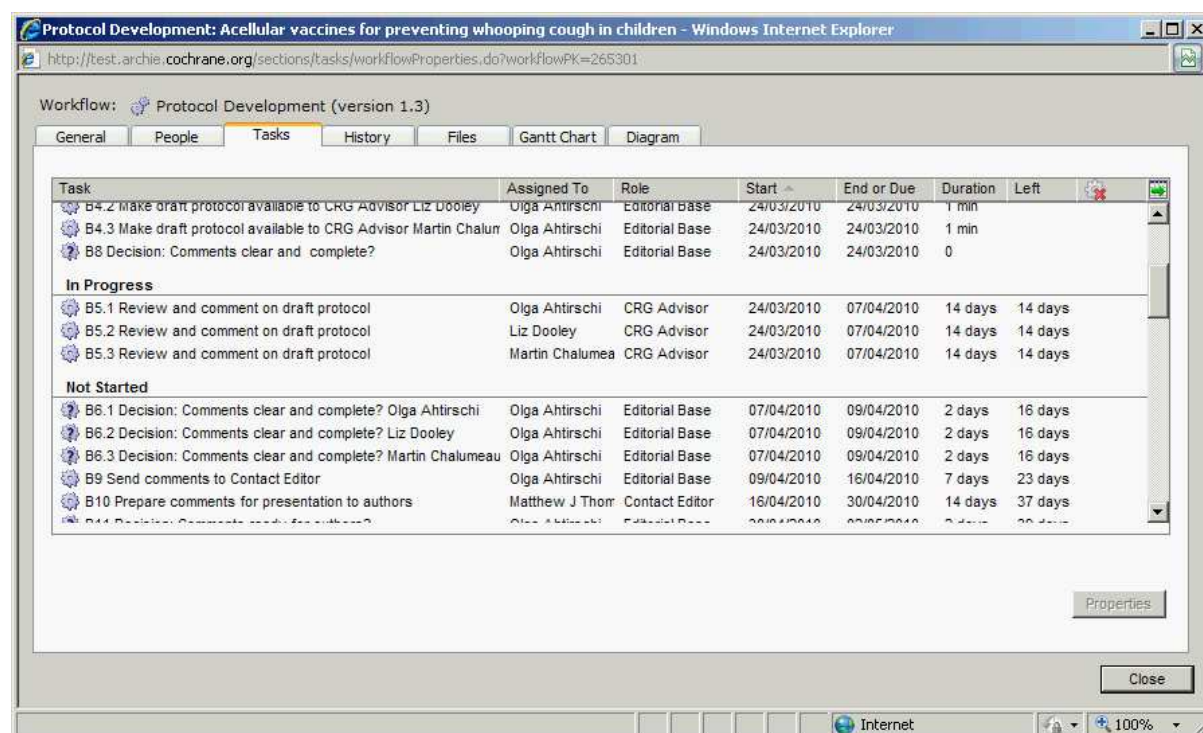
By default, History events are listed in reverse chronological order, with the most recent event at the top. You can sort on any of the available columns (Date/time, Event, User, Task, and Details) by clicking on the desired column heading. Clicking a second time will reverse the order of the sort from ascending to descending.

We encourage pilot CRGs to experiment with the various display options available on the History tab and feed back to the IMS team on their utility.

#### **More on the Tasks list**

The Tasks tab of the workflow Properties provides a list of all the individual tasks that form part of the workflow (Figure 3). Columns (moving from left to right) show task numbers and names; the person to whom the task is assigned; that person's Workflow Role; the task's start and end/due dates; the task duration; the number of days left until the task is due; and whether or not the task was skipped. The default view (as illustrated in Figure 3) orders tasks by start date and groups them together by status (Completed, In Progress, Not Started, etc.). Workflow milestones are lettered and highlighted in grey and appear in their logical order relative to groups of tasks.

**Figure 3. Tasks tab of workflow Properties**



You can change the display to sort on any of the column headings by clicking on the heading; clicking a second time will reverse the sort order.

As indicated above, task numbers are intended to serve primarily as a point of reference for individual tasks and will not always appear in numerical order in the Tasks list. Because some tasks run in parallel, and others are repeated (in a loop), the list of task numbers will sometimes appear out of order. Note also that secondary task numbers are sometimes introduced (e.g., B5.1, B5.2 and B5.3 when there are three CRG Advisors).

Note that the Tasks list – like many other elements of the Archie interface – can be exported by clicking the ‘Export to plain HTML table’ button (📄) in the upper right corner of the Tasks tab. The plain HTML table can be saved as an HTML file or copied and pasted into other applications.

## Workflow Roles

### Overview

Workflow Roles control who does what within a workflow in the sense that individual tasks are assigned to a Workflow Role rather than directly to a person. Some Workflow Roles (e.g., External Referee) can be assigned to several different people for a given workflow (these are referred to as ‘non-unique’ Workflow Roles), while others (most notably, Workflow Manager) must be assigned to one person (these are ‘unique’ Workflow Roles).

### How default Workflow Roles are assigned when a new workflow is created

When a workflow is started on a review, Archie assigns Workflow Roles, by default, to various people using a slightly complicated algorithm. To describe this briefly:

1. Workflow templates that have been customized for your CRG may pre-assign some Workflow Roles to specific people; where this is the case, these role assignments will always appear as the default options when a new workflow is created.
2. Workflow Roles that are not assigned in the workflow template will be assigned to individuals wherever possible based on:
  - The specific review's Document Roles; or
  - The Entity Role 'TSC'.
3. Workflow Roles that cannot be assigned based on any of the above are assigned, by default, to the person starting the workflow.

To describe this in slightly greater detail, as indicated below (*see* 'Customizing your CRG's workflow templates'), it is possible for you to customize the workflow templates available in Archie so that they reflect more closely the way your CRG works. Among other things, you can specify which person should always, by default, be assigned each unique Workflow Role for a given workflow (e.g., 'Jane Doe' should always be the 'Sign-off Editor' for the Review Development workflow). Where these assignments have been made in the workflow template, they will always 'win out' over other possible default options.

For Workflow Roles that are not pre-assigned in this way, some may be assigned, by default, to people with the corresponding Document Roles for the review in question. Specifically, unless different defaults have been specified in the workflow template, if the following Document Roles have been assigned at the time a workflow is started, they will automatically transfer to the new workflow: Contact Person, Contact Editor, Copy Editor, and Referee (which translates to the Workflow Role 'External Referee').

For workflows that include the Workflow Role 'TSC' (Review Development, Review Amendment, Review Update), if no one has been assigned this role in the workflow template, the system will assign it, by default, to someone with the Entity Role 'TSC'. Finally, Workflow Roles that cannot be assigned in any of these ways will be assigned by default to the person starting the workflow.

### **Editing Workflow Roles**

Note that the above describes how Archie populates the various Workflow Roles by default when a new workflow is being created. Workflow Roles can be edited both before and after the new workflow is started. This is done on the Roles tab of the workflow's Properties; *see* 'Starting a new workflow', below. Also note that the link between Document Roles and Workflow Roles described above remains active even after a workflow is started, so that if any relevant Document Roles are added or edited after the workflow is started, the new role information will automatically transfer to the workflow and replace the existing information.

### **Permissions governing the workflow system**

The permissions system that will govern the workflow system has not yet been worked out in its entirety, but the basics are as follows:

- The permission levels associated with the workflow system are as follows (remember that higher levels of permission incorporate any positive permissions associated with lower levels):

- Maximum – Permission to start, abort, and delete workflows, and edit workflow templates.
- High – Permission to modify workflows (including permission to skip, complete, reactivate, and create ‘tickets’ for individual tasks).
- Medium – Permission to view all details about workflows, including reports.
- Low – Permission to view the names of workflows (but not their details).
- Minimum – No permission to see any workflows.
- Permissions relating to workflows derive from Entity Roles. The default workflow permissions associated with various Entity Roles can be viewed (and edited by Super Users) on the Roles tab of the CRG’s Properties.
- Once the pilot is over and all CRGs are using the workflow system, the default permissions in Archie will be set so that Super Users, Managing Editors (MEs), and Assistant MEs have ‘Maximum’ permissions in relation to workflows, which means that they can start, abort, and delete workflows, and edit workflow templates. All other Entity Roles, by default, will have ‘Minimum’ permissions in relation to workflows, meaning that people with these roles cannot view or modify workflows. As stated above, Super Users can edit the workflow permissions attached to particular Entity Roles in the same way they can edit, e.g., permissions related to reviews.
- During the pilot period, default workflow permissions are set to ‘Minimum’ for all Entity Roles. **Please note that MEs of pilot Groups will need to decide on and set workflow permissions for themselves and other users in their Group when they are ready to begin piloting.** MEs of Groups with Satellites will also need to set up workflow permissions for Satellite staff, if appropriate. Please contact your IMS Support person for advice or help with this.
- Any Archie user who has been assigned a specific task within a workflow can view their In Progress tasks on the Organizer tab in Archie. From this same tab, they can open the Properties of the tasks they have been assigned and ‘complete’ them.

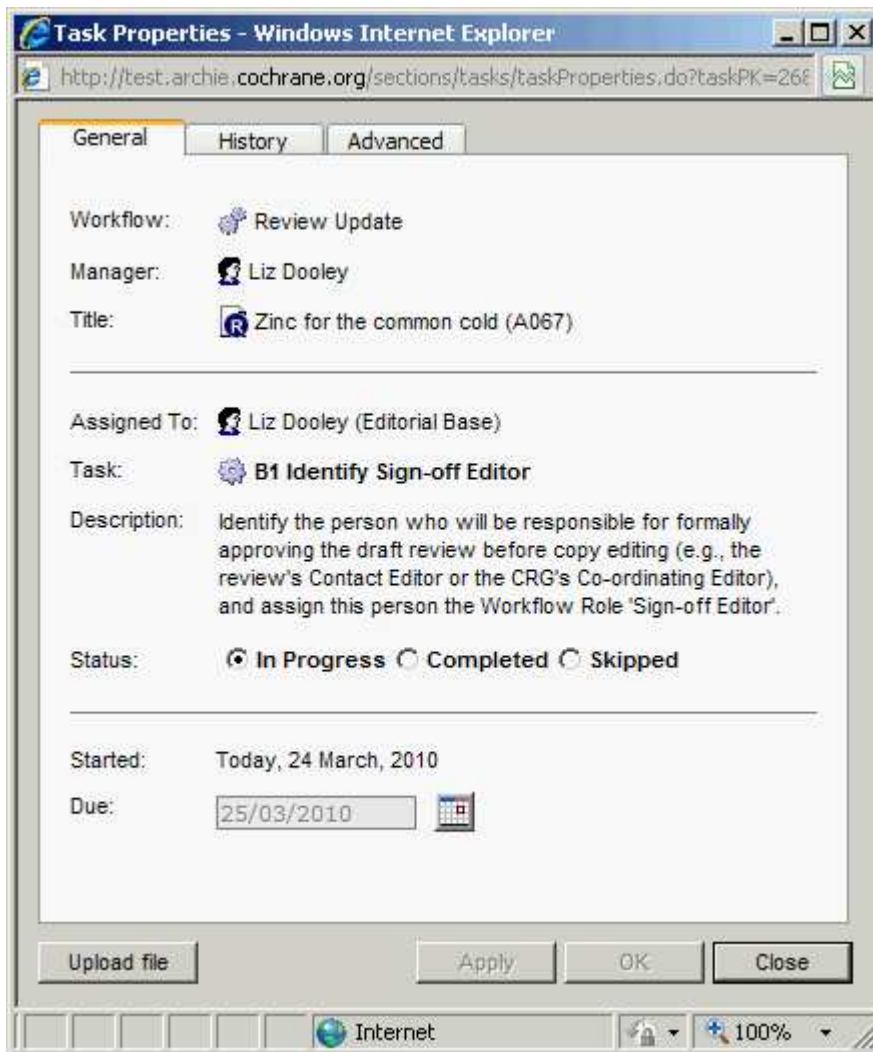
## Task Properties

Every individual task also has a Properties sheet, which can be opened by double-clicking the name of the task on the Tasks tab of the workflow Properties, or by right-clicking and choosing Properties. Alternatively, if the task is both In Progress and assigned to you, you can open the task Properties by clicking the name of the task in the list of Tasks in Progress on the Organizer screen.

Task Properties include the following tabs:

- General (Figure 4) – Displays the name of the workflow, the Workflow Manager, and the review title (with review number, if any). Gives the name of the task, along with a more detailed task description. Shows to whom the task has been assigned (the ‘task assignee’) and provides basic information about the status of the task.

Figure 4. General tab of task Properties



- History – Provides a detailed history of the individual task. As with the more general workflow history, you can select the level of detail you wish to see, sort the display on any column by clicking on the column heading, and add your own notes to the history of the specific task by typing text into the Notes field at the bottom of the tab and clicking Apply.
- Advanced – Allows CRG staff with permission to edit workflows to create a ‘ticket’ to be sent by email to the task assignee (*see* ‘Using the “ticketing” system’, below) and to set Notification preferences relating to the task (*see* ‘How to do basic things – Setting your Notification preferences related to the workflow system’, below). Also indicates whether the task assignee is or is not an Archie user.

### Overview of Workflow and Task Dates and Durations

Both workflows as a whole and the individual tasks within them have start and end dates (and thus ‘durations’) which can be changed in various ways. Some changes can be made manually by the user; others occur automatically as tasks within the workflow are completed, skipped, or become overdue. What follows is not a comprehensive treatment of this topic, but rather a basic guide for pilot CRGs.

## Workflow start and end dates

General principles are:

- When you start a new workflow, you can review and edit, if necessary, the default start and end dates for the workflow as a whole on the General tab of the workflow Properties. The default start date for a new workflow will be the current date; the default end date will be determined by using this start date and adding to it the default durations for all workflow tasks, as specified in the workflow template.
- Before the workflow is started, the start date can be changed to a date in the future, but we recommend that you NOT do this at present.
- The end date of the workflow can be changed either before the workflow is started or while it is in progress *if you do NOT tick the option to 'Maintain this date while setting task dates'*. Moving the end date earlier or later will, respectively, compress or expand the durations of all In Progress and Not Started tasks proportionately.
- *If you DO tick the 'Maintain this date while setting task dates' option*, then you will not be able to change the end date of the workflow manually. If you make changes to the duration of an individual task after selecting this option, then the durations of all remaining tasks will be compressed or expanded proportionately to maintain the selected end date.

## Task start and end dates

General principles are as follows:

- When you start a new workflow, the default durations for individual tasks are taken from the workflow template (which you can modify; see 'Customizing your CRG's workflow templates', below).
- You can manually edit the end (due) date of an individual In Progress or Not Started task on the General tab of the task Properties. The effect that this has on later tasks and the workflow end date depends on whether or not you have ticked the 'Maintain this date while setting task dates' option on the General tab of the workflow Properties.
  - If you have NOT ticked this option, then the start date of all remaining tasks will move forward or backward accordingly, but the durations of individual tasks will remain unchanged. The end date of the workflow will change accordingly.
  - If you HAVE ticked the 'Maintain this date while setting task dates' option, then when you edit the end date of an individual task, the durations of all later tasks will be compressed or expanded proportionately to maintain the selected end date.
- In the following cases, which do not involve manual editing of the due date of a task, the effect on later tasks and the workflow end date is the same whether or not the 'Maintain this date while setting task dates' option has been ticked on the General tab of the workflow Properties:
  - When a task is completed before its due date, or a task is/tasks are skipped:
    - All remaining tasks are moved forward in time, but the duration of individual remaining tasks is not affected.
    - The workflow end date is moved forward by the number of days 'saved', i.e., by the total number of days originally allotted for the completed or skipped tasks.
  - When a task is completed after its due date:
    - All remaining tasks are moved forward in time, but the duration of individual remaining tasks is not affected.

- The workflow end date is moved back by the number of days the task is overdue.
- When a completed task is reactivated:
  - All remaining tasks are moved back in time by the number of days allotted to the reactivated task, but the duration of individual remaining tasks is not affected.
  - The workflow end date is moved back by the number of days allotted to the reactivated task.

### General recommendations for pilot CRGs

A few general recommendations for pilot CRGs flow from the general principles described above:

- 1) **Deciding whether to tick the ‘Maintain this [workflow end] date while setting task dates’ option on the General tab of the workflow Properties.** For various reasons, we recommend that you do NOT tick this box except in special cases, e.g., when a priority review must be published by a specific date or Issue. In such cases, the Workflow Manager will need to monitor progress and review and adjust individual task due dates as needed, to ensure that work is proceeding at a pace that will allow the overall deadline to be met.
  
- 2) **Editing end/due dates for individual tasks.**  
 Examples of when you would edit and end/due date:
  - “1. When an author checks in a draft , I let him know the date I intend to edit it. However, I may need to extend this date if I find it clashes with readying other drafts for the publication deadline date.
  2. In my workflow template External referees are allotted three weeks to comment on a draft. They may later ask for an extension by when to return their comments and so you can edit the due date to the agreed return date.
  3. You may assign a task to your Contact editor to complete within 7 days, and then find they have taken annual leave. You need to edit the due date for the Contact editor to complete the task.”
  
- 3) **Ensuring that the next logical workflow is started after one workflow is completed.** At present, Archie does not automatically start the next logical workflow once a given workflow is finished. There are various ways to deal with this manually. As stated above, before a workflow is started, the start date can theoretically be changed to a date in the future. This would allow you, e.g., to set up a ‘Review Update’ workflow with a (future) start date that follows on from the expected date of first publication of the Full Review. We recommend that you NOT do this. Instead, we suggest that you first run the workflow that is appropriate to the review’s current stage, and then start the next logical workflow as soon as the first is completed. The first task in the new workflow will likely not need to be completed for some time, in which case the due date for that task should be edited accordingly. For example, as soon as the Review Development workflow has been completed, you should start the Review Update workflow. The first task in that workflow, assigned by default to the Editorial Base role, is ‘Remind Contact Person of updating timeline’. You could edit the due date for this task to an appropriate date (e.g., +18 months), request any desired task-specific notifications (e.g., ‘Notify the assignee if task becomes overdue’), and start the workflow. The task would then be listed among the In Progress tasks on the Organizer tab of the person to whom it has been assigned, but would appear near the bottom of the list because of its remote due date.



## How to do basic things

### Starting a new workflow

**Preliminary note:** During the pilot, you will (in some cases, at least) be starting workflows for reviews that have already progressed further than the initial tasks listed in the workflow. In such cases, you can choose either to skip a range of tasks as part of starting the workflow, or complete (and/or skip) those tasks individually after starting the workflow. The latter option has the advantage of allowing you to accurately record any decisions made in relation to already completed tasks as part of the workflow's History. It is not possible to edit the dates under History to a date before the start of the workflow to indicate when the task was actually completed, but you could record this information as part of a separate 'Notes made' event.

#### To start a new workflow:

1. **Open Properties for the new workflow.**

There are several ways to do this:


- a) Right-click the name of the relevant review in the Reviews folder under Resources and choose New > Workflow....
- b) Right-click the name of the review and choose Workflow Properties.
- c) From within the review's Properties, go to the Workflows tab and click New Workflow.

2. **Choose workflow template and review start and end dates.**

From the pull-down list at the top of the Properties window, select the correct workflow template (if there is more than one). As stated above, the default start date will be the current date; the default end date will be set automatically using this start date and adding to it the default durations for all workflow tasks as specified in the workflow template. We recommend that, in most instances, you do NOT change the start date or tick the 'Maintain this [workflow end] date while setting task dates' option; *see* 'Overview of Workflow and Task Dates and Durations', above, for details.

3. **Assign Workflow Roles.**

Some of the roles available for the selected workflow will likely already have been assigned automatically to particular people based on the workflow template, Document Roles, or Entity Roles (*see* 'How default Workflow Roles are assigned when a new workflow is created', above). You can view these assignments and select people to fill any remaining roles On the People tab of the workflow Properties. When you have finished assigning roles, click Apply.

**Note:** When you click the Select Person icon () from within the People tab, you will automatically be presented with a list of people in your CRG who have the Entity Role that the system considers most likely to be related to the selected Workflow Role (e.g., it will suggest people with the Entity Role 'Editor' for the Workflow Role 'Contact Editor'). You can select a person from this list or choose instead to search for a person by name or Primary Entity.

4. **Skip already completed tasks.**

To skip tasks that are already completed for the particular review, go to the Tasks tab, click the first task you want to become In Progress, then tick the 'Skip tasks until:' box in the bottom left corner of the Tasks tab, and click Start.

## 5. Start the workflow.

Click Start. The first task, or the task you skipped to, becomes active.

### Opening an existing workflow

There are several ways to open the Properties of an existing workflow:

- a) In the Workflows folder under Resources, double-click the name of the workflow.
- b) In the Workflows folder, right-click the name of the workflow and choose Properties.
- c) In the Reviews folder under Resources, right-click the name of the relevant review and choose Workflow Properties.
- d) Open the review's Properties, go to the Workflows tab, click the desired workflow, and click Properties.

### Customizing your CRG's workflow templates

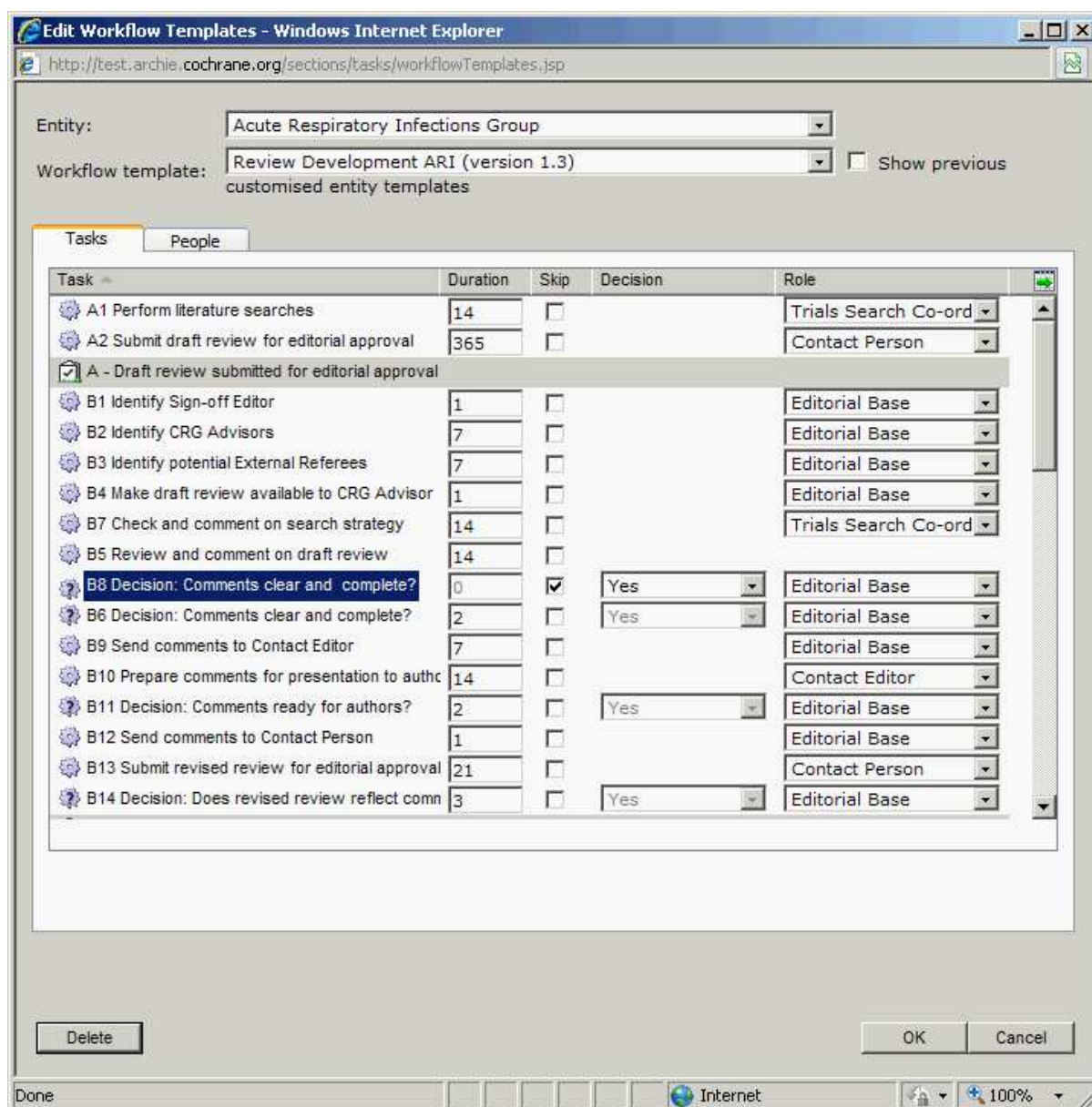
You can customize the default workflow templates provided in Archie in various ways to reflect more closely the way your Group works. In brief, you can edit Archie's default workflow templates by:


- Changing the default durations for individual tasks.
- Indicating that certain tasks should automatically be skipped every time the workflow is run.
- Assigning the Workflow Role 'Editorial Base' to up to three different people ('Editorial Base', 'Editorial Base 2', and 'Editorial Base 3'). This, in turn, allows you to take the tasks that are assigned to a single 'Editorial Base' role in the default templates, divide them up, and assign each task to one of two or three members of your editorial team.
- Choosing which Workflow Role each task should be assigned to (*not* available for tasks assigned to non-unique roles such as 'External Referee').
- Specifying a person who should always be the default choice for each Workflow Role (*not* available for non-unique roles such as 'External Referee').

#### To edit a workflow template:

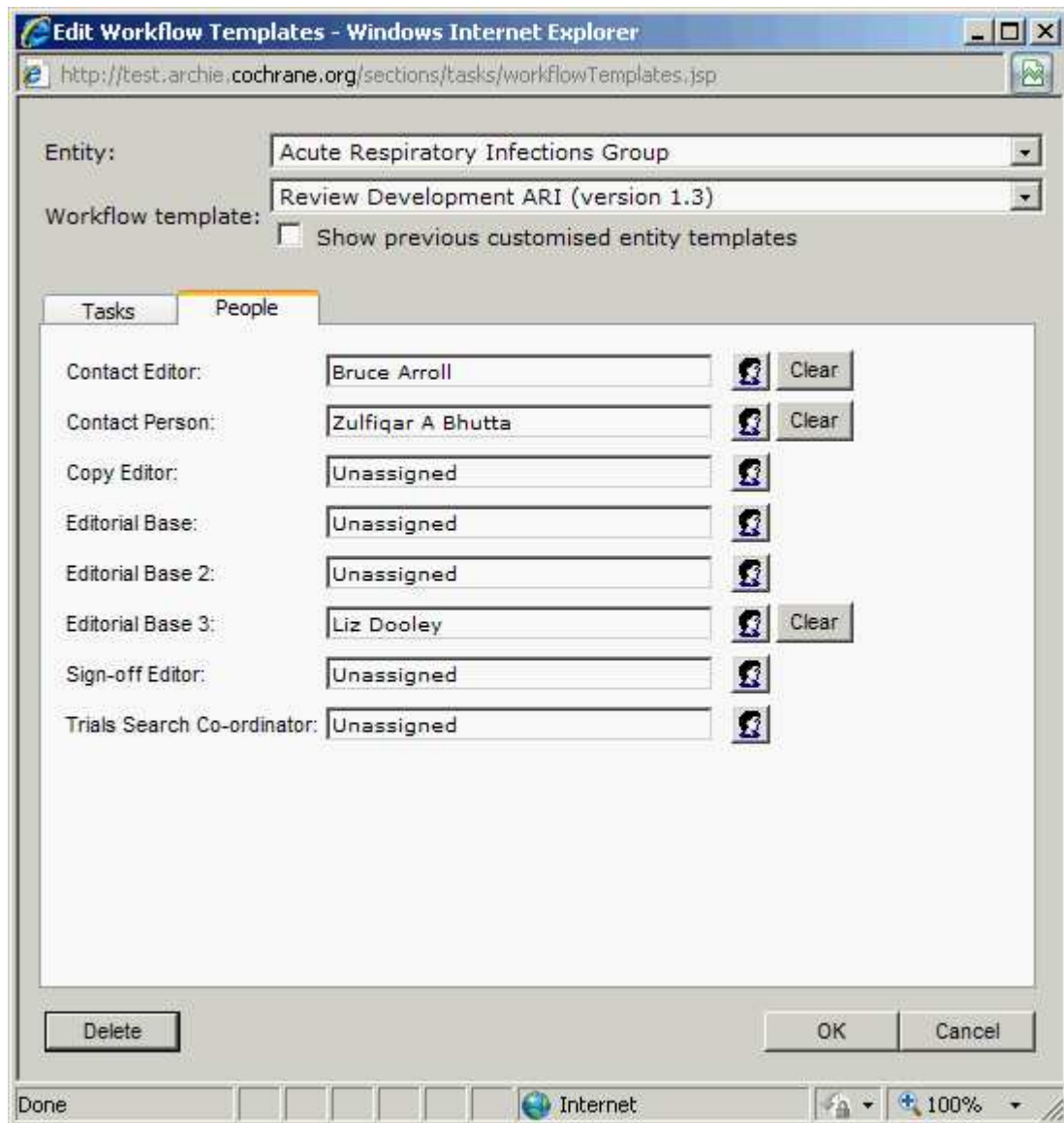
1. Go to Tools > Edit Workflow Templates....
2. Select the template you want to edit from the pull-down list at the top of the window. If you have not yet modified the template for the particular workflow, click Edit to create the initial version of your customized template (which will include your CRG identifier in the template name).
3. On the Tasks tab (*see* Figure 5), scroll down the list of tasks, edit the default task durations as desired (units are days), and mark any tasks you want to skip on a regular basis by ticking the 'Skip' box to the right of the task name. Note that when skipping a decision task, you must indicate which decision (e.g., 'Yes', 'No', or 'Unclear') should be assumed to have been made. Where desired, change the Workflow Role a task is assigned to by selecting the appropriate role from the pull-down list to the right of the task.

Figure 5. Edit Workflow Templates – Tasks tab



4. To select individuals who should always be the default choice for specific Workflow Roles, go to the People tab (*see* Figure 6) and use the Select Person icons () to match specific people to specific Roles. Remember that the people you select will appear as the default selections for the specified Workflow Roles each time the new workflow is run, and consider that it may be appropriate for you to pre-select people for some, but not all, of the available Workflow Roles (e.g., you might want to select one person in advance to act as Sign-off Editor for all reviews, but *not* specify a single person to act as Contact Editor for all reviews).
5. When you have finished your edits, click OK.

**Figure 6. Edit Workflow Templates – People tab**




Once you have edited the workflow template, the edits you have made will be reflected in every *future* application of that workflow. Note that edits to workflow templates will *not* affect workflows that are already running.

**To view earlier (now inactive) versions of customized templates:**

1. Go to Tools > Edit Workflow Templates....
2. Tick the 'Show previous customised entity templates' box to the right of the workflow template pull-down list at the top of the window.
3. Select the workflow template you want to view from the pull-down list. Note that it is not possible to edit or delete inactive templates.

**To export the information displayed on the Tasks tab of the Edit Workflow Templates window to a plain HTML table:**

1. Go to Tools > Edit Workflow Templates....
2. Select the template you want to view from the workflow template pull-down list at the top of the window. (Note that the HTML export option is available for both active and earlier, now inactive, workflow templates.)
3. Click the 'Export to plain HTML table' button () in the upper right corner of the Tasks tab.
4. The plain HTML table may be saved as an HTML file or copied and pasted into other applications, as desired.

**Note:** As indicated above, new versions of the default workflow templates may be deployed to Archie during the pilot – e.g., Review Development (version 1.3) has replaced Review Development (version 1.2). When this happens, you will need to reproduce any edits you made to the old template in the new template, thereby producing an updated version of your CRG-specific template. In this situation, it will be especially useful to be able to view and/or generate an HTML version of your edits to the previous default template so these edits can easily be made again if need be.

#### **To delete an active CRG-specific workflow template:**

1. Go to Tools > Edit Workflow Templates....
2. Select the template you want to delete from the workflow template pull-down list at the top of the window.
3. Click Delete.

#### **Completing or skipping an individual In Progress task**

The quickest way to complete or skip an individual task from within the workflow Properties is by right-clicking the name of the task on the Tasks tab and choosing Complete or Skip. If the task involves a decision, the right-click menu will include both Decision and Skip options; selecting either will bring up a submenu allowing you to choose from among the available decision options.

Individual tasks may also be completed or skipped from within the task Properties as follows:

1. **Open the task Properties** (*see* 'Task Properties', above).
2. **Complete or skip the task.**
  - a. For a task that does not involve a decision, click Completed or Skipped, and then click OK. Proceed with the next task.
  - b. If the task does involve a decision, first click the relevant decision option (Yes, No, Unclear, etc.), and then click Completed or Skipped. Click OK to 'do' the task. Proceed with the next task.

#### **Skipping multiple tasks once a workflow has been started**

As indicated above (*see* 'Starting a new workflow'), it is possible to skip multiple tasks that have already been completed before starting a new workflow. It is also possible to do this *after* a workflow has been started. To do this, right-click the name of the task you want to skip to on the Tasks tab of the workflow Properties and choose Skip To.

#### **Reactivating completed tasks**

The reactivation function is roughly equivalent to the 'Undo' function in a word processing program. Completed tasks can be reactivated if, for example, you realize that you incorrectly marked a task as completed or that you were working in the wrong workflow.

**To reactivate a completed task, *either*:**

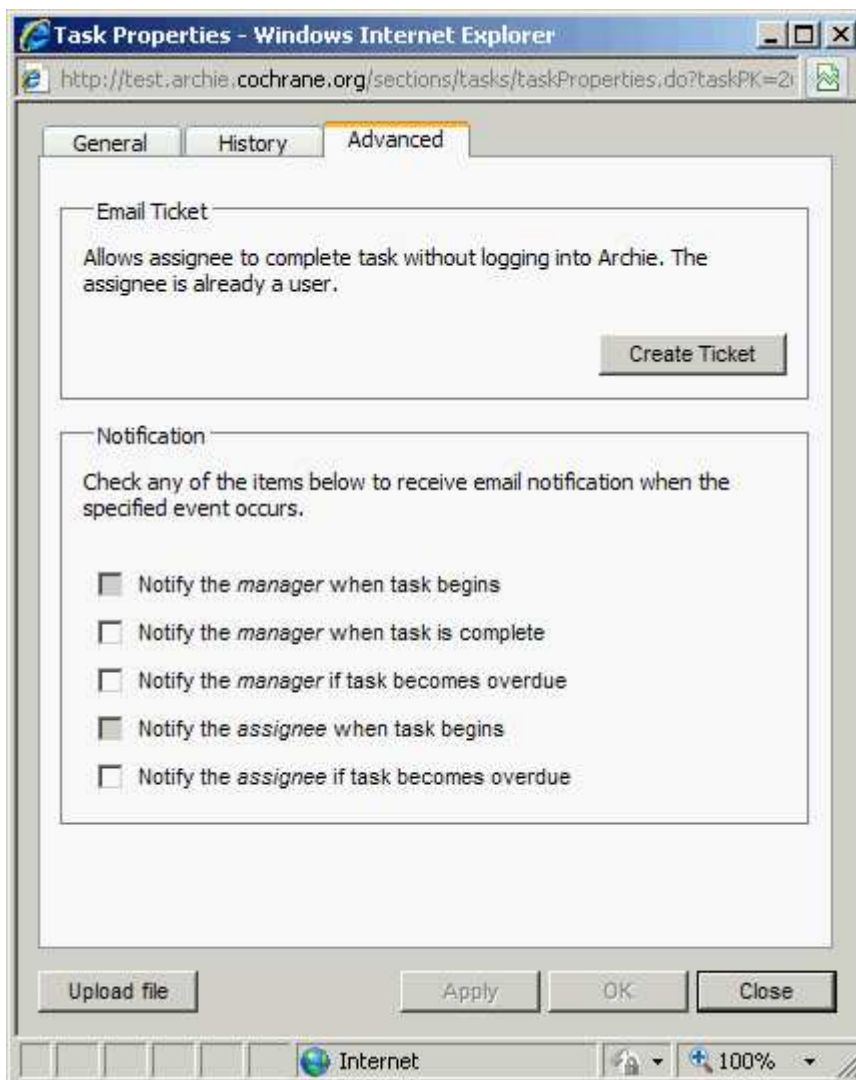
1. Right-click the name of the task on the Tasks tab of the workflow Properties and choose Reactivate; *or*
2. Open the task's Properties to the General tab and click Reactivate.

The task will revert to being In Progress, and the status of other tasks will be adjusted accordingly.

**Requesting task-specific email Notifications**

You can choose from a variety of automatic email notifications in relation to specific tasks from the Advanced tab of the task's Properties (Figure 7). The options available will depend on the status of the task – e.g., the boxes for 'Notify the *manager/assignee* when task begins' will be greyed out for tasks that are already In Progress (as in Figure 7). To request email notifications, simply tick the desired boxes and click Apply.

**Figure 7. Task-specific notifications**



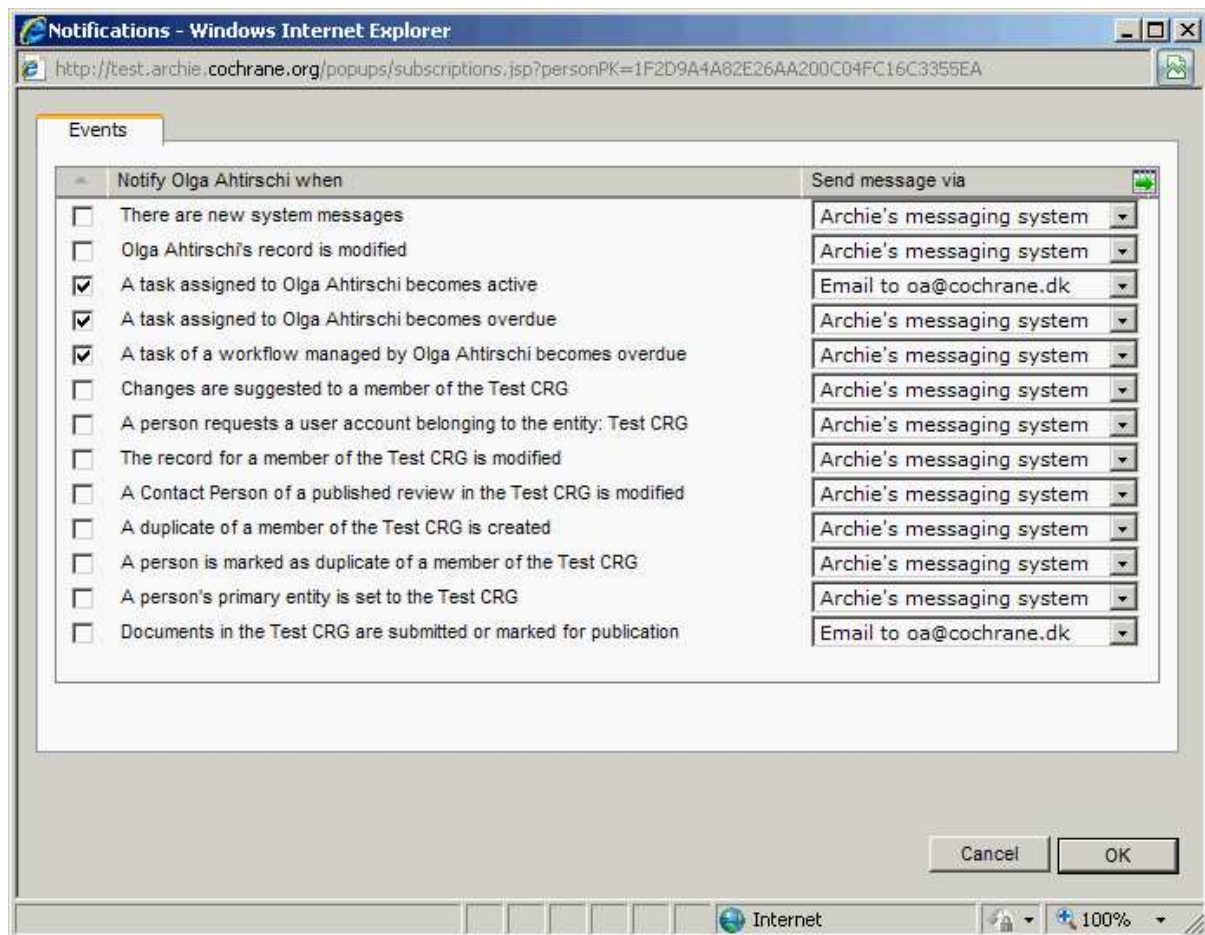
### Setting more general Notification preferences

You can also choose to receive more general Notifications about workflow tasks by editing your general Notifications settings (from within your personal Properties, go to the Settings tab and click Edit Notifications...). From here (see Figure 8), you can choose to be notified:

- When a task assigned to you becomes active;
- When a task assigned to you becomes overdue; and/or
- When *any* task in a workflow managed by you becomes overdue.

In each case, you can specify whether you would like to receive the selected messages via Archie's messaging system or by email. Messages and emails generated in this way contain a link to the Properties of the relevant task.

Figure 8. General Notification options relating to workflow tasks\*



\* Only workflow task-related options are selected in Figure 8 for emphasis. Super Users would normally opt to receive most or all of the available options.

**Tip:** Remember that Super Users can edit Notification preferences for other users who have their CRG as their Primary Entity. Thus, e.g., you might wish to arrange for an Editor in your Group or your Co-ordinating Editor to receive notifications (either within Archie's messaging system or via their usual email address) whenever a task assigned to them becomes active or overdue. However, in

cases where you need to send and receive documents relating to the task, you may prefer to use the ticketing system instead (*see* ‘Using the “ticketing” system’, below).

**Warning:** The two notification systems described above – namely, (1) task-specific email notifications that are selected on the Advanced tab of the task’s Properties; and (2) more general notifications about workflow tasks that you can elect to receive by editing the Notifications settings in your personal Properties – overlap to some extent, but operate independently of each other. This means, e.g., that if you choose within your general Notifications to be alerted when any task in a workflow managed by you becomes overdue, the system does *not* automatically tick the ‘Notify the manager if task becomes overdue’ box on the task-specific notifications for all tasks in all the workflows you manage. Conversely, it also means that if you choose on your general Notifications to be alerted when any task in a workflow managed by you becomes overdue, and you *also* tick the ‘Notify the manager if task becomes overdue’ box for a specific task, you will receive two notifications if the task becomes overdue – one through the general Notifications system, and the other by email through the task-specific notification system.

### **Deleting a workflow**

During piloting, you may wish to delete workflows. To do this, find the workflow by searching or by scrolling through the Workflows folder under Resources, right-click the workflow and choose Delete. Note that this will result in the workflow being irrecoverably deleted from Archie.

### **Aborting a workflow**

If you wish to make a workflow inactive, but want to preserve a record of it (e.g., to preserve a record of why it was abandoned), you can abort the workflow. To do this, find the workflow, right-click, and choose Abort.

You can reactivate an aborted workflow by finding the workflow, right-clicking, and choosing Reactivate. This will change the workflow’s status back to In Progress.

## **Using the ‘ticketing’ system**

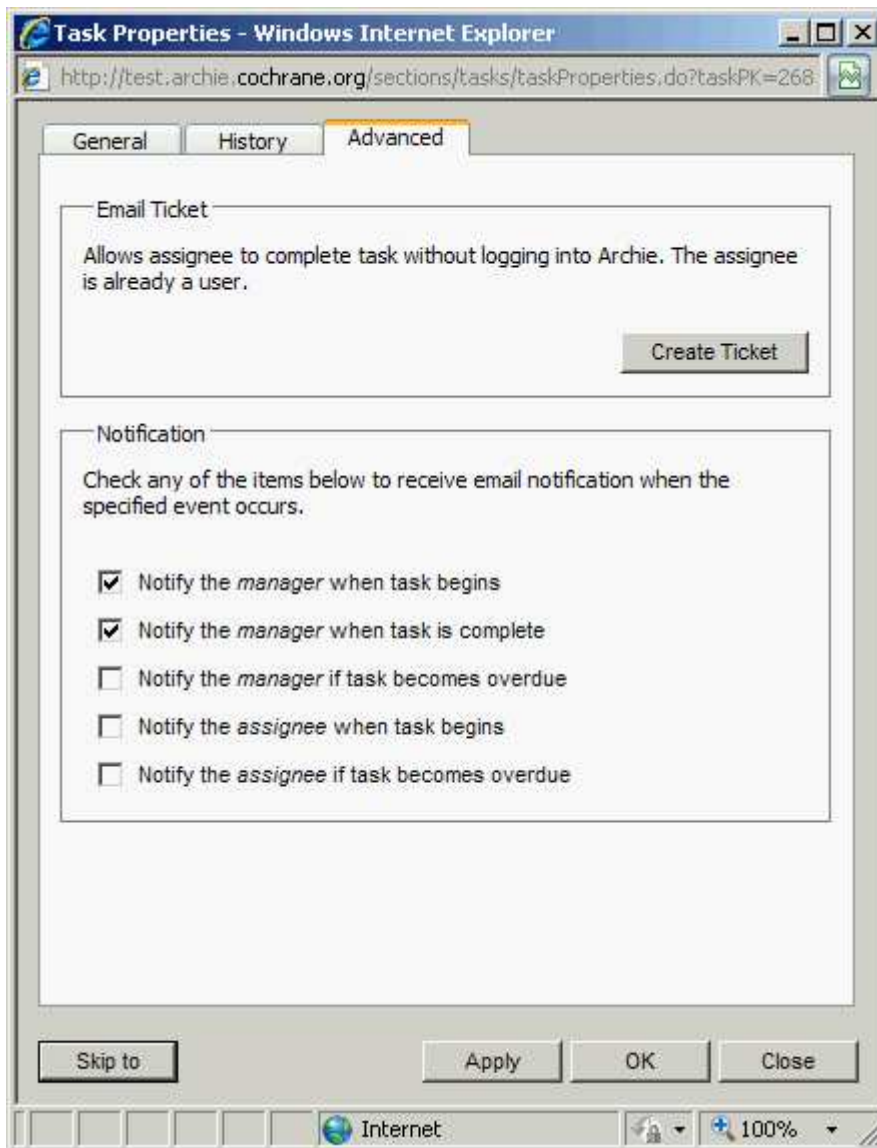
### **Overview**

The workflow system in Archie includes a special messaging system (called a ‘ticketing’ system) that can be used to inform people who are involved in the editorial processing of a review when it is time for them to perform a particular task in relation to a review; at the same time, you can provide them with all the documents they need to complete their task. The basic process is as follows:

1. The Workflow Manager, or any other staff person with ‘Maximum’ or ‘High’ permissions for workflows, can create a ‘ticket’ for a specific task from within the task Properties (Advanced tab; Figure 9). If you want the Workflow Manager to be notified by email when the task is completed, or if you want the Workflow Manager or task assignee to be notified when the task becomes overdue, tick and Apply the appropriate Notification option(s). Click Create Ticket to proceed (*see* Figure 9).



**Figure 9. Create Ticket button on Advanced tab of task Properties**



**Note:** It is also possible to create a ticket from the Tasks tab of the workflow Properties by right-clicking an In Progress task and choosing Send Ticket. This opens the Create Ticket window (with Message and Attachments tabs) but does not allow you to choose from among the task-specific notification options available on the Advanced tab of the task Properties.

2. The Create Ticket window that will then open has two tabs: Message and Attachments. The Message tab (Figure 10) provides a preview of the ticketing email that will be sent to the task assignee and allows you to edit both the subject line and the text of the email. You can also elect to receive a copy of the email, if desired, or send a copy to one or more people with records in Archie by ticking the box next to 'CC:' and using Select Person (👤) to identify copy recipients.

**Figure 10. Message tab of the Create Ticket window**



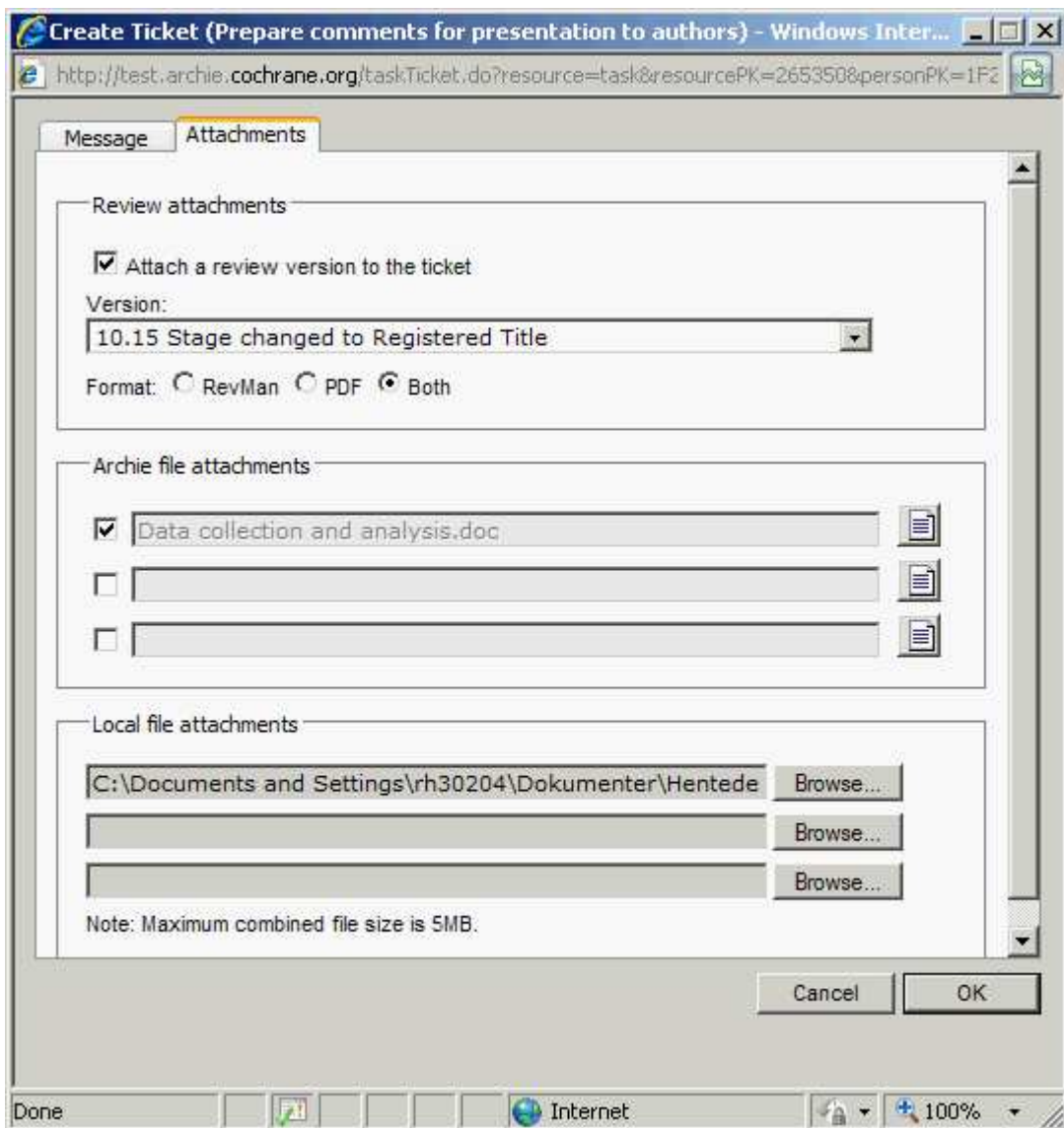
**Notes, warnings, and tips:**

- The email address used for the task assignee/ticket recipient and anyone copied on the message will be their primary email address in Archie.
- There is no limit to the number of people who can be copied ('CC:ed') on ticketing emails. Note, however, that anyone who receives a copy of the ticketing email will (along with the task assignee) have access to the ticket and be able to complete the task.
- Although any staff person with 'Maximum' or 'High' permissions for workflows can create a ticket for a specific task, the ticketing email will always appear to be from the Workflow Manager (it will also include a note indicating that it was 'Sent by: Archie - The Cochrane Collaboration <no-reply@cochrane.dk>'; see Figure 12).
- Edits to the subject line and text of ticketing emails must be made on a case-by-case basis, so if there is standard text, e.g., that you wish to include in all ticketing emails for a given

task, we advise you to save a copy of this text on your computer for easy copying and pasting.

3. On the Attachments tab of the Create Ticket window (Figure 11), you can select documents to attach to the ticketing email. These may include a version of the review (in RevMan and/or PDF formats), documents stored in your CRG's Files folder in Archie, and/or documents stored on your local computer. The maximum permitted combined file size of the documents to be attached is 5 MB.

**Figure 11. Attachments tab of the Create Ticket window**



**Notes and tips:**




- RevMan files attached to a ticketing email should normally be for viewing purposes only. People who need to edit the RevMan file directly to complete their task should not be sent the RevMan file by email; instead, they should be encouraged in the ticketing email to

check the review out to RevMan from Archie, edit, and check the file back into Archie in the usual way.

- Where this would be helpful, consider generating, saving, and attaching a ‘Compare’ document comparing two versions of the review.
4. When you have finished reviewing the email message and selecting documents for attachment, click OK. The system then sends the ticketing email to the task assignee/ticket recipient and anyone selected to receive a copy (*see* Figure 12 for a sample email). The email includes the subject line and text as previewed and edited by you, as well as any documents you selected for attachment. Finally, the email includes a link to the actual ‘ticket’ which allows the recipient to notify you (via Archie) when they have completed their task, and a link to a one-page document providing a brief explanation of the ticketing system from the point of view of the email recipient.

Figure 12. Sample ticketing email

**New task for Cochrane review: (A001) Acellular vaccines for preventing whooping cough in children** Inbox | X

☆ **Karen Hovhannisyan** to me show details 3:38 PM (6 minutes ago)   Reply 

Dear Olga Ahtirschi,

You are receiving this email because of your role as Contact Editor for the Cochrane review Acellular vaccines for preventing whooping cough in children.

We ask that you please: Evaluate the CRG Advisors' comments and prepare them for presentation to the authors in accordance with CRG policy. Confer with the Co-ordinating Editor or others as needed to resolve any significant disagreements among CRG Advisors.

We would be very grateful if you could complete this task by 7 Apr, 2010. We therefore suggest that you save this email and, when you have completed your task, click on the link below to open a web page (a 'ticket'), which will allow you to let me know that you have completed your task.

You will be able to attach notes and documents before you confirm that you have completed your task.

<http://test.archie.cochrane.org/public/formTicket.jsp?key=64920278542488039519100324153731>





If you are unfamiliar with the Cochrane Collaboration's 'ticketing' system, please click the following link for details:  
<http://test.archie.cochrane.org/public/ticket-explanation.html>

If you have any other questions, please let me know.

Best wishes,  
Karen Hovhannisyan  
Cochrane Acute Respiratory Infections Group

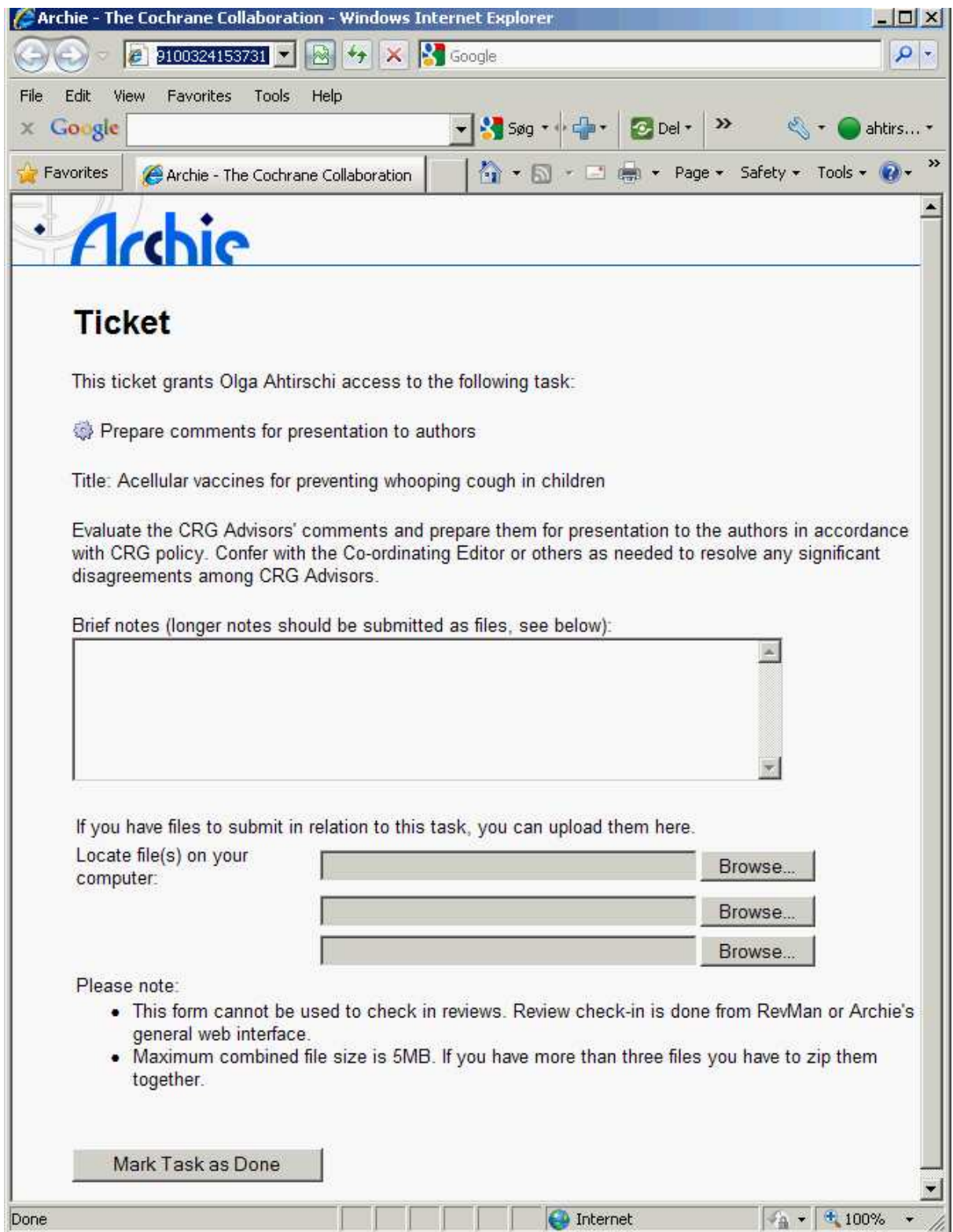
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**4 attachments** — [Download all attachments](#)

-  **Acellular vaccines for preventing whooping cough in children.rm5**  
670K [Download](#)
-  **Acellular vaccines for preventing whooping cough in children.pdf**  
1302K [View](#) [Download](#)
-  **Data collection and analysis.doc**  
71K [View as HTML](#) [Open as a Google document](#) [Download](#)
-  **document.pdf**  
77K [View](#) [Download](#)

5. After receiving the email, the task assignee/ticket recipient completes their task 'offline' in the usual way. They then return to the original email they received (Figure 12) and click the link to open the ticket itself (Figure 13). If the task involves submitting comments or feedback, files containing these can be attached to the ticket for transmission back to you (again, through Archie). Alternatively, if the recipient's comments are brief, they may be typed directly into the 'Brief notes' box included in the ticket. Comments submitted in the latter way are saved as a 'Notes made' Event in the task's History. They can also be displayed and read using the Workflow Report (*see* 'Workflow Report', below).

Figure 13. Sample ticket



6. When the ticket recipient clicks Mark Task as Done at the bottom of the ticket:
  - the task is automatically marked as Completed in the workflow in Archie;
  - the Workflow Manager is informed that the task has been completed (if this task-specific Notification was requested);

- any files submitted are saved to the Files tab of the workflow Properties;
- any ‘Brief notes’ sent by the recipient are added to the task’s History; and
- the assignee of the next task in the workflow will be able to see their new task in the list of Tasks In Progress on the Organiser tab when they next log in to Archie.

### Creating a ticket

Basic instructions on creating a ticket are relatively straightforward and follow on fairly naturally from the above ‘Overview’.

#### To create a ticket for a task:

1. Open the Properties for the task (double-click the task name on the Tasks tab of the workflow Properties, or right-click the name and then click Properties).
2. Within the task Properties, go to the Advanced tab.
3. Select and Apply any desired task-specific notifications, and then click Create Ticket. On the Message tab, preview and edit the subject line and text of the ticketing email as needed. Confirm that the addressee listed at the top of the window is the intended recipient, and add ‘cc’ addressees, if you wish. On the Attachments tab, find and select any documents (review versions, files in Archie, and/or files on your local computer) that you want to include as attachments to the email message.
4. Confirm that all the entered information is correct, and click OK.

**Reminder:** It is also possible to create a ticket from the Tasks tab of the workflow Properties by right-clicking an In Progress task and choosing Send Ticket. This opens the Create Ticket window (with Message and Attachments tabs) but does not allow you to choose from among the task-specific notification options available on the Advanced tab of the task Properties.

### Notes and special topics

A few topics require further mention or comment:

- Stage 3 of the pilot is intended to involve all staff at CRG editorial bases (including Coordinating Editors), Editors, Copy Editors, Contact Persons on reviews, External Referees, and (eventually) Feedback Editors (*see* Appendix). Workflow Managers are free to decide whether or not to use the ticketing system to communicate with any or all of these people, depending on their own preferences, their Group’s particular situation, and how the individuals involved normally work (e.g., whether they log into Archie every day or not).

Here are a few things to keep in mind as you consider your options:

- **People in your CRG who log into Archie on a daily basis** (e.g., staff at the editorial base) will be able to view a list of In Progress tasks assigned to them on the Organizer tab; thus, it may not be necessary to communicate with them via the ticketing system. Remember, however, that using the ticketing system allows you to exchange documents related to the task, which may be useful in some cases. Also, even people who log into Archie on a daily basis may not be in the habit of checking their Organizer tab every day (e.g., their user preferences may be set to open to the Resources tab); you may want to encourage regular Archie users in your Group to start doing this when you begin the pilot.
- The ticketing system can also be used to communicate with **people who use Archie/RevMan for their editorial tasks, but who do not log into Archie on a**

**daily basis** (e.g., Contact Editors, Copy Editors, or Contact Persons). In such cases, when the task involves editing the RevMan file directly, we recommend that you do *not* attach the RevMan file to the ticketing email; instead, remind the task assignee (in the ticketing email) that they should check the review out from Archie to RevMan, edit it, and check it back into Archie in the usual way. Similarly, when the task involves logging into Archie to view documents or compare versions, we recommend that you edit the ticketing email to remind the task assignee that they need to log into Archie and complete their task in the usual way. In all such cases, the recipient might find it helpful if you also include the URL for Archie (<http://archie.cochrane.org/>) in the text of the ticketing email. This email also allows you to send and receive non-review documents (e.g., a form for providing editorial comments).

- For **people who prefer to work completely ‘offline’ (that is, without ever opening RevMan or logging into Archie)** the ticketing system can be used to provide them with everything they need to complete their editorial task: non-RevMan versions of the review, ‘Compare’ documents generated from within Archie, editorial checklists, and so on.
- Remember that you can attach a maximum of three (non-review) Archie files and three local files to the ticketing email; if you need to send more documents, you will need to zip some of these before attaching. Again, maximum combined file size of the documents is 5 MB.
- Similarly, ticket recipients can attach a maximum three documents to their ticket. If they need to send more files, they will need to zip these before sending.
- Files that have been submitted by ticket recipients are saved under the Files tab in the workflow’s Properties. These files can also be viewed on the Workflows tab of the review’s Properties.
- Brief notes typed directly into the ticket are saved as an Event in the task’s History and can also be viewed using the Workflow Report.
- Tickets expire (can no longer be used) only when the relevant task has been completed. Note that this may be after the task due date.
- Tickets can be resent (e.g., if the recipient inadvertently deletes the ticketing email) or deleted (e.g., if the task has been completed outside the ticketing system since the ticket was sent, or you have decided to assign the task to someone else) by clicking Resend/Delete Ticket on the Advanced tab of the task Properties. Deleting a ticket makes it inaccessible to the original recipient – when the recipient clicks on the link to the ticket in the ticketing email, the ticket opens, but says only ‘Invalid Ticket: Ticket was not found’.

## **Using the workflow system to monitor progress and prioritize work in your CRG**

### **Special request for feedback from pilot CRGs**

The IMS team have developed an initial set of reports and search options that we hope will help MEs and their staff monitor overall progress and prioritize and organize work in their CRGs. We would especially welcome your feedback on the currently available options, and on alternatives or additions that would be helpful to you in your day-to-day work.



## Workflows folder under Resources

You can see a list of all workflows in your Group in the Workflows folder under Resources. The default view groups workflows by status (Not Started, In Progress, etc.) and does not include subfolders (Figure 14). Red text and special icons highlight workflows with overdue tasks.

Figure 14. Workflows folder – default view

Resources	Title	Rev No	Workflow	Manager	Start	Last Milestone	Reach	Next due date	End or Due
<b>Not Started</b>									
	Antibiotic prophylaxis to reduce respirator	A016	Review Development	Olga Ahtirshi	22/03/2010 11:48	AB C D E F G H X			12/11/2011
	Antibiotics for sore throat	A017	Review Development	Olga Ahtirshi	22/03/2010 11:23	AB C D E F G H X			12/11/2011
	Decongestants and antihistamines for acu	A031	Review Update ARI	Liz Dooley	04/01/2010 23:41	AB C D E F G H X			27/10/2010
	Decongestants, antihistamines and nasal	A157	Review Development AR	Liz Dooley	12/05/2009 01:45	AB C D E F G H X			16/11/2010
	Remediating buildings damaged by dampn	A151	Review Development AR	Liz Dooley	12/05/2009 01:32	AB C D E F G H X			16/11/2010
	Short course versus long course intraven	A156	Review Development AR	Liz Dooley	12/08/2009 01:23	AB C D E F G H X			16/02/2011
<b>In Progress</b>									
	Acellular vaccines for preventing whoopia	A001	Protocol Development	Olga Ahtirshi	18/03/2010 14:57	AB C D E F G H X	23/03/2010		18/08/2010
	Acetaminophen (panadol) for the common	A145	Protocol Development	Liz Dooley	03/02/2009 22:40		19/03/2010		14/11/2010
	Acetylcysteine and carbocysteine for acu	A002	Review Amendment ARI	Olga Ahtirshi	25/02/2010 13:11	AB C D E F G H X		02/06/2010	21/11/2010
	Acupuncture for mumps in children	A147	Protocol Development	Liz Dooley	14/03/2009 06:23		09/02/2010		13/07/2010
	Acyclovir for infectious mononucleosis (g	A165	Protocol Development AF	Liz Dooley	27/03/2009 04:29	AB C D E F G H X	20/01/2010		24/04/2010
	Acyclovir for treating varicella in otherwis	A003	Review Update ARI	Olga Ahtirshi	25/02/2010 13:28	AB C D E F G H X	11/03/2010		15/12/2010
	Alcohol-based hand-washing for prevent		Title Registration ARI	Olga Ahtirshi	02/03/2010 22:44	AB C D E F G H X	24/03/2010		24/03/2010
	Amantadine and rimantadine for influenza	A006	Review Update	Liz Dooley	24/03/2010 10:24	AB C D E F G H X	25/03/2010		08/11/2010
	Amino acid, fat emulsion and energy supp	A132	Review Development	Liz Dooley	03/12/2008 06:17		05/12/2008		10/01/2009
	Antibiotic prophylaxis for preventing meni	A101	Review Update ARI	Liz Dooley	27/10/2009 07:20	AB C D E F G H X	18/11/2009		19/04/2010
	Antibiotics for acute laryngitis in adults	A008	Review Update	Olga Ahtirshi	22/03/2010 00:34	AB C D E F G H X	14/04/2010		11/08/2010
	Antibiotics for acute maxillary sinusitis	A009	Review Update ARI	Liz Dooley	26/11/2009 00:33	AB C D E F G H X	24/02/2010		02/09/2010
	Antibiotics for clinically diagnosed acute r	A111	Review Development	Liz Dooley	03/12/2008 05:24		05/12/2008		10/01/2009
	Antibiotics for community acquired lower	A071	Review Development	Olga Ahtirshi	18/03/2010 10:52	AB C D E F G H X	01/04/2010		18/10/2010
	Antibiotics for community acquired pneum	A012	Review Update ARI	Olga Ahtirshi	16/03/2010 12:14	AB C D E F G H X	17/03/2010		22/05/2010
	Antibiotics for community acquired pneum	A069	Review Update ARI	Liz Dooley	27/10/2009 06:45	AB C D E F G H X	20/01/2010		20/02/2010
	Antibiotics for exacerbations of chronic o	A089	Review Update ARI	Liz Dooley	16/12/2009 00:25	AB C D E F G H X	17/12/2009		25/06/2010
	Antibiotics for persistent nasal discharge	A014	Review Update ARI	Liz Dooley	03/01/2010 21:10	AB C D E F G H X	17/01/2010		24/10/2010
	Antibiotics for Staphylococcus aureus pn	A113	Review Development	Liz Dooley	03/12/2008 05:25		05/12/2008		15/07/2009
	Antibiotics for the common cold and acute	A018	Review Update	Olga Ahtirshi	24/03/2010 10:17	AB C D E F G H X	25/03/2010		21/02/2011
	Antibiotics for the prevention of acute anc	A074	Review Development	Olga Ahtirshi	17/03/2010 12:00	AB C D E F G H X	18/03/2010		13/08/2010
	Antibiotics for undifferentiated acute resp	A152	Review Development AR	Liz Dooley	28/07/2009 00:37	AB C D E F G H X	31/08/2009		20/02/2010
	Antibiotics for ventilator-associated pneu	A076	Protocol Development AF	Liz Dooley	22/04/2009 00:46	AB C D E F G H X	21/01/2010		06/04/2010

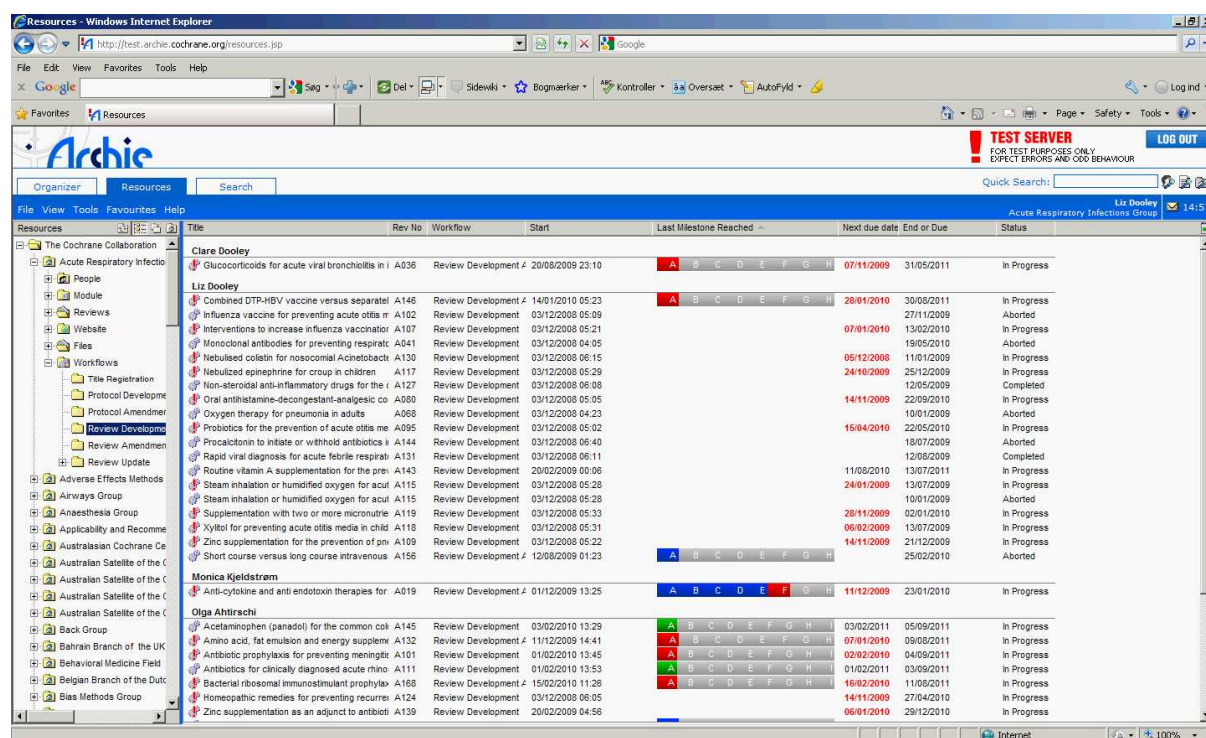
You can customize the Workflows folder view in multiple ways by editing your user Preferences (Tools > Preferences: Workflow tab). Figure 15, for example, shows the Workflows folder view still with no subfolders, but with workflows grouped by type of workflow (Title Registration, Protocol Development, etc.)


Figure 15. Workflows folder – grouped by workflow

Resources	Title	Rev No	Manager	Start	Last Milestone Reached	Next due date	End or Due	Status
<b>Protocol Amendment</b>								
	Corticosteroids for sore throat	A160	Olga Ahtirski	19/03/2010 13:28	A B C D E F G H X	05/04/2010	29/10/2010	In Progress
	Oral topical decontamination for preventing v	A155	Olga Ahtirski	19/03/2010 14:21	A B C D E F G H X	20/03/2010	23/08/2010	In Progress
	Nebulised colistin for nosocomial Acinetobact	A130	Olga Ahtirski	21/03/2010 23:51	A B C D E F G H X		22/03/2010	Completed
<b>Protocol Development</b>								
	Acellular vaccines for preventing whooping c	A001	Olga Ahtirski	18/03/2010 14:57	A B C D E F G H X	23/03/2010	18/08/2010	In Progress
	Acetaminophen (panadol) for the common co	A145	Liz Dooley	03/02/2009 22:40		19/03/2010	14/11/2010	In Progress
	Acupuncture for mumps in children	A147	Liz Dooley	14/03/2009 06:23		09/02/2010	13/07/2010	In Progress
	Anti-cytokine and anti-endotoxin therapies fo	A019	Liz Dooley	18/11/2009 04:50	A B C D E F G H	27/01/2010	21/06/2010	In Progress
	Beta-2 agonists for pneumonia in adults	A164	Liz Dooley	25/02/2009 01:07		29/01/2010	19/05/2010	In Progress
	Combined DTP-HBV vaccine versus separate	A146	Liz Dooley	03/12/2008 06:43		03/06/2009	01/07/2009	In Progress
	Montelukast post bronchiolitis for acute respir	A159	Liz Dooley	30/11/2008 06:25		23/11/2009	29/12/2009	In Progress
	Nebulised deoxyribonuclease for viral bronch	A133	Liz Dooley	30/11/2008 04:51		02/02/2010	20/04/2010	In Progress
	Non-invasive versus invasive methods for se	A149	Liz Dooley	09/03/2009 23:15		10/09/2009	16/03/2010	In Progress
	Prevention of ventilated associated pneumoni	A141	Liz Dooley	24/10/2008 08:02		27/10/2009	14/11/2009	In Progress
	Antibiotics for undifferentiated acute respirat	A152	Liz Dooley	24/10/2008 05:39			12/05/2009	Completed
	Antiviral prophylaxis for varicella zoster in im	A154	Liz Dooley	17/10/2008 06:33			06/08/2009	Completed
	Corticosteroids for pneumonia	A158	Liz Dooley	24/10/2008 03:30			16/02/2009	Completed
	Corticosteroids for sore throat	A160	Liz Dooley	27/10/2008 04:43			24/11/2009	Completed
	Corticosteroids for the common cold	A162	Liz Dooley	27/10/2008 04:57			12/08/2009	Completed
	Corticosteroids for the common cold	A162	Olga Ahtirski	17/03/2010 12:40	A B C D E F G H X		17/03/2010	Completed
	Decongestants, antihistamines and nasal irrig	A157	Liz Dooley	24/10/2008 03:50			12/05/2009	Completed
	Macrolides for diffuse panbronchiolitis	A153	Liz Dooley	23/10/2008 02:09			16/02/2009	Completed
	Oral topical decontamination for preventing v	A155	Liz Dooley	24/10/2008 04:09			24/11/2009	Completed
	Pneumococcal vaccines for prevention of Str	A150	Liz Dooley	23/10/2008 07:19			16/02/2009	Completed
	Outpatient management versus hospitalizator	A163	Liz Dooley	25/02/2009 07:43			28/09/2009	Aborted
<b>Protocol Development ARI</b>								
	Acyclovir for infectious mononucleosis (glanc	A165	Liz Dooley	27/03/2009 04:29	A B C D E F G H	20/01/2010	24/04/2010	In Progress
	Antibiotics for ventilator-associated pneumon	A076	Liz Dooley	22/04/2009 00:46	A B C D E F G H	21/01/2010	06/04/2010	In Progress
	Antiviral prophylaxis for varicella zoster in im	A154	Olga Ahtirski	25/02/2010 13:44	A B C D E F G H	26/02/2010	03/03/2011	In Progress
	Bacterial pneumonia in immunocompromised	A168	Liz Dooley	01/02/2009 05:51	A B C D E F G H	25/04/2010	20/07/2010	In Progress

Finally, Figure 16 shows an example of a view with separate subfolders for each distinct type of workflow (Title Registration, Protocol Development, etc.), with the display in each subfolder grouped by Workflow Manager.

**Figure 16. Workflows folder – with workflow subfolders and grouped by Workflow Manager**



All of the available views include the 'Export to plain HTML table' button  which allows you to save the information in plain HTML table format or copy and paste it to other applications.

We encourage pilot CRGs to explore the many options now available for viewing information in the Workflows folder to identify the one(s) that best help them monitor progress and plan their work.

### Workflow Status Report

The workflow system can generate two types of reports on workflows: one providing an overview of (potentially) all workflows in your Group (the 'Workflow Status Report'), and the other covering a single workflow running on a specific review (a 'Workflow Report').


For information on the status of multiple or all workflows, right-click your CRG's name or the Workflows folder under Resources and choose Reports > Workflow Status. Options within the grey box at the top of the report generator (Figure 17) allow you to select workflows by milestones reached, workflow type (Title Registration, Protocol Development, etc.), and Workflow Manager. You can also choose to group the workflows by workflow type or review title. Tasks displayed under each workflow can be filtered by due date, reviews where no tasks match the filtering options can be excluded, and you can choose to only display active tasks. Tasks can be sorted in a variety of ways using the pull-down menu at the bottom left of the grey box. Finally, you also have the option to display the roles associated with each workflow and to show workflow and/or task notes (i.e., History events from the workflow or task Properties entered manually by users). Click Update to generate a report using the selected options. You can save the options you select so that they will appear as the default the next time you run the report by clicking the 'Save Report filter' button  in the upper left of the viewer.

Figure 17. Workflow Status Report

**Workflow Status**  
Acute Respiratory Infections Group, 21 Apr, 2010

Show tasks with due date before:

Show active tasks only  
 Exclude reviews with no task found

Show workflows that have reached milestone:

Include workflows with no milestones

Manager:

Show roles

Workflows included:

Title Registration  
 Protocol Development  
 Protocol Amendment  
 Review Development  
 Review Amendment  
 Review Update

Group by:  
 Workflow type  
 Review title

Sort tasks by:

Show notes:

**Review Development**

**Homeopathic remedies for preventing recurrent acute respiratory tract infections in children (A124)**

Contact person	Becker, Carmen	Workflow start date	3 Dec, 2008
Workflow Manager	Olga Ahtirschi	Next due date	14 Nov, 2009
Last Milestone Reached	None	Workflow end/due date	20 Apr, 2010

Task	Assigned To	Role	Start	Due	Duration	Left
2 Submit draft review for editorial approval	Olga Ahtirschi	Contact Person	13/11/2009	<b>14/11/2009</b>	1	<b>-157</b>

**Interventions to increase influenza vaccination rates of those 60 years and older in the community and in institutions (A107)**

Contact person	Thomas, Roger E	Workflow start date	3 Dec, 2008
Workflow Manager	Liz Dooley	Next due date	7 Jan, 2010
Last Milestone Reached	None	Workflow end/due date	13 Feb, 2010

Task	Assigned To	Role	Start	Due	Duration	Left
2 Submit draft review for editorial approval	Roger E Thomas	Contact Person	06/01/2010	<b>07/01/2010</b>	1	<b>-103</b>

**Nebulised colistin for nosocomial Acinetobacter baumannii respiratory tract infection (A130)**

**Notes:**

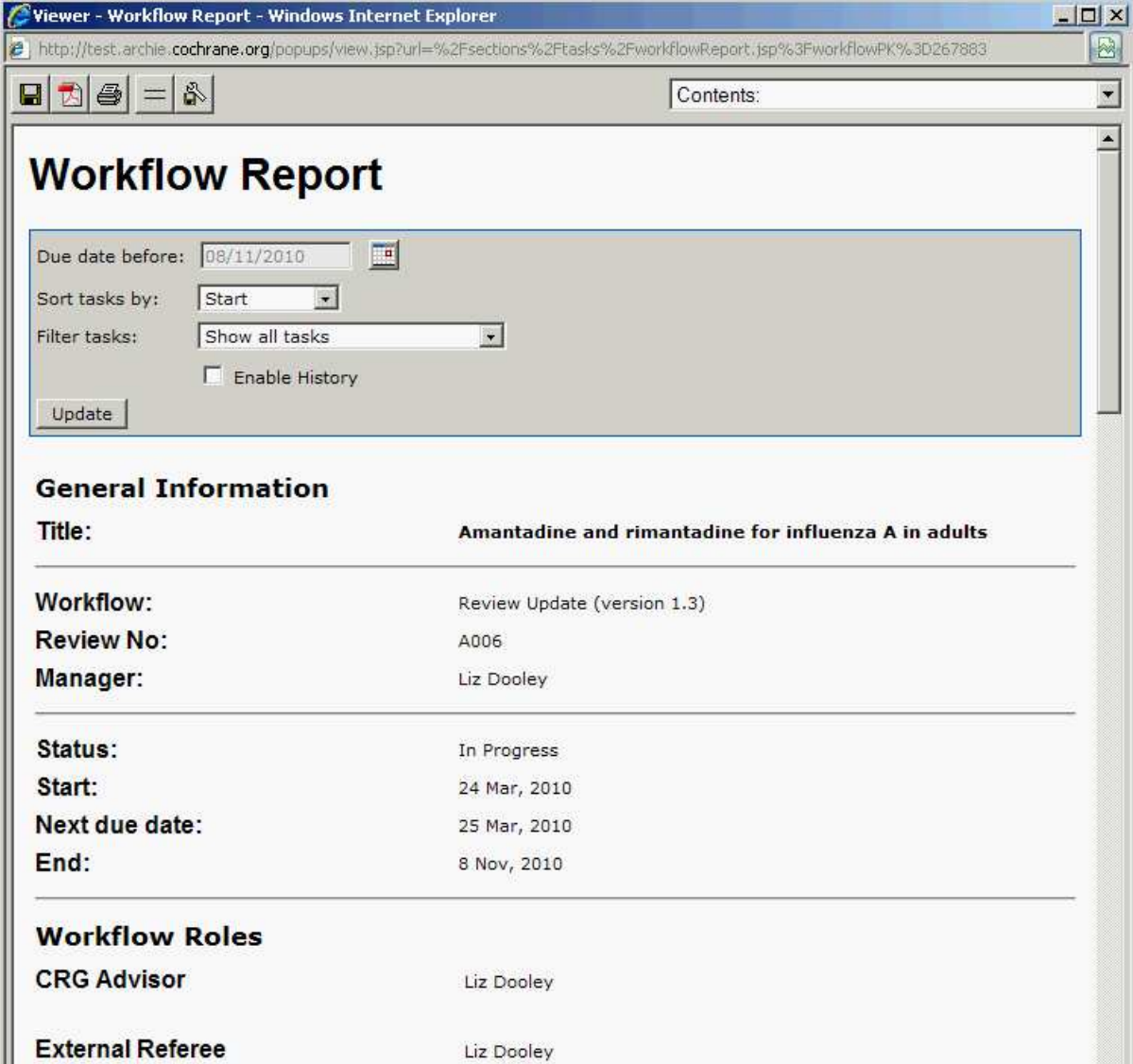
1. The milestone filter in this report identifies workflows that have reached *at least* the milestone selected. This is different from the 'Last Milestone Reached' search option (*see* 'Searching for workflows and tasks', below) which, as the label suggests, searches for workflows by the *last* milestone reached.
2. Workflows based on early versions of the templates (e.g., Review Development v 1.1), which did not have milestones, are also included in the milestone filtering by default.
3. Overdue tasks are indicated by the use of bold red font in the 'Due' and 'Left' columns of the Task list under each workflow (*see* Figure 17).
4. When sorting tasks by the 'Assigned To' option, be aware that the people to whom tasks have been assigned will appear in alphabetical order by their first name, not family name.

## Workflow Report

To generate a report on an individual workflow, right-click the name of the workflow in your CRG's Workflows folder and choose Reports > Workflow Report.

Options within the individual Workflow Report allow you to select tasks by due date and to sort and filter tasks in various ways (Figures 18 and 19). Click Update (bottom left of grey box) to generate a report using the selected options.

Figure 18. Workflow Report (top)



**Workflow Report**

Due date before: 08/11/2010  
Sort tasks by: Start  
Filter tasks: Show all tasks  
 Enable History  
Update

**General Information**

**Title:** Amantadine and rimantadine for influenza A in adults

**Workflow:** Review Update (version 1.3)  
**Review No:** A006  
**Manager:** Liz Dooley

**Status:** In Progress  
**Start:** 24 Mar, 2010  
**Next due date:** 25 Mar, 2010  
**End:** 8 Nov, 2010

**Workflow Roles**

**CRG Advisor:** Liz Dooley  
**External Referee:** Liz Dooley


Figure 19. Workflow Report (showing task list)

**Contact Editor** Allen C Cheng  
**Copy Editor** Jenny Bellorini  
**Sign-off Editor** Liz Dooley

**Tasks**

Task	Assigned To	Role	Start	Due	Duration	Left	Skipped
A1 Remind Contact Person of updating timeline	Liz Dooley	Editorial Base	24/03/2010	<b>24/03/2010</b>	0		
A2 Update literature searches	Sarah Thorning	Trials Search Co-ordinator	24/03/2010	<b>24/03/2010</b>	0		
A3 Submit draft review for editorial approval	Tom Jefferson	Contact Person	24/03/2010	<b>24/03/2010</b>	0		
<b>A - Draft review submitted for editorial approval</b>	-	-	24/03/2010	<b>24/03/2010</b>	0		
B3 Determine 'type' of update	Liz Dooley	Editorial Base	24/03/2010	25/03/2010	1	0	
B1 Identify Sign-off Editor	Liz Dooley	Editorial Base	24/03/2010	25/03/2010	1	0	
B2 Identify CRG Advisors	Liz Dooley	Editorial Base	24/03/2010	31/03/2010	7	6	
B7 Check and comment on search strategy	Sarah Thorning	Trials Search Co-ordinator	31/03/2010	14/04/2010	14	20	

**Notes:**

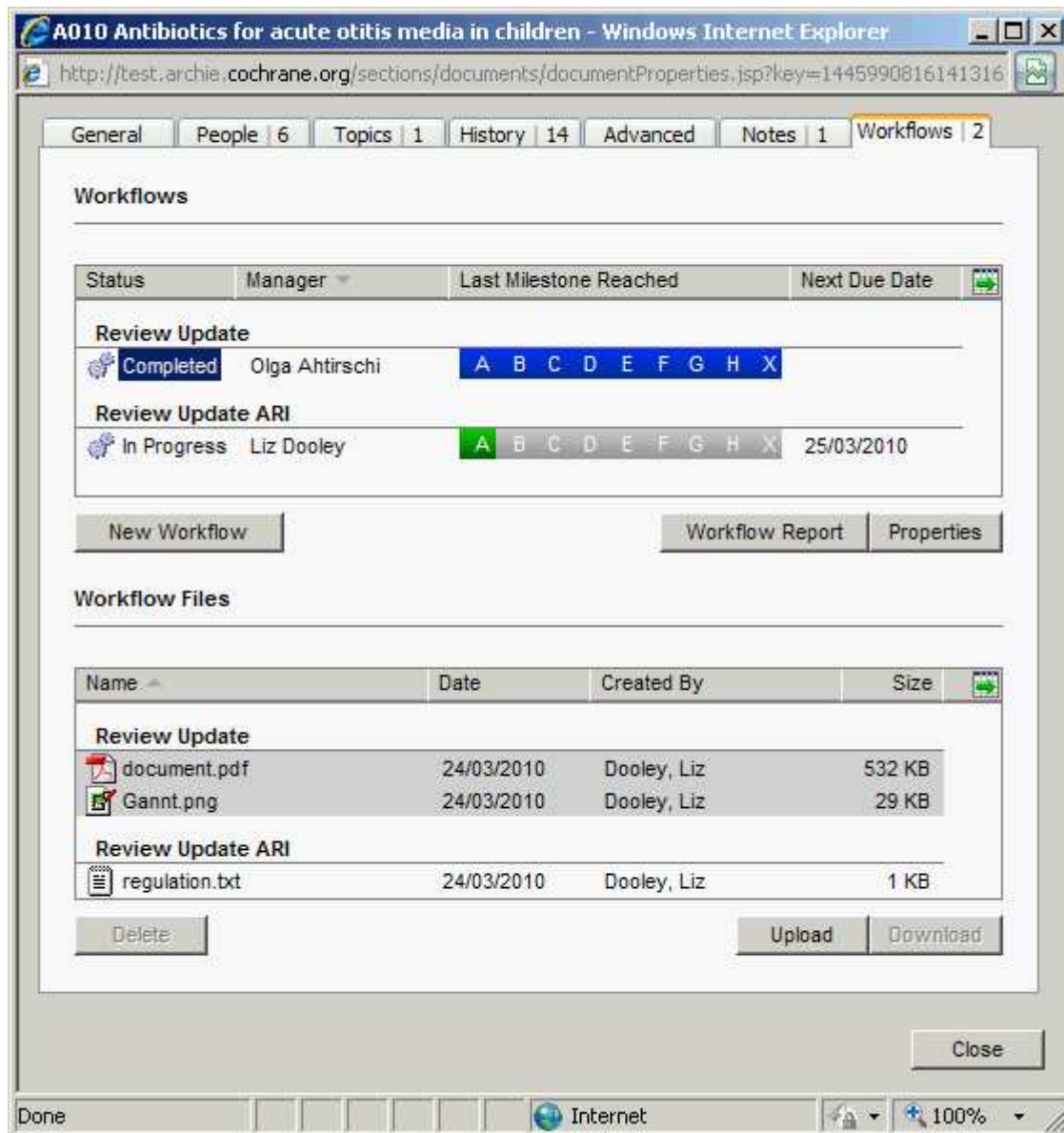
1. As in the Workflow Status Report, overdue tasks are indicated by the use of bold red font in the 'Due' and 'Left' columns of the Task list in this report (not illustrated in Figure 19; see Figure 17 for an example).
2. Again, when sorting tasks by the 'Assigned To' option, be aware that the people to whom tasks have been assigned will appear in alphabetical order by their first name, not family name.
3. Ticking the 'Enable History' box at the top of this report will insert a copy of the workflow History at the end of the report.
4. As with the Workflow Status Report, you can save the viewing options you select so that they will appear as the default the next time you run the report (on *any* workflow) by clicking the 'Save Report filter' button (  ) in the upper left of the viewer.

**Workflows tab in review Properties**

Important information about all workflows related to a particular review is summarized on the Workflows tab of the review's Properties (Figure 20). This tab shows all workflows, of any status (Completed, Aborted, In Progress, or Not Started), that are related the selected review. After clicking a status label ('In Progress' in Figure 20), you can use the buttons on this tab to access the Workflow Report or Properties of the selected workflow. You can also start an entirely new workflow by

clicking New Workflow. Finally, the Workflows tab also centralizes access to all documents saved on the Files tab of all workflows related to the review.

**Figure 20. Workflows tab in review Properties**



### Adding workflows to your Favourites

You can add workflows you need to access frequently to your Favourites list. To do this, simply right-click the name of the workflow and choose Add to Favourites. To access the workflow, go to Favourites > Workflow > [Name of workflow].

### Searching for workflows and tasks

You can use Advanced Search to search for workflows and tasks, and can combine search rows (using AND or OR) as with other types of Advanced Searches in Archie.

Currently, the options for searching **workflows** are:

- Status – Searches workflows by status (Not Started, In Progress, Completed, Aborted).
- Start date – Searches workflows by start date.
- End or due date – Searches workflows by end/due date.
- Manager – Finds workflows managed (or not) by a particular person.
- History – Searches workflow histories for a word or text string.
- Entity – Searches for workflows in (or not) the specified entity.
- Workflow – Searches for workflows of the specified type (Title Registration, Protocol Development, Protocol Amendment, Review Development, Review Amendment, Review Update).
- Last Milestone Reached – Searches workflows by the last milestone reached (e.g., Draft TRF/protocol/review submitted for editorial approval, Internal CRG check completed, Copy edit completed)

The current search options for **tasks** are:

- Workflow Status – Searches tasks by overall workflow status (Not Started, In Progress, Completed, Aborted).
- Start date – Searches tasks by start date (before, after, on, not before, not after [date]).
- End or due date – Finds tasks based on their end/due date.
- Days left – Searches tasks according to the number of days left until the task end/due date.
- Is overdue – Identifies tasks that are (or are not) overdue.
- Task name – Finds tasks with the specified text appearing in the task name.
- Status – Finds tasks based on their status (Not started, Completed, In Progress, Aborted, Passive).
- Is Skipped – Identifies tasks that are (or are not) skipped.
- Assigned to – Finds tasks assigned to the specified person.
- Manager – Finds tasks managed by the specified person (i.e., tasks belonging to a workflow for which the specified person is the Workflow Manager).
- History – Searches task histories for a word or text string.
- Entity – Searches for tasks in (or not) the specified entity.
- Workflow – Searches for workflows of the specified type (Title Registration, Protocol Development, Review Development).

### **Working with Search Results**

Briefly, you can use the right-click menu within Search Results to access the Properties of an individual workflow or task. You can also select some or all of your Search Results and use Tools > Export and Labels... to generate and save an HTML table of your results.

### **Sample search strings you may find useful**

Below are just a couple of sample search strings you may find useful. We encourage you to experiment with the Advanced Search functionality for workflows and tasks, and to contact your IMS Support person with any questions you may have about this. The IMS team are very keen to identify searches that are, or would be, especially helpful to MEs and other editorial staff.



To identify all Protocols that have been submitted for editorial approval and are awaiting action by someone at your editorial base or other CRG Advisors:

1. Go to Advanced Search and tick Workflows.
2. Enter the following search string:
  - a. Status / Is /In progress
  - b. Last Milestone Reached / Is / A – Draft Protocol submitted for editorial approval
  - c. Entity / Is / [CRG name]

To identify all tasks currently assigned to someone other than yourself in your CRG (e.g., TSC or an Editor):

1. Go to Advanced Search and tick Tasks.
2. Enter the following search string:
  - a. Workflow Status / Is / In progress
  - b. Status / Is / In progress
  - c. Assigned To / Is / [selected person]
  - d. Entity / Is / [CRG name]

### **Viewing your tasks on the Organizer tab**

Current tasks assigned to you are displayed under Tasks in Progress on the Organizer tab. Overdue tasks are marked with a red exclamation point. You can skip, complete, or open the Properties of any task in this list by right-clicking the name of the task and selecting the appropriate menu option.

### **Providing feedback during the pilot**

Please provide feedback on bugs encountered during the pilot or suggestions for improvements using the Feedback function in Archie (Help > Feedback, then either ‘Report a problem’ or ‘Suggest a change’, as appropriate). As stated above, your input is critically important as the IMS team work to improve and optimize the workflow system.

## Appendix: Definition of workflow pilot stages

The table below provides an overview of the users involved, available workflows, and system functionality for each of the three planned stages of the workflow pilot.

Stage	Users	Workflows	Functionality
Stage 1 (Sep 08)	<p>Eight pilot groups. Users involved:</p> <ul style="list-style-type: none"> <li>MEs and Assistant MEs only.</li> </ul>	<ul style="list-style-type: none"> <li>Title Registration</li> <li>Protocol Development</li> <li>Review Development</li> </ul>	<ul style="list-style-type: none"> <li>Basic functionality to start workflows and complete workflow tasks.</li> </ul>
Stage 2a (Mar 09)	<p>Thirty-two pilot groups (including the eight Stage 1 pilot groups). Twelve new pilot groups will join in Stage 2a and another 12 in Stage 2b. Users involved:</p> <ul style="list-style-type: none"> <li>All staff at editorial bases and editorial teams, including Co-ordinating Editors, Editors and Copy Editors.</li> </ul>	<ul style="list-style-type: none"> <li>Introduction of milestones in workflows.</li> <li>Introduction of secondary task numbers (e.g., 7.1, 7.2).</li> <li>Default task durations more meaningful.</li> <li>Minor revisions made to Protocol Development and Review Development workflows in response to feedback from Stage 1.</li> <li>Workflow role 'Internal Referee' changed to 'CRG Advisor'.</li> </ul>	<ul style="list-style-type: none"> <li>Ability to customize workflow and task permissions.</li> <li>Ability to customize workflow templates (setting of task durations and skipping of non-mandatory tasks not performed by CRG).</li> <li>Some Document Roles will automatically carry over to Workflow Roles (if the Document Roles have been assigned when the workflow is started).</li> <li>Tasks can be done automatically, triggered by actions elsewhere in Archie (e.g., a draft review is submitted for editorial approval).</li> <li>Prompt to start a new workflow when the preceding workflow is complete.</li> <li>Tickets (allowing tasks to be done without logging into Archie).</li> <li>Attaching reviews and other documents stored in Archie to a ticket.</li> <li>'Undoing' of workflow tasks by reactivating a completed task. This can be used to fix errors, e.g., if you have taken the wrong turn by mistake.</li> <li>Improved and structured workflow history.</li> <li>Performance improved (although changing workflow settings is still relatively slow; better performance across Archie is expected with future planned improvements to the Archie server hardware).</li> <li>Individual workflow reports are available.</li> <li>Review workflows report generator is available.</li> </ul>
Stage 2b (May 09)	<p>Users involved:</p> <ul style="list-style-type: none"> <li>All Contact Persons on reviews.</li> </ul>		

Stage	Users	Workflows	Functionality
Stage 3 (March 2010)	<p>All CRGs are eligible. Users involved:</p> <ul style="list-style-type: none"> <li>• All Stage 2 participants</li> <li>• External Referees</li> <li>• Feedback Editors (once Feedback workflow becomes available)</li> </ul>	<ul style="list-style-type: none"> <li>• New workflows available for piloting (introduced late in Stage 2): <ul style="list-style-type: none"> <li>○ Protocol Amendment</li> <li>○ Review Amendment</li> <li>○ Review Update</li> </ul> </li> <li>• Revisions to all workflows: <ul style="list-style-type: none"> <li>○ Updated all task numbers to include target milestone – eg B4.</li> <li>○ Changes to several tasks in response to feedback from Stage 2.</li> </ul> </li> <li>• Feedback workflow under consideration.</li> </ul>	<ul style="list-style-type: none"> <li>• Allow more than one Editorial Base Workflow Role.</li> <li>• Improved presentation of tasks in workflows.</li> <li>• Filter the set of people who can be selected for filling roles.</li> <li>• Skipping groups of tasks after workflow has started.</li> <li>• Improved searching and reporting functionality.</li> </ul>