The University Of Sheffield.

CIS Enhancements System Guide for Developers.

CiCS

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AP-CIS3

Contents

1. Introduction

This system is available to all users with access to CIS applications. It allows entry and retrieval of information about all stages in the life of a software enhancement or fix and sends email notifications to relevant people.

The system is designed for three types of user:

- General User - any user of CIS
- Key User - a user responsible for approving requests in their area
- Developer - someone who will make the requested changes

The system is accessed by selecting the Enhancements option from the Administration menu, which is on the menu-bar of the first screen which appears after logging on

2. Raising a New Request

When an enhancement requirement or a bug is identified any user can raise a new request. To enter a request the user must first click on the **'Create SER'** icon on the toolbar at the top of the screen. The minimum information which then needs to be entered is the **Application**, **Area** and **Short Description**. The **Application** and **Area** identify which system the request relates to and can be selected from lists by clicking the down-arrow to the right of each item.

When the request is saved a task record named '**MAIN'** is automatically created. (If necessary, additional task records for a particular request can be created later by developers, allowing the work for complex requests to be split up and each task signed-off separately.) When the request is raised an email is automatically sent to the key user for the **Application** and **Area** which have been selected, alerting them that there is a new request which needs their approval before it can be actioned.

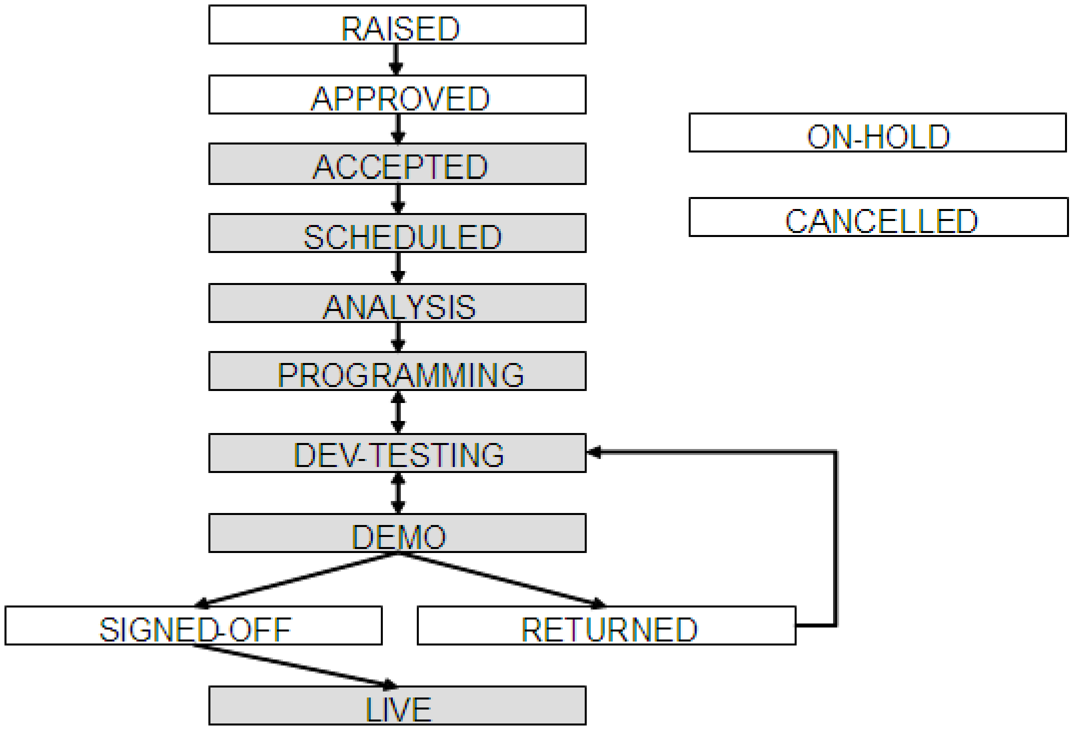
3. Changing the Status of a Task

The Current Status of a task indicates how far work has progressed and governs what actions may next be performed. The status can be changed by selecting any value displayed in the drop-down box for **New Status**. The available values depend on the existing value of **Current Status**, allowing progress only along a valid path of status changes.

The diagram below lists the possible statuses during the progress of a task. Only developers can change the status to those shown in shaded boxes. Some status changes can only be made by the same user who earlier changed the status to **RAISED** or **APPROVED**. Although the values are listed in the normal order of progress, some of them are optional and some may be repeated.

4. Life-Cycle of a Task

Every task passes through a status life-cycle similar to that shown below. Some stages are optional. Only Developers can change the status to those shown in shaded boxes.



When a user changes a task to some statuses a box will appear on the screen allowing entry of a comment associated with the status change. When the record is saved checks are made for the presence of input items which are mandatory for the new status. The **Current Status** item will then be set to the value selected for **New Status**, and **New Status** will be set to blank.

Emails will be sent to the users listed in **Users** to **Notify** at most status changes. Emails will also be sent to the developer(s) listed in the **Allocated To** field.

Each time the status of a task is changed an entry is made in the history log, which may be viewed by clicking the **History** button. Each line of the log shows the new status, the user who made the change, the date and time of the change and any comment that was entered.

5. Changing Status

5.1 APPROVED

Key Users and Developers only can change status to **APPROVED**.

After a new task has been raised, a Key User (Key User or Developer in the case of bugs) must approve it by changing the status of the task from **RAISED** to **APPROVED**. The **Problem Description** and **Cost of Not Solving** must be entered for the parent request. The **Key User** or a **Developer** must also set the **Priority** for the request and enter text in **Users Affected**. When the **MAIN** task is approved, the **Seq. No**. which is unique within the **Application** and **Area** is automatically populated for the request.

The **Priority** of a request may subsequently only be changed by the **Key User** or a **Developer** and any change will be shown in the history log for the **MAIN** task. If a bug rather than an enhancement is being entered, **Priority** should be set to **BUG** to indicate this. If different priorities need to be given to various parts of a job, a request should be raised for each one so that each can have its own priority assigned.

The approver of a task may also enter **Date Requested Demo** and **Date Requested Live** (the latter is mandatory if **HIGH** priority has been selected). If these dates are changed later, an entry will be made in the history log.

5.2 ACCEPTED and SCHEDULED

Only Developers can change status to **ACCEPTED and SCHDULED**.

The next stage is for development staff to enter information about the work required to provide a solution. This appears in the lower half of the task block. A list of values is available for the **Users to Notify** field, which adds any selected users to those already entered in the field, allowing a list of users to be built up. The user who raised the request and other users who should be notified about enhancements in the request's **Application** and **Area** are added by default whenever a task is created. Any users listed here will automatically receive notification emails.

Once **Solution Description** and **Analysed By** have been entered, the status can be changed to **ACCEPTED**. When the scheduling information has been entered too, the status can be moved on to **SCHEDULED**.

5.3 ANALYSIS, PROGRAMMING and DEV-TESTING

Only Developers can change status to **ANALYSIS, PROGRAMMING** and **DEV-TESTING**.

Once a task has been given the status of **SCHEDULED**, a developer may change the status to **ANALYSIS**, **PROGRAMMING** or **DEV-TESTING** as appropriate, to indicate what stage the work is at. When a developer has changed status to **PROGRAMMING** and books a software module out to work on, they will click the **Modules** button. Any modules that have already been booked out for the task are displayed in a list at the top. Double-clicking on a module in the list will cause its details to be displayed in the lower section.

To link a module to a task, the developer must select the module from the list of values. If the required module does not appear in the list of values a new module record must be created by clicking the **New Module** button. A window then appears allowing the module records to be maintained. Each module must be given a name, description and type. After saving a new module record it must still be selected from the list of values in order to link it to the task. The **Location** and **Version** (of the amended module in the version control system or repository being used) are required but the **userid for Developer** is automatically recorded as the current user.

When a module is transferred to the **Demo** area (or otherwise made available for testing by users) the date may be entered in the **Demo Date** field. If an email is required (very rarely in practice) to notify users which modules have been transferred, the **Send** button should be clicked. A **default date** of **today** is supplied for **Demo Date** if none has been entered when the **Send** button is clicked.

5.4 Developer's Notes

There is a **Dev's Notes** button on each task and on each module for a task. Clicking this causes a large edit field to appear. The buttons and the text are only visible to developers. They should be used for entering any additional information that would be useful to record, for instance technical notes on the changes made to a module, notes about progress on a task, the text of an email from a user or installation instructions.

5.5 Changing status to DEMO

When all the changes for a task have been made available to users for testing the developer should change the task's status to **DEMO**. If further changes to the software are required, status can be changed back to **PROGRAMMING** or **DEV-TESTING**.

5.6 Changing status to RETURNED or SIGNED-OFF

Once the user who raised or approved a particular task is satisfied that the work has been completed satisfactorily they should change the status of that task to **SIGNED-OFF**. This indicates that they give authority for the changed modules for the task can be transferred to the Live system. If instead the user thinks there is a problem which still needs resolving, they should change the status to **RETURNED** and enter details in the status change comment. After investigation the developer can then change the status to **PROGRAMMING** or back to **DEMO** as appropriate.

5.7 Changing status to LIVE (Developers only)

When a task has been given the status of **SIGNED-OFF** and the relevant modules made live, the developer should record the **Live Date** for each module on the **Modules** screen. When all modules for the task have been given a live date, the status for the whole task can be changed to **LIVE** by the developer.

5.8 Changing status to ON-HOLD and OFF-HOLD

It may sometimes be necessary to temporarily halt the progress of a task. In this case the status of the task should be changed to **ON-HOLD**. This may be done by a developer or by the raiser or approver of the task. When work is to be resumed or the task cancelled, the status must be changed to **OFF-HOLD**. **Current Status** will then be automatically re-set to the status of the task before it was put **ON-HOLD**. Further valid changes to status can then be made if necessary.

5.9 Changing status to CANCELLED

In the event that a task or all the tasks for a request need to be permanently cancelled each task involved should have its status changed to **CANCELLED** by the user who raised or it or by the user who approved it. Please note that there is no way of reversing this change - once cancelled, nothing further can be recorded or changed for the task. If a task is cancelled when it is still at the **RAISED** status, the request will be given a **Sequence Number** of **----** (four hyphens).

6. Status Search

Records may be queried as normal in CIS applications by entering values in the fields of the request (upper) block and performing a search. There is also a search facility which can be accessed by clicking the **Status Search** button. One of two different methods of searching for tasks by status can then be chosen:

1. Find tasks **having selected status between dates** - this finds all tasks which existed with the selected **Status** at any time on or between the **From** and **To** dates.

2. Find tasks **changed to selected status between dates** - this finds all tasks which had their status changed to the selected **Status** on or between the **From** and **To** dates.

Default values of today's date are offered for the **From** and **To** dates. The search may be further narrowed by entering a value for **Application** - in this case only tasks belonging to requests for that application will be found. By selecting St**a**tus as **PRIORITY CHANGE**, all tasks whose priority was changed during the date range are returned (regardless of search method).

7. Automatic Emailing

Emails are sent automatically in various situations:

- to the key user for the request's **Application** and **Area** when a request is raised;
- to the users entered in **Users to Notify** at certain status changes;
- to the developer(s) entered in **Allocated To** when a task is allocated or the status is changed;
- to the users entered in **Demo Email** or **Live Email** on the **Modules** screen when the **Send** button is clicked to indicate that a module has been sent to **Demo** or **Live**.

Please note that emails are never sent to the user who causes an email to be sent even if they are in the list of users to notify.

8. Checking who are Key Users and Developers

- The **'Maintain Enhancements Applications**' form shows which users are set up as **Key Users**, **Others to Notify** and **Developers** for each application and area. The form can be found on the **Administration/System Setup** menu. If any changes to data on this screen are needed then Anne Rodgers should be contacted.