TOPdesk Analyst Training

Problem Management

Universities of Edinburgh, St. Andrews, Abertay

TOPdesk

Table of Contents

Problem Management Training
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Why a Problem Management Process?

Problem Management has two key goals:

- To minimise the impact of Incidents, by investigating their cause to provide a library of workarounds for the Service Desk to use.
- To systematically improve service by identifying known errors and recommending changes to eliminate them.

Roles in Problem Management

UniDesk has three primary roles involved in Problem Management:

- Incident Operators – These may identify groups of incidents as being symptomatic of a problem. They may wish to see a better workaround for these incidents or wish to see the problem eliminated and, in either case, should create a Problem Wizard.
- Problem Operators – These will be investigating the problems and known errors seeking to understand one and propose changes to eliminate the other, where appropriate.
- Problem Managers – These are responsible for the quality of the problems to which they are assigned. They:
    - approve the closure of problems without workarounds (either due to no problem being found or the problem not being investigated),
    - approve the promotion of problems to known errors when workarounds are found,
    - approve the closure of known errors with, or without, associated change requests,
    - and temporarily monitor known errors during the change process until they are eliminated.

The first thing you see when logging into TOPdesk is the **Welcome screen**. This process page consists of three components.

1. **Overview pages**: displays each of the processes that your account has access to.
2. **Latest News**: displays the published news items.
3. **To do:** displays short cuts to your 'to do' lists

On the overview pages you can zoom into a specific process, in this case **Problem Management**. A process page will provide a central location for all functions of a specific process. Anything that you are able to do with regards to that process will be available through the process page.

Problem Management for Incident Operators – this provides the functionality for logging a problem wizard only.
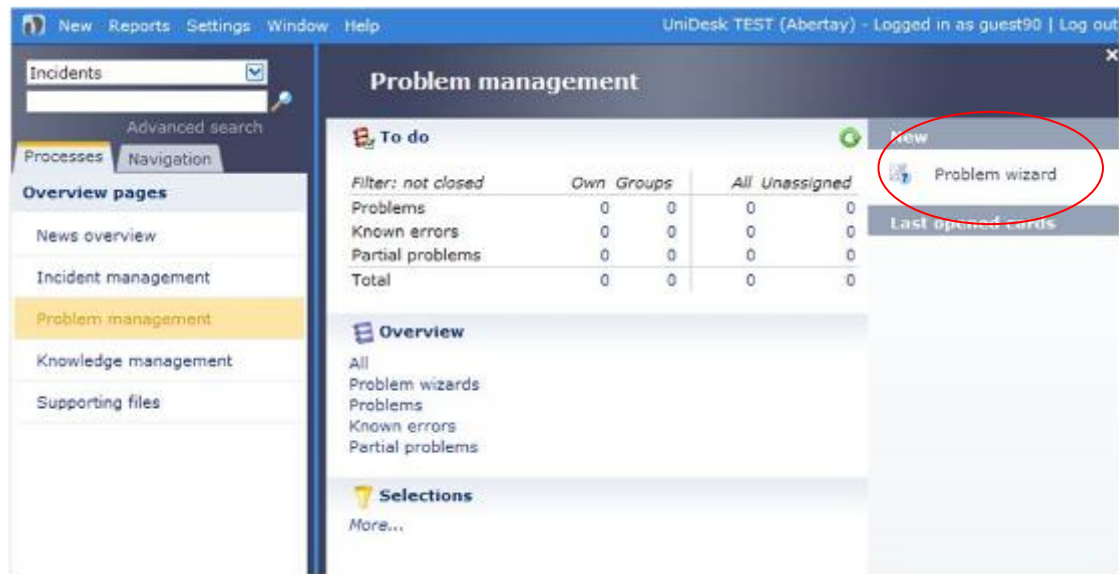
**Applies to Incident Operators only – create a Problem Wizard**

Incident Operators may suspect a problem is causing a series of incidents and hence disruption to users. They may be keen to help their users more quickly with a workaround or may wish to see the problem eliminated permanently.

Problem wizards allow the Incident Operator to quickly gather information about incidents that they suspect are linked. Incident Operators are not expected to complete full problem records, nor be able to complete all the necessary fields for a problem at this stage. Therefore, Incident Operators are offered the Problem Wizard interface, as a way to quickly raise suspected problems for attention.

The problem wizard consists of a brief description field and a main description field.
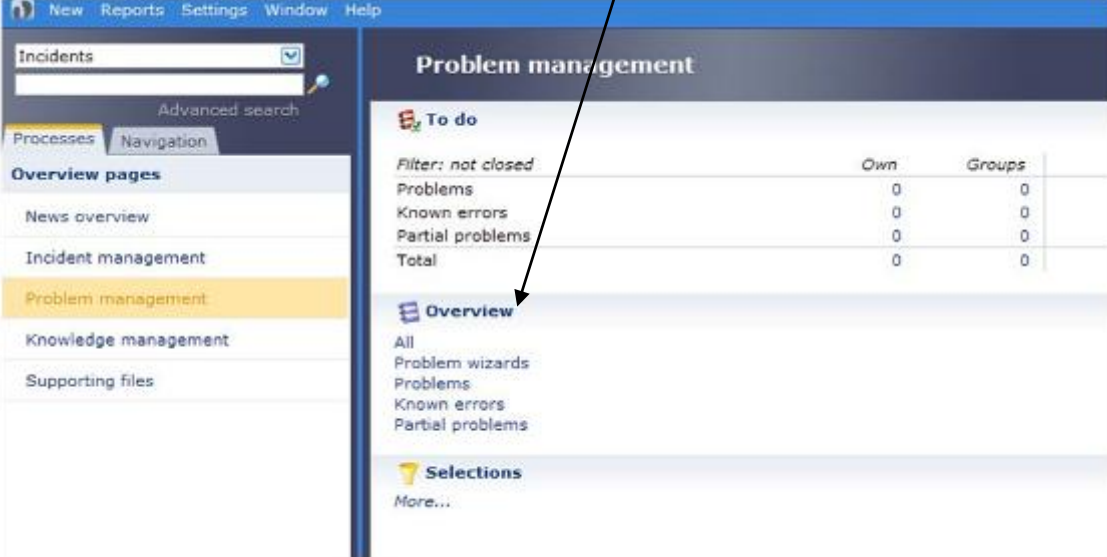

The '**Incidents**' tab within the problem wizard is where incidents can be linked using the '**Links Wizard**'. There are various ways of searching for incidents either by using saved selections or filters. Highlight the desired incidents and choose '**Link'**.
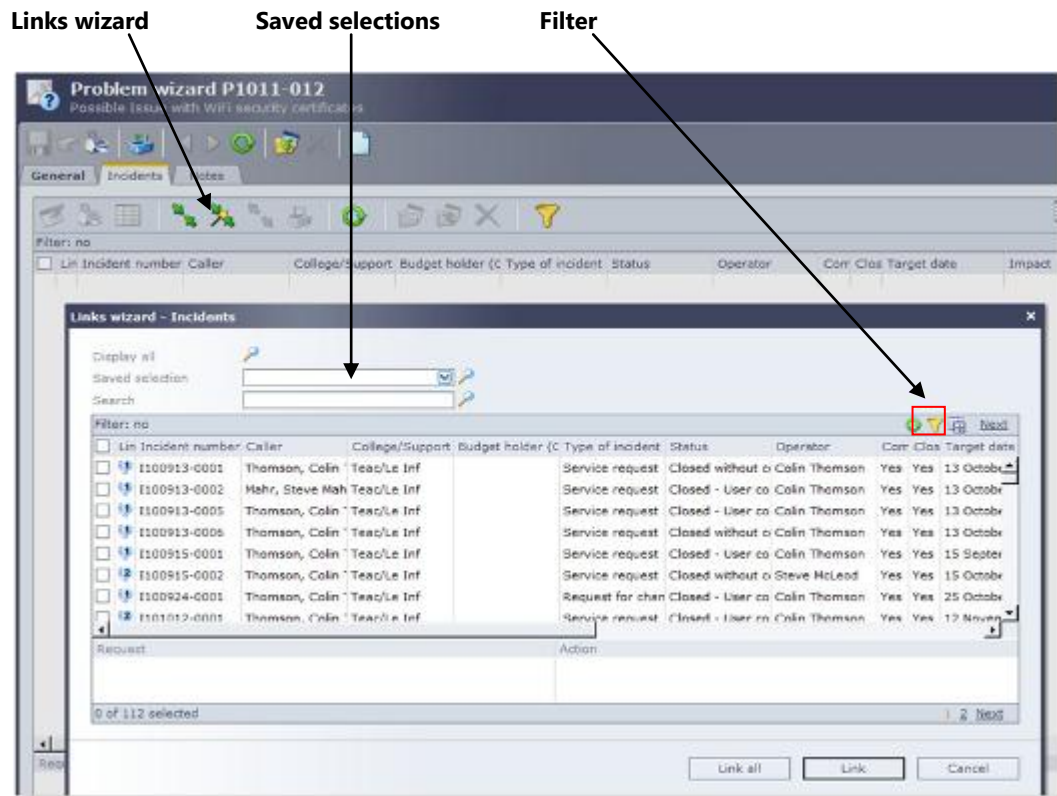
Viewing a Problem Wizard – for Incident and Problem Operators

Problem wizards can be viewed or retrieved from the '**Overview'** section within the Problem management module. Problem Operators should periodically check the problem wizards to see what issues the Incident Operators suspect may be symptomatic of problems. However, it is likely that Incident Operators will highlight Problem wizards to the relevant Problem Operators.

Raising a Problem from a Problem Wizard

When the Incident Operator has highlighted a potential problem, there will be a description within the wizard along with a number of **incidents**. Problem operators (operators responsible for problem management activities) should periodically review problem wizards to check whether they merit further investigation. If a problem operator recognises the need for further investigation, the wizard can be escalated into a problem using the **'Make problem'** option.
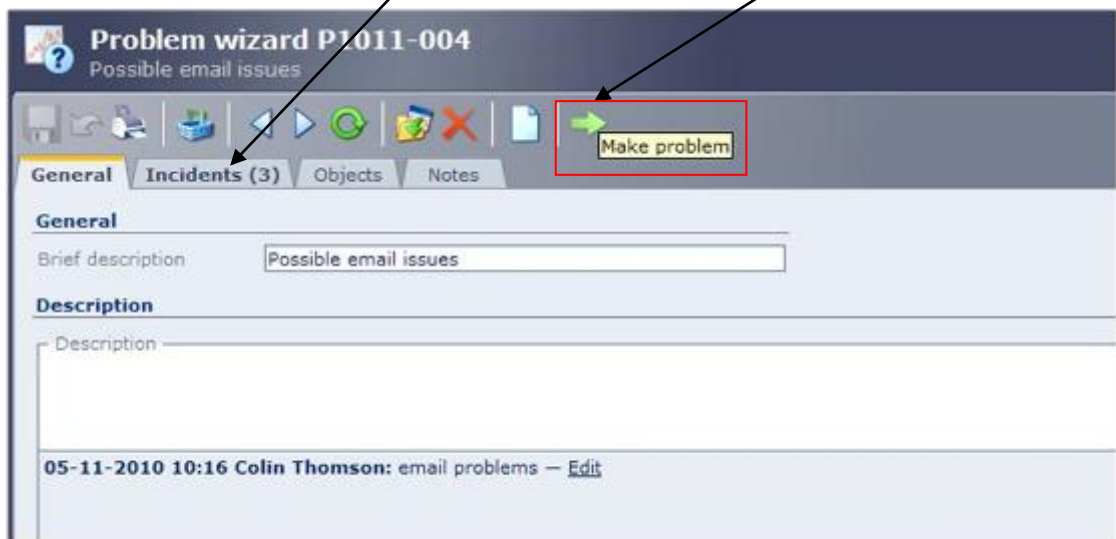
The basis for a problem record has now been created using the description and associated (linked) incidents from the problem wizard. The problem operator must now complete the rest of the mandatory fields and assign an operator to the problem before saving the problem. If the problem operator is creating a new problem which does not start with a problem wizard then it will look the same as below, but without any associated incidents.

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Universities of Edinburgh, St. Andrews, Abertay
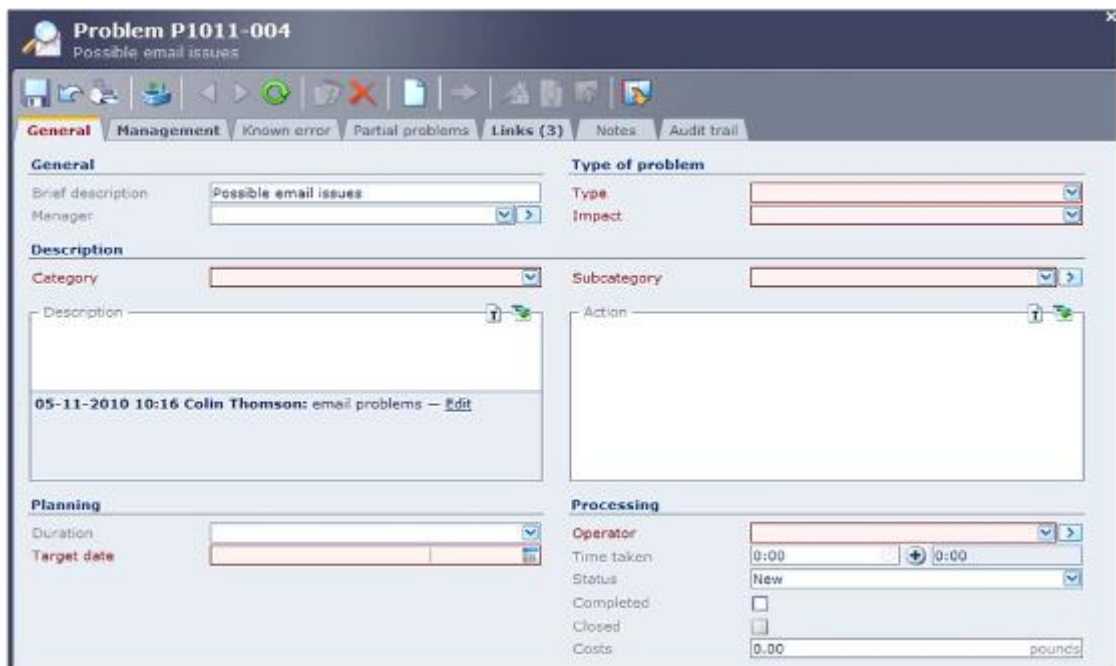
Problem Management for Problem Operators

Problem operators can at any time see the extant Problem Wizards and may at any time decide to investigate these incidents further, or they may have been notified about a problem wizard by an Incident Operator.

If the incidents do require further investigation and a link between the incidents has been established, the Problem Operator should create a new Problem.

Field	Commentary
Brief Description	Describe the problem
Type	How was the problem identified? If the Service Desk highlighted the issue through a problem wizard, then the type would be 'service desk'. If the problem is a result of a number of incidents, choose 'incident management'. If 2nd line has identified a potential problem that might cause incidents this should be logged as 'proactive problem management'
Manager	Every problem needs to have a designated problem manager who is responsible for ensuring the problem is managed appropriately.
Category & Subcategory	These are the same as Incident management by default.
Duration	Estimate how long this problem will take to investigate, or by when the problem should be fixed.
Operator	Choose the problem operator who is best suited to investigate the problem.

Linking Incidents to the Problem

Within the problem call, choose the '**Links**' tab. Click the '**links wizard**' icon. This will display a list of incidents to choose from.
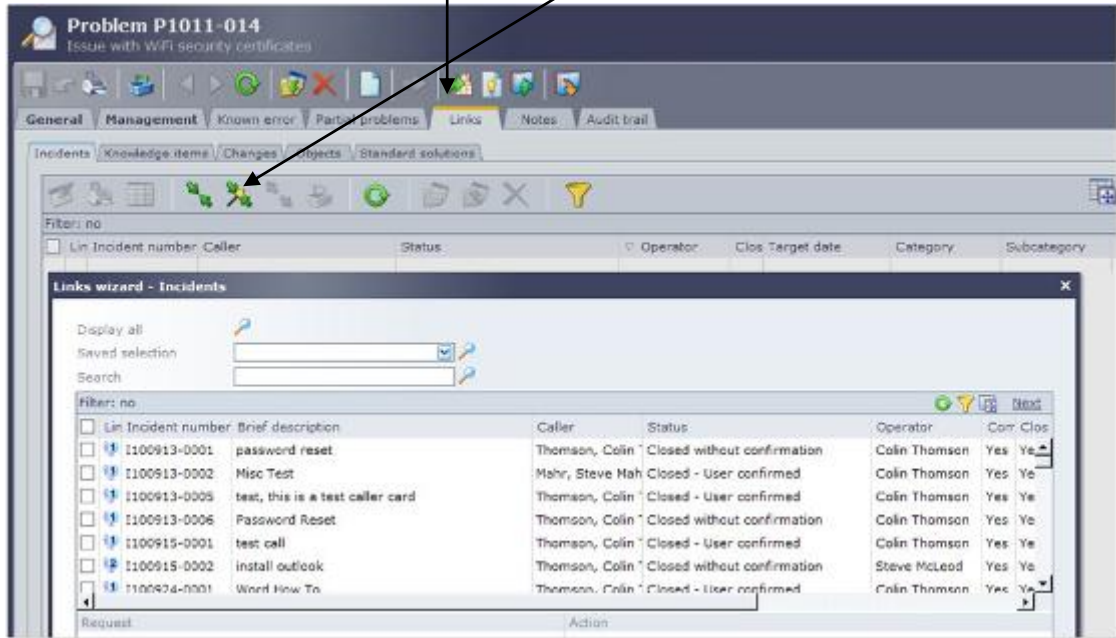
Highlight the required incidents and click 'link'. The linked incidents now appear alongside the problem and the number of linked incidents is visibly shown in brackets.
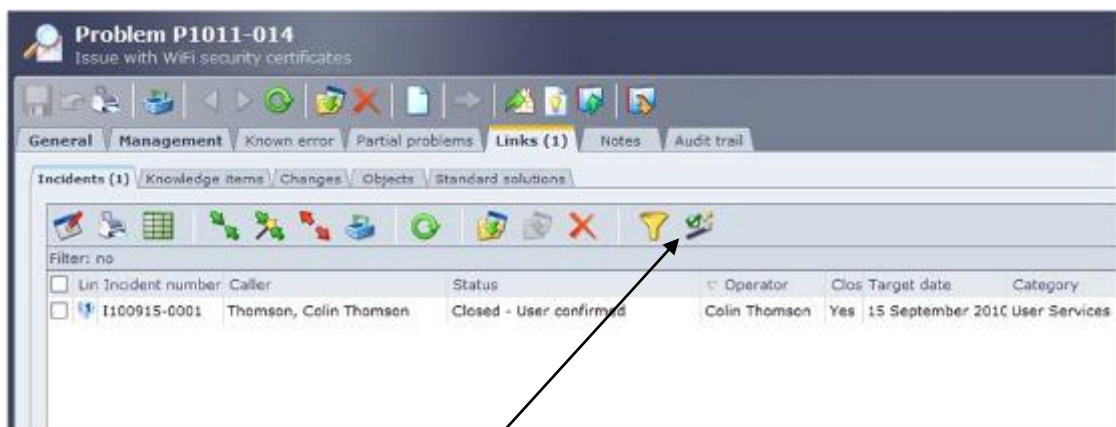
Please note, although incidents can be visibly 'linked' to problems, closing the problem will not close the incidents. The **closure wizard** is provided for this purpose and is available within the links tab. As the closure wizard bypasses the incident management process, it is only available to certain operators.

Searching for associated problems when logging incidents

Within a 1st or 2nd line incident, choose **Links** within the **Problem and known errors** tab, click **Links** wizard.
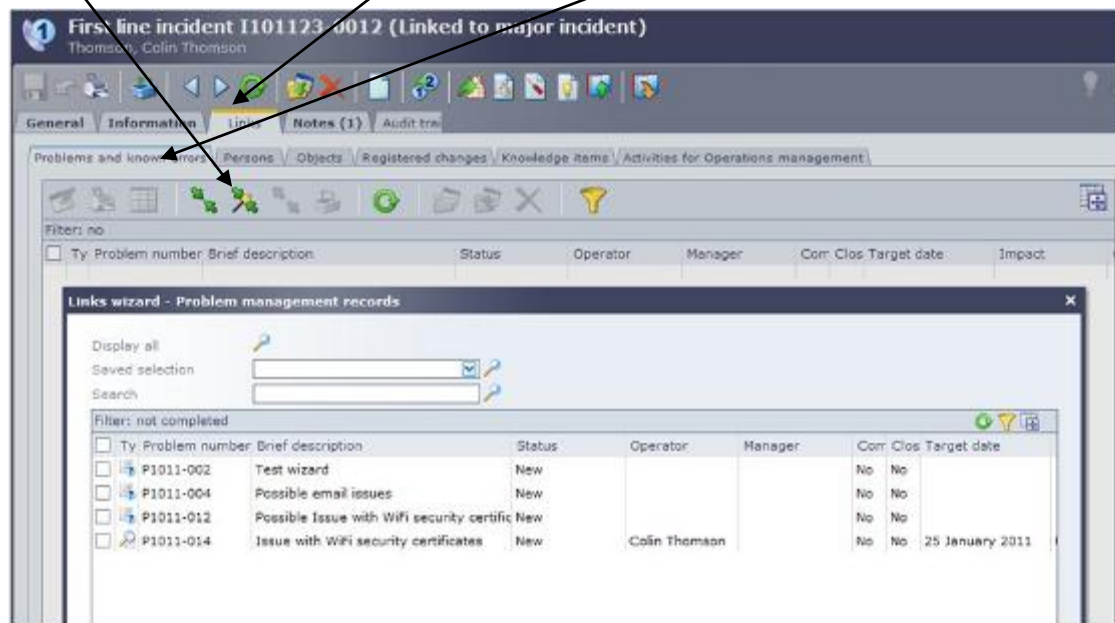
Problem Management Investigation Process

The action field should be updated periodically as you would do with Incidents to provide an audit trail of all actions as well as providing the Service Desk with the ability to update users.

If there is a requirement to pass the problem to another operator, you should update the action field with the reason for passing. Change the operator then save the problem.

Problem status options

Option	Explanation	Completed
New	All new problems	
Under Investigation	The problem has been saved and the operator sets status to under investigation	
Diagnosed	We have identified the cause of the problem	
Crafting work around	During the phase to find a workaround to the cause of the problem	
Workaround available	The workaround becomes available	Completed Problem
For Knowledge Base	If the Problem Manager deems the workaround suitable for the Knowledge Base	
No Change Required	The operator deems no change required to eliminate the known error	Completed Known Error
Requesting Change	The operator has raised a change to fix the known error	Completed Known Error
Change Approved	The change has been approved as is awaiting implementation	Completed Known Error
Change rejected	The change has been rejected	Completed Known Error
Change actioned	The change has been actioned – check to see if problem still exists	Completed Known Error
For archival	Change has been successful, known error can be archived	Completed Known Error
Not being investigated	Problem is not going to be investigated	Completed Problem
No problem found	The problem no longer exists or was not substantiated	Completed Problem

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Known Error Creation by Problem Manager

A problem becomes a known error when the underlying cause of the problem is known and a workaround to the problem becomes available.

When a problem is diagnosed, the Operator begins work on the workaround (status becomes 'crafting work around'). When the workaround is complete and becomes available, the status of the problem should be set to 'work around available' and the 'completed' tick box should be ticked indicating that the problem is now complete. Unlike Incident Management, choosing a status does not automatically tick the completed box.

Once a problem is marked as complete, an email is sent to the Problem Manager responsible for the problem informing them that a problem has been completed. The Problem Manager should decide whether they are satisfied with the completion of the problem and the quality and suitability of the workaround. If they are not happy with the workaround, they should update the action field of the problem call indicating the reasoning, untick the completed box then set the status to 'under investigation'. This will place the problem call back with the original operator for further investigation.

If the Problem Manager is satisfied with the workaround, the problem then becomes a **known error**. The Problem Manager should click the **green arrow icon** which turns the problem into a known error. The original problem ID is retained.
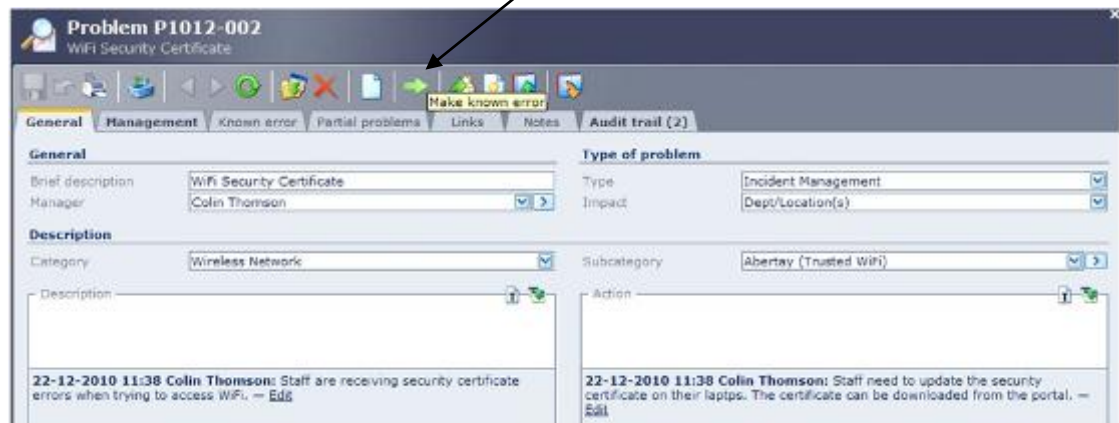
The description of the problem is transferred across to the known error, but the solution for the known error has to be copied manually from the action field of the problem into the solution field of the known error. This also provides the Problem Manager with the opportunity to add any additional information to the known error record.

If the known error would benefit from inclusion in the Knowledge base, the Problem Manager should set the status to 'For Knowledge base'.

All the problem details are stored within the **'Problem' tab** of the known error, so the **action** from the problem can be copied from here into the solution field of the known error.
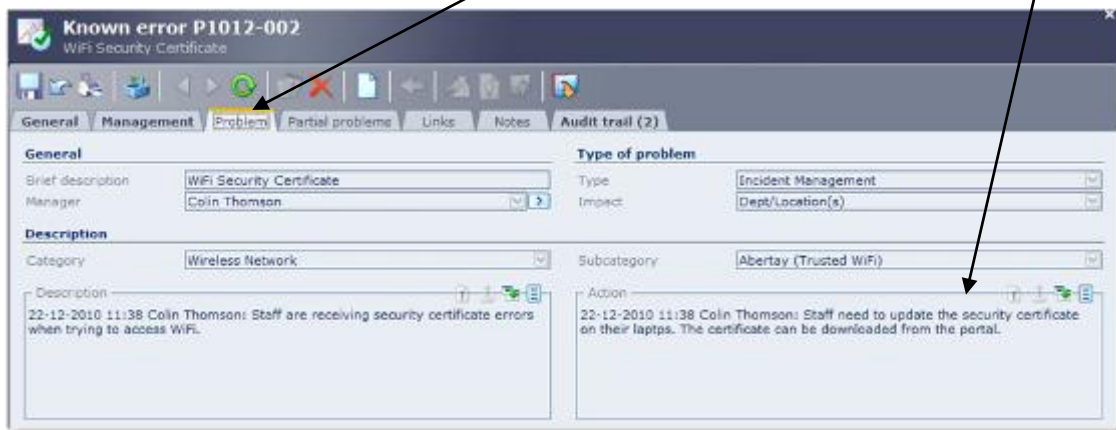

The end result is a known error record like the one below with the action from the problem record copied into the solution of the known error. It is also the responsibility of the Problem Manager to update the **cause** field and to assign the known error to an **Operator** to take forward. The assigned Operator for the known error is emailed to inform them of the new known error for their attention.

Known Error Management

At this stage of the problem management process, we now have a known error with a solution. The current Operator now may need to upload this solution to the **Knowledge Base (KB)**, depending on the status set by the Problem Manager. There is an option button to do this.
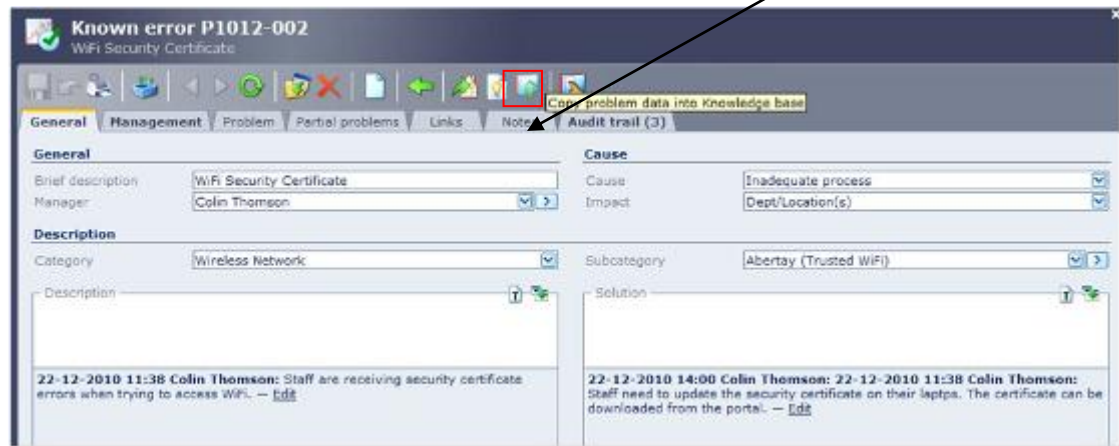
Although a workaround is now available, the Operator still needs to make a decision on whether or not it is worth investigating to determine if this known error can be eradicated completely from the infrastructure. If the Operator feels that a change is required in order to fix the known error, they may investigate further and change the status of the known error to 'Requesting Change'. At this stage the known error can then be completed (tick the completed box), update the solution field with details about the change which is being requested, then save the record.

On completion, the Manager will be emailed to inform them that the known error has been completed. If the Manager is satisfied with the completion, the Manager should close the known error. The status of the known error will need to be maintained during the change assessment, approval and implementation.

The Operator may also decide that they are *not* going to raise a change to fix the known error, in which case the known error remains active for as long as it is still creating incidents or has the potential to create incidents. Reasons for not raising a change to fix the known error may include financial reasons (cost too much to fix) or technical reasons (need to wait on a new version of software). If this is the case, the Operator should change the status of the known error to 'No change required' then complete the call.

As before, once the known error is completed, the Manager will be notified. If they are satisfied that the known error should not be fixed, they will update the solution with the details of this decision and close the known error.

Note: Closed known errors are still relevant to the organisation for as long as they have the potential to generate incidents. The known error may have to be reviewed over time to see if they remain relevant. Only when the known error no longer becomes relevant should they be archived off, indicating that the known error is no longer an issue in the live service.

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