

ServiceNow

PROBLEM MANAGEMENT

Version 2.0



RowanUniversity

INFORMATION RESOURCES & TECHNOLOGY

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Definition of Commonly Used Terms

ITIL: An acronym for Information Technology Infrastructure Library, ITIL is a set of practices for IT service management (ITSM) that focuses on aligning IT services with the needs of business.

ITSM: IT service management refers to all activities that are performed by an organization to plan, design, deliver, operate and control information technology (IT) services offered to customers. These activities are directed by policies, organized and structured in processes and supporting procedures.

Incident: An unplanned interruption to an IRT Service or a reduction in the quality of an IRT Service. For example: A user's email client stops working.

Caller: ServiceNow term for user/customer.

Problem: A problem is defined as the unknown cause of one or more incidents.

Workaround: A temporary means of resolving and overcoming the symptoms of an Incident or Problem.

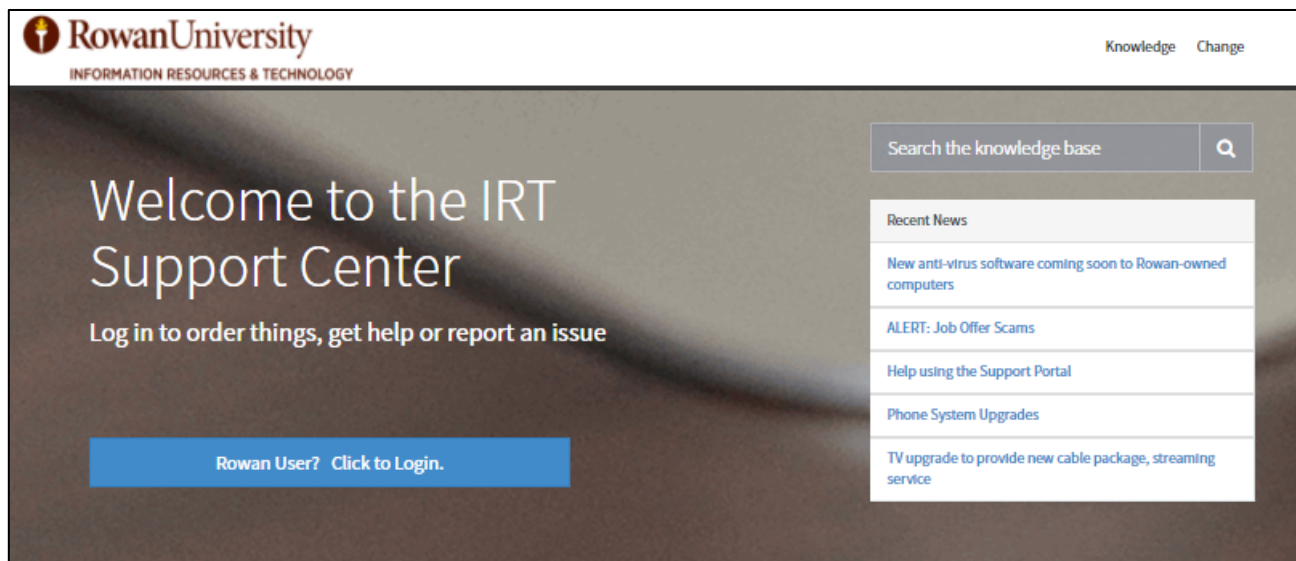
Known Error: A problem should be marked as a Known Error when the root cause was found and a work around or definitive solution has been documented.

NOTE: This manual assumes that Technicians have working knowledge using and navigating ServiceNow.

Logging into ServiceNow

Open a web browser (Chrome is recommended) and navigate to <http://support.rowan.edu>

If you are already authenticated to CAS, you might bypass this login page.



Click "**Technician**" in the header menu once you are logged into the Support Portal and you will be redirected to the full ServiceNow application.



If you are in the application and would like to return to the support portal, you can re-enter the link in your browser with an /sp at the end, i.e. <http://support.rowan.edu/sp>

Safari Warning: A recent update to Safari has impacted the appearance of ServiceNow. ServiceNow is aware of the issue and is investigating a resolution. The recommended workaround is to use a different browser, such as Chrome, until the issue can be resolved.

What is Problem Management?

A “Problem” can be defined as the root cause of one or more incidents.

The goal of Problem Management is to prevent incidents from recurring, identifying the underlying cause and providing a permanent fix or workaround to remove it, or to minimize the impact of recurring incidents that cannot be prevented.

The benefit of Problem Management is the ability to group incidents with the same root cause and then resolve them all at the same time once a fix or workaround has been found.

Proactive vs. Reactive Problems

A Problem is considered “reactive” when the one or more of the following criteria (but not limited to) is met:

1. Multiple users are reporting incidents with the same or similar symptoms.
2. A review of incidents by unit managers or their designated representative reveals a trend.
3. An incident that can only be resolved by a work around.

A Problem is considered “proactive” when a team is performing any type of system or maintenance work that results in the discovery of a possible problem or service interruption that will most likely produce one or more reported incidents.

Problem Management Procedure

1. Identify and Log
 - a. Identify a potential problem (support incidents that can be tracked to a single underlying cause or a known system problem that will most likely result in additional incidents.)
 - b. Create a new Problem record.
 - c. Add any related incidents to the problem.
 - d. Assign the Problem to your Department Supervisor.
 - e. Department Supervisor will review and affirm that a problem may exist.
 - f. Department Supervisor will assign to the appropriate assignment group for investigation.
2. Investigate and Update
 - a. Search for an existing workaround in Known Errors and Knowledge.
 - b. Determine the root cause of the problem.
 - c. Designate the Problem as “Known Error” if the root cause is identified.
3. Propose fix or workaround
 - a. Identify and propose a suitable permanent fix or workaround to relieve the problem for users.
 - b. Communicate fix or workaround to all related incidents.
4. Resolve
 - a. Initiate a Change if one is required in order to fix the problem.
 - b. Verify that the fix or workaround resolved the Problem or Known Error.
 - c. Resolve the Problem by changing the state to “Problem Resolved” and add the fix or workaround to the Knowledgebase.
 - d. All associated incidents will then be resolved and the workaround or fix will be communicated to all Callers.
 - e. Problem will be automatically assigned to the Change Coordinator to ensure a root cause analysis is performed.

Create a New Problem

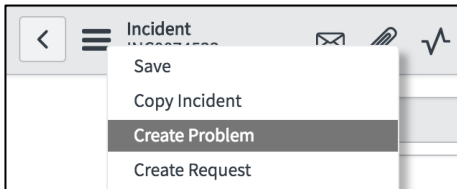
When to create a Problem:

- A group or technician identifies a common trend in incidents. For example, multiple users experiencing the same Windows error message.
- A group or technician has identified a potential issue. For example, an upgrade to a network switch fails and renders the switch inoperable. A Problem should then be created in anticipation of resulting incidents.
- Department Supervisors must review and escalate the Problem if valid.

How to create a Problem: Problems can be created in two ways, directly from an incident or from the Problem module.

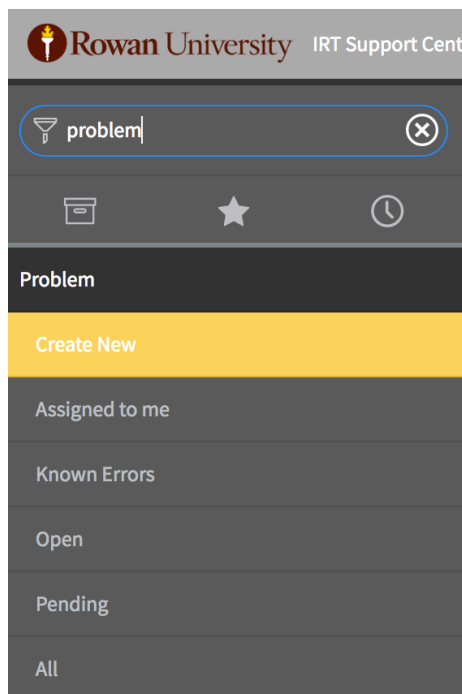
Create a Problem from an Incident

If you have identified a number of Incidents as potentially the result of a single underlying cause, you can click the **Title Menu** on the Incident form and then select “**Create Problem.**”



Create a Problem from the Problem Module

Search the Application Navigator for “problem” and under the Problem module, click “**Create New.**”



The New Problem Form

Once the new “Problem” form is opened, fill in the appropriate fields:

- **Assignment Group:** Your assignment group. *Do not assign the Problem to another group until it has been assessed and approved by your Departmental Supervisor.*
- **Location:** The location where the incidents are taking place
- **Priority:** Set a priority based on the number of people affected and the impact it is having on their work
- **Short Description:** A concise description of the problem.
- **Description:** A detailed description containing as much evidence as possible as to why you think a problem exists and how the attached incidents are related.

Problem PRB0040076

Number: PRB0040076

Location: All or multiple locations

Priority: -- None --

Assignment Group: ServiceNow Questions

Assigned to: Gangloff, Christine

State: Open

Opened: 05/25/18 03:27:50 PM

Opened by: Gangloff, Christine

Known error:

Short Description: Exchange archive error

Description: When the customers opens Outlook this error comes up: Outlook data file network connection password, you must enter a password for the //rowanads.rowan.edu/home network connection.

Attached knowledge: [KB0010532 - Mailbox over the limit or Mailbox is full](#)

Notes: Closure Information | Related Records

Watch List:

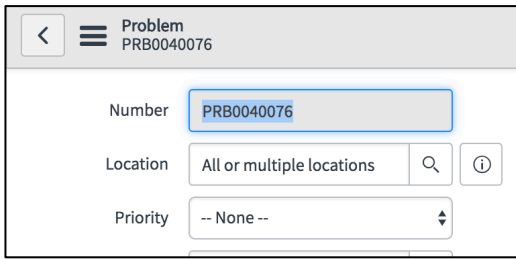
Work Notes List:

Group List:

Associate Incidents with a Problem

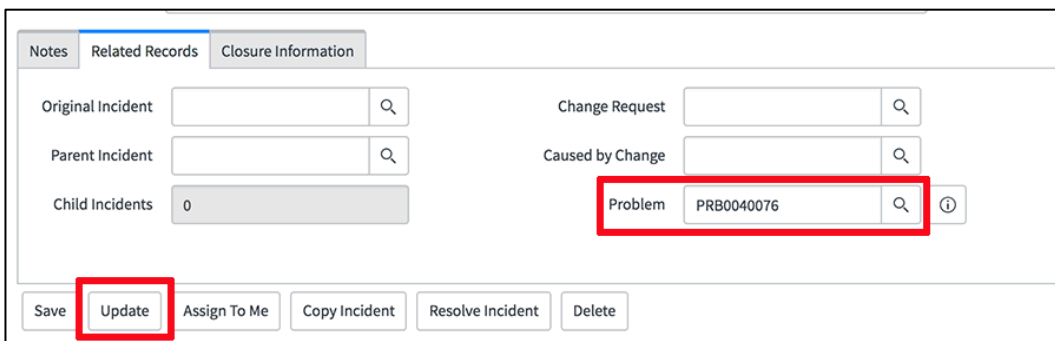
There are three possible ways to associate incidents with a Problem.

1. **From the Incident form:** Once a Problem has been created, copy the Problem Number.



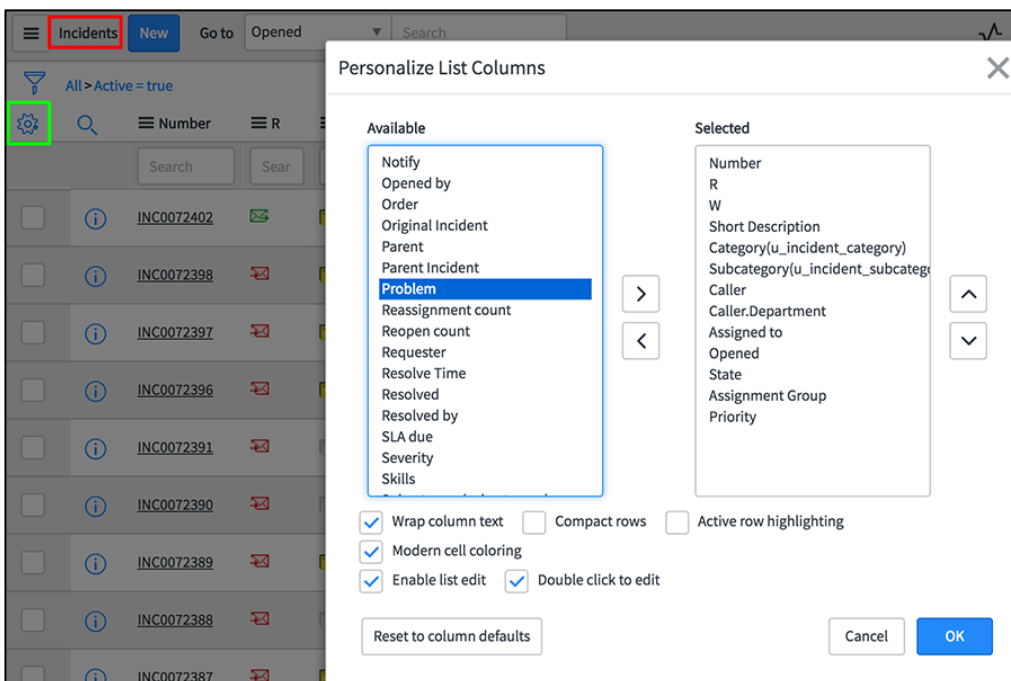
The screenshot shows a form titled "Problem" with the ID "PRB0040076". It contains three main input fields: "Number" with the value "PRB0040076", "Location" with the value "All or multiple locations", and "Priority" with the value "-- None --".

Open all of the related Incidents and paste the Problem Number into the **“Problem”** field on the **“Related Records”** tab and then click **Update**.



The screenshot shows the "Related Records" tab of an incident form. It features several search fields: "Original Incident", "Parent Incident", "Child Incidents" (with a value of 0), "Change Request", "Caused by Change", and "Problem". The "Problem" field contains the value "PRB0040076" and is highlighted with a red box. Below the form are several buttons: "Save", "Update" (highlighted with a red box), "Assign To Me", "Copy Incident", "Resolve Incident", and "Delete".

2. **From the Incident list view:** In the list of incidents, add the **“Problem”** column to your list. Make sure you are on the Incident table and click the **“Gear”** icon in the upper left. Select **“Problem”** from the list of available columns and choose where in the order of columns to add it.



The screenshot shows a list of incidents with a "Personalize List Columns" dialog box open. The dialog has two columns: "Available" and "Selected". The "Available" column lists various fields, with "Problem" highlighted. The "Selected" column lists the fields currently in the list view, including "Number", "R", "W", "Short Description", "Category(u_incident_category)", "Subcategory(u_incident_subcateg)", "Caller", "Caller.Department", "Assigned to", "Opened", "State", "Assignment Group", and "Priority". The dialog also includes checkboxes for "Wrap column text", "Compact rows", "Active row highlighting", "Modern cell coloring", "Enable list edit", and "Double click to edit". Buttons for "Reset to column defaults", "Cancel", and "OK" are at the bottom.

Double-click the empty field and then paste or lookup the Problem number and click the **green check mark** to associate that incident to the Problem record.

Department	Assigned to	Problem	Opened	State
Network and System Services	Hartigan, John	PRB0040072		
Technology Services Workshop	Lafferty, Charles		05/16/18 11:13:04 AM	Active
Technology Services Workshop	Lafferty, Charles		05/16/18 11:11:37 AM	Active

3. From the “Incident” tab at the bottom of the Problem form: You can view the incidents you’ve added at the bottom of the Problem form on the “Incidents” tab.

Number	R	W	Short Description	Caller	Department	Assigned to	Opened	State	Assignment Group	Priority
INC0049601			Michael Lubrano - Possible System Drop from MIS Course	Fox, Courtney	University Advising Center	Qureshi, Arafat	01/07/18 02:24:47 PM	Closed	Business Intelligence (BIA) - ASA	5 - Normal
INC0049252			FW: SOS Important: class registration glitch	Guner, Berrin	Marketing	Qureshi, Arafat	01/03/18 01:51:55 PM	Closed	Business Intelligence (BIA) - ASA	5 - Normal
INC0048804			FW: Another student is dropped from her classes	Guner, Berrin	Marketing	Qureshi, Arafat	12/29/17 11:54:37 AM	Closed	Business Intelligence (BIA) - ASA	5 - Normal
INC0048250			SP18 Courses Dropped - 916165904	Young, Kelly	University Advising Center	Qureshi, Arafat	12/20/17 04:20:53 PM	Closed	Business Intelligence (BIA) - ASA	5 - Normal

You can also initiate a new incident to associate with the Problem by clicking “New” or add more existing incidents to the Problem by clicking “Edit.”

← Edit Members

Add Filter Run filter ?

-- choose field -- -- oper -- -- value --

Collection: INC001002

Incidents List: PRB0040038

INC0010020
INC0010025
INC0010026

INC0038750
INC0039370
INC0039499
INC0039722
INC0039723
INC0039829
INC0040221
INC0040229
INC0040266
INC0040273
INC0040438
INC0040609
INC0041594
INC0041882
INC0042262
INC0043073
INC0043110

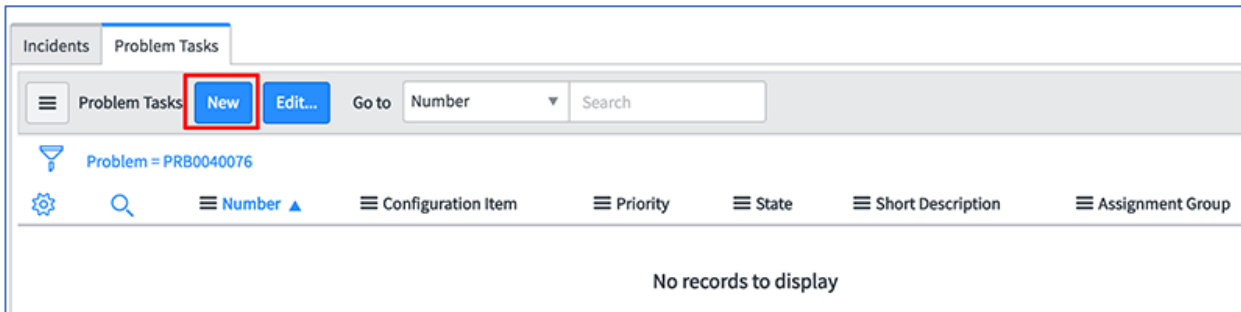
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Cancel Save

After clicking “Edit,” you can select the incident number or create a filter to search for related incidents and add them. From here, you can also remove any incidents that are found to be unrelated to the identified problem.

Problem Tasks

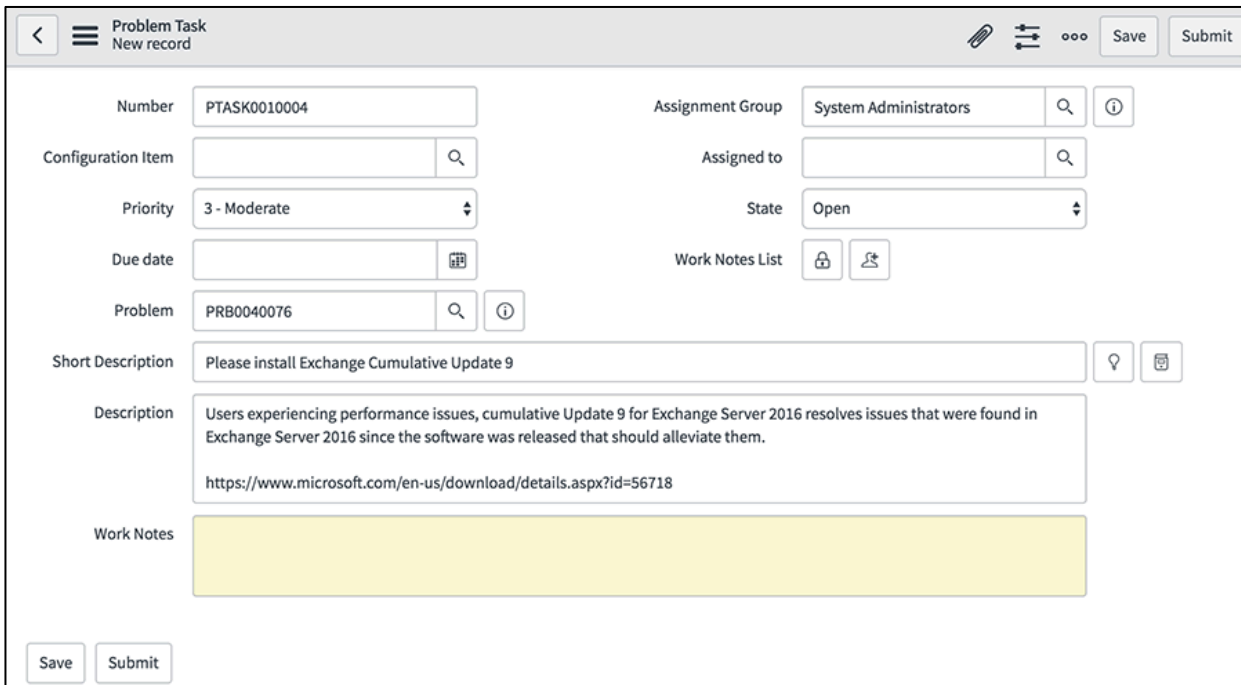
Tasks can be added to Problems if you require assistance from another group or technician to resolve the issues. At the bottom of the Problem form, click **“New”** on the **“Problem Tasks”** tab.



The screenshot shows the 'Problem Tasks' tab selected. A red box highlights the 'New' button. The interface includes a search bar, a filter icon, and a list of columns: Number, Configuration Item, Priority, State, Short Description, and Assignment Group. The message 'No records to display' is centered below the columns.

Fill in the Assignment Group, Priority, Short Description and Description. As with Incidents, please do not assign tasks directly to a technician unless you have made sure they are available and that they are aware you are doing so. Click **“Submit”** when finished.

Problem tasks will show up in the My Work and My Group’s Work modules.



The screenshot shows the 'Problem Task' form with the following fields and values:

- Number: PTASK0010004
- Assignment Group: System Administrators
- Configuration Item: (empty)
- Assigned to: (empty)
- Priority: 3 - Moderate
- State: Open
- Due date: (empty)
- Work Notes List: (empty)
- Problem: PRB0040076
- Short Description: Please install Exchange Cumulative Update 9
- Description: Users experiencing performance issues, cumulative Update 9 for Exchange Server 2016 resolves issues that were found in Exchange Server 2016 since the software was released that should alleviate them.
<https://www.microsoft.com/en-us/download/details.aspx?id=56718>
- Work Notes: (empty)

Buttons for 'Save' and 'Submit' are located at the bottom left of the form.

Investigate & Diagnose a Problem

The Assignment Group manager should assign the Problem record to a technician.

That technician should collect the Incident and Problem history needed to accurately diagnose the problem and identify a workaround or solution when possible.

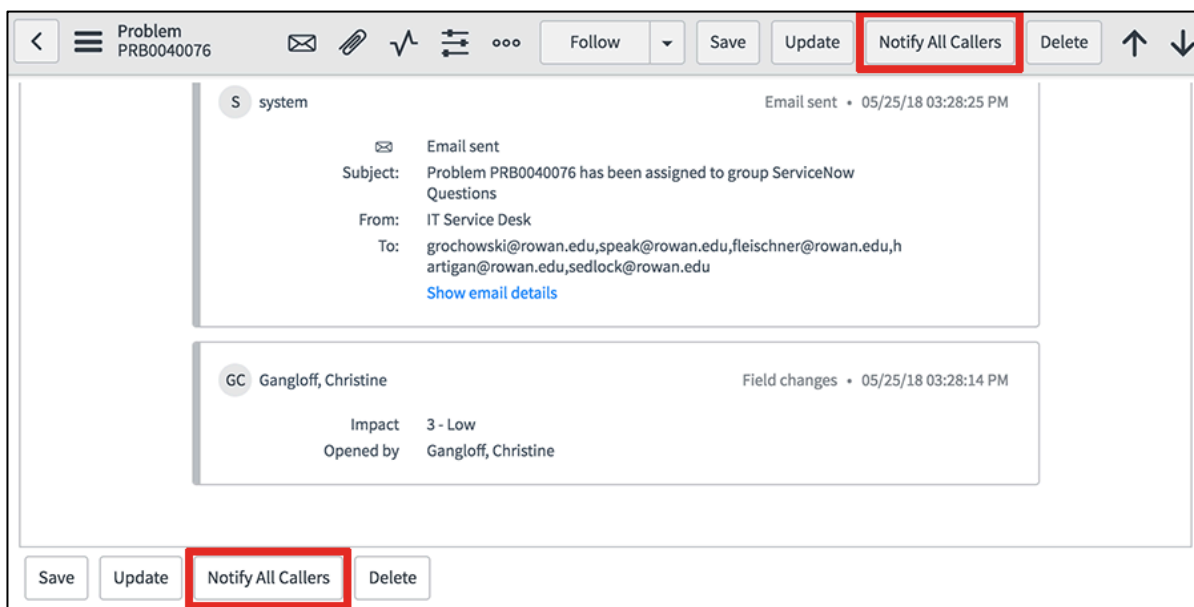
The screenshot shows a problem record interface for 'Problem PRB0040076'. At the top, there are navigation icons and buttons for 'Follow', 'Save', 'Update', 'Notify All Callers', and 'Delete'. The 'Save' button is highlighted with a red box and the number '5'. Below this, there are fields for 'Configuration Item', 'Change request', 'Opened' (05/25/18 03:27:50 PM), and 'Opened by' (Gangloff, Christine). There are two checkboxes: 'Create KB Article' (checked, highlighted with a red box and '3') and 'Known error' (checked, highlighted with a red box and '4'). The 'Short Description' is 'Exchange archive error' and the 'Description' is 'When the customers opens Outlook this error comes up: Outlook data file network connection password, you must enter a password for the //rowanads.rowan.edu/home network connection.' Below the description, there is a link for 'Attached knowledge: KB0010532 - Mailbox over the limit or Mailbox is full'. The 'Notes' section has tabs for 'Notes', 'Closure Information', and 'Related Records'. Under 'Notes', there are sections for 'Watch List', 'Work Notes List', and 'Group List'. A 'Work Notes' field contains the text 'Work notes will be sent to the assigned technician on each attached incident'. Below that, there is a 'Comments (Customer Visible)' section (highlighted with a red box and '1') containing a comment: 'This issue happens when a user's archive is on their home directory and gets too large. You need to move the archive to your C: drive and copy the messages back into your mailbox. You can request a quota increase if you need more space here: https://support.rowan.edu/kb_view.do?sysparm_article=KB0012759'. At the bottom right of the comments section, there is a 'Post' button (highlighted with a red box and '2').

Add a Comment

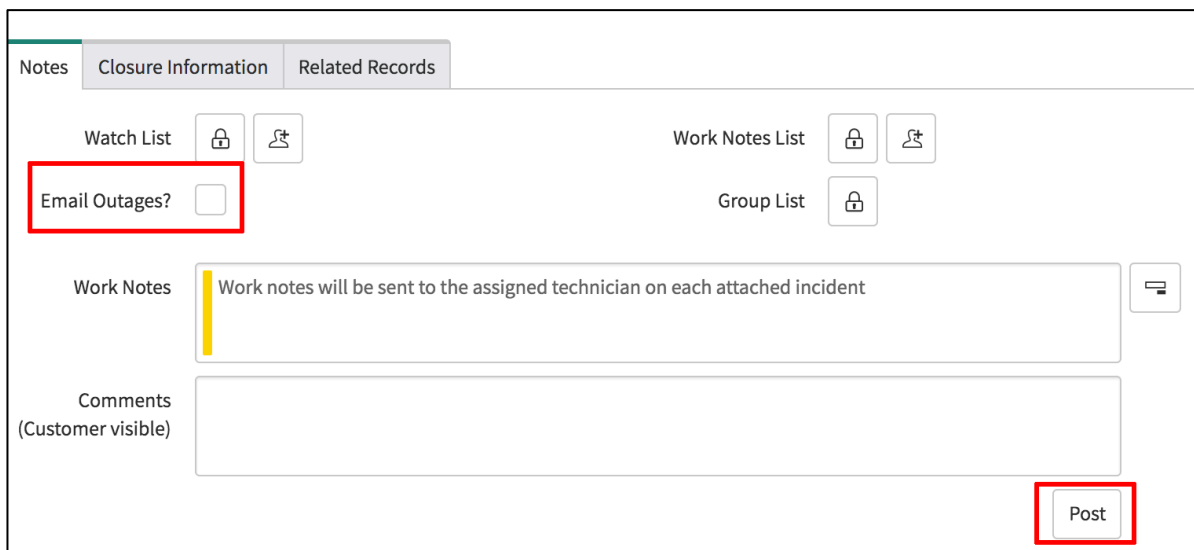
If a potential workaround or solution is identified that details a means of overcoming the symptoms of an Incident, add those details to the “**Comments**” field (1). Click “**Post**” (2) to add your comment to the Activity Log. If there is not a technician in the “Assigned to” field, the comment will be sent to all users in the Problem’s Assignment Group.

The “**Comments**” field is meant for the customer and should reflect clear and easy to understand steps detailing what they can do to remedy their problem, or to just let them know that the Problem should now be resolved, e.g. “*The wireless access point in your area has been replaced and your connection issues should now be resolved.*”

Once a comment is “Posted” you can send the contents of the Comments field to all Callers and Technicians on the related Incidents by clicking “**Notify All Callers**” either at the top of the Problem form or below the tabbed section in the middle of the form.



You can also email the **Outages** distribution group by entering a Comment, clicking the “**Email Outages?**” checkbox and then clicking “**Post.**”



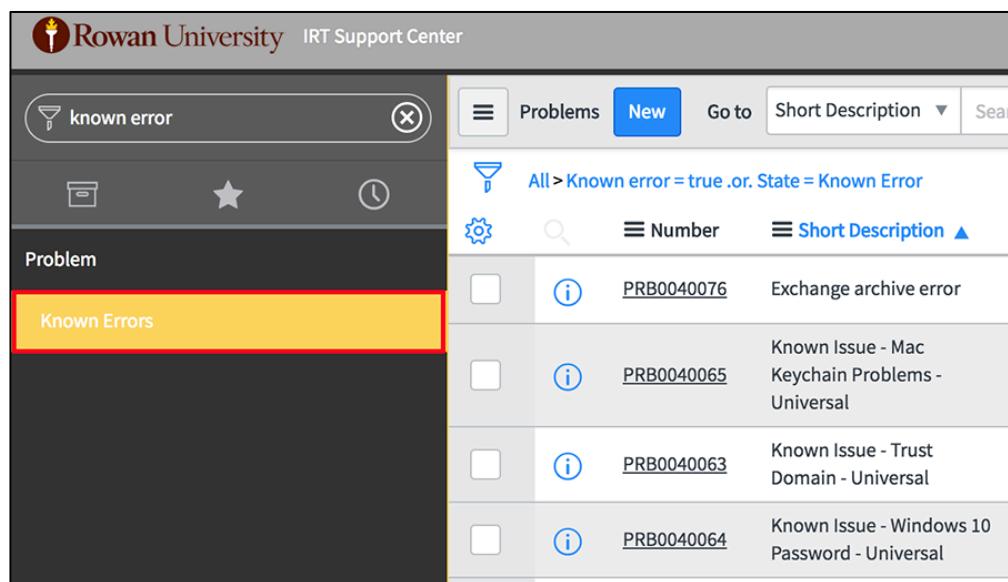
Known Errors

You can add a Problem to the “Known Error” database if the root cause is understood and a temporary workaround or permanent fix exists.

Using the Known Error check box lets you close the problem and resolve any related incidents while also adding the Problem to the Known Errors database.

Click “**Known Error**” (4) and then “**Save**” (5) to add the Problem to the Known Error database.

Technicians can navigate to the Problem > Known Errors module to see all problems that are identified as known errors.

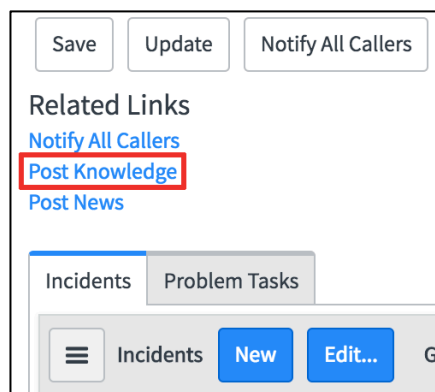


The screenshot shows the Rowan University IRT Support Center interface. The top navigation bar includes the university logo and the text "IRT Support Center". Below this, there is a search bar with the text "known error" and a filter icon. The main content area is divided into two sections. The left section is a sidebar with a "Problem" header and a "Known Errors" button highlighted in yellow. The right section is a list of problems with columns for "Number" and "Short Description". The list contains four entries:

	Number	Short Description
<input type="checkbox"/>	PRB0040076	Exchange archive error
<input type="checkbox"/>	PRB0040065	Known Issue - Mac Keychain Problems - Universal
<input type="checkbox"/>	PRB0040063	Known Issue - Trust Domain - Universal
<input type="checkbox"/>	PRB0040064	Known Issue - Windows 10 Password - Universal

Create a Knowledge Article

You can create a Knowledge article while the Problem is open by clicking “**Post Knowledge**” under the “Related Links” section of the Problem form. The “Comments” field and “Description” field will be copied from the Problem to a draft KB article with the “Short Description” being set as the title.



The screenshot shows a portion of the Problem form interface. At the top, there are three buttons: "Save", "Update", and "Notify All Callers". Below these is the "Related Links" section, which contains three links: "Notify All Callers", "Post Knowledge" (highlighted with a red box), and "Post News". At the bottom, there are tabs for "Incidents" and "Problem Tasks", and a row of buttons including "Incidents", "New", and "Edit...".

You can also initiate a Knowledge article upon closure of the Problem by clicking the “Create KB Article” (3) checkbox. The article will be created in Draft form once the Problem has been set to Closed/Resolved and saved.

All Problems containing a fix or workaround should result in a Knowledge article.

The article can then be edited before submitting for publication and review by the Knowledge Managers.

< ★ Home / Email and Calendar


Flag article Create Incident Edit

PRB0040076 Exchange archive error

KB0012910
☆☆☆☆☆ 2 views

Description:
When the customers opens Outlook this error comes up: Outlook data file network connection password, you must enter a password for the //rowanads.rowan.edu/home network connection.

Workaround:
This issue happens when a user's archive is on their home directory and gets too large. You need to move the archive to your C: drive and copy the messages back into your mailbox. You can request a quota increase if you need more space here: https://support.rowan.edu/kb_view.do?sysparm_article=KB0012759

 Authored by Gangloff-ADM, Christine
Last modified just now

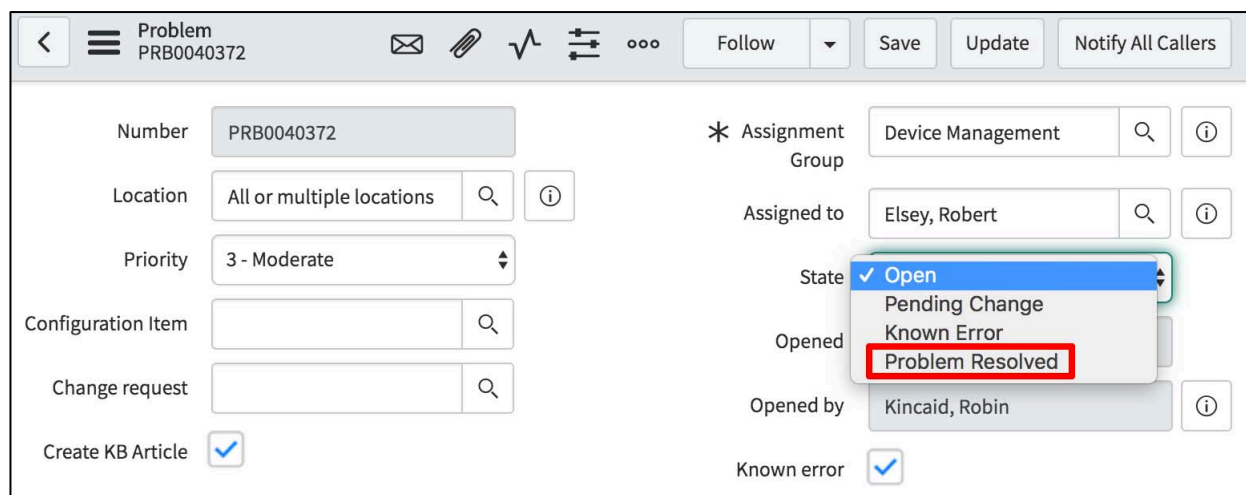
Copy Permalink

For more information, please see our Knowledge Base Article Creation Standards article at https://support.rowan.edu/kb_view.do?sysparm_article=KB0012372

Resolving Problems and Related Incidents

Resolving a problem means fixing the issue that will stop the incidents from occurring in the future. While Incident Management deals with fighting symptoms, Problem Management seeks to remove the causes of incidents permanently.

Once you have identified a workaround or resolution and have checked the boxes to “**Create KB Article**” (if you haven’t created one already) and/or create a “**Known Error**” record if needed, you can then change the **State** of the Problem to “**Problem Resolved.**”



The screenshot shows a web interface for managing a problem. At the top, there is a header with a back arrow, a hamburger menu, the text "Problem PRB0040372", and several icons (envelope, pencil, checkmark, list, and three dots). To the right of the header are buttons for "Follow", "Save", "Update", and "Notify All Callers". Below the header, the form is organized into two columns. The left column contains fields for "Number" (PRB0040372), "Location" (All or multiple locations), "Priority" (3 - Moderate), "Configuration Item", "Change request", and a checked "Create KB Article" checkbox. The right column contains fields for "Assignment Group" (Device Management), "Assigned to" (Elsy, Robert), "State" (Open), "Opened" (Kincaid, Robin), and a checked "Known error" checkbox. A dropdown menu is open over the "State" field, showing options: "Open" (selected with a blue checkmark), "Pending Change", "Known Error", and "Problem Resolved" (highlighted with a red border).

If you have already posted a Comment, changing the **State** to “**Problem Resolved**” will automatically send the last posted Comment to any Callers and “Assigned to” technicians on the attached Incidents once it has been saved or updated. Adding a new Comment indicating that the Problem has been resolved along with any pertinent details is recommended.

If you have not previously entered a Comment, you will need to add one before being able to save the Problem in a **Resolved** state.

Please remember that the “**Comments**” field is meant for the customer and should reflect clear and easy to understand steps for what they can do to remedy their problem, or to just let them know that the Problem should now be resolved, e.g. “*The wireless access point in your area has been replaced and your connection issues should now be resolved.*”

Resolved problems will be automatically assigned to the Change Coordinator to ensure a root cause analysis is performed.

The Change Coordinator may ask you for details to add to the “**Close Notes**” field which will be posted to all related incidents as a work note and should contain any back-end technical information for the technicians that would not necessarily be added to a resolution or Knowledge article that was created for end users.