In this guide, you will learn how to open a **Problem** ticket in ServiceNow.

### Note:
The purpose of Problem Management is to identify root cause of an issue and to make a decision as to how to proceed. This is important since not all problems are “fixed” and there are no Service Level Agreements (SLAs) for closing a problem ticket. Due to monetary or time considerations, a problem could be acknowledged and a workaround put into place, without ever removing root cause. It is also possible, that due to minimal impact, a problem may not have root cause removed. While Incident Management’s focus is to get the service up and running as quickly as possible, Problem Management’s goal, through investigation, is to remove the circumstances that caused it so that there will be no service impact going forward.

Navigate to [https://www.yale.service-now.com](https://www.yale.service-now.com) and login using your NetID and Password. The ServiceNow homepage displays.

- **Problem** tickets can be created in either the Problem or Incident module.
- There are two types of **Problems** tickets:
  - Reactive
  - Proactive

1. Choose **Create New** from Problem in the left navigation bar.
   - The Problem form displays.

2. Select if **Problem Type** is reactive or proactive.
   - Note: Most problem tickets will be ‘reactive.’ Reactive problems are created as a result of an Incident being created, which implies that customers were impacted. Proactive problems are typically made as a result of a Change ticket being applied to production that results in affecting services, but before there was any customer impact.
3. Select **Business Service** and **Category**.
   - Choose a **Service Offering** (3rd level) under **Business Service**.
   - Choose **Category** from drop down list which will auto populate the Assignment Group in the ticket.

   **Assignment Group/Assigned To:** Is the **Problem Owner & Group** (Service Offering Manager). In the future, the Manager name will appear as an uneditable field so that it explicitly will say who the Problem Owner, and the Assigned To will be the person allowed to follow through on the problem analysis. This may be the Manager of the team or the delegate. I.e. Bryan Kazdan in Endpoint Engineering is the Service Owner for Bigfix. However, he would like Luis Torres to be the person responsible for the analysis and cross-group work required to get to root cause. The Assigned To would be Luis Torres, and by default Bryan Kazdan, as the manager of this group would be the Problem Owner.

4. When creating a Problem ticket, Known Error is sometimes understood. This will change the **State** to Known Error after the **Workaround** field is filled in. Known Error can be one of two things;
   a) Workaround is understood.
   b) Root cause has been identified.

   If Workaround or Root Cause is understood, click on the **Known Error** box.

5. Add other relevant information to Problem Ticket in the main section.
   - **Caused by Change:** Change ticket number of modification that caused the issue.
   - **Change Request:** Change ticket number of modification that will remove root cause or provide a workaround to address the issue.
   - **Knowledgebase Article:** KB number of the article that describes the issue, the workaround or the solution.

6. In the **Short Description** field enter the keywords which describe the issue or click on the icon 🌍 to choose something from the suggestion list. It should be descriptive of the issue.

7. In **Description** field add additional details about the **Problem**. Be specific and detailed.

8. Determine **Priority** based on the matrix information below, (see graph that follows as reference):
   - **Impact:** Measure of how business critical it is. Usually directly proportional to the numbers of users affected by the Problem.
   - **Urgency:** Necessary speed of resolving an Problem.
   - **Priority:** Value given to a Problem to indicate its relative importance in order to ensure the appropriate allocation of resources to occur.
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Problem-Opening a New Problem Ticket (continued)

9. Information on Activity tab should be filled out when:
   - **Work Notes**: Used to indicate general findings over the life of the ticket
   - **Workaround**: Should document action to be taken to remove or lessen the impact of the issue. This field becomes mandatory when Known Error box is checked or State is Known Error.

10. Information on the RCA (Root Cause Analysis) tab should be filled out when working on understanding the root cause or when it is understood and is being addressed;
   - **Cause codes**: once root cause is understood, this is the general category of that event.
     i. Application/Software failure
     ii. Hardware failure
     iii. Human Error
     iv. Network
     v. Process Failure
     vi. OS Failure
     vii. Other
   - **Resolution Code**:
     i. Accepted Known Error – No Workaround
     ii. Accepted Known Error – Workaround Implemented
     iii. Deferred
     iv. Resolved – No Action Taken
     v. Resolved – Root Cause Removed
     vi. Unresolved – Costly
     vii. Unresolved – Future Release (WILL BE REMOVED IN THE FUTURE – PLEASE DO NOT USE)
     viii. Unresolved – Rejected
   - **Source**:
     i. Change Management
     ii. Continuous Service Improvement
     iii. Event Management
iv. Incident Management
v. Vendor Identified
vi. Other

- **Chronology of events**: Used to document the date/time/order of important aspects of problem analysis.
- **Contributing factors**: Used to document things that may have influenced the results found during analysis.
- **Lessons learned**: Identify what could be done better next time based on what went right/wrong during the root cause analysis.
- **Recommendations**: During the life of the analysis, suggestions can be made before it is determined whether it would remove root cause.
- **Root Cause**: Ultimate goal of a Problem ticket is to “fix it” through the identification of what specifically resulted in the problem and then the removal of that cause.
- **PM Close Notes**: Problem owner is responsible for Resolving the Problem ticket, but only the Problem Manager can close a ticket. This happens after the notes field is updated to indicate overall findings. The notes are read only to others.

- After you Save the top fields in the ticket, additional tabs appear at the bottom of the page. The items are listed below:

  In the **Incident** tab, **Incident** tickets (indicate impact to the customer) are seen as related to the Problem ticket once staff inputs the Problem ticket number in the **Related Records** section of the Incident.

  **Note** When a Problem ticket is changed to a Resolved State, any Incidents related to it will be updated and Resolved. The assumption is that the Incidents will be updated and closed based on the resolution of the Problem ticket.

11. **Problem Tasks** should be created to assign work to various groups/people to perform needed analysis, workarounds or root cause removal. Like a Problem ticket, a **Problem Task** can document the configuration item(s) affected, Priority, Due Date, Short Description, Work Notes, Business Service, Category, Assignment Group and Assigned To.

12. The **Problem Analysis** tab information is based on the Kepner Tregoe analysis process. The fields in this tab are straightforward and targeted to guide the Problem ticket owner and participants to gather enough information to analyze the data available in order to determine root cause.
- **Create New**

![Problem Analysis](image)

- **Complete all necessary tabs and fields:**
  
i. THE MOST important part of a Problem ticket is identification of the Problem Statement. A Problem Statement consists of two fields on the tab; **Object(s)** and **Deviation**. The **Object(s)** is the WHAT was affected. The **Deviation** is the difference between normal state and current state. It should be as specific/granular as possible and should be modified as more details become available during the life of the Problem ticket. An example would be;

  **Object(s)** Windows 7 Managed Desktops using any browser
  **Deviation** gets an Error 505 when executing OWA

  
ii. **State:**
  
  - Assigned
  - Work in Progress

iii. **Think Beyond the Fix (PLEASE DO NOT USE)**
  
  - Closed
  - Cancelled

iv. **Assignment Group:** Group to perform the analysis work.

v. **Assigned To:** person to perform the analysis work.

vi. **What/Where/When/Extent**

  - **What:**
    
    - Indicate which objects are and are not having the issue. The purpose of this is to be granular by including/excluding different types of objects. i.e. Windows 7 Managed Desktops ARE having the issue. Mac clients ARE NOT having the issue. Windows 8 Managed Desktops ARE NOT having the issue. (start here)
    
    - Is what deviations are and are not having the issue, trying to be as specific as possible. i.e. the issue IS generating a 505 error but is NOT generation any other errors.

  - **Where:**
    
    - Geographical locations that are and are not affected. i.e. the issue happens on the New Haven network but not in China.
    
    - Where on the object does it occur? i.e. the defect occurs on right, outside corner near the power button but not in any other location.

  - **When:**
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- When did it first happen? i.e. it happened the first time I powered on the machine
- Has it happened since? i.e. it has not happened since powering on the first time on ipadA, but I tried a second ipad at it happens the first time for that machine too.
- When in the lifecycle has it happened? i.e. the issue goes away as soon as I shut down the machine and put it back on again.

**Extent:**

- How many objects has it happened to? i.e. there is only 1 ipad in our house so - 2
- What is the size of what happened? i.e. 2
- What is the trend of what is happening? i.e. every time I power up an ipad it happens only the first time and stops.

13. Once all the Problem tasks, and information is completed, change the State to Resolved, which should be completed by the Problem Owner. The Problem Manager will then receive a notification to complete the PM Notes and Close the ticket. The reason why is because of the Impact it can have on the University and to ensure there are thorough notes on the Problem.