

Employee Leave Administration using ServiceNow Workflows

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Abstract - ServiceNow is a tool that tasks customer responses and requests. A request can be raised which contains issues and these problems can be solved using ServiceNow. Service now is PaaS (Platform as a Service) issuing support to the technical management in corporate societies. PAAS is a full satellite creation and implementation landscape with options that allow customers to provide that much from basic moon widgets to complex business applications that are zip archive. ServiceNow helps perform workflow operations in business implementations. In general, workflows is a process that manage tasks based on conditions given. After the task is accepted by the given condition, the tasks is executed else the task is terminated. The set values of the task becomes true when the task is executed else it is false when a task is rejected. A drag-and-drop interface for automating multi-step procedures around the platform is given by Workflow. A series of tasks consists of each workflow, such as creating documents, notifying users of pending permissions, or running scripts. The graphical Workflow Editor physically illustrates workflows as a form of flowchart. It presents events as boxes labelled with information about the activity and changes as lines linking the boxes from one activity to the next. The workflow for Employee leave administration will be explained in the further sections of the paper.

Key Words: ServiceNow, workflows, set values, leave application, approved and rejected

1.INTRODUCTION (Size 11, Times New roman)

ServiceNow has flexible features and gives power to achieve the goal of the project. The user can pick up an interface from the multiple options and then get the details of that interface which will be in use. For providing an effective interaction between the employees and customers, the cloud infrastructure has been built which makes it simple. The cloud infrastructure is a reliable solution making it quicker for moving the system to the cloud. Usage of this cloud infrastructure reduces the costs and provides an optimal usage of the space.

The benefits of ServiceNow are to improve service quality and create an on-demand service ecosystem to optimize cloud usage, reduce resource costs, automate service requests and provide cloud services. Provide server management for VMware, Amazon Cloud and Microsoft Azure environments and make them flexible. Consistency of results, portability, monitoring, fixed cost models, training and management, etc. are some of the benefits of using ServiceNow. For IT executives, this is also the overall approach to asset management. It provides ServiceNow customers with a reliable way to enable executives to consider the company's complex priorities to ensure the

stability, efficiency and productivity of the company's employees. The best solution is whether to be cautious when communicating with customers from the ServiceNow customer list. Large companies use ServiceNow. There are approximately 51,000 users on the Now Learning platform.

2. PROCEDURE

2.1 Creation of table

Workflows are used to automate a process. A new table "Leave Application" is created which extends the "Task Table". Task table is the base table of ServiceNow.

Since the Leave application table is extending task table, some of the fields are automatically assigned and prioritized to the present ongoing table. The fields are:

i) Number ii) Priority iii) State iv) Short Description

Open the form designer in ServiceNow studio. Remove all the pre-existing fields of task table except Number, Priority, State and Short Description. Later, configure the state button by adding three choices types:

i)Waiting for Approval ii) Approved iii) Rejected

The columns of the leave application table are:

- i) Employee-String
- ii) Leave adjusting to-String
- iii) Date-date
- iv) Time from-time
- v) Time to-time
- vi) Leave assigned to-reference

2.2 Creation of Business Rule

A business rule is a script on the server side that runs anytime a record is viewed, added, modified, removed, or queried from a table. Server scripts run on a computer or server. When documents and tables are accessed or updated, they can alter the appearance or actions of ServiceNow or act as business rules. Application Programming Interfaces (API) server-side Glide offers specifications that you can use to execute server-side functions in scripts. Company rules are used to execute activities such as automatically modifying values in the required fields when other parameters are reached, or to build email update events and script actions. Now open studio, create a business rule for Leave Application table. Name the business rule as "LBR1" and tick the checkbox for "Advanced" field. At the bottom of the business rule page, go to the advanced tab and assign the current state of the task as 1 ("current.state=1") and submit.

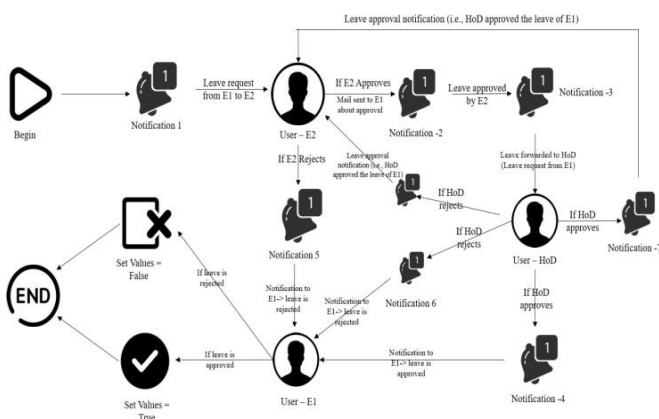
2.3 Creation of workflow

In ServiceNow studio, a workflows needs to be created for the “Leave Application” table. After a workflow is created, a new tab is opened and under the conditions tab, select “Run the workflow always” to check whether the workflow is running or not irrespective to the conditions given and under the “filter condition”, select state as “Waiting for Approval” and submit. After modifying and submitting all the fields, a workflow is opened in a new page. In the workflow page, click on the core tab. Under the core tab, the chores like notifications, approval, conditions, sub flows, service catalogues, tasks, timers are utilities are available since the task table is extended during the creation of the Leave Application table. If the task table is not extended, these chores won’t be available.

2.4 Main task

The main task to implement is:

- Let us assume that the organization or company is XYZ.
- Assume that the employee (E1) of that organization is willing to apply for a leave
- If the faculty E1 wants to apply a leave



- Before getting the approval of HoD, whatever the tasks that are assigned for E1 should be adjusted to another employee (E2). If the E2 employee rejects the adjustment and leave, the process should end there itself and the leave should not be forwarded to HoD.

Once the leave is approved/rejected by E2, the E1 employee should receive a message that “Your leave is approved/rejected by E2 and is forwarded to HoD (if leave is approved)”.

- E2 approves, the leave is forwarded is to HoD. If HoD accepts the leave, E1 will receive a message stating “Your leave is approved” else “Your leave is rejected”.

3. ARCHITECTURE

- BEGIN
- Notification(LN1) to Faculty(E2) that there is a Leave Request from Faculty(E1)
- Approval/Rejection of Faculty(E2)
 - If E2 Approves:
 - Notification(LN2) to E1 that the Leave is accepted
 - Notification(LN3) to HOD about the Leave Request
 - If E2 Rejects,
 - Notification(LN5) to E1 that the Leave is Rejected
 - Approval/ Rejection of HOD
 - If HOD Approves,
 - Notification(LN4) to E1 that the Leave is Approved By HOD
 - Notification(LN7) to E2 that the Leave is Approved By HOD
 - If HOD Rejects,
 - Notification(LN6) to E1 that the Leave is Rejected By HOD
 - Notification(LN8) to E2 that the Leave is Rejected By HOD
- All the Approved states will be connected to "SET VALUES ACCEPTED"
- All the Rejected states will be connected to "SET VALUES REJECTED"
- SET VALUES APPROVED & REJECTED will be connected to END.

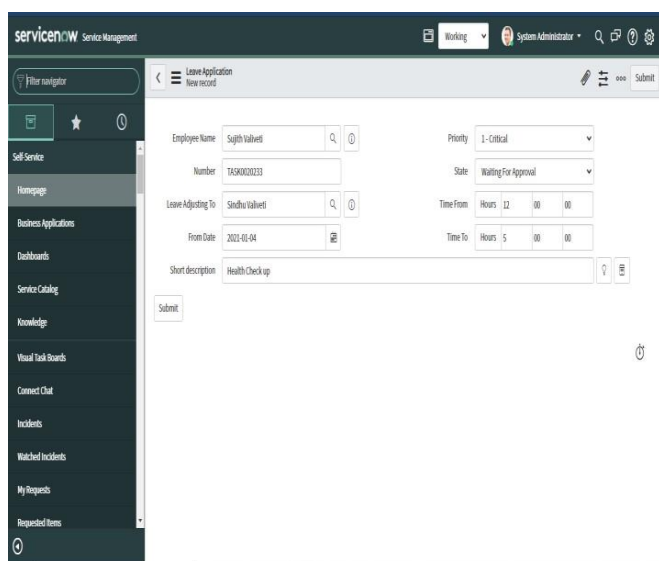
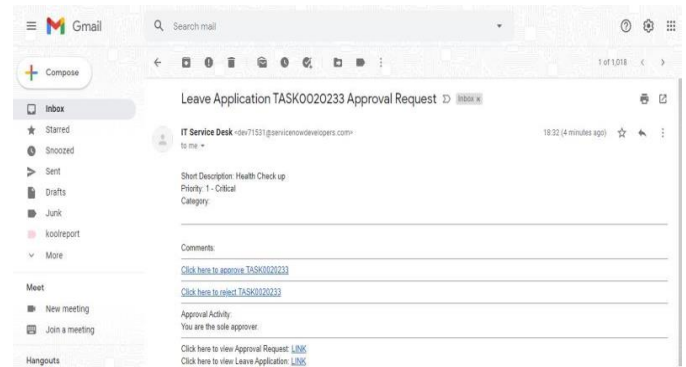
4. RESULTS

Scenario: Faculty or Employee (E1) wants to take a leave and that faculty has a class/ Session at the same time So he decides the adjust the session with another faculty by requesting his co-worker or employee or faculty(E2) , Followed by the head of the department.

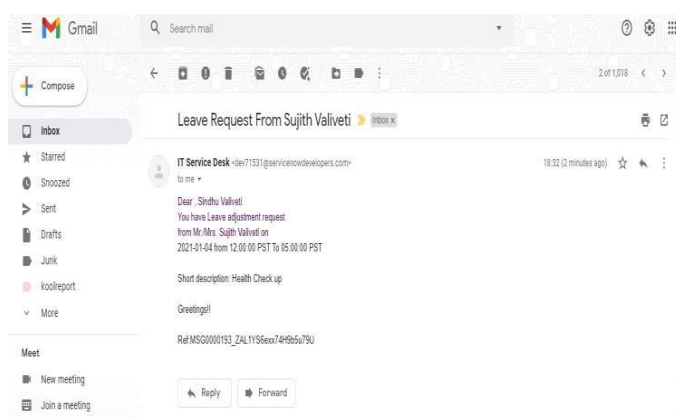
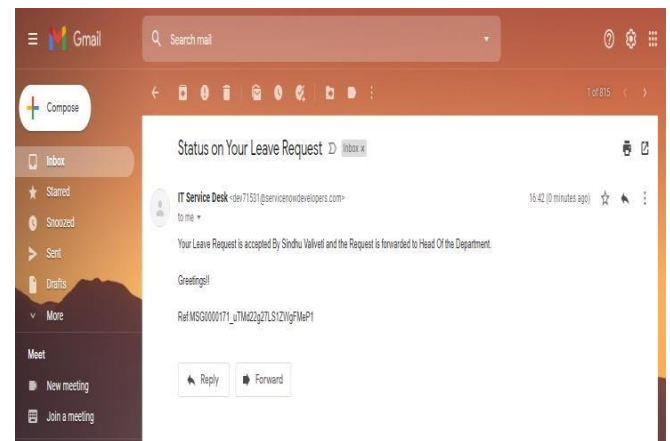
Faculty(E1) applies for the leave by filling all the necessary fields like

- 1) Employee name
- 2) Leave Adjusting To: Whom he wants to take up his Absence
- 3) Date
- 4) Time from
- 5) Time to
- 6) Priority – How important that leave is to individual Faculty/ Employee
- 7) Short Description

In the “ Leave Application Table’s Form” and submit the form.

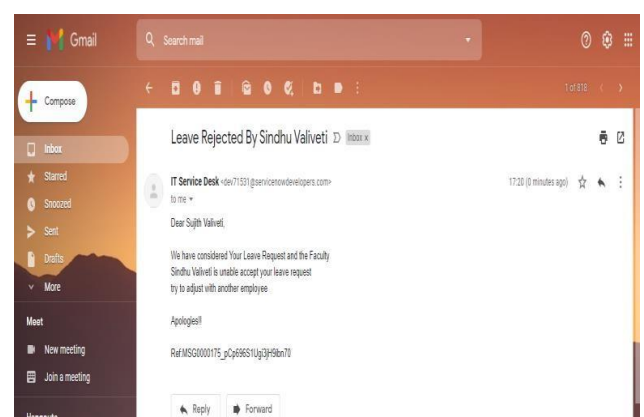



As shown in the above Depiction ,Faculty (E2) will also receive a direct Approval/Rejection Mail With a link to approve or reject, (i.e), E2 can accept the leave from E1 by Just tapping on the Approve Link.E2 can reject the leave from E1 by Just tapping on the Rejection Link.



As shown in the above Depiction, Faculty(E2) will receive a Leave Request mail form Faculty(E1) with all the necessary fields like Name of the Employee, Date , Time From , Time to with combined priority and a short description.

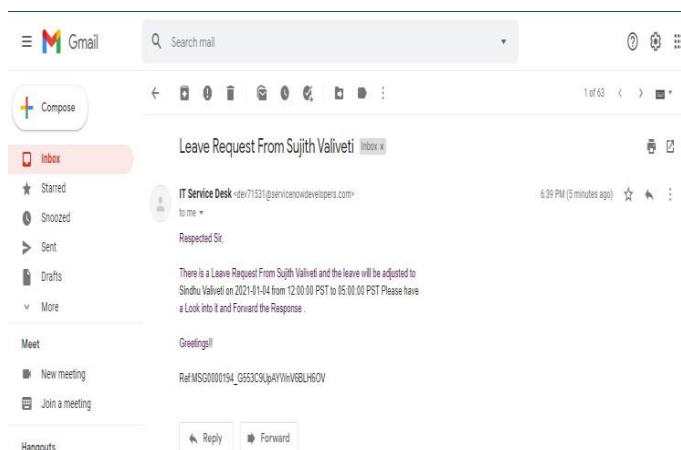
As shown in the above depiction, If Faculty (E2) accepts the Leave Request, Faculty(E1) will receive a Mail about the update on the leave as Partial Step with a memo that Leave is accepted by Faculty(E2) and forwarded to Head of the Department for complete Approval.



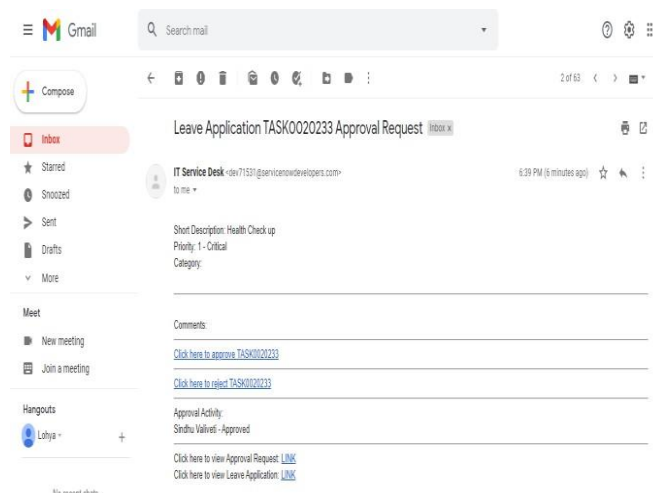
As shown in the above depiction, if Faculty (E2) rejects the Leave Request, Faculty(E1) will receive a Mail about the update on the leave as Step with a memo that Leave is Rejected by Faculty(E2).

As the next step of the Leave Approval,

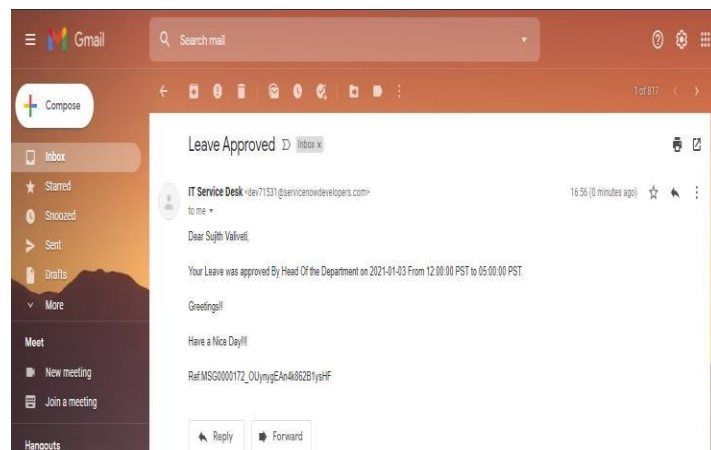
Head of the Department comes into picture for the Approval/ Rejection of the Leave Request



As shown in the above depiction, Head of the Department(HOD) will receive a mail with memo as that there is a Leave Request from Faculty(E1) and the Leave will be Adjusted to Faculty(E2) on the particular fields like date and time.



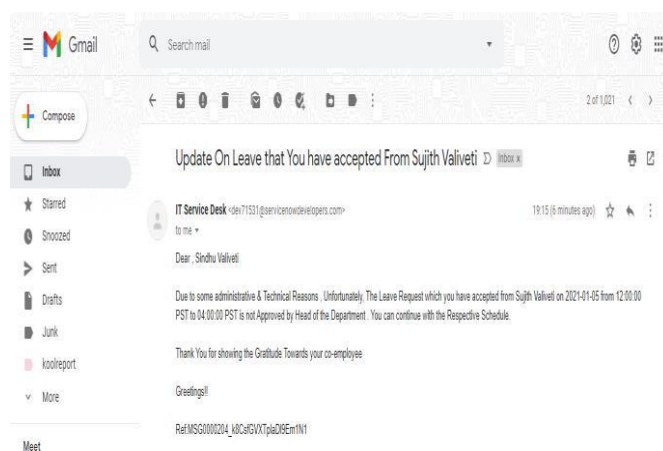
As shown in the above Depiction, Head of the Department will also receive a direct Approval/Rejection Mail With a link to approve or reject, (i.e), HOD can accept the leave from E1 by Just tapping on the Approve Link, HOD can reject the leave from E1 by Just tapping on the Rejection Link.



As shown in the above depiction, If HOD accepts the Leave Request, Faculty(E1) will receive a Mail about with short memo that leave is accepted by the head of the department.

If HOD accepts the Leave Request, Faculty(E2) will also receive a Mail with a short memo enclosing all the details of the Leave (i.e), Date and Time.

If HOD Rejects the Leave Request, Faculty(E1) will receive a mail with a short memo mentioning the reason for not approving the leave request



As shown in the above depiction, If HOD Rejects the Leave Request, Faculty(E2) will also Receive a Mail with a short memo mentioning the reason for not approving the leave request.

4.1 ADVANTAGES

- Instead of paperwork involvement for asking for leave, these workflows are used for the easy approving or rejecting a leave

- ii) In general scenario, an Employee E1 should send leave to employee E2. Later E2 will either be accepting or rejecting. Sometimes, E2 might forget to send the leave application to Head of the Department. To eradicate this disadvantage, the workflow designed will automatically send the leave application to HoD after getting the response from Employee E2.
- iii) The data of the leave will also be saved in their respective mail accounts which helps for the data to be secure and safe.

5. FUTURE WORK

The workflow for the testcase in the paper is explained among three employees i.e., Employee E1, Employee E2 and Head of the Department. But in the future, the ServiceNow workflow can be used for maintaining leave records for all the employees in the organization. There will be no loss of data since the data to be sent is stored in their respective workflows and mail accounts. In future, workflows can play a crucial role in most of the companies.

6. CONCLUSIONS

To conclude, the testcase in this paper helps to automate the workflows. In traditional approach, an employee takes a paper, go to an employee for leave approval. Later, another employee takes it to the Head. A lot of paperwork and time is wasted. Later on, technology is developed and Employee E1 sends mail to Employee E2. After E2 accepts/ rejects, if E2 forgets to send the mail to Head of the Department, the time wastes. So, a workflow is designed in this paper to automate the leave application process. After E2 accepts/rejects the leave, it is directly redirected to either Hod or E1. So all the process becomes easy and less time taking. In the coming years, the workflow will show a greater impact for leave administration in most of the companies.

7. REFERENCES

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