# **SERVICENOW**



**CHANGE MANAGEMENT 101** 





#### **OVERVIEW**

- Introduction
- **Definition**
- Background
- Change Types
- Labs
  - o Life Cycle of a Standard Change
  - o Life Cycle of an Emergency Change
  - o Life Cycle of a Normal Change
  - o How to Cancel a Change
  - o How to Relate a Change to an Incident
- Questions

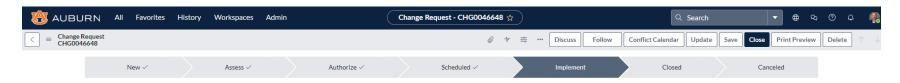




#### INTRODUCTION

ITIL defines a "change" as the addition, modification, or removal of anything that could have a direct or indirect effect on services; therefore, some requests from the Service Catalog, specifically those that generate or cause "changes," will generate a Change Record (CHG9999999).

The fulfillment of a **change request** differs from that of a **service request**. Just like service requests, there is at least one **Task** for fulfillment, but the staged workflow for **change requests** is much more manual and deliberate, as you can see in this screenshot.



Change requests can and most often will be generated directly from the platform to document work done on configuration items.

### **DEFINITION**

**Change Management** is the process of documenting any new or modified service in our IT environment. It provides us with the ability to limit outages and collisions using conflict managers such as **blackout calendars** to automatically tell us if a change we are submitting interferes with another change or if there is a significant event happening during our planned start time and end times.

Change provides oversight with approvals, including leadership and **Change Advisory Board (CAB)** approval.

Change allows the documentation of work related to a modification or introduction to a service. In the case of Auburn University's change process, it not only allows us to revisit how and when the change occurred. It





also gives us a historical look into changes for particular configuration items. It also gives departments the ability to track how many changes are occurring over time.

The process of managing configuration item changes across the institution falls under the oversight of the **Change Manager**. The Change Manager leads the **CAB**, which meets weekly to review **Normal Changes** submitted for consideration and **Emergency Changes** that have taken place.

Auburn's Change Management implementation leans heavily on ITIL best practices. Still, it has been modified to consider the institution's concerns, consultation from peer institutions, direction from the administration, and feedback from our IT professionals. The Change Management process may continue to evolve as Auburn University's IT landscape matures.

### **BACKGROUND**

Yes, change management is familiar to Auburn University. It started as an email chain, which became an Outlook calendar. It later began its automation journey with a venture into SharePoint and eventually landed in ServiceNow, where it resides today.

The most significant update to the change management process came with its automation. This allowed dynamic tracking of changes on a calendar and notifications to supervisors, IT Providers, and others.

The idea of the **CAB** came within the automation timeframe. This, too, was a big but necessary addition to the process as we mature as an IT organization.





#### **CHANGE TYPES**

There are three (3) types of changes. (Standard, Normal, and Emergency)

## a) Standard

A Standard Change is a low-risk, pre-authorized change that is well-understood and fully documented and can be implemented without needing additional authorization.

- Low impact and low risk (which is always well understood)
- Repeatable and well-documented process with a high degree of success
- Relatively common and frequently occurring
- Authority granted in advance (Pre-Approved by Change Manager/CAB)
- Does not directly alter user/business data

## **Examples**

- Server patching or similar activity that is performed throughout the year
- OS updates
- DNS Changes

## **Required Notification / Approvals**

Auto Approved

## Required Documentation (step-by-step documentation)

• Change Requests must be submitted through ServiceNow using a Standard Change Template





## b) Normal

A Normal Change is not an emergency change or a standard change. Normal changes follow the defined steps of the change management process.

- Not auto-approved
- Cannot be created after the event
- Must go through the CAB
- Requested and CAB-reviewed with enough lead time, depending on the risk level

## **Examples**

- Oracle DB Upgrade
- Banner Upgrade
- SharePoint Server Upgrade
- Network hardware changes
- Large-scale changes or upgrades to various telecom systems

## **Required Documentation** (<u>step-by-step documentation</u>)

- Change request in ServiceNow
- Thorough information (in the change requests) that sufficiently explains the impact of the normal change





## c) **Emergency**

An Emergency Change is a high-priority change that requires the bypassing of the normal change process to mitigate a production issue in the shortest possible time. Emergency changes fall within one of the following categories

- Fix on fail or retroactive situations where the impact to service has already been experienced.
- Fix or fail situations where the impact to service is imminent if action is not taken.

## **Examples**

- System breach by hackers
- Firewall changes in response to attack
- Response to exposure to critical system vulnerability
- Restore system/service crash

## **Required Notification / Approvals**

• The requestor's manager or director required

## Required Documentation (step-by-step documentation)

- Change request in ServiceNow
- Thorough information (in the change requests) that sufficiently explains the need and nature of the emergency change

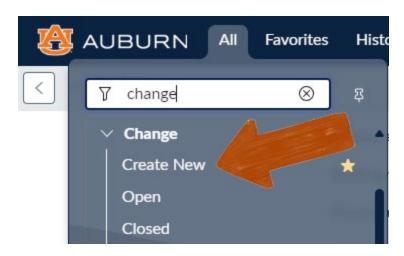




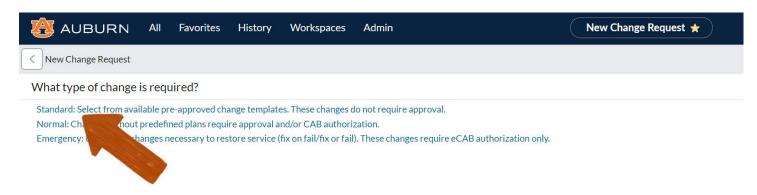
## **LABS**

## LAB 1: Lifecycle of a Standard Change

1. In the filter navigator, search for Change and click Create New



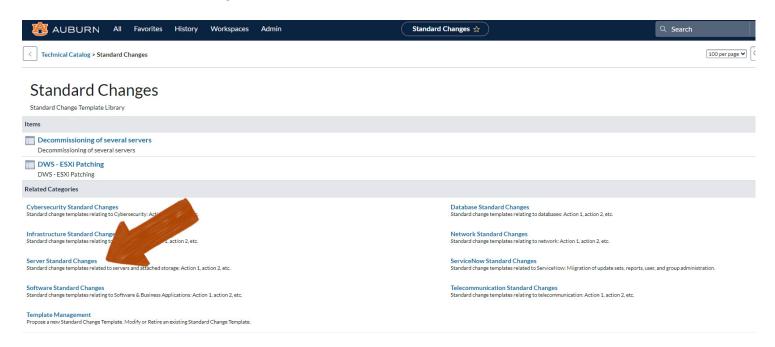
2. On the What type of change is required? screen, click Standard: Select from available pre-approved change templates. These changes do not require approval.







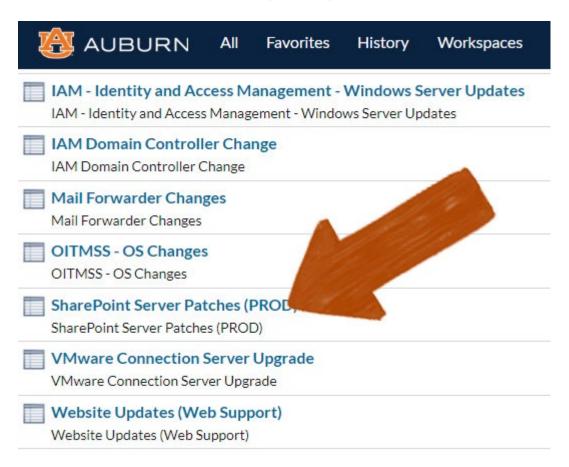
3. On the **Standard Changes** screen, select the **category** for your change. For example, **Server Standard Changes**.





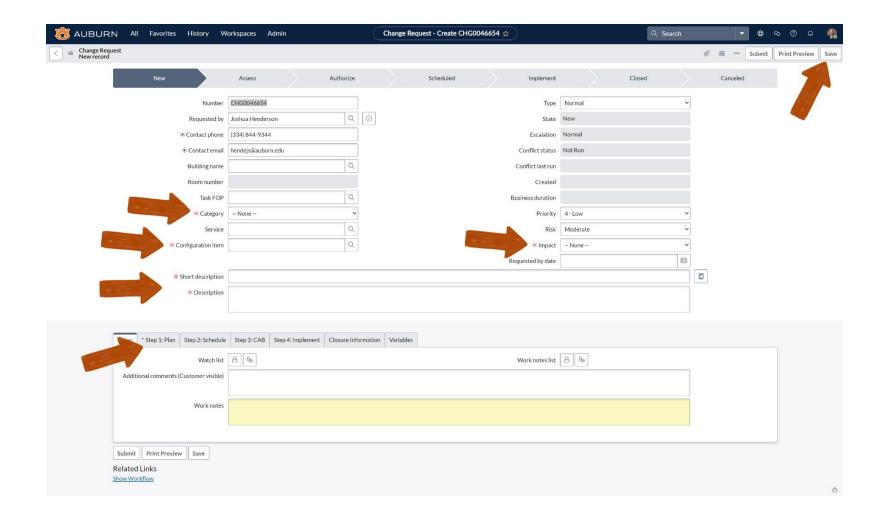


4. Select the standard change template from the list in the category. For example, SharePoint Server Patches (PROD).



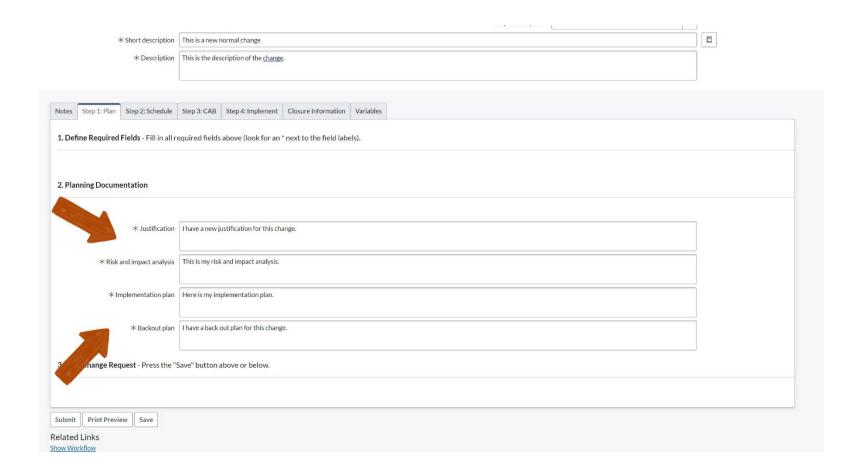
- 5. Complete the change request form, documenting all required fields (look for the red \* next to the fields and the \* on the tabs). When you have completed the form, click **Save**.
  - Upon submission, A notification will be sent to the individual who requested the change (Requested By) and the Assignment Group.









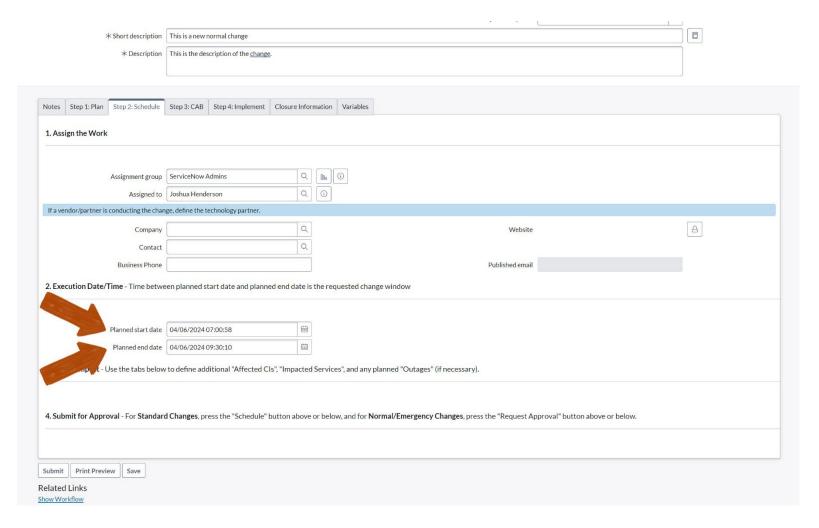


The current **State** is **New**.



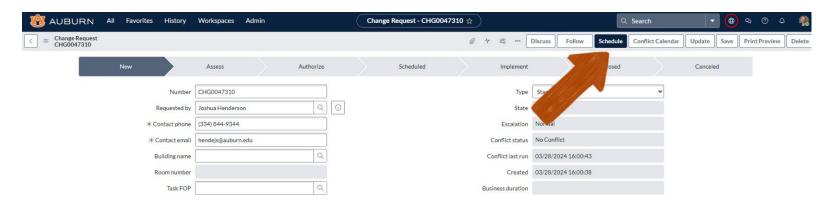


6. It's time to schedule your change. Enter the **Planned Start Date** and **Planned End Date**. Then, click the **Schedule** button.



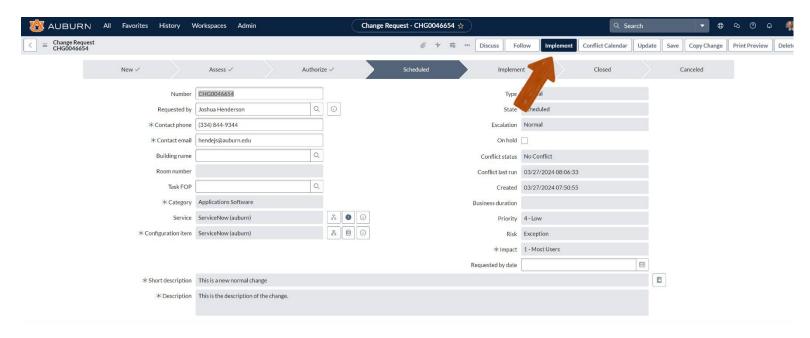






The current State is Scheduled.

7. When you are ready to implement the change, click the **Implement** button.



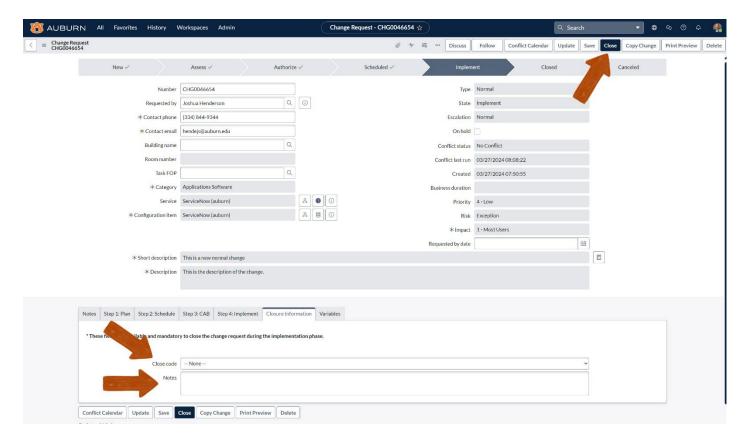




Entering the implementation phase automatically fills in the **Actual Start** field and creates the **change task** (CTASK######) to complete this change request. This also opens the **Close Code** and **Notes** on the **Closure Information Tab** for single pane closure.

The current State is Implement.

8. As mentioned in step 7, closing the change is now available from the change request. This is the preferred method for closing a change request due to the ease of this process. To close the change request, navigate to the **Closure Information** tab, choose the **Close Code**, provide **Notes**, and then click the **Close** button.







NOTE: However, the aforementioned **change task** will continue to be a viable option. This is how you'd close the change via the change task.

The individual assigned to the **change task** now completes the actual change work and **closes the task**. This action **automatically** closes the change request, and the **Requested By** individual will be notified that the change has been completed.

The current State is Closed.

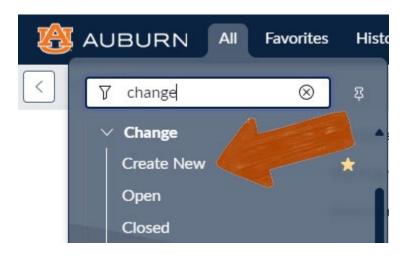
Notice that the change request and change task is now **closed**, and the **Actual End** was filled in.



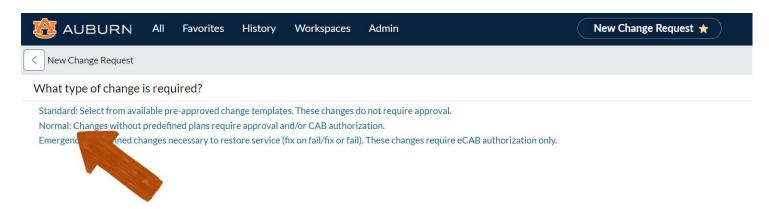


## LAB 2: Lifecycle of a Normal Change

1. In the filter navigator, search for **Change** and click **Create New**.



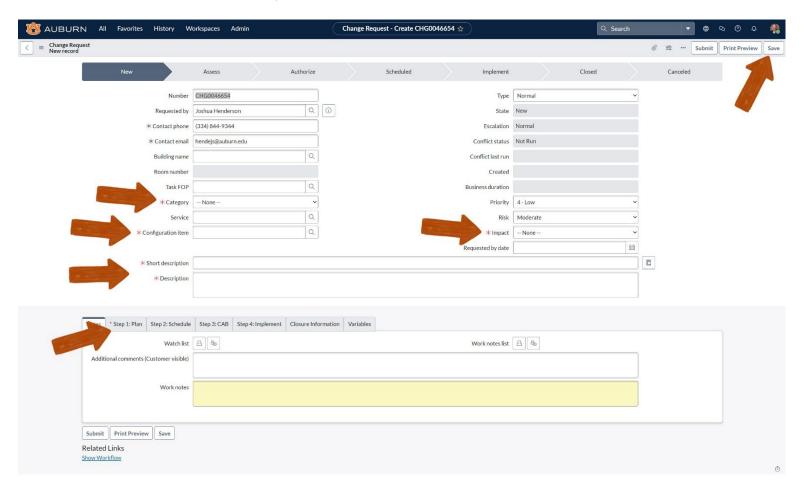
2. On the What type of change is required? screen, click Normal: Changes without plans that require approval and CAB authorization.





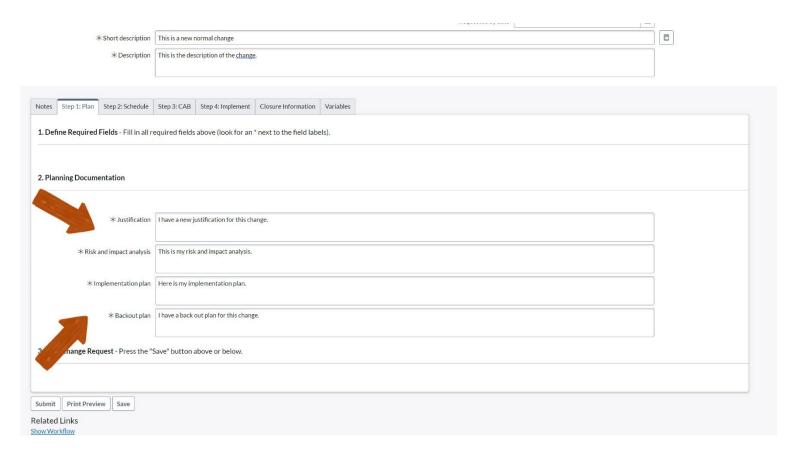


- 3. Select the **Step 1: Plan** tab to start walking through the submission process.
  - a. Complete all the required fields for the change request and any additional fields that would be helpful for both completion and CAB evaluation.
  - b. Specifically, complete the Category & Configuration item selection, Description fields, Impact and Planning Documentation fields.
  - c. When the documentation is complete, click the Save button









Upon submission or saving this record, a notification will be sent to the individual who requested the change (**Requested By**) if that person isn't the same individual who opened the change.

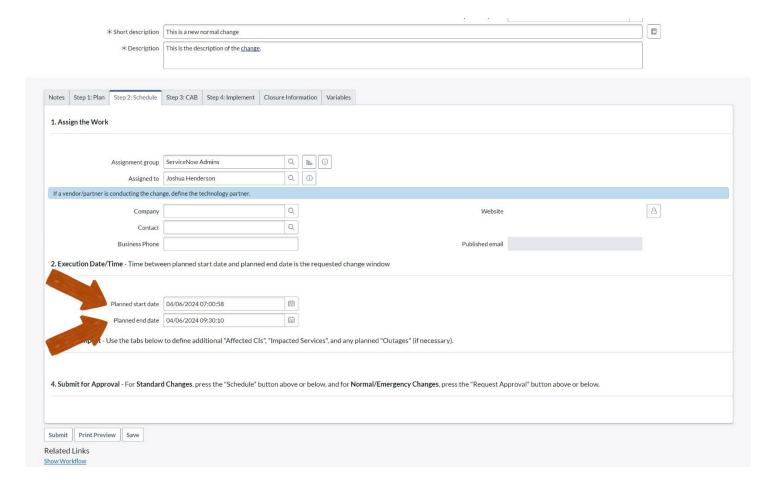
The current **State** of **New**.

- 4. Select the **Step 2: Schedule** tab to continue the change process.
  - a. Assign the work to who will execute the change with the **Assignment Group** and **Assigned To** fields.



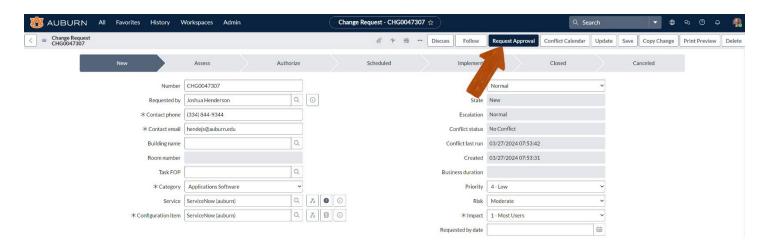


- b. Provide the Planned Start Date and Planned End Dates.
- c. Using the related lists tabs at the bottom of the page, define additional **Affected CIs**, **Impacted Services**, and any planned **Outages**.
- d. Click the **Request Approval** button.









A notification will be sent to the **Assigned To** individual unless you are that person.

If this change creates an outage for a business service, use the **Outages** related list to identify which **Mapped Application Services** or **Service Offerings** will be affected by this **Planned Outage**. NOTE: In the future, we hope to have this process automated.

When you click the **New** button, a window will open to define the **Outage**. The **Configuration Item** should most often be a **Mapped Application Service** or **Service Offering**, so the proper notification appears on the <u>Services Status</u> page. The **Type** should be **Planned Outage**. When the **Begin** and **End** fields are defined for the duration of the outage, click the Submit button.

The current State of Assess.





#### **SCHEDULING WARNING**

Be aware of the **Planned start date** and **Planned end date** you select. If you select times outside of a maintenance window, you will trigger a scheduling conflict. Look for this popup.

If you select the **Conflicts** tab, the reason for the conflict is listed. Here is an example:

For help selecting a time inside a maintenance window, click the **Scheduling Assistant** link in the orange popup and then navigate the calendar for an appropriate change window.

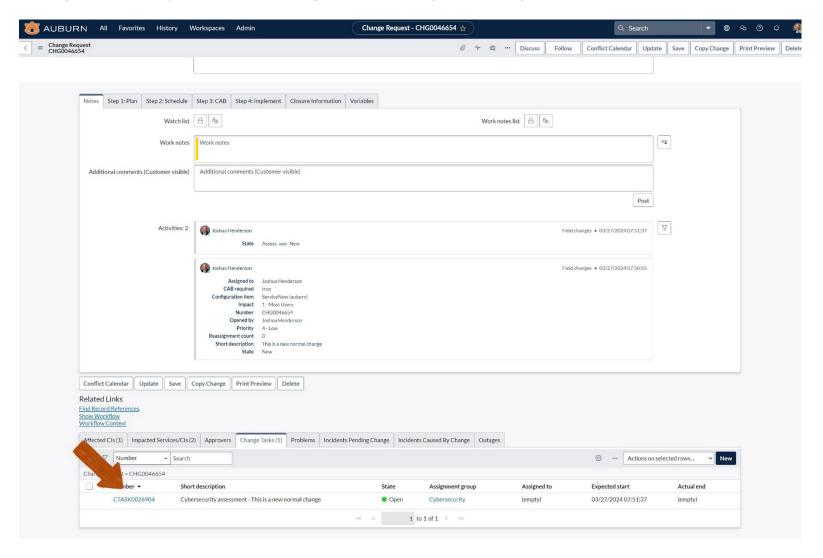
Once a time slot is selected, a confirmation popup is presented.

**NOTE**: Sometimes changes are scheduled outside maintenance windows for a variety of reasons. CAB considers these and may grant an exception; however, doing so does raise the Risk level for the change.





5. During the **Assess** phase, some changes receive a Cybersecurity task.



A notification is sent to the respective groups to review their tasks. Sometimes, the Cyber group will reassign the task to the **Assignment Group** for the change. If this occurs, that group will receive a

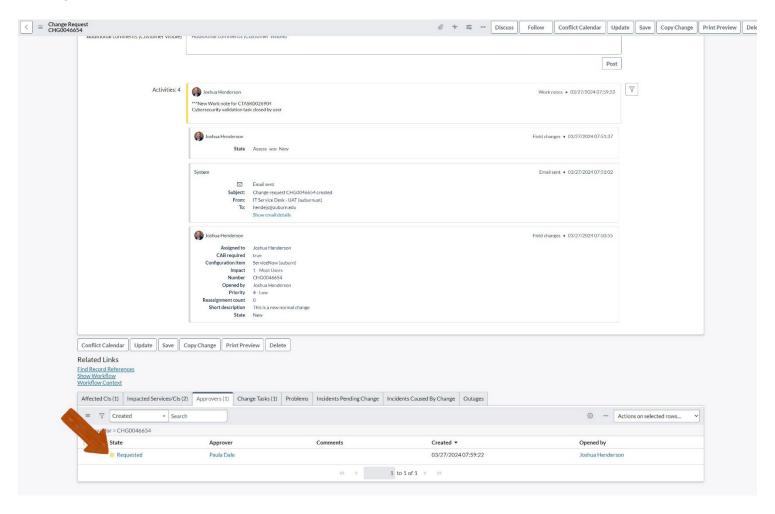




notification and should complete the task to move forward.

The current **State** of **Assess**.

6. When all Assess State change tasks are complete, the Approval request is sent to the responsible Manager.







If the Manager **rejects** the request, the change is **canceled**.

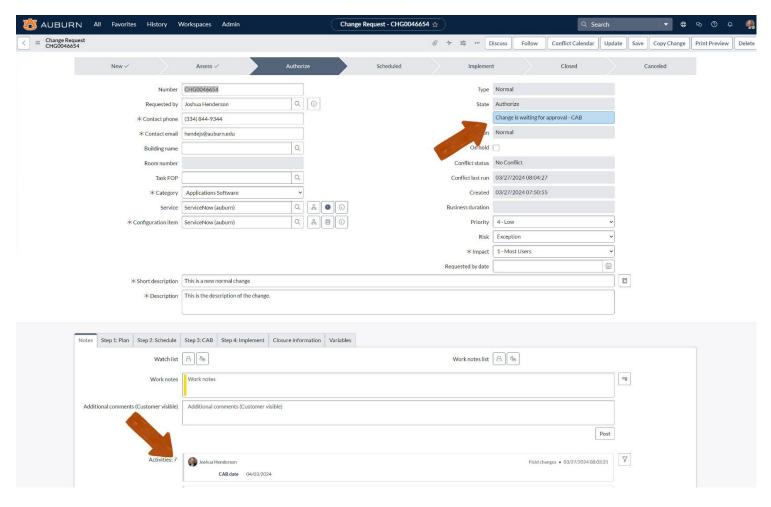
If the Manager **approves** the request, the Risk is reassessed automatically. If insufficient lead time is provided, it will be flagged as an **exception** for **CAB** to consider. The change will be assigned a **CAB date** and be added to the **agenda** for that meeting.

The current State of Authorize.

7. The change is now awaiting CAB **approval**. If this is your change, your **presence** is necessary at the CAB meeting to answer any questions the board members may have. If the change is **approved**, you may proceed with your change at the approved planned time, but remember to keep working on the change record.





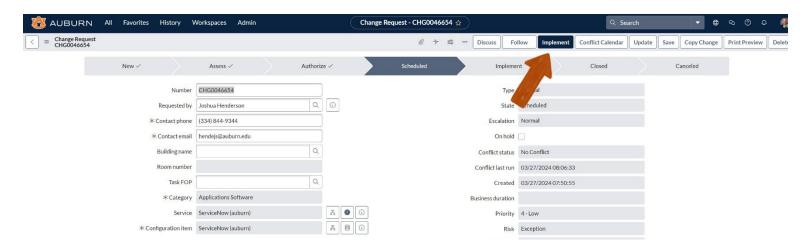


The current State of Scheduled.

8. When you are ready to implement the change, click the **Implement** button.







Entering the implementation phase automatically fills in the **Actual Start** field and creates the **change task** (CTASK######) to complete this change request. This also opens the **Close Code** and **Notes** on the **Closure Information Tab** for single pane closure.

The current **State** of **Implement**.





9. The individual assigned the change task now closes the change by adding a **Close Code** and **Notes**. This action closes both the change request and the change task, and the Requested By individual will be notified that the change has been completed.

AUBURN All Favorites History V	Vorkspaces Admin	Change Request - CHG0046654 ☆	Q Search	▼ <b>⊕</b> ∞ ⑨ ♀ <b>§</b>
Change Request CHG0046654			Follow Conflict Calendar Update Sa	ve Close Copy Change Print Preview Delete
New ✓	Assess ✓ Authorize ✓	Scheduled ✓ Impleme	Closed	Canceled
Number	CHG0046654	Туре	Normal	
Requested by	Joshua Henderson Q (i)	State	Implement	
*Contact phone	(334) 844-9344	Escalation	Normal	
*Contact email	hendejs@auburn.edu	On hold		
Building name	Q	Conflict status	No Conflict	
Room number		Conflict last run	03/27/2024 08:08:22	
Task FOP	Q	Created	03/27/2024 07:50:55	
*Category	Applications Software	Business duration		
Service	ServiceNow (auburn)		4 - Low	
*Configuration item	ServiceNow (auburn)	Risk	Exception	
		*Impact	1 - Most Users	
		Requested by date	(iii)	
* Short description	This is a new normal change			
* Description	This is the description of the change.			
Notes Step 1: Plan Step 2: Schedule	Step 3: CAB Step 4: Implement Closure Information	√ariables		
* These fie	y to close the change request during the implementation phase	B.		
Close code	None		~	
Notes				
Conflict Calendar Update Save	Close Copy Change Print Preview Delete			
12/2/1/2014				





NOTE: However, the aforementioned **change task** will continue to be a viable option. This is how you'd close the change via the change task.

The individual assigned to the **change task** now completes the actual change work and **closes the task**. This action **automatically** closes the change request, and the **Requested By** individual will be notified that the change has been completed.

The current **State** is **Closed**.

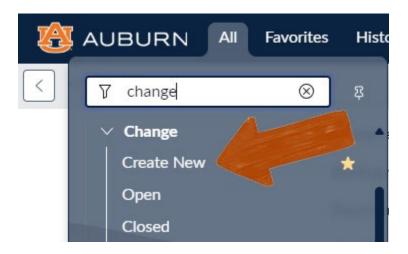
Notice that the change request and change task is now **closed**, and the **Actual End** was filled in.



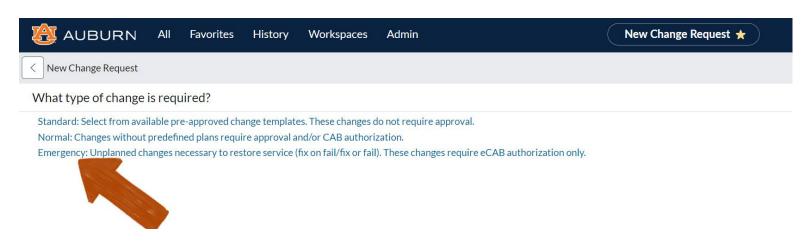


## LAB 3: Lifecycle of an Emergency Change

1. In the filter navigator, search for **Change** and click **Create New**.



2. On the What type of change is required? screen, click Emergency: Unplanned changes necessary to restore service. These changes require eCAB authorization only.





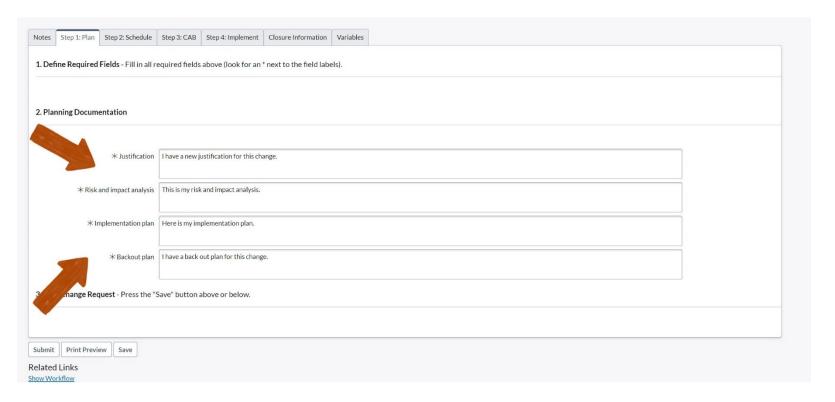


3. Complete all the required fields for the change request and any additional fields that would be helpful for both completion and CAB evaluation. These are the data fields at the top of the record and those on the **Step 1: Planning** tab. When the documentation is complete, click the **Save** button.

AUBURN All Favorites History W	orkspaces Admin	Change Request - Create CHG0046654 ☆	Q Search	▼ # 0 © C 🦺
Change Request New record				⊗ ss ··· Submit Print Preview Save
New	Assess Authorize	Scheduled Implement	Closed	Canceled
Number	CHG0046654	Туре	Normal	
Requested by	Joshua Henderson Q	State	New	
* Contact phone	(334) 844-9344	Escalation	Normal	
* Contact email	hendejs@auburn.edu	Conflict status	Not Run	
Building name	Q	Conflict last run		
Room number		Created		
Task FOP	Q	Business duration		
*Category	None	Priority	4-Low v	
Service	Q	Risk		
*Configuration item	Q	* Impact		
		Requested by date		(m)
* Short description				
* Description				
* Sten 1: Plan Sten 2: Schedule	Step 3: CAB Step 4: Implement Closure Info	rmation Variables		
Watch list		Work notes list		
Additional comments (Customer visible)				
Work notes				
Submit Print Preview Save				
Related Links				
<u>Show Workflow</u>				•







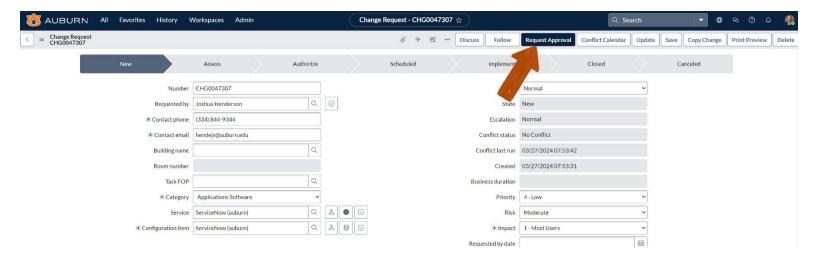
Upon submission or saving this record, a notification will be sent to the individual who requested the change (**Requested By**) if that person is different from the individual who opened the change.

The current **State** of **New**.

4. To continue the process, provide the **Planned Start Date**, **Planned End Date**, **Assignment Group**, and **Assigned To** field data and click the **Request Approval** button.







A notification will be sent to the **Assigned To** individual unless you are that person.

An **Approval Request** notification will be sent to each member of the Emergency CAB (eCAB).

The current State of Authorize.

5. If an **eCAB** member rejects the request, the change is canceled.

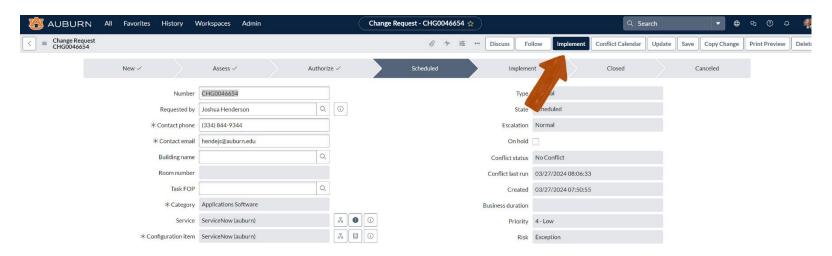
If an **eCAB** member approves the request, you may proceed with your change at the approved planned times but remember to keep the working change record. The change will be assigned a **CAB date** and added to the **agenda** for the next CAB meeting to be reviewed.

The current State of Scheduled.

6. When you are ready to implement the change, click the **Implement** button.





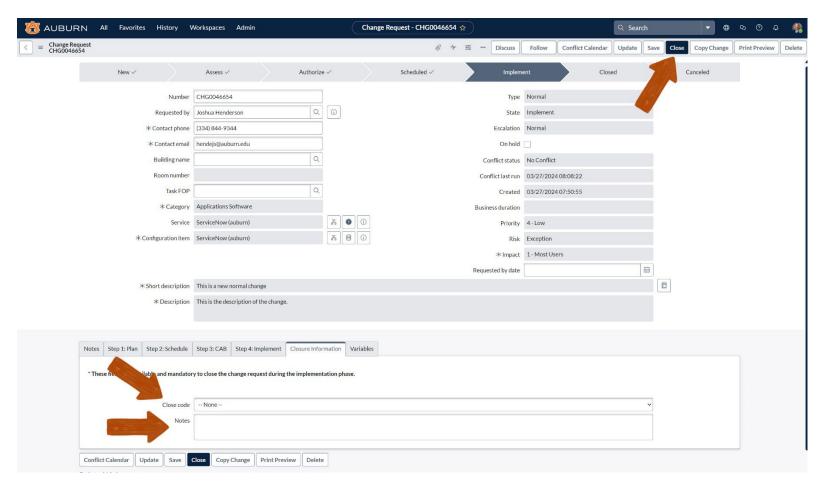


Entering the implementation phase automatically fills in the **Actual Start** field and creates the change task (CTASK######) to complete this change request. This also opens the **Close Code** and **Notes** on the **Closure Information** tab for single pane closure.

7. As mentioned in step 6, closing the change is now available from the change request. This is the preferred method for closing a change request due to the ease of this process. To close the change request, navigate to the **Closure Information** tab, choose the **Close Code**, provide **Notes**, and then click the **Close** button.







The current **State** of **Closed**.

Notice that the parent emergency change is **closed**, and the **Actual End** field is filled in.

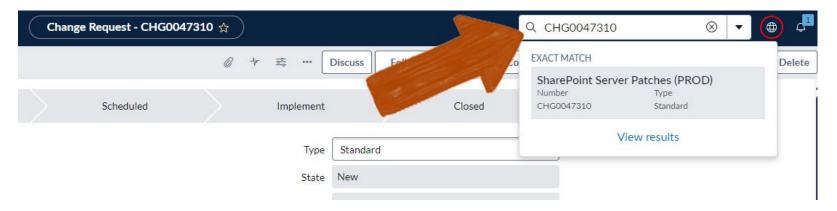




## LAB 4: How to Cancel Change

Canceling a change can be required in many unforeseen circumstances, and doing so is a very easy process. A change request can be canceled while the record is in any state before the Implementation state.

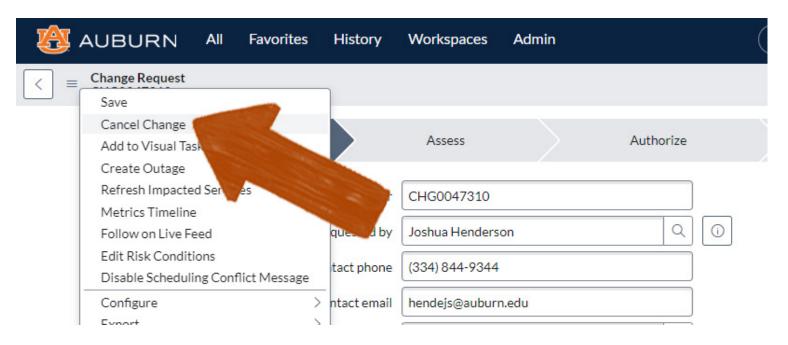
1. Navigate to your change already in progress. You can do this by searching for the **CHG######** number in the top-right global search. Alternatively, you could search for **Change** in the **filter navigator**, view all Open changes, and find your change there.



2. Once you have opened your change record, click the hamburger menu on the top-left side of the navigation bar and click **Cancel Change**.







3. You will immediately receive information that you have successfully canceled the change.

It will also be reflected in the change itself in the **State** field.

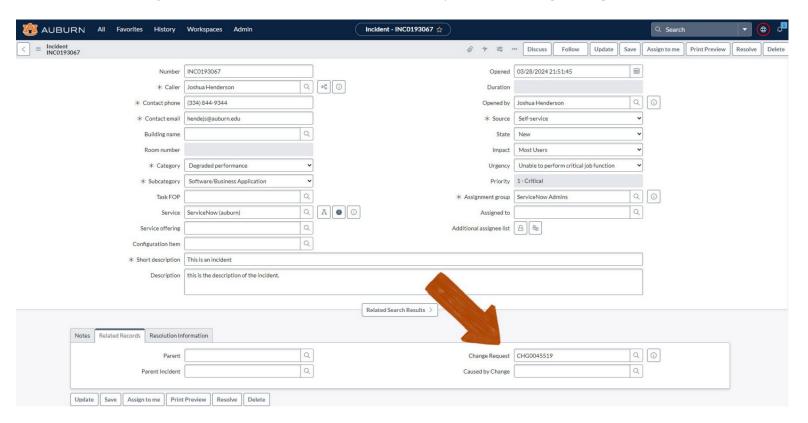




## LAB 5: How to Relate a Change to an Incident

If you have an open **incident** that is waiting for a **change request** to be completed, you can relate the tickets to one another to connect them. The change request could be waiting on approval, a future date, or a scheduled maintenance window. This will create a **relationship** between the tickets for a better audit trail of incidents and changes for break-fix situations.

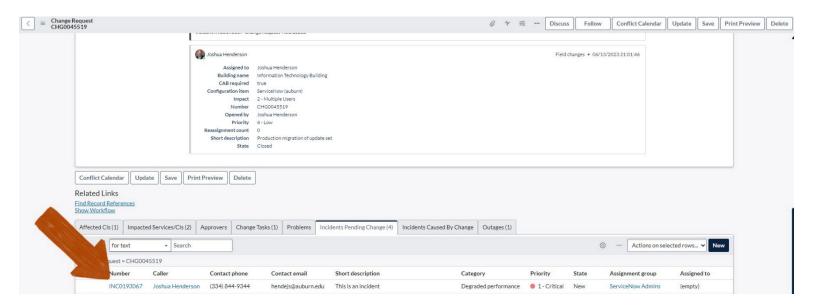
1. On the Incident, go to the related records tab and input the Change Request number.







2. It will also be visible on the **Change Request** on the **Incidents Pending Change** tab.









## **CHANGE MANAGEMENT 101**

# **QUESTIONS?**

Important Links		
Service Portal:	auburn.service-now.com/it	
Platform:	<u>auburn.service-now.com</u>	
Service Desk:	service@auburn.edu	
ServiceNow Assist:	<u>aub.ie/snowassist</u>	

ServiceNow Team		
Jackie Bailey	jab0228@auburn.edu	
Josh Henderson	hendejs@auburn.edu	



